USDA United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with Maine Agricultural and Forest Experiment Station and Maine Soil and Water Conservation Commission

Soil Survey of Hancock County Area, Maine

How to Use This Soil Survey

General Soil Map

The general soil map, which is the color map preceding the detailed soil maps, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

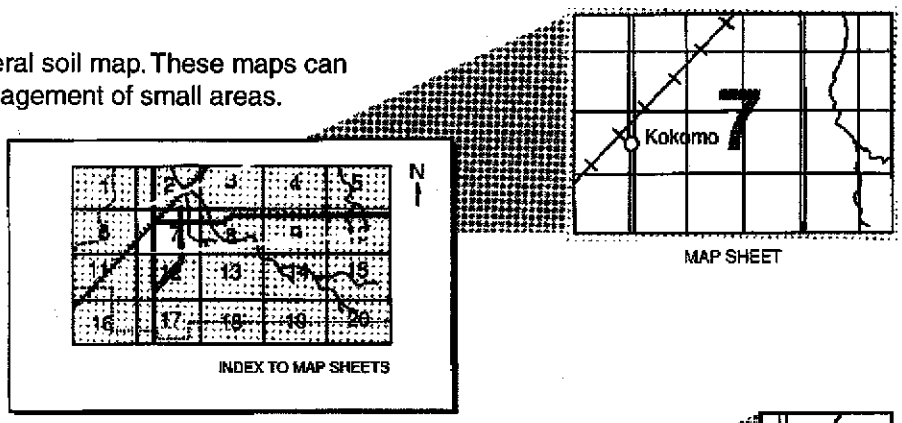
Detailed Soil Maps

The detailed soil maps follow the general soil map. These maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**, which precedes the soil maps. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map units symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other federal agencies, state agencies including the Agricultural and Forest Experiment Stations, and local agencies. The Natural Resources Conservation Service has leadership for the federal part of the National Cooperative Soil Survey. In line with Department of Agriculture policies, benefits of this program are available to all, regardless of race, color, national origin, sex, religion, marital status, handicap, or age.

Major fieldwork for this soil survey was completed in 1986. Soil names and descriptions were approved in 1988. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1986. This survey was made cooperatively by the Natural Resources Conservation Service and the Maine Agricultural and Forest Experiment Station and the Maine Soil and Water Conservation Commission. The survey is part of the technical assistance furnished to the Hancock County Soil and Water Conservation District.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

Cover: Blue Hill Bay on the Atlantic Ocean. In the foreground, a golf course in an area of Lamoine silt loam, 3 to 8 percent slopes. In the background, Blue Hill, consisting of the Lyman-Tunbridge-Schoodic complex, rolling, very stony.

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Issued 1998

Foreword

This soil survey contains information that can be used in land-planning programs in the Hancock County Area. The survey contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads.

Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Darrel Dominick
State Conservationist
Natural Resources Conservation Service

This soil survey is dedicated to the memory of the author, **Glendon B. Jordan**, a Maine native, a friend, and a soil scientist who defined common sense.

Soil Survey of Hancock County Area, Maine

By Glendon B. Jordan, Natural Resources Conservation Service

Fieldwork by: Manley H. Bailey, Donald O. Clark, Glendon B. Jordan, Kenneth J. LaFlamme, and David E. Wilkinson, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the Maine Agricultural and Forest Experiment Station and the Maine Soil and Water Conservation Commission

Hancock County, located in eastern coastal Maine, encompasses a land area of 983,680 acres. The area covered by this soil survey consists of all of the organized towns in Hancock County plus Long Island Plantation and Township 8SD, a total land area of 640,576 acres, or approximately 1,001 square miles (fig. 1). It includes all of the coastal towns and extends north to Penobscot County in the northwest part of the survey area and just north of Maine Route 9 in the northeast part of the survey area. The survey area is bordered on the west by the Penobscot River and on the east by unorganized townships of Hancock County. The total population of Hancock county is about 45,000, about 95 percent of whom reside in the coastal area.

The Hancock County Area is in the coastal area of the New England Uplands. The area consists of till-mantled, rolling to hilly uplands in the northern part and gently sloping valleys terminating in coastal lowlands in the southern part. The coastal valleys are covered by glaciolacustrine or glaciomarine sediments. The elevation ranges from sea level to 1,528 feet above sea level on the crest of Cadillac Mountain in the town of Bar Harbor.

The main industries in the area are forest products, tourism, agriculture, fishing, and services.

More than 95 percent of Hancock County is forested, and the forest products industry is a major source of employment and income for the area. A large pulp and paper plant in the town of Bucksport is the largest commercial employer in the county. Further, many households receive part or all of their income from the harvest and sale of wood products. Among the wood related industries in the area are lumber mills, trap mills, firewood suppliers, and pulpwood suppliers.

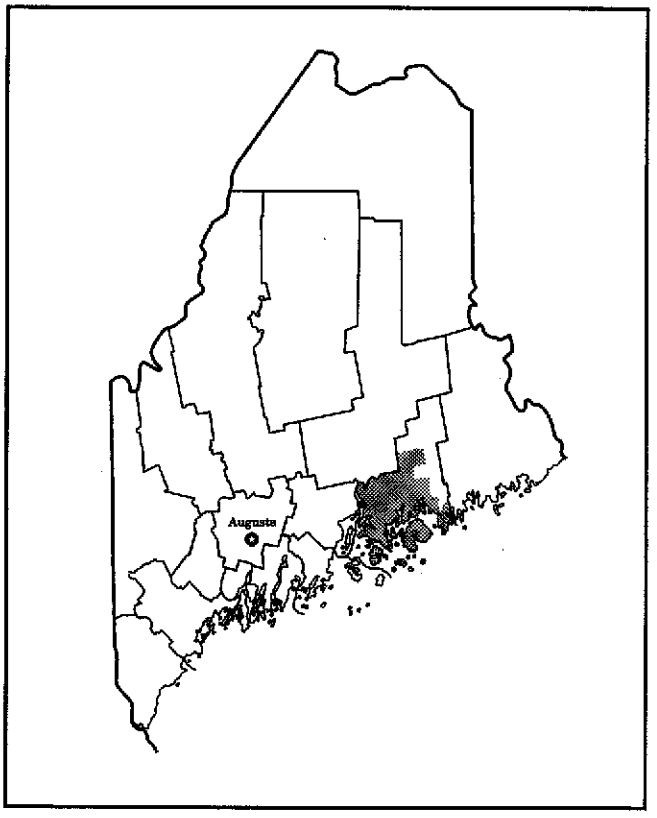

Figure 1.—Location of Hancock County Area in Maine.

Many public and private tourist facilities are throughout the coastal area. Acadia National Park on Mt. Desert Island is the largest tourist attraction in

eastern Maine and attracts over 4 million visitors a year.

The main agricultural enterprise consists of the production, harvesting,and processing of wild blueberries. About 10,000 acres of blueberry land is harvested in Hancock County. Other agricultural enterprises include nurseries and greenhouses, Christmas trees and wreaths, livestock, and hay. Only about 1.5 percent of the total land area of the county is used for agricultural purposes.

The fisheries industry comprises the harvesting and sale of fish, shellfish, and marine worms. In terms of value, the lobster fishery ranks highest of all marine fisheries in Hancock County. Related marine industries include boat building, boat storage, fish wharves, and trap-stock mills.

The service industries are mainly in the larger communities of Bar Harbor, Bucksport, and Ellsworth.

General Nature of the Survey Area

This section provides general information about the areas's history and development, climate, and drainage patterns.

History and Development

The coastal areas of Hancock County were originally settled from 1626 to 1785, when what is now Maine was still a part of Massachusetts; the greatest settlement activity took place between 1760 and 1770, when 22 towns were occupied. Thirteen towns were incorporated from 1775 to 1800. The most active year was 1788 because the General Court of Massachusetts requested the incorporation of "larger islands and new townships" in the District. The incorporation of Hancock County took place on June 25, 1789, and on May 1, 1790, the county was officially separated from Lincoln County.

Hancock County was named for Governor Hancock of Massachusetts. After portions were taken in 1816 to form Penobscot County and in 1827 for Waldo County, Hancock County contained 33 towns, three plantations, and one city, Ellsworth, which is the shire town.

A federal census in the early 1800's showed that the number of people in the county increased from 4,549 to 11,443 by 1816. More towns were incorporated as more people settled in the county, and by 1850, 75 percent of the present-day towns were incorporated.

Hancock County consists partly of two large peninsulas and numerous points and islands between them. Inland is a vast interior that is dotted by small settlements. The westernmost region, bounded by the Penobscot and Blue Hill Bays, includes the town of Bucksport. To the south is the town of Penobscot, one of the county's oldest towns, and Castine, a village that at one time or another was claimed by four nations — France, England, Holland, and the United States. During the Revolutionary War, most of America's naval fleet was destroyed there. Castine is the present location of the Maine Maritime Academy.

To the south a large suspension bridge connects the mainland to Deer Isle, Maine's second largest island. In this area a thriving granite quarrying business has produced some of the world's finest quality granite. This granite was used in many large buildings and monuments throughout the United States. Among the most recent is the Kennedy Memorial in Arlington Cemetery.

At the head of the Union River Bay, the shire town of Ellsworth was settled by a small party of coastal explorers in 1763. Originally named the Union River Settlement, it was later named in honor of Supreme Court Justice Oliver Ellsworth. He was the Massachusetts delegate to the Constitutional Convention. Lumbering and shipbuilding were the early industries in Ellsworth, but these gradually gave way to the retail and service businesses of the present.

To the south of Ellsworth and the town of Trenton is Maine's largest island, Mt. Desert Island. The island was named Isles de Monts Desert in 1604 by Samuel de Champlain because of its barren rocky summits. The first permanent settlement on the island was Somesville, which was established in 1621 by Abraham Somes. Mt. Desert Island is about 68,000 acres and includes the towns of Bar Harbor, Mt. Desert, Tremont, and Southwest Harbor. About half of Mt. Desert Island is within Acadia National Park. The park was instituted in 1914 when citizens of the island petitioned Congress to recognize the area as a national monument. The area was officially proclaimed Seur de Monts National Monument in 1916, became Lafayette National Park in 1919, and was named Acadia National Park in 1929.

Jackson Laboratory, the largest center for mammalian genetic research in the world, is in the town of Bar Harbor. The laboratory was founded in 1929 by geneticist Clarence Cook Little. There, scientists study cancer, diabetes, aging, and behavioral and neuromuscular disorders. Special strains of mice are bred here to aid in genetic research and are shipped to research centers throughout the world.

In the southwest area of Hancock County on Gouldsboro Peninsula are the towns of Winter Harbor and Gouldsboro. Schoodic Point on the tip of the peninsula is a part of Acadia National Park. This rugged headland rises more than 500 feet and provides an unbroken view eastward to the Bay of Fundy and westward to Mt. Desert Island.

Climate

Prepared by the National Climatic Center, Asheville, North Carolina.

Winters in Hancock County are cold, and summers are warm. Both the start and the end of the warm period are influenced by the Atlantic Ocean. In winter the ground is frequently, but not continuously, covered with snow. Total annual precipitation is nearly always adequate for crops that are suited to local temperatures.

Table 1 gives data on temperature and precipitation for the survey area, as recorded at Ellsworth for the period 1951 to 1981. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter the average temperature is 22 degrees F, and the average daily minimum temperature is 13 degrees. The lowest temperature on record, which occurred on January 4, 1981, is -33 degrees. In summer the average temperature is 65 degrees, and the average daily maximum temperature is 76 degrees. The highest recorded temperature, which occurred on August 2, 1975, is 100 degrees.

Growing degree days, shown in Table 1, are equivalent to heat units. During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

Of the total annual precipitation, 20 inches, or 45 percent, usually falls in April through September, which includes the growing season for most crops. In 2 years out of 10, the rainfall in April through September is less than 16 inches. The heaviest 1-day rainfall during the period of record was 4.88 inches on September 12, 1954. Thunderstorms occur on about 18 days each year, and most occur in summer.

Average seasonal snowfall is 70 inches. The greatest snow depth at any one time during the period of record was 45 inches. On the average, 36 days have at least 1 inch of snow on the ground, but the number of such days varies greatly from year to year.

The average relative humidity in mid-afternoon is about 60 percent. Humidity is higher at night, and the average at dawn is about 80 percent. The percentage of possible sunshine is 60 percent in summer and 55 percent in winter. The prevailing wind is from the south. Average windspeed is highest, 10 miles per hour, in spring.

Winter storms moving northeastward along the coast frequently bring rain and thawing and then more snow and cold weather. In summer, sea breezes frequently moderate the temperature, particularly near the coast.

Drainage

Most of the drainage in the Hancock County Area is through short streams and rivers that flow into the Union River in the center of the area. Coastal areas drain into Penobscot Bay, Blue Hill Bay, and Frenchmans Bay. The extreme western part of the area drains into the Penobscot River.

The streams and rivers are generally postglacial, and at some point almost all of them flow into or out of glacial lakes. Graham Lake is used for hydro-electric power and is the only major manmade lake in the area.

The rivers and streams provide adequate drainage for all areas in Hancock County. The many small bogs and swamps provide storage for stormwater runoff.

How This Survey Was Made

This survey was made to provide information about the soils in the survey area. The information includes a description of the soils and their location and a discussion of the suitability, limitations, and management of the soils for specified uses. Soil scientists observed the steepness, length, and shape of slopes; the general pattern of drainage; the kinds of crops and native plants growing on the soils; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biologic activity.

The soils in the survey area occur in an orderly pattern that is related to the geology, the landforms, relief, climate, and the natural vegetation of the area. Each kind of soil is associated with a particular kind of landscape or with a segment of the landscape. By observing the soils in the survey area and relating their position to specific segments of the landscape, a soil scientist develops a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientist to predict with considerable accuracy the kind of soil at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-

landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, acidity, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. The system of taxonomic classification used in the United States is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpreted the data from these analyses and tests as well as the field-observed characteristics and the soil properties in terms of expected behavior of the soils under different uses. Interpretations for all of the soils were field tested through observation of the soils in different uses under different levels of management. Some interpretations are modified to fit local conditions, and new interpretations sometimes are developed to meet local needs. Data were assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management were assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can state with a fairly high degree of probability that a given soil will have a high water table within certain depths in most years, but they cannot assure that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

This survey area was mapped at two levels of detail. At the more detailed level, map units are narrowly defined and map unit boundaries were plotted and verified at closely spaced intervals. At the less detailed level, map units are broadly defined and boundaries were plotted and verified at wider intervals. In the legend for the detailed soil maps, narrowly defined units are indicated by symbols in which the first letter is uppercase and the second is lowercase. For broadly defined units, the first and second leters are uppercase.

The descriptions, names, and delineations of the soils in this survey area do not fully agree with those of the soils in adjacent survey areas. The differences are the result of better knowledge of the soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in different survey areas.

Map Unit Composition

A map unit delineation on a soil map represents an area dominated by one major kind of soil or an area dominated by several kinds of soil. A map unit is identified and named according to the taxonomic classification of the dominant soil or soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural objects. In common with other natural objects, they have a characteristic variability in their properties (fig. 2). Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of soils of other taxonomic classes. Consequently, every map unit is made up of the soil or soils for which it is named and some soils that belong to other taxonomic classes. These latter soils are called inclusions or included soils.

Most inclusions have properties and behavioral patterns similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting (similar) inclusions. They may or may not be mentioned in the map unit descriptions. Other inclusions, however, have properties and behavior divergent enough to affect use or require different management. These are contrasting (dissimilar) inclusions. They generally occupy small areas and cannot be shown separately on the soil maps because of the scale used in mapping. The

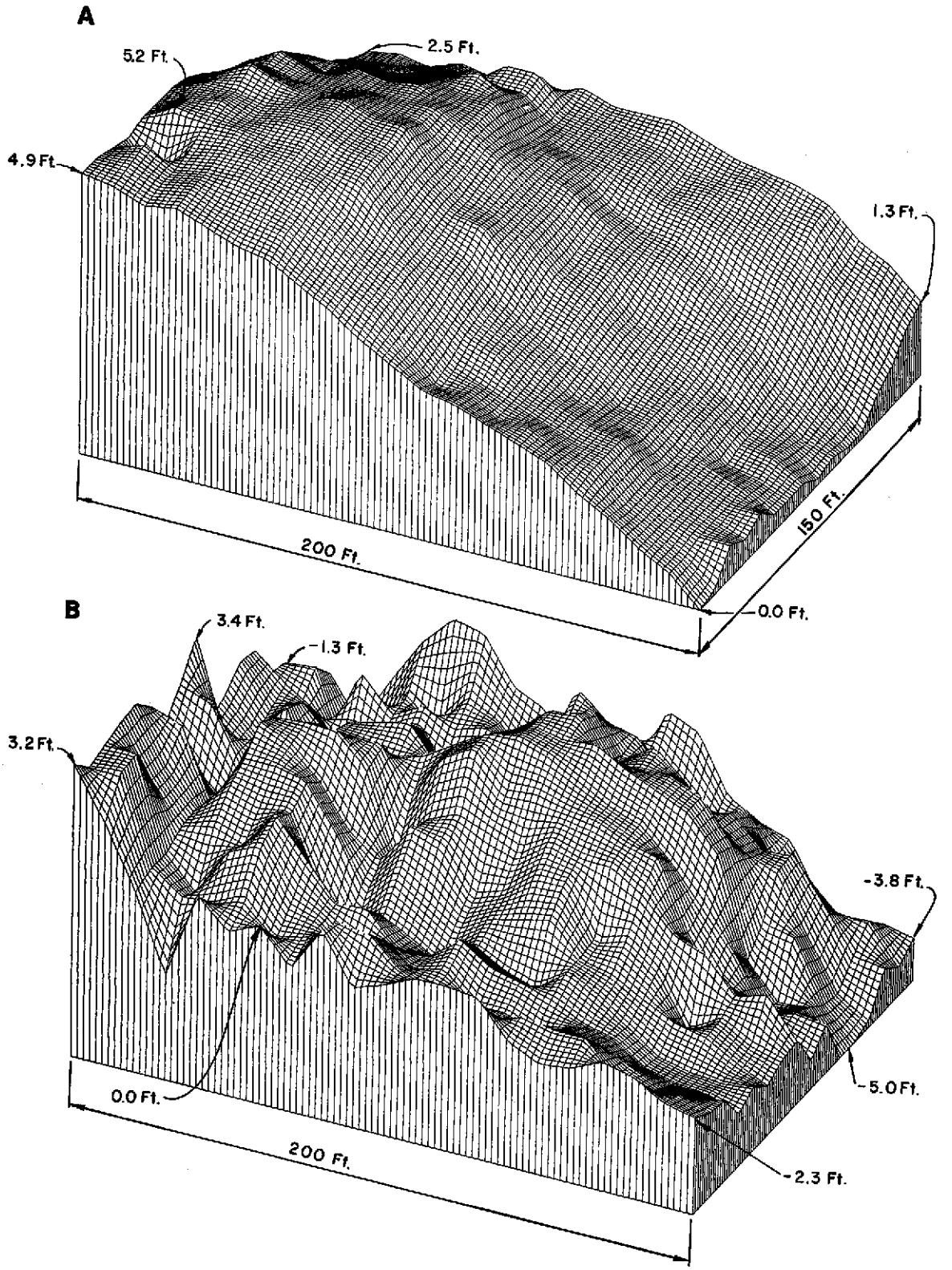

Figure 2.—Relationship of the surface (A) to the underlying bedrock (B) in the Tunbridge-Lyman complex, 3 to 8 percent slopes.

inclusions of contrasting soils are mentioned in the map unit descriptions. A few inclusions may not have been observed and consequently are not mentioned in the descriptions, especially where the soil pattern was so complex that it was impractical to make enough observations to identify all of the kinds of soil on the landscape.

The presence of inclusions in a map unit in no way diminishes the usefulness or accuracy of the soil data. The objective of soil mapping is not to delineate pure taxonomic classes of soils, but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but onsite investigation is needed to plan for intensive uses in small areas.

Survey Procedures

Prior to actual field mapping, general field investigations were made to determine the patterns of landforms. Spot checks were made of various soils in the field. Where available, surficial geology maps and bedrock geology maps were used to form a correlation between landforms and individual soil sites.

Field mapping was done primarily by making traverses on foot. Traverses were made mainly at intervals of ½ mile or less, depending on the complexity of topography and soil patterns. Areas mapped as broadly defined units were traversed at intervals of ½ mile or more. Areas of high variability are in coastal areas and along streams and river valleys.

Soil examinations along the traverses were made mainly 300 to 800 yards apart, depending on the landscape and the soil patterns. Areas of broadly defined map units were examined at greater intervals. The soil material was examined with the aid of a shovel, screw auger, or bucket auger to a depth of about 5 feet, or to bedrock or the dense compact substratum if it was at a depth of less than 5 feet. The pedons described as typical were observed and studied in pits. Some of these pedons were sampled for laboratory analysis.

All soils information was recorded on aerial photographs. These photographs were at a scale of 1:20,000 and 1:15,840. Surface drainage was also recorded on aerial photographs. Cultural features are from U.S. Geological Survey 7 ½ and 15 minute topographic maps.

General Soil Map Units

The general soil map at the back of this publication shows the soil associations in this survey area. Each association has a distinctive pattern of soils, relief, and drainage. Each is a unique natural landscape. Typically, an association consists of two or more major soils and some minor soils. It is named for the major soils. The soils making up one association can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field, or for selecting a site for a road or building or other structure. The soils in any one association differ from place to place in slope, depth, drainage, and other characteristics that affect management.

The names and delineations of the soils on the map do not in all instances match those on maps of adjacent survey areas. The differences are the result of changes in soil classification and mapping procedures.

Soil Descriptions

1. Hermon-Dixfield-Lyman

Very deep to shallow, gently sloping to very steep, somewhat excessively drained and moderately well drained soils formed in glacial till

Areas of this map unit are throughout the survey area. These soils are on upland till ridges surrounding lakes, ponds and valleys. The surface of these soils is very stony to extremely bouldery.

This map unit makes up about 14 percent of the survey area. The unit is about 35 percent Hermon soils, 19 percent Dixfield soils, 15 percent Lyman soils, and 31 percent soils of minor extent (fig. 3).

Hermon soils are in a complex with Monadnock soils in an irregular topography of ridges, knolls, and moraines with complex slopes. Hermon soils are very deep, gently sloping to steep, and somewhat excessively drained. The surface layer is sandy loam. The subsoil is sandy loam, gravelly sandy loam, and very gravelly loamy sand. The substratum is extremely gravelly loamy sand and extremely gravelly coarse sand.

Dixfield soils are on the lower side slopes of ridges and knolls in slightly lower positions on the landscape than the Hermon soils. Some of the Dixfield soils are in a complex with Colonel soils. The Dixfield soils are very deep, gently sloping to moderately steep, and moderately well drained. The surface layer is fine sandy loam. The subsoil is fine sandy loam and gravelly fine sandy loam. The substratum is gravelly fine sandy loam. Dixfield soils have a compact substratum that restricts water movement and root penetration and creates a seasonal high water table.

Lyman soils are on the crests of ridges. They are mainly in complexes with Tunbridge and Schoodic soils and rock outcrop. They are shallow to bedrock, gently sloping to very steep, and somewhat excessively drained. The surface layer is fine sandy loam. The subsoil is fine sandy loam and gravelly fine sandy loam. Below that is hard, unweathered bedrock.

The minor soils in the map unit consist of poorly drained Brayton soils formed in glacial till in drainageways, very poorly drained Bucksport and Wonsqueak soils formed in organic material in depressions, somewhat poorly drained Lamoine soils and moderately well drained Buxton soils formed in marine or lacustrine sediments on terraces, and well drained Marlow soils formed in compact glacial till on upland ridges.

Areas of this unit are mostly forested. The Hermon and Dixfield soils are mainly hardwood sites and include such species as beech, paper birch, and northern red oak. The Lyman soils are mainly softwood sites of balsam fir and red spruce. The major limitations of the soils for woodland use are the stones and boulders on the surface, the shallow depth to bedrock of the Lyman soils, and droughtiness of the Lyman and Hermon soils. Windthrow is a hazard on the Lyman soils due to shallow rooting of the trees.

Some areas adjacent to lakes and ponds are used for seasonal residences. If the unit is used as a site for septic tank absorption fields, the poor filtering of the

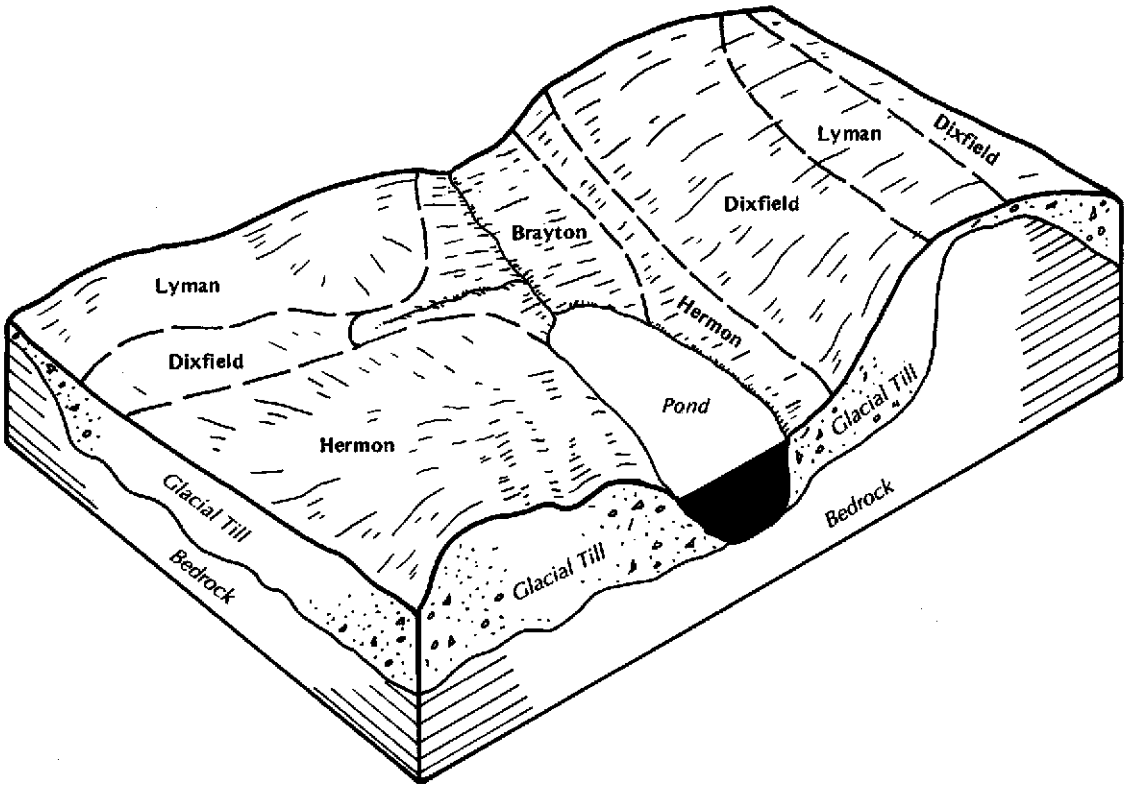

Figure 3.—Typical pattern of soils and underlying material in the Hermon-Dixfield-Lyman unit.

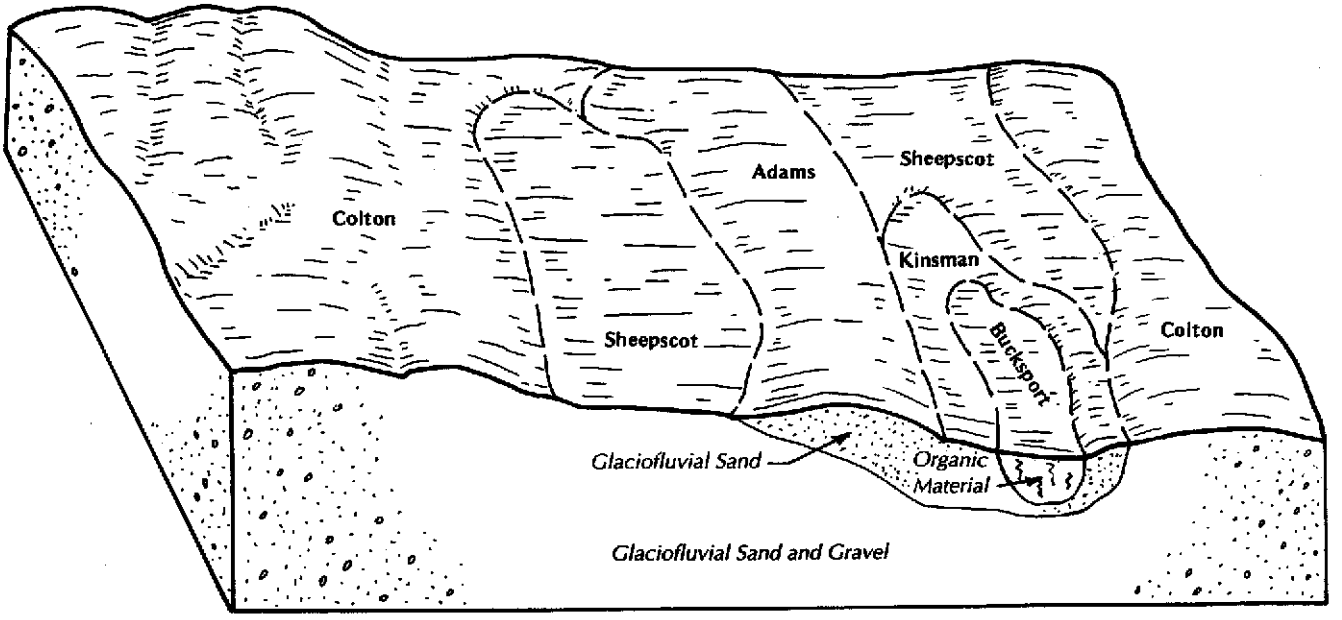

Figure 4.—Typical pattern of soils and underlying material in the Colton-Sheepscot-Adams unit.

substratum of the Hermon soils may cause pollution of the ground water. The seasonal high water table in the Dixfield soils and the shallow depth to bedrock in the Lyman soils are limitations for urban uses.

2. Colton-Sheepscot-Adams

Very deep, nearly level to steep, excessively drained to moderately well drained soils formed in glaciofluvial sand and gravel

The largest areas of this unit are in the towns of Amherst and Aurora. Smaller areas are in Ellsworth, Lamoine, Otis, Mariaville, and Franklin. Areas of this map unit are on outwash plains, terraces, eskers, and kames.

This map unit makes up about 2 percent of the survey area. The unit is about 50 percent Colton soils, 25 percent Sheepscot soils, 16 percent Adams soils, and 9 percent soils of minor extent (fig. 4).

Colton soils are on strongly sloping to steep eskers and kames and on nearly level to gently sloping outwash plains. The soils are excessively drained. The surface layer is gravelly sandy loam. The subsoil is gravelly coarse sandy loam, gravelly loamy sand, and gravelly sand. The substratum is extremely gravelly coarse sand and very gravelly coarse sand.

Sheepscot soils are in a lower position in the landscape than the Colton soils. Sheepscot soils are nearly level to strongly sloping and are moderately well drained. The surface layer is sandy loam. The subsoil is sandy loam, gravelly sandy loam, and very gravelly loamy sand. The substratum is very gravelly coarse sand and extremely gravelly coarse sand.

Adams soils are on kame terraces and commonly on the edges of outwash plains. The soils are nearly level to steep and are somewhat excessively drained. The surface layer is loamy sand. The subsoil is loamy sand or sand. The substratum is sand.

The minor soils are poorly drained Kinsman soils formed in sandy outwash in depressions and very poorly drained Bucksport, Sebago, and Waskish soils formed in organic materials in kettle holes and depressions.

Areas of this map unit are mainly forested. They are best suited to softwood production. Pines respond especially well to management on these soils. Some hardwoods grow on these areas, but they are slow growing and of poor quality due to the droughtiness of the soils.

Wild blueberries are grown on some cleared areas. Irrigation is needed in dry years for good production.

In some areas the soils are mined for sand and gravel.

3. Dixfield-Marlow-Brayton

Very deep, nearly level to steep, well drained to poorly drained soils formed in compact glacial till

Areas of these soils are common throughout the inland portions of the survey area. These soils are on upland till areas.

This map unit makes up about 26 percent of the survey area. The unit is about 35 percent Dixfield soils, 25 percent Marlow soils, 20 percent Brayton soils, and 20 percent soils of minor extent (fig. 5).

Dixfield soils are on ridges and on the crests and lower side slopes of larger hills. The soils are gently sloping to moderately steep and are moderately well drained. The surface layer is fine sandy loam. The subsoil is fine sandy loam and gravelly fine sandy loam. The substratum is gravelly fine sandy loam.

Marlow soils are on the upper side slopes of hills and ridges. The soils are gently sloping to steep and are well drained. The surface layer and subsoil are fine sandy loam. The substratum is fine sandy loam and gravelly fine sandy loam.

Brayton soils are in depressions and drainageways. The soils are nearly level to gently sloping and are poorly drained. The surface layer, subsoil, and substratum are fine sandy loam.

The minor soils in the map unit are the somewhat poorly drained Colonel soils on lower toe slopes, in depressions, and on the crests and upper side slopes of ridges and mountains; moderately deep to bedrock, well drained Tunbridge soils; shallow to bedrock, some what excessively drained Lyman soils; and very shallow to bedrock, excessively drained Schoodic soils.

Areas of this map unit are mainly forested. The Dixfield and Marlow soils are primarily hardwood sites and include such species as sugar maple, beech, red oak, and paper birch. The Brayton soils and the shallow and very shallow inclusions are primarily softwood sites and include such species as balsam fir, red spruce, and white pine. Red maple is also common on the Brayton soils. The Dixfield and Marlow soils are productive hardwood sites. Windthrow is severe on the Brayton soils due to shallow rooting of the trees.

Areas of this unit that have been cleared of stones are suitable for farming. The Dixfield and Marlow soils produce good yields of row crops and hay and pasture. Slope is the major limitation. Conservation measures such as conservation tillage, stripcropping, and planting on the contour are needed on the steeper slopes to prevent soil erosion. The cleared areas are also productive sites for wild blueberries.

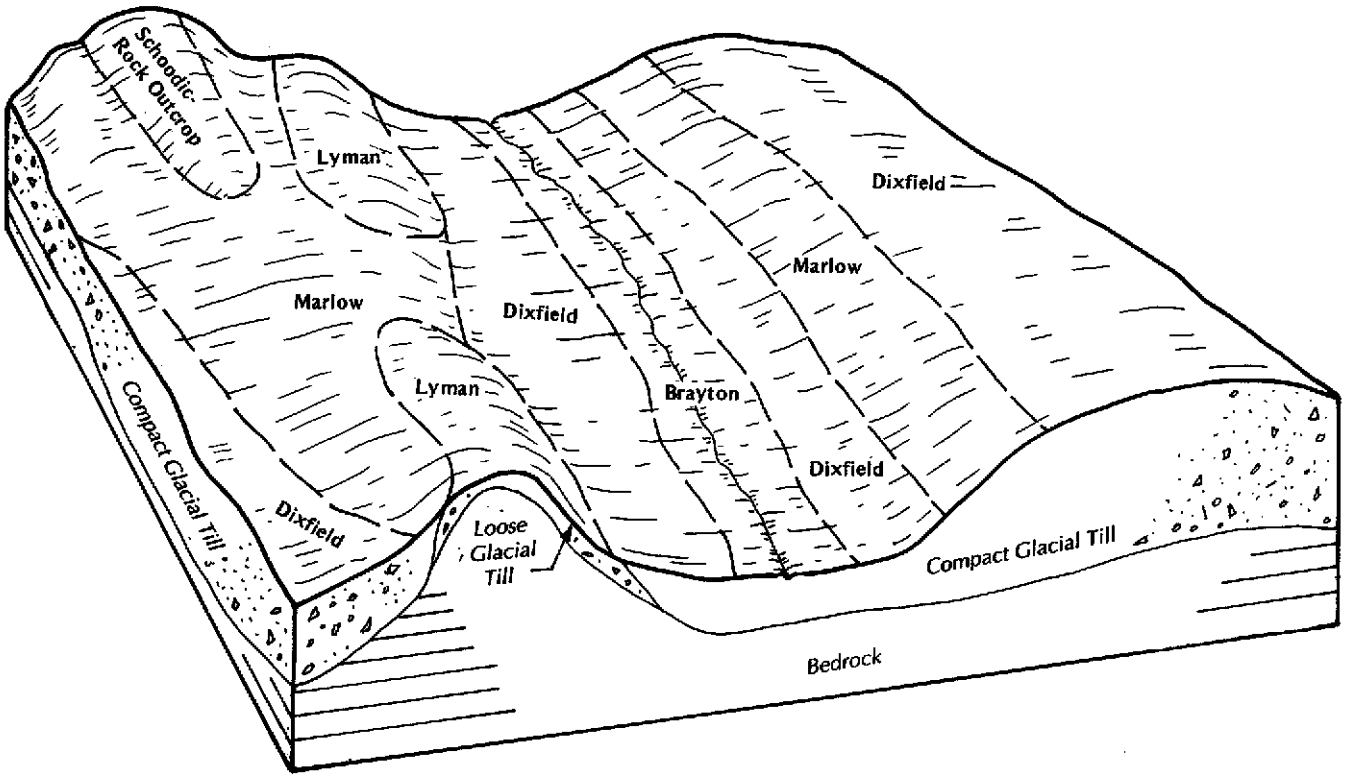

Figure 5.—Typical pattern of soils and underlying material in the Dixfield-Marlow-Brayton unit.

4. Lamoine-Lyman-Dixfield

Very deep, nearly level to gently sloping, somewhat poorly drained soils formed in glaciomarine or glaciolacustrine sediments and shallow to very deep, gently sloping to very steep, somewhat excessively drained and moderately well drained soils formed in glacial till

Areas of these soils are on the coastal plain and extend inland along major rivers.

This map unit makes up about 25 percent of the survey area. The unit is about 26 percent Lamoine soils, 21 percent Lyman soils, 10 percent Dixfield soils, and 43 percent soils of minor extent (fig. 6).

Lamoine soils are in areas along the coast and in river valleys. The soils are very deep, nearly level to gently sloping, and somewhat poorly drained. The surface layer is silt loam. The subsoil is silt loam and silty clay loam. The substratum is silty clay.

Lyman soils are on crests of hills and ridges, mainly in complexes with Tunbridge and Schoodic soils and rock outcrop. The Lyman soils are shallow to bedrock, gently sloping to very steep, and somewhat excessively drained. The surface layer is fine sandy loam. The subsoil is fine sandy loam and gravelly fine sandy loam. Below that is hard, unweathered bedrock.

Dixfield soils are on small ridges and knolls. The soils are very deep, gently sloping to moderately steep, and well drained. The surface layer is fine sandy loam. The substratum is gravelly fine sandy loam.

The minor soils consist of moderately well drained Buxton soils, poorly drained Scantic soils, and very poorly drained Biddeford soils that formed in marine and lacustrine sediments on coastal plains and in river valleys; somewhat poorly drained Colonel soils and well drained Marlow soils that formed in compact glacial till on ridges; somewhat excessively drained Hermon soils and well drained Monadnock soils that formed in sandy glacial till on small ridges; and very poorly drained Bucksport and Wonsqueak soils that formed in organic material in depressions.

Areas of this map unit are mainly forested. They are primarily softwood sites; the major species are balsam fir and red spruce. The abundant natural regeneration of spruce and fir make these areas well suited for pulpwood production. Windthrow is a hazard on the shallow Lyman and Lamoine soils.

Some areas have been cleared of trees and used for hay and pasture. The high water table in Lamoine and Dixfield soils is a limitation and may delay harvesting.

Commercial and residential uses of the soils are common in coastal areas. The high water table in Lamoine and Dixfield soils and depth to bedrock of the

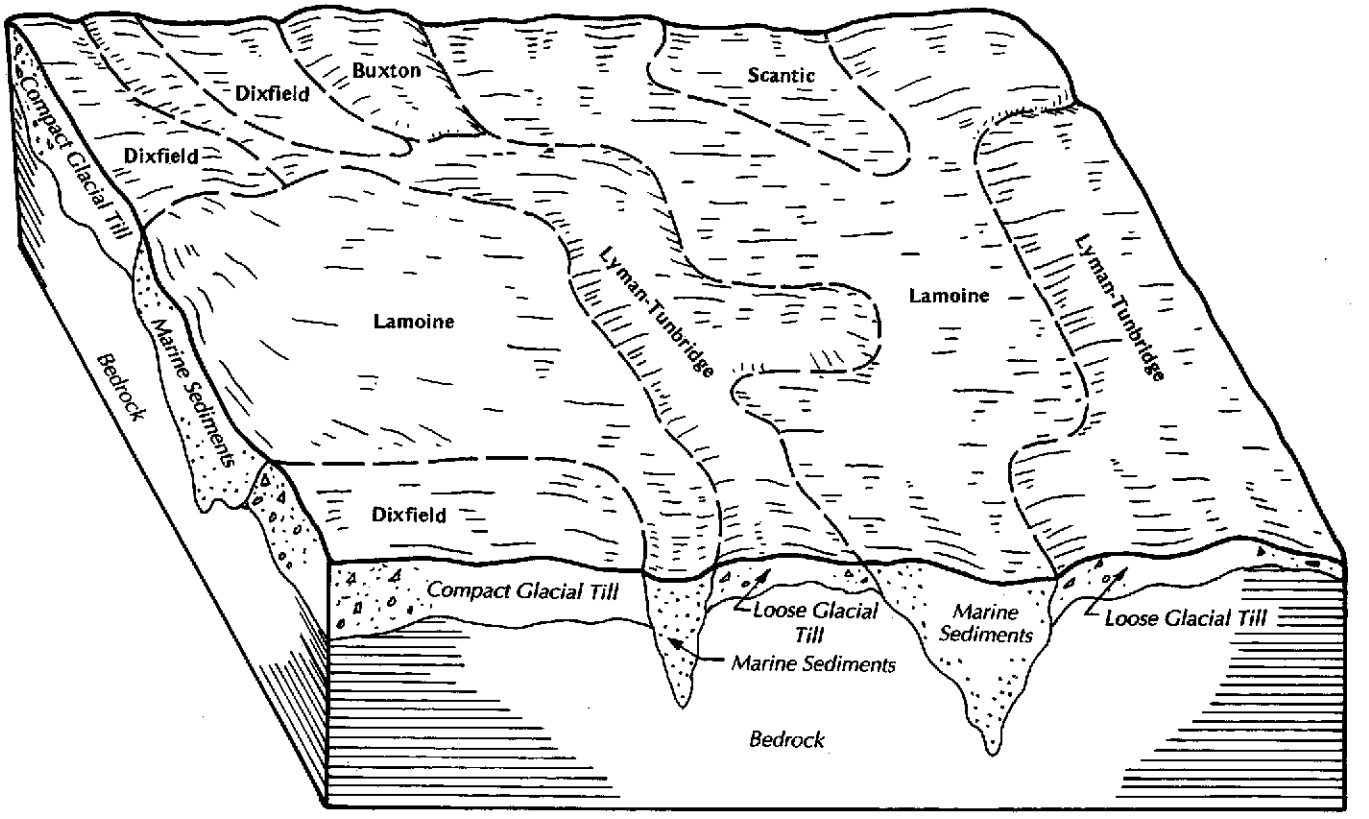

Figure 6.—Typical pattern of soils and underlying material in the Lamoine-Lyman-Dixfield unit.

Lyman soils are the main limitations of the map unit for these uses.

5. Lyman-Scantic-Hermon

Shallow, gently sloping to very steep, somewhat excessively drained soils formed in glacial till; very deep, nearly level to gently sloping, poorly drained soils formed in glaciomarine or glaciolacustrine sediments; and very deep, gently sloping to strongly sloping, somewhat excessively drained soils; formed in glacial till

These soils are on coastal peninsulas and islands.

This map unit makes up about 23 percent of the survey area. The unit is about 27 percent Lyman soils, 25 percent Scantic soils, 14 percent Hermon soils, and 34 percent soils of minor extent.

Lyman soils are on the crests of small hills and ridges in complexes with Schoodic and Tunbridge soils and rock outcrop. The surface layer is fine sandy loam. The subsoil is fine sandy loam and gravelly fine sandy loam. Below that is hard, unweathered bedrock.

Scantic soils are in basins between ridges and in drainageways. The surface layer is silt loam. The subsoil is silty clay loam and silty clay. The substratum is silty clay.

Hermon soils are on small ridges, knolls, and moraines. The surface is very stony to extremely bouldery. The surface layer is sandy loam. The subsoil is sandy loam, gravelly sandy loam, and very gravelly loamy sand. The substratum is extremely gravelly loamy sand and extremely gravelly coarse sand.

The minor soils consist of very poorly drained Bucksport and Wonsqueak soils that formed in organic material in depressions; moderately well drained Buxton soils, somewhat poorly drained Lamoine soils, and very poorly drained Biddeford soils formed in marine or lacustrine sediments on coastal plains and in river valleys; and somewhat poorly drained to poorly drained Naskeag soils formed in sandy glacial till in depressions between the shallow till ridges.

Areas of this map unit are mainly forested. They are mostly softwood sites; the major species are balsam fir and red spruce. The abundant regeneration of spruce and fir makes these areas well suited for pulpwood production. Windthrow is a hazard on the shallow Lyman soils and the poorly drained Scantic soils due to shallow rooting of the trees.

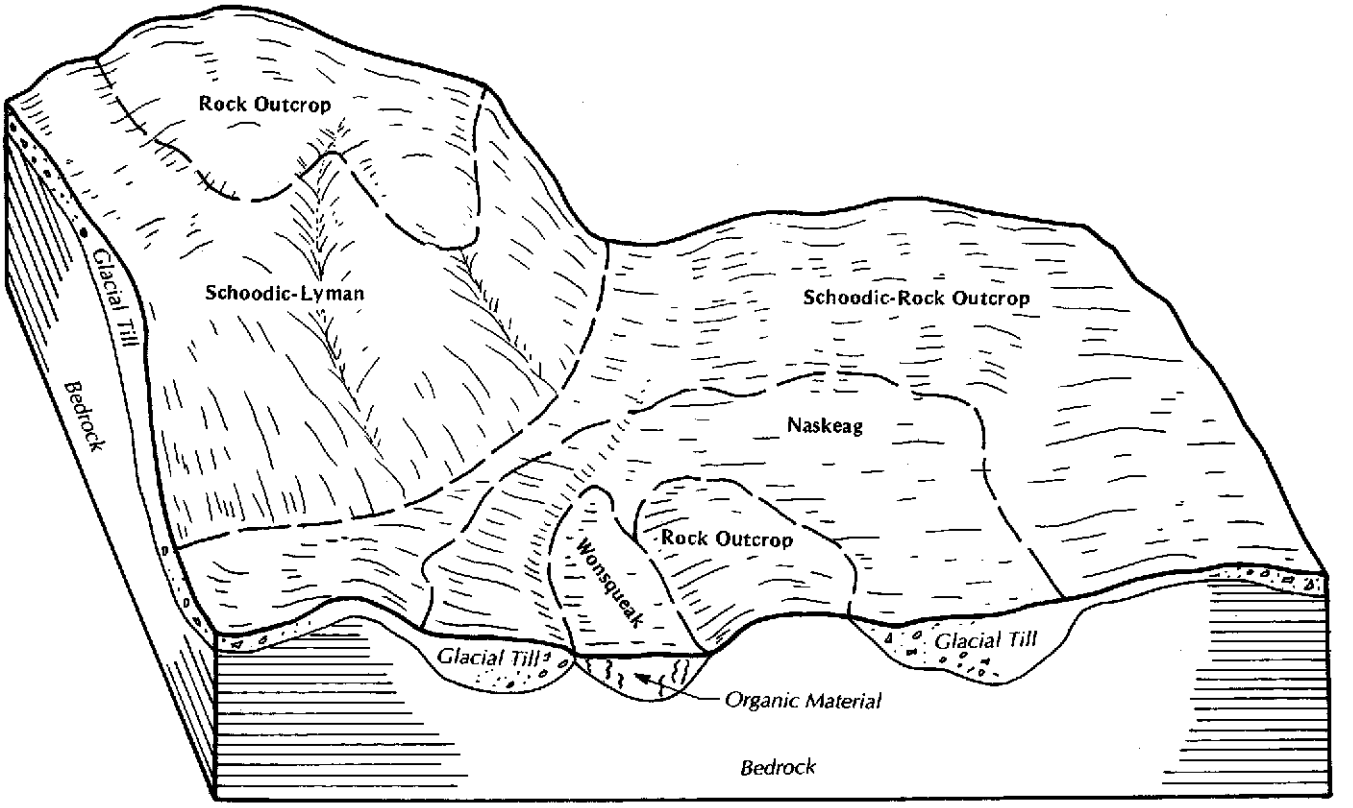

Figure 7.—Typical pattern of soils and underlying material in the Schoodic-Rock outcrop-Naskeag unit.

Some areas have been cleared of trees and are used for hay, pasture, residences, and commercial buildings. The high water table in Scantic soils and droughtiness and shallow depth to bedrock of the Lyman soils are the major limitations for these uses.

6. Schoodic-Rock outcrop-Naskeag

Very shallow to moderately deep, nearly level to very steep, excessively drained and somewhat poorly to poorly drained soils formed in glacial till; and rock outcrop.

Areas of these soils are on coastal peninsulas and offshore islands.

This map unit makes about 10 percent of the survey area. The unit is about 40 percent Schoodic soils, 20 percent Rock outcrop, 15 percent Naskeag soils, and 25 percent soils of minor extent (fig.7).

Schoodic soils are on ridges and mountains. The soils are very shallow to bedrock, nearly level to very steep, and excessively well drained. The surface layer is very gravelly fine sandy loam. Below that is hard, unweathered bedrock.

Rock outcrop consists of areas of exposed bedrock on the crests of ridges and mountains and on steep side slopes of mountains.

Naskeag soils are in depressions between shallow till ridges. The soils are moderately deep to bedrock, nearly level to gently sloping, and somewhat poorly drained to poorly drained. The surface layer is fine sandy loam and gravelly loamy sand. The subsoil is gravelly loamy sand. Below that is hard, unweathered bedrock.

The minor soils in this map unit are very deep, very poorly drained Bucksport and Wonsqueak soils formed in organic material in depressions; very deep, moderately well drained Dixfield soils and somewhat poorly drained Colonel soils formed in compact glacial till on lower side slopes and toe slopes of ridges; and shallow to bedrock, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on upper side slopes of ridges.

Areas of this map unit are mainly forested. They are primarily softwood sites of red spruce, balsam fir, and jack pine. Tree growth is very slow on the very shallow Schoodic soils due to droughtiness. Windthrow is severe on this unit due to the depth to bedrock and shallow rooting of the trees.

Depth to bedrock and wetness limit this unit for most urban uses.

Detailed Soil Map Units

The map units on the detailed soil maps at the back of this survey represent the soils in the survey area. The map unit descriptions in this section, along with the soil maps, can be used to determine the suitability and potential of a soil for specific uses. They also can be used to plan the management needed for those uses. More information on each map unit, or soil, is given under "Use and Management of the Soils."

Each map unit on the detailed soil maps represents an area on the landscape and consists of one or more soils for which the unit is named.

A symbol identifying the soil precedes the map unit name in the soil descriptions. Each description includes general facts about the soil and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer or of the underlying material, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer or of the underlying material. They also can differ in slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Marlow fine sandy loam, 8 to 15 percent slopes, very stony, is a phase of the Marlow series.

Some map units are made up of two or more major soils. These map units are called soil complexes, soil associations, or undifferentiated groups.

A *soil complex* consists of two or more soils, or one or more soils and a miscellaneous area, in such an intricate pattern or in such small areas that they cannot be shown separately on the soil maps. The pattern and proportion of the soils are somewhat similar in all areas. Lyman-Tunbridge complex, 0 to 15 percent slopes, very stony, is an example.

A *soil association* is made up of two or more geographically associated soils that are shown as one unit on the maps. Because of present or anticipated soil uses in the survey area, it was not considered practical or necessary to map the soils separately. The pattern and relative proportion of the soils are somewhat similar. Marlow-Dixfield association, strongly sloping, very stony, is an example.

An *undifferentiated group* is made up of two or more soils that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils in the mapped areas are not uniform. An area can be made up of only one of the major soils, or it can be made up of all of them. Wonsqueak, Bucksport and Sebago soils is an undifferentiated group in this survey area.

Most map units include small scattered areas of soils other than those for which the map unit is named. Some of these included soils have properties that differ substantially from those of the major soil or soils. Such differences could significantly affect use and management of the soils in the map unit. The included soils are identified in each map unit description. Some small areas of strongly contrasting soils are identified by a special symbol on the soil maps.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example. Miscellaneous areas are shown on the soil maps. Some that are too small to be shown are identified by a special symbol on the soil maps.

This survey area underwent two intensities of mapping, narrowly defined and broadly defined.

Narrowly defined map units have been used in open areas and in areas adjacent to rivers, lakes, and major roads. These areas need soil interpretations for yields of specific crops and for important farmlands, sanitary facilities, urban development, and intensive recreation. Most of these units are phases of a soil series. A few units are complexes or undifferentiated groups. The minimum-size delineation is about 3 acres.

Broadly defined units have been used in the extensively forested areas. These areas need soil interpretations for woodland management and productivity, watershed management, and extensive

outdoor recreation. The map units are mainly soil associations and some undifferentiated groups. The minimum-size delineation is about 15 acres.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables (see Contents) give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils.

Soil Descriptions

AdB—Adams loamy sand, 0 to 8 percent slopes

This very deep, gently sloping, somewhat excessively drained soil is on edges of outwash plains and on kame terraces. Slopes are smooth and convex. Areas are irregularly shaped and range from 3 to 200 acres.

Typically, the surface layer is black, highly decomposed organic material 1 inch thick underlain by 2 inches of light gray loamy sand. The subsoil is 21 inches thick. It is dark reddish brown to yellowish red loamy sand in the upper part and yellowish brown to light olive brown sand in the lower part. The substratum is light brownish gray sand to a depth of 65 inches or more.

Included with the soil in mapping are small areas of Colton soils in slightly higher landscape positions than Adams soil; moderately well drained Sheepscot soils in slightly lower landscape positions than Adams soils; and an occasional wet pocket of Kinsman soil. These areas make up about 10 percent of the mapped acreage. In some areas the soil is underlain by silt loam or silty clay loam at a depth of less than 40 inches. These areas make up about 5 percent of the mapped acreage.

Depth to a seasonal high water table in this Adams soil is commonly more than 6 feet. Permeability of the soil is rapid or very rapid. Surface runoff is slow or medium. Available water capacity is low or very low.

Most areas of this soil are used for woodland. A few areas are used for cultivated crops and wild blueberry production. A few areas are in urban uses, such as building sites, and a few are used as a source of sand.

This soil is well suited for softwood production, especially white pine. White pine, red spruce, and hemlock are the main tree species. Pines respond well to management on this soil. The main limitation of this soil is droughtiness. It sometimes causes seedling mortality of 50 percent or more during dry years. However, reproduction is usually adequate to restock sites. If seedlings are planted, it should be in spring when soil moisture levels are highest. Using containerized seedlings may also reduce seedling mortality on this soil.

In areas of wild blueberry plants, yields are fair to poor. During dry years, yields will be reduced by droughtiness. This soil has very few or no surface stones, and is well suited for flail mowing and mechanical harvesting. With irrigation, control of weeds, insects, and diseases, and fertility management, the soil will produce good yields of blueberries.

This soil is fairly well suited for cultivated crops. The main limitation is droughtiness. The soil will only produce fair yields of cultivated crops even with moisture-conserving measures. Improved yields can be obtained by the addition of organic matter, maintaining adequate fertility, and irrigation. Deep-rooted legumes will produce fair yields on this soil if fertility is maintained. Irrigation is needed for high yields of grasses and legumes.

This soil has few limitations as a site for dwellings and small commercial buildings, but it has severe limitations for septic tank absorption fields due to rapid percolation and possible contamination of ground water. The soil is droughty for lawns and landscaping. It is a good source of sand and roadfill material.

AdC—Adams loamy sand, 8 to 15 percent slopes

This very deep, strongly sloping, somewhat excessively drained soil is on side slopes of outwash plains and on kame terraces. Slopes are smooth and convex. Areas are irregularly shaped and range from 3 to 50 acres.

Typically, the surface layer is black, highly decomposed organic material 1 inch thick, underlain by 2 inches of light gray loamy sand. The subsoil is 21 inches thick. It is dark reddish brown to yellowish red loamy sand in the upper part and yellowish brown to light olive brown sand in the lower part. The substratum is light brownish gray sand to a depth of 65 inches or more.

Included with this soil in mapping are small areas of Colton soils in slightly higher landscape positions than Adams soils, moderately well drained Sheepscot soils in slightly lower landscape positions than Adams or Colton soils, and an occasional wet pocket of Kinsman soils. These areas make up about 10 percent of the mapped acreage. In some areas this soil is underlain by silt loam or silty clay loam at a depth of less than 40 inches. These areas make up about 5 percent of the mapped acreage.

Depth to a seasonal high water table in this Adams soil is commonly more than 6 feet. Permeability of the

soil is rapid or very rapid. Surface runoff is slow or medium. Available water capacity is low or very low.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production. A few areas are in urban uses, such as building sites, and a few are a source of sand.

This soil is well suited for softwood production, especially white pine. White pine, red spruce and hemlock are the main tree species. Pines respond well to management on this soil. The major limitation of this soil is droughtiness. It sometimes causes seedling mortality of 50 percent or more during dry years. However, natural reproduction is usually adequate to restock sites. If seedlings are planted, it should be in spring when soil moisture levels are highest. Using containerized seedlings may also reduce seedling mortality on this soil.

In areas of wild blueberry plants, yields are fair to poor. During dry years, yields will be reduced by droughtiness. The soil has very few or no surface stones, and it is well suited for flail mowing and mechanical harvesting. With irrigation, control of weeds and insects, and fertility management, the soil will produce good yields of blueberries.

This soil is fairly well suited for cultivated crops. The main limitation is droughtiness. The soil will only produce fair yields of cultivated crops even with moisture-conserving measures. Improved yields can be obtained by the addition of organic matter, fertilizer, and irrigation. Conservation measures such as contour farming and stripcropping should be used on steeper slopes to reduce erosion, especially on irrigated areas. Deep-rooted legumes will produce fair yields on this soil if fertility is maintained. Irrigation is needed for high yields of grasses and legumes.

The soil has moderate limitations as a site for dwellings and small commercial buildings because of slope. It has severe limitations for septic tank absorption fields because of slope, rapid percolation, and possible contamination of ground water. The soil is droughty for lawns and landscaping. It is a good source of sand and roadfill material.

Bd—Biddeford muck

This very deep, nearly level, very poorly drained soil is in depressions on coastal lowlands and in the larger river valleys. Slopes are smooth and linear or slightly concave. Slope ranges from 0 to 1 percent. Areas of this unit are oval or elongated and range from 3 to 50 acres.

Typically, the surface is covered with a mat of mosses and roots 3 inches thick. The surface layer is black muck 9 inches thick underlain by mottled, gray silty clay loam 4 inches thick. The subsoil is 12 inches thick. It is mottled, olive gray silty clay. The substratum is mottled, olive gray and gray silty clay to a depth of 65 inches or more.

Included with this soil in mapping are small areas of poorly drained Scantic soils at the edges of the unit and very poorly drained Wonsqueak and Bucksport soils in the deeper depressions. Also included are very poorly drained alluvial soils along streams. These soils make up about 15 percent of the mapped acreage.

A seasonal high water table is commonly 1 foot above to 6 inches below the surface of this Biddeford soil from early fall to early summer. Permeability is moderate to moderately slow in the surface layer and slow to very slow in the subsoil and substratum. Surface runoff is very slow, or the soil is intermittently ponded. Because of wetness, most root growth is restricted to the organic surface layer and upper mineral layer. Available water capacity is high.

Most areas of the soil are wetland or woodland.

This soil has good potential for wetland wildlife habitat. With water control, good habitat for waterfowl, muskrats, and other wetland wildlife can be maintained.

This soil is poorly suited for woodland. The main tree species are black spruce, balsam fir, tamarack, red maple, and northern white cedar. The main limitation is the high water table. Because of it, trees are shallow rooted, short lived, and slow growing. Seedling mortality is severe because of the high water table and ponding of the soil. Windthrow is severe on the soil because of the shallow rooting. Clearcutting or strip cutting will expose fewer trees to the wind and will reduce windthrow. Because of the high water table, harvesting operations on this soil should be restricted to winter months when the soil is frozen.

The high water table and clayey substratum make this soil poorly suited for cropland, recreational uses, and urban uses.

BfB—Brayton fine sandy loam, 0 to 8 percent slopes

This very deep, nearly level to gently sloping, poorly drained soil is on glacial till uplands. It is in depressions, along drainageways, and at the foot of slopes where it receives runoff from higher elevations. Slopes are smooth and concave. Areas are irregularly shaped and range from 3 to 100 acres.

Typically the surface layer is very dark grayish brown fine sandy loam 9 inches thick. The subsoil is 9 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown fine sandy

loam in the lower part. The substratum is firm to very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Included with this soil in mapping are areas of moderately well drained Dixfield soils and somewhat poorly drained Colonel soils on small knolls and very poorly drained till soils and Wonsqueak soils in depressions. These areas make up about 10 percent of the mapped acreage. Also included are a few areas of poorly drained soils with a surface layer of loamy sand and very stony Brayton soils with slopes of more than 8 percent. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly within 1 foot of the surface of this Brayton soil from late fall to late spring. Permeability is moderate or moderately rapid in the surface layer and subsoil and slow or very slow in the substratum. Surface runoff is slow or medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this soil are idle land that was used for pasture and hay, or areas that have reverted to woodland. A few areas are used for hay or pasture.

The soil is poorly suited for pasture and hayland. Harvesting of forage crops is limited to the driest part of the season because of the seasonal high water table. The soil is also difficult to manage in the spring because of the high water table. Subsurface drainage will lower the water table.

This soil is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant natural reproduction of spruce and fir make this soil best suited for pulpwood production. The main limitation is the high water table. Seedling mortality is moderate on this soil because of the high water table. Plant competition is severe. Site preparation and weeding may be needed to suppress competition for the desired softwood species. Because of the high water table, equipment is difficult to operate on the soil except during drier parts of the year or when the soil is frozen. Windthrow is severe on this soil because the high water table and compact substratum cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the prevailing wind and help to prevent windthrow.

The seasonal high water table is the major limitation of this soil for urban uses. Sites for dwellings, septic tank absorption fields, or small commercial buildings should be located on better drained inclusions in the unit.

BgB—Brayton fine sandy loam, 0 to 8 percent slopes, very stony

This very deep, nearly level to gently sloping, poorly drained soil is on glacial till uplands. It is in depressions, along drainageways and at the foot of slopes where it receives runoff from higher elevations. Slopes are smooth and concave. Areas are irregularly shaped and range from 3 to 250 acres. Up to 3 percent of the surface of the soil is covered with stones.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black highly decomposed organic material, over 5 inches of very dark gray fine sandy loam and mottled, gray gravelly fine sandy loam. The subsoil is 13 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm to very firm, mottled olive fine sandy loam to a depth of 65 inches or more.

Included with the soil in mapping are areas of moderately well drained Dixfield soils and somewhat poorly drained Colonel soils on small knolls and very poorly drained till soils and Wonsqueak soils in depressions. These areas make up 15 percent of the mapped acreage. Also included are a few areas of poorly drained soils that have a surface layer of loamy sand and Brayton soils with slopes of more than 8 percent. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly within 1 foot of the surface of this Brayton soil from late fall to late spring. Permeability is moderate or moderately rapid in the surface layer and subsoil and slow or very slow in the substratum. Runoff is slow to medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this soil are used for woodland. A few acres are shrub vegetation.

This soil is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant natural reproduction of spruce and fir make this soil well suited for pulpwood production. The main limitations of this soil are the high water table and plant competition. Seedling mortality is moderate on this soil because of the high water table. Plant competition is severe. Site preparation and weeding may be needed to suppress competition for the desired softwood species. Because of the high water table, equipment is difficult to operate on this soil except during the drier parts of the year or when the soil is frozen. Windthrow is severe on this soil because

the high water table and compact substratum cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the wind and help to prevent windthrow.

This soil is poorly suited for hay and pasture and cropland because of stones on the surface and the high water table.

The seasonal high water table is the major limitation of this soil for most urban uses. Sites for dwellings, septic tank absorption fields, or small commercial buildings should be located on better drained inclusions in the unit.

BhB—Brayton fine sandy loam, 0 to 8 percent slopes, rubbly

This very deep, nearly level to gently sloping, poorly drained soil is on glacial till uplands. It is in depressions, along drainageways, and at the foot of slopes where it receives runoff from higher elevations. Slopes are smooth and concave. Areas are irregularly shaped and range from 3 to 100 acres. Stones and boulders cover 15 to 75 percent of the surface.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black highly decomposed organic material over 5 inches of very dark gray fine sandy loam and mottled, gray gravelly fine sandy loam. The subsoil is 13 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown in the lower part. The substratum is firm to very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Included with the soil in mapping are areas of moderately well drained Dixfield soils and somewhat poorly drained Colonel soils on small knolls and very poorly drained till soils and Wonsqueak soils in depressions. These areas make up about 10 percent of the mapped acreage. Brayton soils with an extremely stony, extremely bouldery, very stony, or very bouldery surface are included in mapping. These areas make up about 15 percent of the mapped acreage. Also included are areas of poorly drained soils that have a surface layer of loamy sand and Brayton soils with slopes of more than 8 percent. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly within 1 foot of the surface of this Brayton soil from late fall to late spring. Permeability is moderate or moderately rapid in the surface layer and subsoil and slow to very slow in the substratum. Runoff is slow to medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this soil are woodland.

This soil is poorly suited for woodland, but if used for this purpose it is best suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The main limitations of this soil are stones and boulders on the surface and the high water table. Equipment use is severely restricted on this soil because of the stones and boulders and because of the high water table except during drier parts of the year or when the soil is frozen. Windthrow is severe on this soil because the high water table and compact substratum cause trees to be shallow rooted. Clearcutting or strip cutting will expose fewer trees to the wind and help prevent windthrow. Seedling mortality is moderate on this soil because of wetness. Plant competition is severe.

This soil is very poorly suited for hay and pasture and cropland because of stones and boulders on the surface and the high water table.

The seasonal high water table is the major limitation of this soil for most urban uses. Sites for dwellings, septic tank absorption fields, or small commercial buildings should be located on better drained inclusions in the unit.

BSB—Brayton-Colonel association, gently sloping, very stony

This very deep, nearly level to gently sloping unit is on glacial till uplands. It is in valleys and on lower toe slopes of till ridges. The Brayton soils are in a slightly lower position on the landscape than the Colonel soils. Up to 3 percent of the surface of the unit is covered with stones. Slopes are mainly smooth and concave. Slope ranges from 0 to 8 percent for Brayton soils and 3 to 8 percent for Colonel soils. Areas of the unit are irregularly shaped and range from 15 to 250 acres.

This unit consists of about 50 percent poorly drained Brayton soils, 30 percent somewhat poorly drained Colonel soils, and 20 percent other soils.

Typically, the surface of the Brayton soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black, highly decomposed organic material, over 5 inches of very dark gray fine sandy loam and mottled, gray gravelly fine sandy loam. The subsoil is 13 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm to very firm, mottled olive fine sandy loam to a depth of 65 inches or more.

Typically the surface of the Colonel soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dusky red, highly decomposed organic material underlain by 1 inch of

light gray fine sandy loam. The subsoil is 17 inches thick. It is dark reddish brown to dark brown fine sandy loam in the upper part and mottled, yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is firm or very firm, mottled olive fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of extremely stony Brayton and Colonel soils. These areas make up about 10 percent of the mapped acreage. Also included are moderately well drained Dixfield soils on hummocks and very poorly drained till soils and Bucksport and Wonsqueak soils in deeper pockets. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly within 1 foot of the surface in the Brayton soil and commonly at a depth of 1 to 2 feet in the Colonel soil from late fall to late spring. Permeability of the Colonel soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Permeability of the Brayton soil is moderate or moderately rapid in the surface layer and subsoil and slow or very slow in the substratum. Surface runoff is slow or medium on both soils. Available water capacity is moderate for both soils. Rooting depth in these soils is restricted by the firm substratum and high water table.

Most areas of the unit are used for woodland.

This unit is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant natural reproduction of spruce and fir make this unit best suited for pulpwood production. The main limitations of this unit are the high water table and plant competition. Seedling mortality is moderate on the Brayton soil because of the high water table. Plant competition is severe on this unit, and site preparation and weeding may be needed to suppress competition to the desired softwood species. Because of the high water table, equipment is difficult to operate on this unit except during the drier parts of the year or when the soil is frozen. Windthrow is severe on this soil because the high water table and compact substratum cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the wind and help to prevent windthrow.

This unit is a fair to poor source of roadfill material. The high water table is the major limitation for this use.

This unit is a poor site for roads because of the high water table and frost action. A coarse grained subgrade to frost depth is needed to prevent frost action. Roadfill is needed to raise the road base above the seasonal water table.

BTB—Brayton-Colonel association, gently sloping, rubbly

This very deep, nearly level to gently sloping unit is on glacial till uplands. It is in valleys and on lower toe slopes of till ridges. The Brayton soils are in a slightly lower position on the landscape than the Colonel soils. Stones and boulders cover 15 to 75 percent of the surface of the unit. Slopes are mainly smooth and concave. Slope ranges from 0 to 8 percent on Brayton soils and 3 to 8 percent on Colonel soils. Areas of the unit are irregularly shaped and range from 15 to 200 acres.

This unit consists of about 50 percent poorly drained Brayton soils, 30 percent somewhat poorly drained Colonel soils, and 20 percent other soils.

Typically, the surface of the Brayton soil is covered with a layer of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black, highly decomposed organic material, over 5 inches of very dark gray fine sandy loam and mottled, gray gravelly fine sandy loam. The subsoil is 13 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm to very firm, mottled olive fine sandy loam to a depth of 65 inches or more.

Typically, the surface of the Colonel soil is covered with a layer of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dusky red, highly decomposed organic material underlain by 1 inch of light gray fine sandy loam. The subsoil is 17 inches thick. It is dark reddish brown too dark brown fine sandy loam in the upper part and mottled, yellowish brown to light olive brown fine sandy loam in the lower part. The subsoil is firm or very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of very stony and extremely stony Brayton and Colonel soils. These areas make up about 10 percent off the mapped acreage. Also included are areas of very poorly drained rubbly till soils and rubbly organic soils in deeper pockets and an occasional knoll of moderately well drained Dixfield soil. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly within 1 foot of the surface of the Brayton soil and commonly at a depth of 1 to 2 feet in the Colonel soil from late fall to late spring. Permeability of the Colonel soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Permeability of the Brayton soil is moderate or moderately rapid in the surface layer

and subsoil and slow or very slow in the substratum. Surface runoff is slow to medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of the unit are used for woodland.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main tree species are red spruce, balsam fir, and red maple . The main limitations are stones and boulders on the surface and the high water table. Equipment use is severely restricted on this soil because of the stones and boulders. Windthrow is severe because the high water table and compact substratum cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the wind and help to prevent windthrow. Seedling mortality is moderate on the unit because of the high water table. Plant competition is severe on this unit, and site preparation and weeding may be needed to suppress competition to the desired softwood species. Because of the high water table, equipment is difficult to operate on this unit except during the drier parts of the year or when the soil is frozen.

This unit is a poor source of roadfill material because of the high water table and the large stones and boulders on the surface.

This unit is a poor site for roads because of frost action and the high water table. A coarse grained subgrade to frost depth is needed to prevent frost action. Roadfill is also needed to raise the road base above the seasonal water table.

BwC—Buxton silt loam, 8 to 15 percent slopes

This very deep, strongly sloping, moderately well drained soil is in coastal lowlands and river valleys. Slopes are smooth and convex. Areas are irregularly shaped and range from 5 to 50 acres.

Typically, the surface layer is dark brown silt loam about 8 inches thick. The subsoil is about 27 inches thick. It is dark yellowish brown silt loam in the upper part; mottled, light olive brown silty clay loam in the middle part; and mottled, olive silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Included with this soil in mapping are areas of Buxton soils with slopes more than 15 percent along drainageways and somewhat poorly drained Lamoine soils and poorly drained Scantic soils in less sloping areas and in depressions. These areas make up about 10 percent of the mapped acreage. Also included are soils formed in marine sediments with 18 to 35 percent clay, a few areas of very stony Buxton soils, and an occasional area of Dixfield soil on knolls or small ridges. Also included are small areas of soils with a surface layer and subsoil of loamy sand to sandy loam surface layer and a substratum of silt loam to silty clay loam. These areas are common inclusions where the Buxton soils are adjacent to outwash soils. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 3 feet in this Buxton soil from late fall to late spring. Permeability of this soil is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil and in the substratum. Runoff is medium or rapid. Available water capacity is high.

Most areas of this soil are used for woodland, much of which was formerly hay and pastureland. Some areas are used for hay and pasture or are idle fields that are reverting to woodland.

This soil is well suited for woodland and is best suited for softwood production. The main tree species are white spruce, balsam fir, hemlock, and red maple. White pine planted on this soil produce well, but require considerable management to reduce competition from other species. The abundant natural reproduction of spruce and fir makes the soil well suited for pulpwood production. The main limitations of this soil are the high water table and plant competition. Windthrow hazard is moderate on this soil because the high water table causes trees to be shallow rooted. Strip cutting or clear cutting will expose fewer trees to the wind and will help to prevent windthrow. Competition from hardwoods may require suppression by weeding and thinning to enhance the growth of softwood stands.

This soil is poorly suited for cropland and hay and pasture. The high water table and erosion hazard are the main limitations. Diversion ditches, grassed waterways, and stripcropping help to control erosion and remove surface water. Grazing in the spring when the soil is wet will cause soil compaction. The high water table may limit the use of equipment on the soil during the early spring and fall. Hay cutting operations may be delayed by wetness.

This soil has severe limitations for most commercial and residential uses because of the high water table, slow permeability, frost action, and slope.

BwD—Buxton silt loam, 15 to 30 percent slopes, eroded

This very deep, hilly, moderately well drained soil is in coastal lowlands and river valleys that are dissected by streams and drainageways, many of which have a

series of eroded gullies. Slopes are complex. Areas range from 5 to 50 acres.

Typically the surface layer is dark brown silt loam about 4 inches thick. The subsoil is about 27 inches thick. It is dark yellowish brown silt loam in the upper part; mottled,light olive brown silty clay loam in the middle part; and mottled, olive silty clay in the lower part. The substratum is mottled,olive gray silty clay to a depth of 65 inches or more.

Included with this soil in mapping are small areas of Nicholville soils and soils formed in marine sediments that have 18 to 35 percent clay. Also included are Buxton soils with complex slopes of more than 30 percent. Included soils make up about 25 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 3 feet in this Buxton soil from late fall to late spring. Permeability of the soil is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil and in the substratum. Runoff is rapid. Available water capacity is high.

Most areas of this soil are woodland. Some areas are in hay and pasture or idle fields that are reverting to woodland.

This soil is well suited for woodland and is best suited for softwood production. The main tree species are white spruce, balsam fir, hemlock, and red maple. White pine plantings on this soil produce well, but require considerable management to reduce competition from other species. The abundant natural reproduction of spruce and fir makes this soil well suited for pulpwood production. The main limitations are the high water table, plant competition, and erosion hazard. Windthrow hazard is moderate on this soil because the high water table cause trees to be shallow rooted. Strip cutting or clearcutting will expose fewer trees to the wind and will help to prevent windthrow. Competition from the hardwoods may require suppression by weeding and thinning to enhance the growth of softwood stands. Erosion can occur on skid trails and roads. Erosion can be reduced by locating the skid trails and roads on the contour and by using water bars on roads.

This soil is poorly suited for hay and pasture. The main limitations are erosion hazard, slope, and the high water table. Use of proper stocking rates, pasture rotation, and restricted grazing during wet periods help to keep the pasture in good condition and to protect the soil from erosion. Equipment use is restricted by the steep slopes.

This soil has severe limitations for commercial and residential uses because of the high water table, slow permeability, frost action, and slope.

Ch—Charles silt loam

This very deep, nearly level, poorly drained soil is on flood plains along the larger streams and rivers. Areas are long and narrow or irregularly shaped and range from 3 to 50 acres. Slopes are smooth and slightly concave. Slope ranges from 0 to 2 percent.

Typically, the surface layer is a mottled, dark grayish brown silt loam, 6 inches thick. The substratum to a depth of 65 inches or more is mottled, grayish brown to olive gray silt loam in the upper part; mottled, gray very fine sandy loam to mottled,olive gray loamy very fine sand in the middle part; and greenish gray very fine sandy loam in the lower part.

Included with this soil in mapping are areas of sandy, poorly drained alluvial soils and small areas of sandy or silty, somewhat poorly drained and moderately well drained alluvial soils. Also included are small areas of very poorly drained alluvial soils and Wonsqueak soils in depressions. A few areas have alluvial soils underlain by clay or gravel. Included soils make up about 30 percent of this unit.

A seasonal high water table is commonly within 1.0 feet of the surface of this Charles soil from fall to late spring. This soil is subject to occasional, brief periods of flooding during periods of high rainfall in March through October. Permeability is moderate in the silty layers and moderate to very rapid in the stratified layers of sand. Surface runoff is slow. Available water capacity is high.

Most areas of the soil are idle land. A few areas are used for hay and pasture, woodland, and wildlife habitat.

This soil is poorly suited for hay and pasture. The main limitations agree the high water table and seasonal flooding. In the drier part of the year, some areas are used for hay or pasture. Subsurface drainage would lower the water table, but outlets are usually not available for drainage because of the low position of the soil on the landscape.

This soil is well suited for woodland and best suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The natural reproduction of spruce and fir makes these soils well suited for pulpwood production. The main limitations are the high water table, flooding, and plant competition. Seedling mortality is moderate on these soils because of the high water table and flooding, which also limit the use of equipment on the soil

except during the drier part of the year or when the soil is frozen. Plant competition is severe. Hardwood suppression and thinning are often needed to enhance the softwood stands. Windthrow is moderate on this soil because the high water table cause trees to be shallow rooted.

Many areas that are idle land serve as wildlife habitat. The soil produces fair habitat for woodland wildlife but needs management to maintain most productive and desirable vegetation. With water control, the soil could be managed for wetland wildlife and produce good habitat for wetland species.

CoB—Colton gravelly sandy loam, 0 to 8 percent slopes

This very deep, nearly level to gently sloping, excessively drained soil is on glacial outwash plains and kame terraces. Slopes are smooth and linear to slightly convex. Areas are oval or irregularly shaped and range from 5 to 150 acres.

Typically, the surface layer is 1 inch of black highly decomposed organic material underlain by dark reddish brown gravelly sandy loam 1 inch thick and brown gravelly sandy loam 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown to yellowish red gravelly coarse sandy loam in the upper part, strong brown gravelly loamy sand in the middle part, and dark yellowish brown to olive brown gravelly sand in the lower part. The substratum is stratified olive extremely gravelly and very gravelly coarse sand to a depth of 65 inches or more.

Included with this soil in mapping are small areas of moderately well drained Sheepscot soils in slightly lower positions than the Colton soils and poorly drained Kinsman soils and very poorly drained Bucksport and Wonsqueak soils in depressions or kettle holes. These soils make up about 10 percent of the mapped acreage. Also included are small areas of Adams soil on the edges of some units and very stony Colton soils. These areas make up about 5 percent of the mapped acreage.

Depth to a seasonal high water table in this Colton soil is commonly more than 6 feet. Permeability is rapid or very rapid. Available water capacity is very low. Surface runoff is slow.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production, cropland, and hay and pasture. This soil is also used extensively as a source of sand and gravel.

This soil is well suited for woodland and is best suited for softwood production, especially white pine. White pine, red spruce, and hemlock are the main tree species. Pines respond well to management on this soil. The main limitation is droughtiness. Due to the droughtiness, seedling mortality of 50 percent or more may occur during dry years. However, natural reproduction is usually adequate to restock sites. If seedlings are planted, it should be done in spring when soil moisture levels are highest. Using containerized seedlings may also reduce seedling mortality.

This soil produces fair to poor yields of blueberries. During dry years, yields will be reduced because of droughtiness. This soil has very few to no surface stones, and it is well suited for flail mowing and mechanical harvesting. With irrigation, control of weeds and insects, and fertility management, the soil will produce good yields of blueberries.

The soil is poorly suited for cropland and hay and pasture. The main limitation is droughtiness. Irrigation is necessary to produce good yields. Yields are also improved by the addition of organic matter and good fertility management. When this soil is used for pasture, protection from overgrazing is especially important because of droughtiness.

This soil has few limitations as a site for dwellings, but the rapid or very rapid permeability of the substratum may cause pollution of ground water if the soil is used for septic tank absorption fields. The soil is droughty for lawns and landscaping. The soil is a good source of gravel.

CoC—Colton gravelly sandy loam, 8 to 15 percent slopes

This very deep, strongly sloping, excessively drained soil is on the sides of outwash plains, kames, and eskers. Slopes are smooth and convex. Areas are irregularly shaped but are mostly elongated. They range from 3 to 50 acres.

Typically, the surface layer is 1 inch of black highly decomposed organic material underlain by dark reddish brown gravelly sandy loam 1 inch thick and brown gravelly sandy loam 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown to yellowish red gravelly coarse sandy loam in the upper part, strong brown gravelly loamy sand in the middle part, and dark yellowish brown to olive brown gravelly sand in the lower part. The substratum is stratified olive extremely gravelly and very gravelly coarse sand to a depth of 65 inches or more.

Included with this soil in mapping are small areas of moderately well drained Sheepscot soils in slightly lower positions than the Colton soils and poorly drained

Kinsman soils and very poorly drained Bucksport and Wonsqueak soils in depressions or kettle holes. These soils make up about 10 percent of the mapped acreage. Also included are small areas of Adams soil on the edges of some units and very stony Colton soils. These areas make up about 5 percent of the mapped acreage.

Depth to a seasonal high water table in this Colton soil is commonly more than 6 feet. Permeability is rapid or very rapid. Available water capacity is very low. Surface runoff is slow.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production, cropland, and hay and pasture. This soil is also used extensively as a source of gravel.

This soil is well suited for woodland and is best suited for softwood production, especially white pine. White pine, red spruce, and hemlock are the main tree species. Pines respond well to management on this soil. The main limitation is droughtiness. Due to the droughtiness, seedling mortality of 50 percent or more may occur during dry years. However, natural regeneration is usually adequate to restock sites. If seedlings are planted, it should be done in spring when the moisture levels are highest. Using containerized seedlings may also reduce seedling mortality.

This soil will produce fair to poor yields of blueberries. During dry years, yields will be reduced because of droughtiness. This soil has very few to no surface stones and is well suited for flail mowing and mechanical harvesting. With irrigation, control of weeds, insects, and diseases, and fertility management, the soil will produce good yields of blueberries.

The soil is poorly suited for cropland and hay and pasture. The main limitations are droughtiness and slope. Irrigation is necessary to produce good yields. Erosion control measures such as farming on the contour, conservation tillage, and stripcropping are needed on the soil to prevent erosion, especially on irrigated areas. Irrigation, additions of organic matter, and proper liming and fertilization are necessary for production of forage crops. Where this soil is used for pasture, protection from overgrazing is especially important because of droughtiness.

Slope is the major limitation of the soil as a site for dwellings or small commercial buildings. Designing the areas to conform to the landscape and shaping the land will help to overcome this limitation. The rapid or very rapid permeability in the substratum may cause ground-water pollution where the soil is used for septic tank absorption fields. Slope is also a limitation for septic tank absorption fields. The soil is a good source of gravel.

CoE—Colton gravelly sandy loam, 15 to 45 percent slopes

This very deep, moderately steep to steep, excessively drained soil is on the sides of eskers, kames, and outwash plains. Slopes are smooth, short, and convex. Areas are mainly long and narrow and range from 3 to 30 acres.

Typically, the surface layer is 1 inch of black highly decomposed organic material underlain by dark reddish brown gravelly sandy loam 1 inch thick and brown gravelly sandy loam 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown to yellowish red gravelly coarse sandy loam in the upper part, strong brown gravelly loamy sand in the middle part, and dark yellowish brown to olive brown gravelly sand in the lower part. The substratum is stratified olive extremely gravelly and very gravelly coarse sand to a depth of 65 inches or more.

Included with the soil in mapping are a few areas of Adams soil on the edges of the unit, very stony Colton soils, and Colton soils with short steep slopes of more than 45 percent. Included soils make up about 10 percent of the mapped acreage.

Depth to a seasonal high water table in this Colton soil is commonly more than 6 feet. Permeability is rapid or very rapid. Available water capacity is very low. Surface runoff is slow.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production. This soil is also used extensively as a source of gravel.

This soil is well suited for woodland and is best suited for softwood production, especially white pine. White pine, red spruce, and hemlock are the main tree species. Pines respond well to management on this soil. The main limitations are droughtiness and slope. Due to the droughtiness, seedling mortality of 50 percent or more may occur during dry years. However, natural regeneration is usually adequate to restock sites. If seedlings are planted, it should be in spring when the soil moisture levels are highest. Using containerized seedlings may also reduce seedling mortality. On Colton soils with slopes of more than 35 percent, equipment is difficult to operate.

This soil will produce fair to poor yields of blueberries. During dry years, yields will be reduced because of droughtiness. This soil has few or no surface stones, and equipment such as flail mowers

and mechanical harvesters can be used, but only in the less sloping areas.

CRE—Colton-Adams association, steep

This unit consists of very deep, moderately steep and steep soils on the side slopes of outwash plains, kames, eskers, and kame terraces. Slopes are smooth and convex. Slope ranges from 15 to 45 percent. The areas are oval and elongated on the side slopes of plains, kames, and terraces and are long and narrow on eskers. Areas of the unit range from 15 to 100 acres.

This unit consists of about 55 percent excessively drained Colton soils, 30 percent somewhat excessively drained Adams soils, and 15 percent other soils.

Typically, the surface layer of the Colton soil has 1 inch of black highly decomposed organic material underlain by dark reddish brown gravelly sandy loam 1 inch thick and brown gravelly sandy loam 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown to yellowish red gravelly coarse sandy loam in the upper part, strong brown gravelly loamy sand in the middle part, and dark yellowish brown to olive brown, gravelly sand in the lower part. The substratum is stratified olive extremely gravelly and very gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Adams soil is black, highly decomposed organic material 1 inch thick underlain by 2 inches of light gray loamy sand. The subsoil is 21 inches thick. It is dark reddish brown to yellowish red loamy sand in the upper part and yellowish brown to light olive brown sand in the lower part. The substratum is light brownish gray sand to a depth of 65 inches or more.

Included with this unit in mapping are small areas of moderately well drained, sandy soils and moderately well drained Sheepscot soils in slightly lower positions than Colton and Adams soils; poorly drained Kinsman soils in depressions; and very poorly drained, sandy or gravelly soils and Wonsqueak and Bucksport soils in deeper depressions or kettle holes. These soils make up about 10 percent of the mapped acreage. Also included are occasional areas of outwash soils that are underlain at depths of less than 40 inches by silt loam, silty clay loam, or bedrock and areas that have a very stony or extremely stony surface. These areas make up about 5 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of more than 6 feet in the Colton and Adams soils. Permeability is rapid or very rapid in both soils. Surface runoff is slow on the Colton soils and medium on the Adams soils. Available water capacity is very low in the Colton soils and low in the Adams soils.

Most areas of this unit are used for woodland. A few areas are used for wild blueberry production or as a source of sand and gravel.

This unit is well suited for woodland and is best suited for softwood production, especially white pine. White pine, red spruce, and hemlock are the main tree species. Pines respond well to management on these soils. The main limitations are droughtiness and slope. Due to droughtiness, seedling mortality of 50 percent or more may occur during dry years. However, natural reproduction is usually adequate to restock the sites. If seedlings are planted, it should be in spring when soil moisture levels are highest. Using containerized seedlings may also reduce seedling mortality. Equipment is difficult to use on the steeper slopes.

Yields of wild blueberries are poor to fair. The major limitation is droughtiness. With irrigation, control of weeds, insects, and disease, and fertility management, good yields of blueberries can be produced. This unit has few or no surface stones and is well suited for flail mowing and mechanical harvesting, but equipment is difficult to use on the steeper slopes.

This unit is a good source of roadfill material. The Colton soils are a good source of gravel. The Adams soils are a good source of sand.

The unit is a poor site for roads because of slope. Roads on this unit should be designed on the contour to prevent erosion.

CSC—Colton-Adams-Sheepscot association, strongly sloping

This unit consists of very deep, nearly level to strongly sloping soils on outwash plains, kames, eskers, and kame terraces. Colton soils mainly make up the central part of the unit. Adams soils are mainly at the edge of the unit. Sheepscot soils are in slightly lower positions on the landscape than the Colton and Adams soils. Slopes are smooth and are mainly convex on the Colton and Adams soils and slightly concave on the Sheepscot soils. Slopes range from 0 to 15 percent on the Colton and Adams soils and from 0 to 8 percent on the Sheepscot soils. The areas of the unit are mainly oval on outwash plains and kames, long and narrow on eskers, and elongated on terraces. The areas range from 15 to 200 acres.

This unit consists of about 40 percent excessively drained Colton soils, 25 percent somewhat excessively drained Adams soils, 20 percent moderately well drained Sheepscot soils, and 15 percent other soils.

Typically, the surface layer of the Colton soil has 1 inch of black, highly decomposed organic material underlain by dark reddish brown gravelly sandy loam 1 inch thick and brown gravelly sandy loam 2 inches

thick. The subsoil is 16 inches thick. It is dark reddish brown to yellowish red gravelly coarse sandy loam in the upper part, strong brown gravelly loamy sand in the middle part, and dark yellowish brown to olive brown gravelly sand in the lower part. The substratum is stratified olive very gravelly and extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Adams soil is black highly decomposed organic material 1 inch thick underlain by 2 inches of light gray loamy sand. The subsoil is 21 inches thick. It is dark reddish brown to yellowish red loamy sand in the upper part and yellowish brown to light olive brown sand in the lower part. The substratum is light brownish gray sand to a depth of 65 inches or more.

Typically, the surface layer of the Sheepscot soil is covered with a mat of needles, leaves, and twigs 1 inch thick. The surface layer is 2 inches of black highly decomposed organic material over 2 inches of grayish brown sandy loam. The subsoil is 20 inches thick. It is reddish brown sandy loam to dark yellowish brown gravelly sandy loam in the upper part and mottled, olive brown very gravelly loamy sand in the lower part. The substratum is dark grayish brown very gravelly coarse sand in the upper part and olive gray extremely gravelly coarse sand in the lower part to a depth of 65 inches or more.

Included with this unit in mapping are areas of moderately well drained sandy soils, poorly drained Kinsman soils in depressions, and very poorly drained sandy or gravelly soils and Wonsqueak and Bucksport soils in deeper depressions or kettle holes. These areas make up about 10 percent of the mapped acreage. Also included are occasional areas of outwash soils that are underlain at depths of less than 40 inches by silt loam, silty clay loam, or bedrock and areas that have a very stony or extremely stony surface. These areas make up about 5 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of more than 6 feet in the Colton and Adams soils and 1.5 to 2 feet in the Sheepscot soil from late fall to early spring. Permeability is rapid or very rapid in the Colton and Adams soils. In the Sheepscot soil, it is moderate or moderately rapid in the surface layer and subsoil and rapid or very rapid in the substratum. Surface runoff is slow on the Colton soils and slow or medium on the Adams and Sheepscot soils. Available water capacity is very low in the Colton soil, low or very low in the Adams soil, and low in the Sheepscot soil.

Most areas of this unit are used for woodland. A few areas are used for wild blueberry production and as a source of sand and gravel.

This unit is well suited for woodland and best suited for softwood production, especially white pine. White pine, red spruce, and hemlock are the main tree species. Pines respond well to management on these soils. The main limitation is droughtiness. It sometimes causes seedling mortality of 50 percent or more during dry years. However, natural reproduction is usually adequate to restock the sites. If seedlings are planted, it should be done in spring when soil moisture levels are highest. Using containerized seedlings may also reduce seedling mortality.

In areas of wild blueberry plants, yields are poor to fair. The major limitation is droughtiness. With irrigation, control of weeds, insects, and disease, and fertility management, good yields of blueberries can be produced. This unit has few or no surface stones and is well suited for flail mowing and mechanical harvesting.

The Colton and Adams soils are good sources of roadfill material. Because of the high water table, Sheepscot soils are fair as a source of roadfill material. The Colton and Sheepscot soils are good sources of gravel. The Adams soils are a good source of sand.

The main limitation of this unit as a site for roads is the high water table in the Sheepscot soils. Additional fill material is needed in areas of Sheepscot soils to raise the road base above the seasonal high water table.

DaB—Dixfield fine sandy loam, 3 to 8 percent slopes

This very deep, gently sloping, moderately well drained soil is on the crests of glacial till ridges. Slopes are smooth and convex. Areas are irregularly shaped and range from 3 to 50 acres.

Typically, the surface layer is dark brown fine sandy loam about 6 inches thick. The subsoil is 20 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this soil in mapping are areas of somewhat poorly drained Colonel soil and poorly drained Brayton soil in drainageways and depressions and well drained Marlow soil on knolls and upper slopes. These areas make up about 10 percent of the mapped acreage. Also included are small areas of shallow, somewhat excessively drained Lyman soil and moderately deep, well drained Tunbridge soil on crests of ridges and upper side slopes. Dixfield soils with

slopes of more than 8 percent or a very stony surface are also included in mapping. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in this Dixfield soil from late fall to spring. Permeability is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this soil are used for hay and pasture. Some areas are used for wild blueberry production, cropland, and as sites for residential development. A few areas have reverted to woodland or are idle land that is reverting to woodland.

This soil is well suited for cropland and hay and pasture. It has few limitations. Erosion control practices such as conservation tillage and contour farming may be needed on the steeper slopes to prevent erosion. Drainage is needed to use equipment on some inclusions of soils with a high water table. The firm substratum will restrict the rooting depth of deep-rooted legumes such as alfalfa.

This soil is well suited for blueberry production. This soil has few surface stones and is well suited for flail mowing and mechanical harvesting. This soil will produce good yields with proper management practices. Weed control is essential to reduce competition.

This soil is well suited for hardwood production. The main limitations are plant competition and the high water table. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. Plant competition will restrict natural regeneration. Windthrow hazard is moderate on this soil because the high water table and compact substratum cause trees to be shallow rooted. Harvesting to reduce the number of trees exposed to the prevailing winds helps to prevent windthrow.

The seasonal high water table is the major limitation of this soil for most urban uses. Sites for dwellings on this unit should be located on the highest part of the landscape or on a well drained inclusion. Installing drains around footings, placing footings above the seasonal water table, and backfilling around foundations will help prevent wet basements. Because of the high water table, septic tank absorption fields should be located on the highest part of the landscape or on a well drained inclusion. Fill material may be needed to raise the level of the absorption field.

DaC—Dixfield fine sandy loam, 8 to 15 percent slopes

This very deep, strongly sloping, moderately well drained soil is on the side slopes of glacial till ridges. Slopes are smooth and convex. Areas are irregularly shaped and range from 3 to 50 acres.

Typically, the surface layer is a dark brown, fine sandy loam about 6 inches thick. The subsoil is 20 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this soil in mapping are areas of somewhat poorly drained Colonel soil and poorly drained Brayton soil in drainageways and depressions and well drained Marlow soil on knolls and upper slopes. These areas make up about 10 percent of the mapped acreage. Shallow, somewhat excessively drained Lyman soil and moderately deep, well drained Tunbridge soil are inclusions on crests of ridges and upper side slopes. Dixfield soil with slopes of less than 8 percent or a very stony surface are also included in mapping. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in this Dixfield soil from late fall to spring. Permeability is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this soil are used for hay and pasture. A few areas are used for cropland, wild blueberry production, and as sites for residential development. A few areas have reverted to woodland or are idle land.

This soil is fairly well suited for cultivated crops. The main limitation is erosion hazard. Erosion control practices such as conservation tillage, contour farming, stripcropping, and terracing are needed to prevent erosion.

The soil is well suited for hay and pasture and will produce good yields of forage crops. The firm substratum will restrict rooting depth of deep-rooted legumes such as alfalfa.

In areas of wild blueberries, this soil is well suited for blueberry production. This soil has few surface stones and is well suited for flail mowing and mechanical harvesting. This soil will produce good yields with

proper management practices. Weed control is essential to reduce competition.

This soil is well suited for hardwood production. The main limitations are plant competition and the high water table. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. Plant competition will restrict natural regeneration. Windthrow hazard is moderate on this soil because the high water table and compact substratum cause trees to be shallow rooted. Harvesting to reduce the number of trees exposed to the prevailing winds helps to prevent windthrow.

The high water table and slope are the major limitations of this soil for most urban uses. Sites for dwellings on this unit should be located on the highest part of the landscape or on a well drained inclusion. Installing drains around footings, placing footings above the seasonal water table, and backfilling around foundations will help prevent wet basements. Designing developments to fit the natural slope and land shaping will help to overcome the limitations of slope. Because of the high water table, septic tank absorption fields should be located on the highest part of the landscape or on a well drained inclusion. Fill material may be needed to raise the level of the absorption field.

DbC—Dixfield fine sandy loam, 8 to 15 percent slopes, very stony

This very deep, strongly sloping, moderately well drained soil is on the side slopes of glacial till ridges. Slopes are smooth and convex. Areas are long and narrow or irregularly shaped and range from 3 to 150 acres. Up to 3 percent of the surface of the soil is covered with stones.

Typically, the surface layer is 2 inches of black highly decomposed organic material underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this soil in mapping are areas of somewhat poorly drained Colonel soils and poorly drained Brayton soils in drainageways and depressions and Marlow soils on knolls and upper slopes. These areas make up about 10 percent of the mapped acreage. Also included are small areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on crests of ridges and upper side slopes. Dixfield soils with slopes of less than 8 percent are also included in mapping. These areas make up 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in this Dixfield soil from late fall to spring. Permeability is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium. Available water capacity is moderate. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production or as sites for residential development.

This soil is well suited for hardwood production. The main limitations are plant competition and the high water table. Softwoods produce well on this soil, but require considerable management to reduce competition from other species. Plant competition will restrict natural regeneration. Windthrow hazard is moderate on this soil because the high water table and compact substratum cause trees to be shallow rooted. Harvesting to reduce the number of trees exposed to the prevailing winds helps to prevent windthrow.

This soil is poorly suited for cropland and hay and pasture because of the very stony surface. If surface stones are removed, the soil is well suited for hay and pasture, but slope and erosion limit cultivated crops.

In areas of wild blueberries, this soil is well suited for blueberry production. The soil is not suited for flail mowing or mechanical harvesting because of the very stony surface. This soil will produce good yields of blueberries with proper management practices. Weed control is essential to reduce competition.

The high water table and slope are the major limitations of this soil for most urban uses. Sites for dwellings on this unit should be located on the highest part of the landscape or on a well drained inclusion. Installing drains around footings, placing footings above the seasonal water table, and backfilling around foundations will help prevent wet basements. Designing developments to fit the natural slope and land shaping will help to overcome the limitations of slope. Because of the high water table, septic tank absorption fields should be located on the highest part of the landscape or on a well drained inclusion. Fill material will be needed to raise the level of the absorption field.

DsB—Dixfield-Colonel complex, 3 to 8 percent slopes

This very deep, gently sloping unit is on the crests or lower toe slopes of glacial till ridges. Dixfield soils are on knolls, upper slopes, and crests of ridges. Colonel soils are in slightly lower positions than Dixfield soils. Slopes are smooth and convex on Dixfield soils

and smooth and concave on Colonel soils. Areas of the unit ranges from 3 to 100 acres.

This unit consists of about 45 percent moderately well drained Dixfield soils, 40 percent somewhat poorly drained Colonel soils, and 15 percent other soils.

Typically, the Dixfield soil has a surface layer of dark brown fine sandy loam 6 inches thick. The subsoil is 20 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled light olive gravelly fine sandy loam to a depth of 65 inches or more.

Typically, the Colonel soil has a surface layer of dark brown, fine sandy loam 6 inches thick. The subsoil is 12 inches thick. It is dark brown fine sandy loam in the upper part and mottled, yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is firm or very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of well drained Marlow soils on knolls and poorly drained Brayton soils in depressions. These areas make up about 10 percent of the mapped acreage. Also included are areas of moderately deep, well drained Tunbridge soils and shallow, somewhat excessively drained Lyman soils on crests of ridges and small areas of Dixfield and Colonel soils with very stony surfaces. These areas make up 5 percent of the mapped acreage.

A perched high water table is commonly at depth of 1 to 2 feet in the Colonel soil and commonly at a depth of 1.5 to 2.5 feet in the Dixfield soil from late fall to spring. Permeability in both soils is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium in the Dixfield soil and slow or medium in the Colonel soil. Available water capacity is moderate in both soils. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this unit are used for hay and pasture and wild blueberry production. A few areas are used as sites for residential development, cropland, and orchards. Some areas have reverted to woodland or are idle land.

This unit is fairly well suited for cropland. The seasonal high water table is the major limitation. Drainage of the lower areas of the Colonel soil and wet pockets is needed to remove excess water from the unit. Due to the seasonal high water table, planting may be delayed in wet years. Unless the unit is drained, wetness restricts the use of equipment in early spring and late fall.

The unit is well suited for hay and pasture and will produce good yields of forage crops. Drainage of the wetter Colonel soils and wet inclusions will improve the soils for use of haying equipment. Due to the seasonal wetness, soil compaction will occur if this unit is grazed early in the spring or late in the fall. The firm substratum restricts rooting depth of deep-rooted legumes such as alfalfa.

This unit is well suited for blueberry production. Surface or subsurface drainage of the Colonel soils will improve yields. This unit is well suited for flail mowing and mechanical harvesting of wild blueberries. Weed control is essential to reduce competition from grasses and weeds.

This unit is well suited for hardwood production. The main limitations of this unit are plant competition and the high water table. Softwoods produce well on these soils, but will require considerable management to reduce competition from the hardwood species. Plant competition will restrict natural regeneration in the wetter areas. Site preparation and weeding may be needed to reduce the competition. Windthrow hazard is moderate on the Dixfield soils and severe on the Colonel soils because the high water table and compact substratum cause trees to be shallow rooted. To reduce windthrow, as few trees as possible should be exposed to the prevailing winds by harvesting operations.

The high water table, especially in the Colonel soil, is the major limitation of this unit for most urban uses. Sites for dwellings on this unit should be located on the highest part of the landscape or preferably on a well drained inclusion. Installing drains around footings, placing footings above the seasonal water table, and backfilling around foundations will help prevent wet basements. Because of the high water table, septic tank absorption fields should be located on the highest part of the landscape or on a well drained inclusion. Fill material will be needed to raise the level of the absorption field.

DtB—Dixfield-Colonel complex, 3 to 8 percent slopes, very stony

This very deep, gently sloping unit is on the crests or lower toe slopes of glacial till ridges. Dixfield soils are on knolls, upper slopes, and crests of ridges. Colonel soils are in slightly lower positions than Dixfield soils. Slopes are smooth and convex on Dixfield soils and smooth and concave on Colonel soils. Up to 3 percent of the surface of the unit is covered with stones. Areas are irregularly shaped and range from 3 to 200 acres.

This unit is about 45 percent moderately well drained

Dixfield soils, 40 percent somewhat poorly drained Colonel soils, and 15 percent other soils.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of black highly decomposed organic material underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Typically, the surface of the Colonel soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dusky red highly decomposed organic material underlain by 1 inch of light gray fine sandy loam. The subsoil is 17 inches thick. It is dark reddish brown to dark brown fine sandy loam in the upper part and mottled, yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is firm or very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of well drained Marlow soils on knolls and poorly drained Brayton soils in depressions. These areas make up about 10 percent of the mapped acreage. Also included are areas of moderately deep, well drained Tunbridge soils and shallow somewhat excessively drained Lyman soils on crests of ridges and upper side slopes and small areas of Dixfield and Colonel soils with no stones on the surface. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1 to 2 feet in the Colonel soil and commonly at a depth of 1.5 to 2.5 feet in the Dixfield soil from late fall to spring. Permeability in both soils is moderate in the surface layer and subsoil and moderately slow to slow in the substratum. Surface runoff is medium in the Dixfield soil and slow to medium in the Colonel soil. Available water capacity is moderate in both soils. Rooting depth is restricted by the firm substratum and high water table.

Most areas of this unit are used for woodland. A few areas are used for wild blueberry production and as sites for residential development.

This unit is well suited for hardwood production. The main limitations of this unit are plant competition and the seasonal high water table. Softwoods produce well on these soils, but require considerable management to reduce competition from the hardwood species. Plant competition will restrict natural regeneration in the wetter areas. Site preparation and weeding may be needed to reduce this competition. Windthrow hazard is moderate on the Dixfield soils and severe on the Colonel soils because the seasonal high water table and compact substratum cause trees to be shallow rooted. To reduce windthrow, trees left in wetter areas during harvest should not be exposed to the prevailing winds.

This unit is poorly suited for cropland and hay and pasture because of the stony surface and seasonal high water table. If surface stones are removed the unit is suited for these uses but drainage may be required to lower the high water table.

In areas of wild blueberries, this unit is well suited for blueberry production. The unit is not suited for flail mowing or mechanical harvesting because of the very stony surface. Surface or subsurface drainage of Colonel soils will improve yields. Weed control is essential to reduce competition.

The high water table, especially in the Colonel soil, is the major limitation of this unit for most urban uses. Sites for dwellings on this unit should be located on the highest part of the landscape or preferably on a well drained inclusion. Installing drains around footings, placing footings above the seasonal water table, and backfilling around foundations will help prevent wet basements. Because of the high water table, septic tank absorption fields should be located on the highest part of the landscape or on a well drained inclusion. Fill material will be needed to raise the level of the absorption field.

DWB—Dixfield-Colonel-Tunbridge complex, gently sloping, very stony

This unit is on glacial till ridges with low relief in coastal areas. The Dixfield and Tunbridge soils are typically on knolls and crests of the ridges. The Colonel soils are typically in pockets and on lower toe slopes. Up to 3 percent of the surface of the unit is covered with stones. Slope ranges from 3 to 8 percent. Slopes are mainly smooth and convex on the Dixfield and Tunbridge soils and concave on the Colonel soil. Areas of the unit are irregularly shaped and range from 15 to 200 acres.

This unit is about 35 percent very deep, moderately well drained Dixfield soils; 25 percent very deep, somewhat poorly drained Colonel soils; 20 percent moderately deep, well drained Tunbridge soils; and 20 percent other soils.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of black, highly decomposed organic material underlain by 4 inches of light gray, fine sandy loam. The subsoil is 22 inches

thick. It is dark reddish brown to brown fine sandy loam in the upper part and olive brown fine sandy loam to mottled, light olive gravelly brown fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Typically, the surface of the Colonel soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dusky red highly decomposed organic material underlain by 1 inch of light gray fine sandy loam. The subsoil is 17 inches thick. It is dark reddish brown to dark brown fine sandy loam in the upper part and mottled, yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is firm or very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Typically, the surface layer of the Tunbridge soil is 4 inches of black highly decomposed organic material over 2 inches of reddish gray, fine sandy loam. The subsoil is 13 inches thick. It is dark reddish brown to yellowish red fine sandy loam in the upper part and yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Hard bedrock is at a depth of 33 inches.

Included with this unit in mapping are areas of well drained Marlow soils on knolls and poorly drained Brayton soils in depressions. These areas make up about 10 percent of the mapped acreage. Also included are areas of shallow, somewhat excessively drained Lyman soils; very shallow, excessively drained Schoodic soils; moderately deep, somewhat poorly or poorly drained Naskeag soils; moderately deep, moderately well drained till soils; and an occasional rock outcrop on small ridges or hummocks. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in the Dixfield soil and commonly at a depth of 1 to 2 feet in the Colonel soil. Depth to bedrock is 20 to 40 inches in the Tunbridge soils and more than 60 inches in Dixfield and Colonel soils. Permeability in the Dixfield and Colonel soils is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Permeability is moderate or moderately rapid in the Tunbridge soil. Surface runoff is medium for the Dixfield and Tunbridge soils and slow or medium for the Colonel soil. Available water capacity is moderate for all these soils. Rooting depth is restricted by the firm substratum and high water table in the Dixfield and Colonel soils and by bedrock in the Tunbridge soil.

Most areas of the unit are used for woodland.

This unit is well suited for hardwood production. The main limitations are plant competition and the high water table. Softwoods produce well on these soils but require considerable management to reduce competition from the hardwood species. Plant competition will restrict natural regeneration in the wetter areas. Site preparation and weeding may be needed to reduce this competition. Windthrow hazard is moderate on the Dixfield soil and severe on the Colonel soil because the seasonal high water table and compact substratum cause trees to be shallow rooted. Windthrow hazard is moderate on the Tunbridge soil because bedrock limits rooting depth. To reduce windthrow, trees left after harvest should be exposed as little as possible to the prevailing winds.

Dixfield and Colonel soils are fair sources of roadfill material. The main limitation is the seasonal high water table.

Dixfield and Colonel soils have severe limitations as sites for roads because of frost action. Tunbridge soils have moderate limitations for roads because of the depth to bedrock and frost action. A coarse grained subgrade to frost depth is needed to prevent frost action. If possible, roads should be planned so that grades will not require removal of rock in the Tunbridge soils.

Go—Gouldsboro silt loam

This very deep, nearly level, very poorly drained soil is in tidal marshes. Areas are irregular in shape and range from 3 to 100 acres. Slopes are smooth and slightly convex. Slope ranges from 0 to 1 percent.

Typically, the surface layer is dark grayish brown silt loam, 5 inches thick. The substratum to a depth of 65 inches or more is dark grayish brown silt loam in the upper part, dark gray silt loam in the middle part, and gray silt loam in the lower part.

Included with this soil in mapping are areas of very deep organic soils and organic soils that are underlain by silt, clay, sand, or bedrock at a depth of less than 51 inches. Also included are occasional knolls of Hermon or Lyman soils or rock outcrop. Included soils make up 20 percent of the mapped area

A seasonal high water table is commonly 1 foot above the surface to a depth of 6 inches in this Gouldsboro soil all year. The soil is frequently inundated by higher than normal tides throughout the year. Permeability is moderate or moderately slow in the surface layer and slow to very slow in the substratum. Surface runoff is very slow, or the soil is ponded. Available water capacity is high.

This soil is poorly suited for woodland, cropland, or urban use because of high water table, flooding, and salinity.

This unit is used by waterfowl and shorebirds for

food and resting areas, especially during migration. The vegetation is mainly smooth cordgrass, marsh-hay cordgrass, arrowgrass, blackgrass, and other saltwater-tolerant plants.

Gt—Gouldsboro-Beaches complex

This very deep, nearly level unit consists of beaches along the ocean. The Gouldsboro soils are in tidal marsh areas behind these beach fronts. Most areas are long and narrow or oval. The areas range from 3 to 20 acres. Slopes are smooth and slightly convex and range from 0 to 1 percent on the Gouldsboro soils and 1 to 3 percent on the beaches.

This unit is about 50 percent very poorly drained Gouldsboro soils, 25 percent Beaches, and 25 percent other soils.

Typically, the surface layer of the Gouldsboro soil is dark grayish brown silt loam about 5 inches thick. The substratum to a depth of 65 inches or more is dark grayish brown silt loam in the upper part, dark gray silt loam in the middle part, and gray silt loam in the lower part.

Beaches consist of sand, gravel, cobblestones, and boulders. They are worked by tidal action of the ocean and support little or no vegetation. The composition of the beaches varies according to location and exposure to the open ocean. They are often reshaped by high tides and storms.

Included with this unit in mapping are silty soils underlain by sand, gravelly sand, or clay. Also included are areas of very poorly drained Wonsqueak and Bucksport soils and rock outcrop. Included soils make up about 25 percent of the mapped acreage.

This unit is flooded frequently by higher than normal tides throughout the year. Gouldsboro soils commonly have a seasonal high water table at 1 foot above to 6 inches below the surface all year. Permeability is moderate or moderately slow in surface layer and slow or very slow in the substratum. Available water capacity is high. Surface runoff is very slow, or the soil is ponded.

This unit is poorly suited for woodland or urban use because of the high water table, flooding, and salinity. Most areas are used for recreation. They provide habitat for shorebirds and waterfowl. Vegetation on the Gouldsboro soils is mainly smooth cordgrass, marsh-hay cordgrass, arrowgrass, blackgrass, and other water- and salt-tolerant plants. Beaches support little vegetation with the exception of beach pea, dune grasses, and rugosa rose on some higher and more stable sections of larger beaches.

HcC—Hermon-Colton-Rock outcrop complex, 3 to 15 percent slopes, very stony

This unit consists of very deep, gently sloping to strongly sloping soils on moraines and kame terraces between or adjacent to areas of rock outcrop. Slopes are generally smooth and convex. Up to 3 percent of the surface is covered with stones. The areas are irregularly shaped, but are mainly elongated and range from 3 to 50 acres.

This unit is about 30 percent very deep, somewhat excessively drained Hermon soils; 25 percent very deep, excessively drained Colton soils; 20 percent Rock outcrop; and 25 percent other soils.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material underlain by very dark grayish brown sandy loam 1 inch thick and gray sandy loam 2 inches thick. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Colton soil is 1 inch of black highly decomposed organic material underlain by dark reddish brown gravelly sandy loam 1 inch thick and brown gravelly sandy loam 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown to yellowish red gravelly coarse sandy loam in the upper part, strong brown gravelly loamy sand in the middle part, and dark yellowish brown to olive brown gravelly sand in the lower part. The substratum is stratified olive extremely gravelly and very gravelly coarse sand to a depth of 65 inches or more.

Rock outcrop consists mainly of exposures of granite, diorite, or gabbro bedrock that has insufficient soil material to support plant growth.

Included with this unit in mapping are areas of soils that are similar to Colton and Hermon soils, but are moderately deep, shallow Lyman soils; moderately deep Tunbridge soils; very shallow Schoodic soils; and very shallow and shallow soils that are loamy sand. These are transitional soils between the very deep Hermon and Colton soils and the rock outcrops. They make up about 20 percent of the mapped acreage. Also included are areas between the rock outcrops of moderately deep, moderately well drained gravelly loamy sand and small pits where the soil has been removed. These areas make up about 5 percent of the unit.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Permeability is moderately rapid or rapid for the Hermon soil and rapid or very rapid for the Colton soil. Available water capacity is low for the Hermon soil and very low for the Colton soil. Surface runoff is medium for the Hermon soil and slow for the Colton soil.

Most areas of this unit are used for woodland. A few areas are used as sites for residential development. This unit is also used extensively as a source of gravel and fill.

This unit is fairly well suited for softwood production. In coastal areas, where the unit is located, the main tree species is red spruce. White or red pine on this unit respond well to management if not subject to salt spray. The main limitations of this unit are rock outcrops and droughtiness. Rock outcrop and inclusions of shallow soils reduce the value of this unit for woodland. The rock outcrop in this unit may cause some equipment limitations. Droughtiness of the Hermon and Colton soils and especially the inclusions of shallow soils causes seedling mortality of 50 percent or more during dry years. Windthrow may be severe on inclusions of shallow soils.

Because of the complex pattern of soil and rock outcrop, this unit has severe limitations for urban uses. Slope and large stones on the surface are also major limitations. The rapid or very rapid permeability of the substratum of the soils in this unit may cause pollution of ground water if this unit is used for septic tank absorption fields. Hermon and Colton soils are a fair to good source of roadfill and gravel.

HmB—Hermon-Monadnock complex, 3 to 8 percent slopes

This very deep, undulating unit is on small ridges of ground moraine and on recessional moraines mainly in the coastal areas. Slopes are complex. Areas are long and narrow on moraines and irregularly shaped on ridges. They range from 3 to 50 acres.

This unit is about 45 percent somewhat excessively drained Hermon soils, 35 percent well drained Monadnock soils, and 20 percent other soils.

Typically, the surface layer of the Hermon soil is very dark grayish brown sandy loam 6 inches thick. The subsoil is 24 inches thick. It is strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Monadnock soil is very dark grayish brown fine sandy loam 8 inches thick. The subsoil is 10 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Included with the unit in mapping are areas of moderately well drained Dixfield soils that are in a slightly lower position than Hermon and Monadnock soils. Sandy-skeletal soils that are moderately deep to bedrock and small areas of very stony Hermon and Monadnock soils that are also included in mapping. These areas make up about 10 percent of the mapped acreage. Also included are areas of loamy-skeletal soils, Colton soils, soils formed in poorly sorted, water-worked material, and areas with slopes of more than 8 percent. These areas make up 10 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. The Hermon soil has low available water capacity. The Monadnock soil has moderate available water capacity. Runoff is slow for Hermon soil and medium for Monadnock soil.

Most areas of this unit are used for hay and pasture or are idle land. Some areas have reverted to woodland. A few areas are used as sites for residential development, cropland, or wild blueberry production.

This unit is fairly well suited for cropland. The main limitation is droughtiness, especially on the Hermon soils. Improved yields can be obtained by the addition of organic matter, good fertility management, and irrigation.

The unit is well suited for hay and pasture, but irrigation is needed for maximum yields. Deep-rooted legumes such as alfalfa are well suited for these soils.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are poor quality on these coarse textured, somewhat droughty soils. The main limitations of this unit are plant competition and droughtiness. Softwoods such as pines will produce well on this unit but will require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock soil, but natural regeneration is usually adequate to overcome the competition. Hermon soils have moderate seedling mortality because of droughtiness.

This unit is well suited for blueberry production. Droughtiness, especially on the Hermon soils, will limit

yields in dry years unless irrigation is used. This unit has few surface stones and is well suited for flail mowing and mechanical harvesting.

The large stones in the soil are the major limitation of this unit for most urban uses, such as sites for dwellings and roads. Excavation and disposition of the stones may be difficult.

The rapid or very rapid permeability in the substratum of the Hermon soils may cause pollution of the ground water if this unit is used for septic tank absorption fields. The Monadnock soil has few limitations for this use.

HmC—Hermon-Monadnock complex, 8 to 15 percent slopes

This very deep, rolling unit is on small ridges of ground moraine and on recessional moraines mainly in the coastal areas. Slopes are complex. Areas are long and narrow on moraines and irregularly shaped on ridges and range from 3 to 50 acres.

The unit is about 45 percent somewhat excessively drained Hermon soils, 35 percent well drained Monadnock soils, and 20 percent other soils.

Typically, the surface layer of the Hermon soil is very dark grayish brown sandy loam 6 inches thick. The subsoil is 24 inches thick. It is strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Monadnock soil is very dark grayish brown fine sandy loam 8 inches thick. The subsoil is 10 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Included with this unit in mapping are areas of moderately well drained Dixfield soils that are in a slightly lower position than Hermon and Monadnock soils. Sandy-skeletal soils that are moderately deep and small areas of very stony Hermon and Monadnock soils are also included in mapping. These areas make up about 10 percent of the mapped acreage. Also included are areas of loamy-skeletal soils, Colton soils, soils that formed in poorly sorted, water-worked materials, and soils with slopes of more than 15 percent. These areas make up 10 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Hermon soil has low available water capacity. Monadnock soil has moderate available water capacity. Runoff is slow to medium for Hermon soil and medium to rapid for Monadnock soil.

Most areas of this unit are used for hay or pasture or are idle land. Some areas have reverted to woodland. A few areas are used as sites for residential development, cropland, or wild blueberry production.

This unit is fairly well suited for cropland. The main limitations are slope, erosion hazard, and droughtiness. Conservation measures such as conservation tillage, contour farming and stripcropping are needed to prevent erosion. Irrigation, good fertility management, and addition of organic matter are also needed for maximum yields.

The unit is well suited for hay and pasture, but irrigation is needed for maximum yields. Deep-rooted legumes such as alfalfa are well suited for these soils.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are of poorer quality on these coarse textured, somewhat droughty soils. The main limitations of this unit are plant competition and droughtiness. Softwoods such as pines will produce well on this unit but require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock soil, but natural regeneration is usually adequate to overcome the competition. The Hermon soils have moderate seedling mortality because of droughtiness.

This unit is well suited for blueberry production. Droughtiness of the soils will limit yields in dry years unless irrigation is used. This unit has few surface stones and is well suited for flail mowing and mechanical harvesting.

The large stones in the soil are the major limitation of this unit for most urban uses, such as sites for dwellings and roads. Excavation and disposition of the stones may be difficult.

The rapid or very rapid permeability of the substratum of the Hermon soils may cause pollution of the ground water if this unit is used for septic tank absorption fields. The absorption field should be designed to conform with the natural slope.

HtB—Hermon-Monadnock complex, 3 to 8 percent slopes, very stony

This very deep, undulating unit is on small ridges of ground moraine and on recessional moraines mainly in the coastal areas. Up to 3 percent of the surface of the

soil is covered with stones. Slopes are complex. The areas are long and narrow on moraines and irregularly shaped on ridges. The areas range from 3 to 100 acres.

This unit is about 45 percent somewhat excessively drained Hermon soils, 35 percent well drained Monadnock soils, and 20 percent other soils.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed material underlain by very dark grayish brown sandy loam 1 inch thick and gray sandy loam 2 inches thick. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown, highly decomposed organic material underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Included with this unit in mapping are areas of extremely stony and extremely bouldery Hermon and Monadnock soils, moderately well drained Dixfield soils in a slightly lower position than Hermon and Monadnock soils, and sandy-skeletal soils that are moderately deep. These areas make up about 10 percent of the mapped acreage. Also included are areas of loamy-skeletal soils, Colton soils, soils formed in poorly sorted, water worked materials, and soils with slopes of more than 8 percent. These areas make up 10 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Hermon soil has low available water capacity. Monadnock soil has moderate available water capacity. Runoff is slow for Hermon soil and medium for Monadnock soil.

Most areas of this unit are used for woodland. Some areas are used for wild blueberry production, and a few areas are used as sites for residential development.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are of poorer quality on these coarse textured, somewhat droughty soils. The main limitations of this unit are plant competition and droughtiness. Softwoods such as pines will produce well on this unit, but require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock soil, but natural regeneration is usually adequate to overcome the competition. The Hermon soils have moderate seedling mortality because of droughtiness.

In areas of wild blueberries, this unit is well suited for blueberry production. Droughtiness of the Hermon soils will limit yields in dry years unless irrigation is used. The unit is not suited for flail mowing or mechanical harvesting because of surface stones.

The large stones in the soil are the major limitations of this unit for most urban uses, such as sites for dwellings and roads. Excavation and disposition of the stones may be difficult.

The rapid or very rapid permeability of the substratum of the Hermon soils may cause pollution of the ground water if this unit is used for a septic tank absorption fields.

HtC—Hermon-Monadnock complex, 8 to 15 percent slopes, very stony

This very deep, rolling unit is on ridges of ground moraine and on recessional moraines mainly in the coastal areas. Up to 3 percent of the surface of the soil is covered with stones. Slopes are complex. The areas are long and narrow on moraines and irregularly shaped on ridges. The areas range from 3 to 100 acres.

This unit is about 45 percent somewhat excessively drained Hermon soils, 35 percent well drained Monadnock soils, and 20 percent other soils.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material underlain by 1 inch of very dark grayish brown sandy loam and 2 inches of gray fine sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown, highly decomposed organic material underlain by 1 inch of very dark grayish brown fine sandy loam

and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Included with this unit in mapping are areas of extremely stony and extremely bouldery Hermon and Monadnock soils, moderately well drained Dixfield soils in a slightly lower position than Hermon and Monadnock soils, and sandy-skeletal soils that are moderately deep. These areas make up about 10 percent of the mapped acreage. Also included are areas of loamy-skeletal soils, Colton soils, soils formed in poorly sorted, water worked materials, and soils with slopes of more than 15 percent. These areas make up 10 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Hermon soil has low available water capacity. Monadnock soil has moderate available water capacity. Runoff is slow to medium for Hermon soil and medium to rapid for Monadnock soil.

Most areas of this unit are used for woodland. Some areas are used for wild blueberry production and a few areas are used as sites for residential development.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods on these coarse textured, somewhat droughty soils. The main limitations of this unit are plant competition and droughtiness. Softwoods such as pines will produce well on this unit, but require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock soil, but natural regeneration is usually adequate to overcome the competition. The Hermon soils have moderate seedling mortality because of droughtiness.

In areas of wild blueberries, this unit is well suited for blueberry production. Droughtiness of the Hermon soils will limit yields in dry years unless irrigation is used. The unit is not suited for flail mowing or mechanical harvesting because of surface stones.

The large stones in the soil are the major limitations of this unit for most urban uses, such as sites for dwellings and roads. Excavation and disposition of the stones may be difficult.

The rapid or very rapid permeability in the substratum of the Hermon soils may cause pollution of the ground water if this unit is used for septic tank absorption fields. The absorption field should be designed to conform with the natural slope.

HtE—Hermon-Monadnock complex, 15 to 45 percent slopes, very stony

This very deep, hilly to steep unit is on side slopes of ridges of ground moraine mainly in the coastal areas. Up to 3 percent of the surface of the soil is covered with stones. Slopes are complex. The areas are long and irregularly shaped and range from 3 to 50 acres.

This unit is about 45 percent somewhat excessively drained Hermon soils, 35 percent well drained Monadnock soils, and 20 percent other soils.

Typically, the surface layer of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material underlain by 1 inch of very dark grayish brown sandy loam and 2 inches of gray fine sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown highly decomposed organic material, underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Included with this unit in mapping are areas of extremely stony and extremely bouldery Hermon soils and sandy-skeletal soils that are moderately deep. These areas make up about 10 percent of the mapped acreage. Also included are areas of loamy-skeletal soils, Colton soils, and soils formed in poorly sorted, water-worked materials. These areas make up 10 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Hermon soil has low available water capacity.

Monadnock soil has moderate available water capacity. Runoff is medium for Hermon soil and rapid for Monadnock soil.

Most areas of this unit are used for woodland. Some areas are used for wild blueberry production, and a few areas are used as sites for residential development.

This unit is fairly well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are of poorer quality on these coarse textured, somewhat droughty soils. The main limitations of this unit are plant competition, erosion hazard, slope, and droughtiness. Softwoods such as pines will produce well on this unit, but require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock soil, but natural regeneration is usually adequate to overcome the competition. Severe erosion can occur on skid trails and roads on the steeper slopes in the unit. Erosion can be reduced by locating skid trails and roads on the contour and by using waterbars on roads. Equipment is difficult to use on the steeper parts of the unit. The Hermon soils have moderate seedling mortality because of droughtiness.

In areas of wild blueberries, this unit is well suited for blueberry production. The main limitation is slope. Droughtiness of the Hermon soils will limit yields in dry years unless irrigation is used. Because of the surface stones and slope, this unit is not suited for flail mowing or mechanical harvesting. Equipment use is difficult on the steeper slopes.

This unit has severe limitations for most urban uses because of slope. The rapid or very rapid permeability of the substratum of the Hermon soils may cause pollution of the ground water if this unit is used for septic tank absorption fields. If the unit is used as a site for dwellings or small commercial buildings, they should be located on less sloping areas of Monadnock soils.

HVC—Hermon-Monadnock-Dixfield complex, strongly sloping, very stony

This very deep unit is on upland glacial till ridges and moraines, mainly at elevations of less than 350 feet above sea level. Hermon and Monadnock soils are on upper slopes and crests of the ridges and knolls. Dixfield soils are on the lower slopes. Up to 3 percent of the surface of the unit is covered with stones. Slope ranges from 8 to 15 percent on the Hermon and Monadnock soils and from 3 to 15 percent on the Dixfield soils. Areas of the unit are irregularly shaped on ridges and are long and narrow on moraines. The areas range from 15 to 250 acres.

This unit consists of about 35 percent somewhat excessively drained Hermon soils, 25 percent well drained Monadnock soils, 20 percent moderately well drained Dixfield soils, and 20 percent other soils.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material, underlain by 1 inch very dark grayish brown sandy loam and 2 inches of gray fine sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of extremely stony or bouldery Monadnock, Hermon, and Dixfield soils. These areas make up about 10 percent of the mapped acreage. Also included are areas of poorly drained Brayton soils and somewhat poorly to poorly drained Naskeag soils in depressions and drainageways; very stony, moderately well drained Sheepscot soils on toe slopes; shallow Lyman soils, very shallow Schoodic soils; and an occasional rock outcrop on the crests of ridges. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in the Dixfield soils from late fall to spring. In the Hermon and Monadnock soils the seasonal high water table is commonly at a depth of

more than 6 feet. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Permeability of the Dixfield soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is slow to medium on the Hermon soil and medium on the Monadnock soil and Dixfield soil. Available water capacity is low for the Hermon soil and moderate for the Monadnock and Dixfield soils. Rooting depth is restricted by the firm substratum and high water table in the Dixfield soil.

Most areas of this unit are used for woodland.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods on these coarse textured, somewhat droughty soils. The main limitations of this unit are plant competition, droughtiness, and the high water table. Softwoods such as pines will produce well on the unit, but require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock soils, but natural regeneration is usually adequate to overcome this competition. The Hermon soils have moderate seedling mortality because of droughtiness. Windthrow is moderate on the Dixfield soils because the high water table and compact substratum cause trees to be shallow rooted.

This unit is a fair to good source of roadfill material. The larger stones in the soil are the major limitation for use as roadfill.

Slope and the large stones in these soils are the major limitations of the Hermon and Monadnock soils as sites for roads. Roads should be designed on the contour to reduce the slope. A coarse grained subgrade to frost depth is needed to prevent frost heaving in the Dixfield soils.

HVE—Hermon-Monadnock-Dixfield complex, very hilly, very stony

This very deep, very hilly to steep unit is on the side slopes of glacial till ridges and moraines mainly at elevations of less than 350 feet above sea level. Hermon and Monadnock soils are on the upper slopes. Dixfield soils are on lower slopes. Up to 3 percent of the surface of the unit is covered with stones. Slopes are complex. Slope ranges from 15 to 45 percent on the Hermon and Monadnock soils and from 8 to 15 percent on the Dixfield soils. Areas of the unit are irregularly shaped on ridges and are long and narrow on moraines. The areas range from 15 to 150 acres.

This unit consists of about 40 percent somewhat excessively drained Hermon soils, 30 percent well drained Monadnock soils, 15 percent moderately well drained Dixfield soils, and 15 percent other soils.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material underlain by 1 inch of very dark grayish brown sandy loam and 2 inches of gray fine sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum to a depth of 65 inches or more is olive extremely gravelly loamy sand to extremely gravelly coarse sand.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Typically the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material, underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of extremely stony or bouldery Monadnock, Hermon, and Dixfield soils. These areas make up about 10 percent of the mapped acreage. Also included are areas of very stony, moderately well drained Sheepscot soils on toe slopes and shallow Lyman soils, very shallow Schoodic soils, and an occasional rock outcrop on crests of ridges. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in the Dixfield soils from late fall to spring. In the Hermon and Monadnock soils the

seasonal high water table is commonly at a depth of more than 6 feet. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Permeability of the Dixfield soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium on Hermon soil, rapid on the Monadnock soil, and medium to rapid on the Dixfield soil. Available water capacity is low for the Hermon soil and moderate for the Monadnock and Dixfield soils. Rooting depth is restricted by the firm substratum and high water table in the Dixfield soil.

Most areas in this unit are used for woodland.

This unit is fairly well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods on these coarse textured, somewhat droughty soils. The main limitations of this unit are erosion hazard, slope, plant competition, and droughtiness. Severe erosion can occur on skid trails and roads on the steeper slopes in this unit. Erosion can be reduced by locating skid trails and roads on the contour and by using waterbars on roads. Equipment is difficult to use on the steeper parts of the unit. Softwoods such as pines will produce well on the unit, but require considerable management to reduce competition from hardwoods. Plant competition is moderate on the Monadnock and Dixfield soils, but natural regeneration is usually adequate to overcome this competition. The Hermon soils have moderate seedling mortality because of droughtiness.

This unit is a fair to good source of roadfill materials. The large stones in the Hermon and Monadnock soils are the major limitation for use as roadfill.

Slope and the large stones in the soil are the major limitation of the Hermon and Monadnock soils as sites for roads. Roads should be designed on the contour to reduce the slope. A coarse grained subgrade to frost depth is needed to prevent frost heaving in the Dixfield soils.

Kn—Kinsman loamy sand

This very deep, nearly level, poorly drained soil is in depressions on outwash plains. Slopes are smooth and linear to slightly concave. Slope ranges from 0 to 3 percent. Areas are oval or irregularly shaped and range from 3 to 50 acres.

Typically, the surface layer is dark reddish brown moderately decomposed organic material 4 inches thick, over 3 inches of grayish brown loamy sand. The subsoil is 30 inches thick. It is mottled, dark reddish brown loamy sand in the upper part; mottled, reddish brown sand in the middle part; and mottled, dark yellowish brown to light olive brown sand in the lower part. The substratum is mottled, olive gray sand to gravelly coarse sand to a depth of 65 inches or more.

Included with this soil in mapping are areas of somewhat poorly drained and poorly drained, sandy soils with less than 5 percent or more than 35 percent rock fragments in the substratum. These areas make up about 10 percent of the mapped acreage. Also included on higher knolls are areas of moderately well drained Sheepscot soils and sandy soils. In lower depressions in this unit are areas of very poorly drained Bucksport, Wonsqueak, and sandy or gravelly outwash soils. These areas make up about 10 percent of the mapped acreage. Included in mapping in some areas are somewhat poorly drained and poorly drained, sandy soils underlain by silt loam or silty clay loam within 40 inches of the surface. These areas make up about 10 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of 1.5 feet in this Kinsman soil from late fall to late spring. Permeability of the soil is rapid. Surface runoff is very slow. Available water capacity is low.

Most areas of this soil are used for woodland. A few areas are brushy idle land.

This soil is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, hemlock, and red maple. The abundant natural reproduction of spruce and fir makes the soil best suited for pulpwood production. The main limitation is the high water table and plant competition. Seedling mortality is moderate on these soils because of the high water table. It is difficult to operate equipment on this soil except during the drier part of the year or when the soil is frozen. Windthrow is severe on this soil because the high water table cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the prevailing wind and help to prevent windthrow. Plant competition is severe on this soil because of wetness. Hardwood suppression and thinning is often needed to enhance the softwood stands.

This soil is sometimes used as a source of sand, but the high water table restricts removal operations to dry seasons.

The soil is poorly suited for urban uses, cropland, and hay and pasture because of the high water table. Utilization of subsurface drains to lower the water table

is usually not feasible because of the low position of the soil on the landscape and absence of drainage outlets.

KW—Kinsman-Wonsqueak association

This unit consists of very deep, nearly level soils in low positions in valleys. Kinsman soils are on outwash plains, and Wonsqueak soils are in depressions on outwash plains. Slopes are smooth and concave. Slope ranges from 0 to 3 percent on Kinsman soils and 0 to 1 percent on Wonsqueak soils. Areas are oval or irregularly shaped and range from 15 to 100 acres.

This unit consists of about 45 percent poorly drained Kinsman soil, 30 percent very poorly drained Wonsqueak soils, and 25 percent other soils.

Typically, the surface layer of the Kinsman soil is dark reddish brown moderately decomposed organic material 4 inches thick, over 3 inches of grayish brown loamy sand. The subsoil is 30 inches thick. It is mottled, dark reddish brown loamy sand in the upper part; mottled, reddish brown sand in the middle part; and mottled, dark yellowish brown to light olive brown sand in the lower part. The substratum is mottled, olive gray sand to gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface layer of the Wonsqueak soil is very dark gray muck, 8 inches thick. The subsurface layer is black muck, 24 inches thick. The substratum is gray silt loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of very poorly drained Biddeford, Waskish, Sebago, Bucksport, and sandy or gravelly soils. These areas make up about 20 percent of the mapped acreage. Also included are areas of moderately well drained Sheepscot soils and excessively drained Colton soils on knolls or hummocks and very stony, sandy or gravelly soils. These areas make up about 5 percent of the mapped acreage.

Kinsman soils have a seasonal high water table commonly at depth of 1.5 feet from late fall to late spring. Wonsqueak soils have a seasonal high water table commonly from 1 foot above to 6 inches below the surface of the soil from early fall to early summer. Permeability is rapid in the Kinsman soil. Permeability of the Wonsqueak soil is moderately slow to moderately rapid in the organic material and moderate or moderately slow in the mineral soil. Surface runoff is very slow on the Kinsman soil and very slow or ponded on the Wonsqueak soil. Available water capacity is low for Kinsman soil and high for Wonsqueak soil.

Most areas of this unit are used for woodland.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. Wonsqueak soils are not suited for commercial wood production because the high water table and organic matter content cause slow growth. On the Kinsman soils the main tree species are black spruce, balsam fir, white spruce, and red maple. The abundant natural reproduction of spruce and fir makes these soils best suited for pulpwood production. The main limitation of this unit is the high water table. Seedling mortality is moderate on these soils because of the high water table. It is difficult to operate equipment on this unit except during the drier part of the year or when the soil is frozen. Plant competition is severe on this soil because of the high water table. Hardwood suppression and thinning is often needed to enhance the softwood stands. Windthrow is severe on this unit because the high water table causes trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the prevailing wind and help to prevent windthrow.

Kinsman soils are limited as a source of roadfill because of the high water table, but they are a good source of sand. Removal of the sand should be limited to the dry season when the water table is lowest.

This unit is a poor location for roads because of the high water table and because of the instability of the Wonsqueak soils. If possible, roads should be located on better drained inclusions in the unit. Roads will require considerable roadfill material to raise the road base above the seasonal high water table.

LaB—Lamoine silt loam, 3 to 8 percent slopes

This very deep, gently sloping, somewhat poorly drained soil is on coastal lowlands and in river valleys. Slopes are smooth and convex. The areas are irregularly shaped and range from 5 to 100 acres.

Typically, the surface layer is dark brown silt loam 7 inches thick. The subsoil is 14 inches thick. It is mottled, light olive brown to light yellowish brown silt loam in the upper part and mottled, light olive brown to olive silty clay loam in the lower part. The substratum is mottled, olive silty clay to a depth of 65 inches or more.

Included with this soil in mapping are areas of poorly drained Scantic soils and very poorly drained Biddeford soils in depressions and pockets and moderately well drained Buxton soils on knolls. These areas make up about 15 percent of the mapped acreage. Included in some areas are soils that are similar to Lamoine, but have 18 to 35 percent clay throughout or have bedrock at a depth of 20 to 40 inches. Soils with a surface layer and subsoil of loamy sand to sandy loam and a substratum of silt loam to silty clay loam are common

inclusions where Lamoine soils are adjacent to outwash soils. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly 6 inches to 1.5 feet below the surface of this Lamoine soil from late fall to early summer. Permeability of this soil is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil and in the substratum. Surface runoff is slow to medium. Available water capacity is high.

Most areas of this soil are used for woodland, much of which was hay and pasture. Some areas are used for hay and pasture or are idle fields that are reverting to woodland. A few areas are used for cropland.

This soil is well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant natural reproduction of spruce and fir makes these soils well suited for pulpwood production. The main limitations of this unit are plant competition and the high water table. White pine will produce well on this soil, but requires considerable management to reduce competition from other species. Plant competition will restrict natural regeneration. Site preparation and weeding may be needed to reduce this competition. Windthrow hazard is severe on this unit because the seasonal high water table cause trees to be shallow rooted. Strip cutting or clearcutting will expose fewer trees to the wind and will help to prevent windthrow. Because of the high water table, harvesting operations should be restricted to the drier months or when the ground is frozen; equipment is easiest to use then and will cause the least damage to the site.

This soil is poorly suited for cultivated crops because of the high water table. The soil dries slowly in the spring and after heavy rains. Drainage ditches and grassed waterways will help remove excess surface water. Plowing in early spring when the soil is wet will destroy the structure of the soil and cause compaction and poor tilth.

This soil will produce good yields of hay and pasture, but it is limited by the high water table. Equipment use is restricted by wetness in the spring and fall and in wetter years haying may be delayed. Grazing in early spring or late fall when the soil is wet will cause soil compaction.

This soil is poorly suited for most urban and commercial uses because of the seasonal high water table.

LbB—Lamoine-Scantic complex, 0 to 8 percent slopes

This very deep, nearly level to gently sloping unit is on coastal lowlands and in river valleys. The Lamoine soils are on small knolls, and the Scantic soils are in depressions. Slopes are smooth and slightly convex on the Lamoine soils and slightly concave on the Scantic soils. Slope ranges from 0 to 3 percent on the Scantic soils and 3 to 8 percent on the Lamoine soils. Areas are irregularly shaped and range from 3 to 100 acres.

This unit consists of about 45 percent somewhat poorly drained Lamoine soils, 40 percent poorly drained Scantic soils, and 15 percent other soils.

Typically, the surface layer of the Lamoine soil is dark brown silt loam 7 inches thick. The subsoil is 14 inches thick. It is mottled, light olive brown to light yellowish brown silt loam in the upper part; and mottled, light olive brown to olive silty clay loam in the lower part. The substratum is mottled, olive silty clay to a depth of 65 inches or more.

Typically, the surface layer of the Scantic soil is dark grayish brown silt loam 7 inches thick and is mottled in the lower part. It is underlain by 8 inches of mottled, olive gray silt loam. The subsoil is about 20 inches thick. It is mottled, olive gray silty clay loam in the upper part and mottled, olive gray silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Included with this unit in mapping are areas of very poorly drained Biddeford soils in depressions and moderately well drained Buxton soils and Dixfield and Colonel soils on knolls. These areas make up about 10 percent of the mapped acreage. Also included are areas of soils that are similar to Lamoine soil, but have 18 to 35 percent clay throughout or have bedrock at a depth of 20 to 40 inches. Soils with a surface layer and subsoil of loamy sand to sandy loam and a substratum of silt loam to silty clay loam are common inclusions where Lamoine and Scantic soils are adjacent to outwash soils. These areas make up about 5 percent of the mapped acreage.

The Lamoine soils have a perched high water table that is commonly at a depth of 6 inches to 1.5 feet from late fall to early summer. Scantic soils have a perched high water table commonly at a depth of 1 foot from mid-fall to early summer. Permeability of the Lamoine soils is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil and in the substratum. Permeability of the Scantic soils is moderate or moderately slow in the surface and subsurface layers and slow or very slow in the subsoil and substratum. The available water capacity is high.

Most of this unit is used for woodland, much of which was hay and pasture. Some areas are used for hay and pasture or are idle fields that are reverting to woodland.

This unit is fairly well suited for woodland and best

suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant reproduction of spruce and fir makes these soils well suited for pulpwood production. The main limitations of this unit are plant competition and the high water table. Plant competition is severe on this unit. Site preparation and weeding may be needed to suppress hardwoods. Equipment is difficult to operate on the wetter parts of the unit except during the drier parts of the year or when the ground is frozen. Windthrow hazard is severe on this unit because the high water table cause trees to be shallow rooted. Strip cutting or clearcutting will expose fewer trees to the wind and will help to prevent windthrow.

This unit will produce good yields of hay and pasture. The high water table is the major limitation for management. Grazing during early spring or late fall when the soil is wet will cause soil compaction. Haying may be delayed to mid-summer or late summer because of the high water table.

This unit has severe limitations for most commercial and residential uses because of the high water table, moderately slow to very slow permeability, and frost action.

LCB—Lamoine-Scantic-Buxton association, gently sloping

This unit consists of very deep, nearly level to strongly sloping soils on coastal lowlands and in river valleys. The Lamoine and Buxton soils are on small knolls and ridges surrounded by the nearly level Scantic soils. Slopes are smooth. They are mainly convex on the Lamoine and Buxton soils and concave on the Scantic soils. Slope ranges from 0 to 8 percent on the Lamoine soils, 0 to 3 percent on the Scantic soils, and 5 to 15 percent on the Buxton soils. Areas of the unit are irregularly shaped and range from 15 to 200 acres.

This unit consists of about 35 percent somewhat poorly drained Lamoine soils, 30 percent poorly drained Scantic soils, 20 percent moderately well drained Buxton soils, and 15 percent other soils.

Typically, the surface layer of the Lamoine soil is dark brown silt loam 7 inches thick. The subsoil is 14 inches thick. It is mottled, light olive brown to light yellowish brown silt loam in the upper part and mottled, light olive brown to olive silty clay loam in the lower part. The substratum is mottled, olive silty clay to a depth of 65 inches or more.

Typically, the surface layer of the Scantic soil is about 7 inches of dark grayish brown silt loam that is mottled in the lower part. It is underlain by 8 inches of mottled, olive gray silt loam. The subsoil is 20 inches thick. It is mottled, olive gray silty clay loam in the upper part and mottled, olive gray silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Typically the surface layer of the Buxton soil is dark brown silt loam about 8 inches thick. The subsoil is about 27 inches thick. It is dark yellowish brown silt loam in the upper part; mottled, light olive brown silty clay loam in the middle part; and mottled, olive silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Included with this unit in mapping are small areas of well drained, clayey soils and moderately well drained, somewhat poorly drained, and poorly drained soils that are 18 to 35 percent clay. These areas make up about 10 percent of the mapped acreage. Also included are areas of shallow Lyman soils and moderately well drained Dixfield and Nicholville soils on knolls or small ridges and an occasional pocket of very poorly drained Biddeford soil. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 6 inches to 1.5 feet in the Lamoine soil, within 1 foot of the surface in the Scantic soil, and at a depth of 1.5 to 3 feet in the Buxton soil. Permeability of the Lamoine and Buxton soils is moderate or moderately slow in the surface layer and subsoil and slow or very slow in the substratum. Permeability of the Scantic soil is moderate or moderately slow in the surface layer, moderately slow in the subsoil, and slow or very slow in the substratum. Surface runoff is medium to rapid on the Buxton soil, medium on the Lamoine soil, and slow on the Scantic soil. Available water capacity is high in all three soils.

Most areas of this unit are used for woodland.

This unit is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. White pine will produce well on this soil, but requires considerable management to reduce competition from other species. The abundant natural reproduction of spruce and fir makes these soils best suited for pulpwood production. The main limitations of this unit are plant competition and the high water table. Competition of hardwoods may require suppression by weeding and thinning to enhance the growth of softwood stands. Windthrow hazard is severe on this unit because the high water table cause trees to be shallow rooted. Strip cutting or clearcutting will expose fewer trees to the wind and will help to prevent windthrow. Because of the high water table, use of harvesting equipment should be restricted to the drier

months or when the soil is frozen; the equipment is easiest to use then and causes the least damage to the site.

This unit is a poor site for roads because of the high water table and frost action. A coarse grained subgrade to frost depth is needed to prevent frost action. Roadfill is needed to raise the subgrade above the seasonal high water table.

These soils are a poor source of roadfill because of the high water table.

LgB—Lyman-Brayton complex, 0 to 15 percent slopes, very stony

This nearly level to rolling unit is on upland glacial till ridges. The Lyman soils are on the crests and side slopes of the ridges. The Brayton soils are in depressions between the ridges. Slopes are complex. Slope ranges from 0 to 3 percent on the Brayton soils and from 3 to 15 percent on the Lyman soils. Areas are irregularly shaped and range from 3 to 200 acres. Up to 3 percent of the surface of the areas is covered with stones.

This unit consists of about 40 percent shallow, somewhat excessively drained Lyman soils; 30 percent deep, poorly drained Brayton soils; and 30 percent other soils.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Typically, the surface of the Brayton soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black highly decomposed organic material, over 5 inches of very dark gray fine sandy loam and mottled, gray gravelly fine sandy loam. The subsoil is 13 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown in the lower part. The substratum is firm to very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of very shallow, excessively drained Schoodic soils, a soil similar to Schoodic, but with less than 35 percent rock fragments, and rock outcrops on the crests of ridges. These areas make up about 15 percent of the mapped acreage. Also included in depressions and drainageways with the Brayton soils are soils that are similar to Brayton, but are somewhat poorly drained to very poorly drained and have bedrock at a depth of less than 65 inches, pockets of Wonsqueak soils, and other organic soils that are less than 51 inches deep to bedrock. These areas make up about 10 percent of the mapped acreage. Some areas have moderately deep, well drained Tunbridge soils;a soil similar to Tunbridge but is moderately well drained; moderately well drained Dixfield soils on the side slopes of ridges; and somewhat poorly drained Colonel soils. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman soil and more than 60 inches in the Brayton soil. A perched high water table is commonly within 1 foot of the surface of the Brayton soil from late fall to late spring. Permeability in the Lyman soil is moderately rapid and in the Brayton soil is moderate or moderately rapid in the surface layer and subsoil and slow or very slow in the substratum. Available water capacity is very low or low for Lyman soil and moderate for Brayton soil. Surface runoff is slow to rapid for Lyman soil and slow for Brayton soil. Rooting depth is restricted by depth to bedrock in the Lyman soil and by the firm substratum and high water table in the Brayton soil.

This unit is used mainly for woodland.

This unit is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant reproduction of spruce and fir makes the unit best suited for pulpwood production. The main limitations of this unit are the high water table and depth to rock. Seedling mortality is moderate on the unit because of the high water table in Brayton soils and droughtiness of the Lyman soils. Windthrow hazard is severe on this unit because the high water table and compact substratum in Brayton soils and the bedrock in the Lyman soils cause trees to be shallow rooted. Strip cutting or clearcutting will reduce the amount of windthrow damage.

This unit is very poorly suited for cultivated crops and hay and pasture because of surface stoniness, high water table in the Brayton soils, and depth to bedrock in the Lyman soils.

The major limitations of this unit as a site for dwellings are depth to bedrock in the Lyman soils and the high water table in the Brayton soils. If possible, dwellings with basements should be located on inclusions of very deep, moderately well drained and well drained soils. If dwellings with basements are located on the Lyman soils, bedrock will have to be removed or the foundation placed on the bedrock and backfilled to grade.

Depth to bedrock in the Lyman soils and the high water table in the Brayton soils are the major limitations of this unit for septic tank absorption fields.

On the deeper areas of Lyman soils, fill material can be used to raise the level of the absorption fields.

LHC—Lyman-Brayton-Schoodic complex, rolling, very stony

This undulating to rolling unit is on upland glacial till ridges and in depressions and drainageways between the ridges. Schoodic soils are on the crest of the ridges. Lyman soils are on the upper slopes. Brayton soils are on the lower toe slopes and in drainageways. Up to 3 percent of the surface of the unit is covered with stones. Slopes are complex. Slope on the Brayton soils ranges from 0 to 3 percent and on the Lyman and Schoodic soils from 3 to 15 percent. Areas of the unit are irregularly shaped and range from 15 to 250 acres.

This unit consists of about 30 percent shallow, somewhat excessively drained Lyman soils, 25 percent very deep, poorly drained Brayton soils, 20 percent very shallow, excessively drained Schoodic soils, and 25 percent other soils.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Typically, the surface of the Brayton soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black highly decomposed organic material, over 5 inches of very dark gray fine sandy loam; and mottled, gray gravelly fine sandy loam. The subsoil is 13 inches thick. It is mottled, grayish brown fine sandy loam in the upper part and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm to very firm, mottled, olive fine sandy loam to a depth of 65 inches or more.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Included in mapping are areas of a soil similar to Schoodic soils, but with less than 35 percent rock fragments and rock outcrop on the crests of ridges. These areas make up about 5 percent of the mapped acreage. Also included are areas of moderately deep Tunbridge soils; a soil similar to Tunbridge soils, but that is moderately well drained, moderately well drained Dixfield soils on the side slopes of ridges, and somewhat poorly drained Colonel soils. These areas make up about 10 percent of the mapped acreage. Pockets of very poorly drained Wonsqueak and Bucksport soils, somewhat poorly drained Naskeag soils, and soils similar to Lyman soils but that are very poorly or poorly drained are included in the mapping. These areas make up about 10 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman soils, more than 60 inches in the Brayton soils, and 1 to 10 inches in the Schoodic soils. A perched high water table is commonly within 1 foot of the surface of the Brayton soils from late fall to late spring. Permeability is moderately rapid in the Lyman soils, rapid in the Schoodic soils, and moderate or moderately rapid in the surface layer and subsoil and slow or very slow in the substratum of the Brayton soils. Surface runoff is slow to rapid on the Lyman and Schoodic soils and slow on the Brayton soil. Available water capacity is very low for the Lyman soils, moderate for the Brayton soils, and very low for the Schoodic soils. Rooting depth is restricted by depth to bedrock in the Lyman and Schoodic soils and by the firm substratum and high water table in the Brayton soils.

Most areas of this unit are used for woodland.

This unit is fairly well suited for softwood production. The main tree species on this unit are red spruce, balsam fir, and red maple. The abundant reproduction of spruce and fir makes the unit best suited for pulpwood production. The main limitations of this unit are the high water table and depth to bedrock. Seedling mortality is moderate to severe on the unit because of the high water table in the Brayton soils and droughtiness of the Lyman and Schoodic soils. Windthrow hazard is severe on this unit because the high water table in the Brayton soils, shallow depth to bedrock in the Lyman soils, and the very shallow depth to bedrock in Schoodic soils cause trees to be shallow rooted. Strip cutting or clearcutting will reduce the amount of windthrow damage.

This unit is a poor source of roadfill material because of the high water table in the Brayton soils and depth to bedrock of the Lyman and Schoodic soils.

This unit is a poor site for roads because of the high water table and frost action of the Brayton soils and

depth to bedrock and slope of the Lyman and Schoodic soils. Roads on this unit should be designed on the contour to reduce cuts and lessen slope.

LsE—Lyman-Schoodic complex, 15 to 45 percent slopes, very stony

This hilly to very hilly unit is on the side slopes of upland glacial till ridges and mountains. Slopes are mainly complex. Areas are irregularly shaped and range from 3 to 200 acres. Up to 3 percent of the acreage of the areas is covered with stones.

This unit consists of about 45 percent shallow, somewhat excessively drained Lyman soils, 35 percent very shallow, excessively drained Schoodic soils, and 20 percent other soils.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs about 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs about 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Included with this unit in mapping are areas of rock outcrop; a soil similar to Schoodic soils, but with less than 35 percent rock fragments; shallow, sandy till soils on the crests of ridges; moderately deep, well drained Tunbridge soils; well drained Marlow soils; and deep, well drained, loamy till soils on the side slopes of ridges. These areas make up about 15 percent of the mapped acreage. Also included are moderately well drained Dixfield soils and moderately deep, moderately well drained, loamy till soils on toe slopes. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman soils and 1 to 10 inches in the Schoodic soils. Permeability is moderately rapid for Lyman soils and rapid for Schoodic soils. Available water capacity is low or very low for Lyman soils and very low for Schoodic soils. Surface runoff is rapid for both soils. Rooting depth is restricted in both soils by the depth to bedrock.

The unit is mostly used for woodland. A few areas are used for wild blueberry production. A few of the less sloping areas are used for residential development.

This unit is poorly suited for woodland. The main tree species are red spruce and balsam fir. The abundant natural reproduction of spruce and fir makes this unit best suited for pulpwood production. The main limitations of this unit are soil depth, erosion hazard, and slope. Seedling mortality is moderate on the Lyman soils and severe on the Schoodic soils because of droughtiness. Windthrow hazard is severe on this unit because the very shallow and shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage. Severe erosion can occur on the skid trails and roads on the steeper slopes in the unit. Erosion can be reduced by locating the skid trails and roads on the contour and by using waterbars on roads. The use of equipment is difficult on the steeper slopes of the unit.

This unit will produce fair to poor yields of wild blueberries. The main limitations are droughtiness, stones on the surface, and slope. During years of normal or higher rainfall, Lyman soils will produce fair yields of blueberries. The very stony surface and slope restricts the use of flail mowers, mechanical harvesters, and other equipment.

This unit has severe limitations for urban uses because of slope and depth to bedrock. Dwellings, small commercial buildings, and septic tank absorption fields should be located in less sloping, deep inclusions in the unit.

LTE—Lyman-Schoodic-Rock outcrop complex, very hilly, very stony

This hilly to very hilly unit is on side slopes of upland glacial till ridges and mountains. The Schoodic soils and rock outcrop are on the peaks and upper side slopes of ridges and mountains. The Lyman soils are on the lower side slopes. Up to 3 percent of the surface of the unit is covered with stones. Slopes are complex and range from 15 to 45 percent. Areas of the unit are irregularly shaped and range from 15 to 250 acres.

This unit consists of about 45 percent shallow, somewhat excessively drained Lyman soils; 25 percent very shallow, excessively drained Schoodic soils; 15 percent rock outcrops; and 15 percent other soils.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs about 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part

and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Typically, the surface of the Schoodic soils is covered with a mat of leaves, needles, and twigs about 4 inches thick. The surface layer is 3 inches of dark reddish brown, moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Rock outcrop is exposed areas of mainly schist, phyllite, granite, diorite, or gneiss bedrock. Some of this rock outcrop is covered with mosses and lichens.

Included with this unit in mapping are areas of a soil similar to Schoodic soils, but with less than 35 percent rock fragments or slopes of less than 15 percent and areas of well drained Marlow soils and somewhat excessively drained Hermon soils on lower side slopes. These areas make up about 10 percent of the mapped acreage. Also included are areas of very shallow and shallow gravelly loamy sand. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman soils and 1 to 10 inches in the Schoodic soils. Permeability is moderately rapid for Lyman soils and rapid for Schoodic soils. Surface runoff is rapid on both soils. Available water capacity is low or very low in the Lyman soils and very low in the Schoodic soils. Rooting depth is restricted by the depth to bedrock.

Most areas of this unit are used for woodland; however, this unit is poorly suited for woodland.

The main tree species are red spruce and balsam fir. The abundant natural reproduction of spruce and fir makes this unit best suited for pulpwood production. The main limitations of this unit are depth to bedrock, erosion hazard, and slope. Seedling mortality is moderate on the Lyman soils and severe on the Schoodic soils because of droughtiness. Windthrow hazard is severe on this unit because the very shallow and shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage. Severe erosion can occur on the skid trails and roads on the steeper slopes in the unit. Erosion can be reduced by locating the skid trails and roads on the contour and by using waterbars on roads. The use of equipment is difficult on the steeper slopes of the unit.

This unit is a poor source of roadfill material because of the depth to bedrock of the soils.

The unit has severe limitations as a site for roads because of slope and depth to bedrock. Roads on this unit should be designed on the contour to keep cuts to a minimum and lessen slope. Removal of bedrock will be necessary in some areas, and roadfill will be needed to construct an adequate road base.

LuC—Lyman-Tunbridge complex, 0 to 15 percent slopes, very stony

This nearly level to rolling unit is on the crests and side slopes of upland glacial till ridges. Slopes are mainly complex. Slope ranges from 3 to 15 percent on Lyman soils and from 0 to 15 percent on Tunbridge soils. Areas are irregularly shaped and range from 3 to 200 acres. Up to 3 percent of the surface of the areas is covered with stones.

This unit consists of about 40 percent shallow, somewhat excessively drained Lyman soils; 35 percent moderately deep, well drained Tunbridge soils; and 25 percent other soils.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at 19 inches.

Typically, the surface layer of the Tunbridge soil is 4 inches of black highly decomposed organic material over 2 inches of reddish gray fine sandy loam. The subsoil is 13 inches thick. It is dark reddish brown to yellowish red fine sandy loam in the upper part and yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Hard bedrock is at a depth of 33 inches.

Included with this unit in mapping are areas of very shallow, excessively drained Schoodic soils; a soil similar to Schoodic soils, but with less than 35 percent rock fragments; shallow, sandy till soils and rock outcrop on the crests of ridges; and well drained Marlow soils; moderately well drained Dixfield soils; moderately deep, moderately well drained, loamy till soils; and deep, well drained, loamy till soils on the side slopes and between the ridges of Lyman and Tunbridge soils. These areas make up about 20 percent of the mapped acreage. Also included are areas of somewhat poorly drained Colonel soils and poorly drained Brayton soils in depressions and drainageways. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman soils and 20 to 40 inches in the Tunbridge soils. Permeability is moderately rapid for Lyman soils and moderate or moderately rapid for Tunbridge soils.

Available water capacity is low or very low in the Lyman soils and moderate in the Tunbridge soils. Rooting depth is restricted by the depth to bedrock.

This unit is used mostly for woodland. A few areas are used for residential development and wild blueberry production.

This unit is fairly well suited for softwood production. The main tree species are red spruce and balsam fir on Lyman soils. On the moderately deep Tunbridge soils and deeper inclusions, northern hardwoods are the main species. The abundant natural reproduction of spruce and fir makes this unit best suited for pulpwood production. The main limitations of this unit are plant competition and depth to bedrock. If this unit is managed for softwoods, competition from hardwoods must be controlled. Seedling mortality is moderate on the Lyman soils because of droughtiness. Windthrow hazard is severe on the Lyman soils because the shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage.

This unit will produce fair to good yields of blueberries. The main limitations are droughtiness and stones on the surface. During dry years, yields will be reduced because of the droughtiness of the Lyman soils and inclusions of very shallow soils. The very stony surface and inclusions of rock outcrop will restrict the use of flail mowers and mechanical harvesters on this unit.

The major limitations of this unit as a site for dwellings are depth to bedrock and slope. Cuts needed to provide essentially level building sites can expose bedrock. Dwellings with basements should be located on inclusions of deep soils in this unit, the bedrock should be removed, or the foundation should be set on the bedrock and backfilled to the established grade. The buildings should be designed to conform to the natural slope.

Depth to bedrock is also the major limitation of the unit for septic tank absorption fields. The systems can be located in deeper inclusions in the unit, if available, or fill material can be used to raise the level of the absorption field. The systems should be designed to conform to the natural slope.

LWC—Lyman-Tunbridge-Schoodic complex, rolling, very stony

This undulating to rolling unit is on upland glacial till ridges and mountains. Schoodic soils are typically on the crest and peaks of the ridges and mountains. Lyman and Tunbridge soils are on side slopes. Up to 3 percent of the surface of the unit is covered with stones. Slopes are mainly complex. Slope ranges from 8 to 15 percent on the Lyman and Tunbridge soils and from 0 to 15 percent on the Schoodic soils. Areas of the unit are irregularly shaped and range from 15 to 250 acres.

This unit consists of about 30 percent shallow, somewhat excessively drained Lyman soils; 25 percent moderately deep, well drained Tunbridge soils; 20 percent very shallow, excessively drained Schoodic soils; and 25 percent other soils.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Typically, the surface layer of the Tunbridge soil is 4 inches of black highly decomposed organic material over 2 inches of reddish gray fine sandy loam. The subsoil is 13 inches thick. It is dark reddish brown to yellowish red fine sandy loam in the upper part and yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Hard bedrock is at a depth of 33 inches.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs about 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Included with this unit in mapping are areas of soils similar to Schoodic soils but with less than 35 percent rock fragments and areas of rock outcrop on crests of ridges. These areas make up about 5 percent of the mapped acreage. Also included are areas of well drained Marlow soils; moderately well drained, moderately deep soils; and moderately well drained Dixfield soils on side slopes; somewhat poorly drained to poorly drained Naskeag soils; and poorly drained Brayton soils in depressions and drainageways. These areas make up about 10 percent of the mapped acreage. Included in mapping in coastal areas are areas of very shallow and shallow gravelly loamy sand soils on ridgetops and moderately well drained Buxton soils and somewhat poorly drained Lamoine soils between ridges. These areas make up about 10 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman

soils, 20 to 40 inches in the Tunbridge soils, and 1 to 10 inches in the Schoodic soils. Permeability is moderately rapid for Lyman soils, moderate or moderately rapid for Tunbridge soils, and rapid for Schoodic soils. Surface runoff is slow to rapid on all of these soils. Available water capacity is low or very low in the Lyman soils, moderate in the Tunbridge soils, and very low in the Schoodic soils. Rooting depth is restricted by the depth to bedrock.

Most areas of this unit are used for woodland.

This unit is fairly well suited for softwood production. The main tree species are red spruce and balsam fir. On the moderately deep Tunbridge soils and deeper inclusions, northern hardwoods are the main species. The abundant natural reproduction of spruce and fir makes this unit best suited for pulpwood production. The main limitations of this unit are plant competition and depth to bedrock. If this unit is managed for softwoods, competition from hardwoods must be controlled.

Seedling mortality is moderate on the Lyman soils and severe on the Schoodic soils because of droughtiness. Windthrow hazard is severe on the Lyman and Schoodic soils because the shallow and very shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage.

This unit is a poor source of roadfill material because of the depth to bedrock.

This unit has severe limitations for roads because of depth to bedrock. Roads should be designed to keep cuts to a minimum. Removal of bedrock will be necessary in some areas and roadfill will be needed to construct an adequate road base.

MaC—Marlow fine sandy loam, 8 to 15 percent slopes

This very deep, strongly sloping, well drained soil is on the side slopes of glacial till ridges. The areas are mainly oval to irregularly shaped and range from 3 to 50 acres. Slopes are smooth and convex.

Typically, the surface layer is dark brown fine sandy loam 8 inches thick. The subsoil is 13 inches thick. It is yellowish brown fine sandy loam in the upper part and light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of moderately well drained Dixfield soils on lower side slopes and a few areas of somewhat poorly drained Colonel soils on toe slopes. These areas make up about 10 percent of the mapped acreage. Also included are areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on the crest and upper side slopes of the ridges. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in this Marlow soil for short periods in the spring. Permeability of the soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium to rapid. Available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of this soil are used for pasture and hayland. Some areas that were pasture have reverted to woodland. A few areas are used as sites for residential development, cropland, and wild blueberry production.

This soil is fairly well suited for cropland. The main limitation is erosion hazard. Erosion control practices such as conservation tillage, contour farming, and stripcropping are needed to prevent erosion.

The soil is well suited for hay and pasture. The firm substratum will restrict rooting depth of deep-rooted legumes such as alfalfa.

This soil is well suited for hardwood production. It has few limitations. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken during harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate, but natural regeneration is usually adequate to overcome the competition.

This soil will produce high yields of blueberries with good management. Weed control is needed to prevent competition from grasses and shrubs. The fertility and moderate available water capacity of this soil encourage competing vegetation. This soil has few surface stones and is suitable for flail mowing and mechanical harvesting.

Slope is the major limitation of this soil for most urban uses. The limitation can be lessened by designing developments to conform with the natural slope and by land shaping where needed. Installing drains around the foundations and placing footings above the high water table will help prevent wet

basements. The moderately slow to slow permeability of the substratum of this soil cause severe limitations for septic tank absorption fields. Fill material is needed to raise the level of the absorption field.

MaD—Marlow fine sandy loam, 15 to 25 percent slopes

This very deep, moderately steep to steep, well drained soil is on the side slopes of glacial till ridges. Areas are mainly oval to irregularly shaped and range from 3 to 30 acres. Slopes are smooth and convex.

Typically, the surface layer is dark brown fine sandy loam 8 inches thick. The subsoil is 13 inches thick. It is yellowish brown fine sandy loam in the upper part and light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on the crests and upper side slopes of the ridges. These areas make up about 10 percent of the mapped acreage. Also included are areas of moderately well drained Dixfield soils on the lower slopes and an occasional seep area of somewhat poorly drained Colonel soil on toe slopes. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in this Marlow soil for short periods in the spring. Permeability of the soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is rapid. Available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of this soil are used for pasture and hayland. Some areas that were pasture have reverted to woodland. A few areas are used as sites for residential development, cropland, and wild blueberry production.

This soil is poorly suited for cropland. The main limitations are slope and erosion hazard. Erosion control practices such as conservation tillage, contour farming, stripcropping, and diversions are needed to prevent soil erosion.

The soil is fairly well suited for hay and pasture. The firm substratum will restrict the rooting depth of deep-rooted legumes such as alfalfa. Equipment is difficult to operate on the steeper slopes.

This soil is well suited for hardwood production. It has few limitations. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate, but natural regeneration is usually adequate to overcome the competition. Erosion can occur on skid trails and roads. Laying out the skid trails and roads on the contour and using waterbars on the roads will reduce erosion. Use of equipment will be restricted on the steeper slopes in the unit.

This soil will produce high yields of blueberries with good management. Weed control is needed to prevent competition from grasses and shrubs. The fertility and moderate available water capacity of this soil encourage competing vegetation. This soil has few surface stones and is suitable for flail mowing and mechanical harvesting, but equipment may be difficult to use on the steeper slopes.

Slopes limit the use of this soil for urban uses. Dwellings and septic tank absorption fields should be on less sloping inclusions.

MbC—Marlow fine sandy loam, 8 to 15 percent slopes, very stony

This very deep, strongly sloping, well drained soil is on the side slopes of glacial till ridges. The areas are mainly oval to irregularly shaped and range from 3 to 200 acres. Up to 3 percent of the surface of these areas are covered with stones.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderately decomposed organic material over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of moderately well drained Dixfield soils on lower side slopes and a few areas of somewhat poorly drained Colonel soils on toe slopes. These areas make up about 15 percent of the mapped acreage. Also included are areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on the crests and upper side slopes of the ridges. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in this Marlow soil for short periods in

the spring. Permeability of the soil is moderate in the surface layer and the subsoil and moderately slow or slow in the substratum. Surface runoff is medium to rapid. Available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production and as sites for residential development.

This soil is well suited for hardwood production. It has few limitations. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate on the soil, but natural regeneration is usually adequate to overcome the competition.

In areas of wild blueberries, this soil will produce good yields. Weed control is needed to prevent competition from grasses and shrubs. Mechanical harvesting of blueberries and flail mowing is restricted by surface stones.

Slope is the major limitation of this soil for most urban uses. The limitation can be lessened by designing developments to conform to the natural slope and by land shaping where needed. Installing drains around the foundation and placing footings above the high water table will help prevent wet basements. The moderately slow or slow permeability of the substratum of this soil cause severe limitations for septic tank absorption fields. Fill material is needed to raise the level of the absorption field.

MbE—Marlow fine sandy loam, 15 to 45 percent slopes, very stony

This very deep, moderately steep to steep, well drained soil is on the side slopes of glacial till ridges. Slopes are smooth and convex. Areas mainly are oval or long and irregularly shaped and range from 3 to 150 acres. Up to 3 percent of the surface of these areas is covered with stones.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderately decomposed organic material, over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on the crests and upper side slopes of the ridges. These areas make up about 10 percent of the mapped acreage. Also included are areas of moderately well drained Dixfield soils on the lower slopes and an occasional seep area of somewhat poorly drained Colonel soils on toe slopes. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in this Marlow soil for short periods in the spring. Permeability of the soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is rapid. Available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production and as sites for residential development.

This soil is well suited for hardwood production. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. The main limitations of this soil are erosion hazard and slope. Erosion can occur on skid trails and roads on the unit. Laying out the skid trails and roads on the contour and using waterbars on the roads will reduce erosion. Use of equipment is restricted by the steep slopes in this unit. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate, but natural regeneration is usually adequate to overcome the competition.

The soil is poorly suited for cultivated crops, hay, or pasture because of the very stony surface and slope.

In areas of wild blueberries, this soil will produce good yields. Weed control is needed to reduce competition from grasses and weeds. Mechanical harvesting, flail mowing, and other equipment use are restricted by slope and surface stones.

Slope limits the use of this soil for most urban uses. Dwellings and septic tank absorption fields should be on less sloping inclusions.

McC—Marlow fine sandy loam, 3 to 15 percent slopes, extremely bouldery

This very deep, gently sloping to strongly sloping, well drained soil is on the side slopes of glacial till ridges. Areas mainly are oval or irregularly shaped and range from 3 to 200 acres. Slopes are smooth and

convex. Stones and boulders cover 3 to 15 percent of the surface of the soil.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderately decomposed organic material, over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of moderately well drained Dixfield soil on lower side slopes and a few areas of somewhat poorly drained Colonel soil on toe slopes. These areas make up about 15 percent of the mapped acreage. Also included are areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on the crests and upper side slopes of ridges. These areas make up about 5 percent of the mapped acreage. Extremely stony and very stony Marlow soils are also included in mapping. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in this Marlow soil for short periods in the spring. Permeability of the soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium to rapid. Available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of the soil are used for woodland. A few areas are used for wild blueberry production and as sites for residential development.

This soil is well suited for hardwood production. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. The main limitation of this soil is stones and boulders on the surface. Equipment is very difficult to use on this soil because of the stones and boulders. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate, but natural regeneration is usually adequate to overcome the competition.

The soil is poorly suited for cropland, pasture, and hayland because of the stones and boulders on the surface.

In areas of wild blueberry plants, good yields of blueberries can be produced on this soil, but the extremely bouldery surface creates severe management limitations. Equipment is very difficult to use on this soil because of the bouldery surface. Weed control is essential to reduce competition to the blueberry plants from the grasses and weeds.

Slope and the surface stones and boulders are the major limitations of this soil as a site for dwellings. Designing developments to the natural slope and land shaping will reduce the limitation of slope. Installing drains around the foundation and placing footings above the high water table will help prevent wet basements.

The moderately slow or slow permeability of the substratum of this soil cause severe limitations for septic tank absorption fields. Fill material is needed to raise the level of the absorption fields.

McE—Marlow fine sandy loam, 15 to 45 percent slopes, extremely bouldery

This very deep, moderately steep or steep, well drained soil is on the side slopes of glacial till ridges. Areas are oval or long and irregularly shaped and range from 3 to 150 acres. Stones and boulders cover 3 to 15 percent of the surface of the soil.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderately decomposed organic material, over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of shallow, somewhat excessively drained Lyman soils and moderately deep, well drained Tunbridge soils on the crests and upper side slopes of the ridges. These areas make up about 10 percent of the mapped acreage. Also included are areas of moderately well drained Dixfield soils on the lower slopes and an occasional area of somewhat poorly drained Colonel soils on toe slopes. These areas make up about 10 percent of the mapped acreage. Extremely stony and very stony Marlow soils are also included in mapping. They make up about 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in this Marlow soil for short periods in the spring. Permeability of the soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is rapid. Available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production or as sites for residential development.

This soil is fairly well suited for hardwood production. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. The main limitations of this soil are stones and boulders on the surface, erosion hazard, and slope. Severe erosion can occur on skid trails and roads. Laying out skid trails and roads on the contour and using waterbars on the roads will reduce erosion. Equipment is very difficult to use on this soil because of the extremely bouldery surface and slope. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate on this soil, but natural regeneration is usually adequate to overcome the competition.

In areas of wild blueberry plants, good yields of blueberries can be produced on this soil. However, because of the extremely bouldery surface and slope it is difficult to use equipment on this soil. Weed control is essential to reduce competition to blueberry plants from grasses and weeds.

The soil has severe limitations for most urban uses because of slope, boulders, and firm substratum. Dwellings, septic tank absorption fields, or small commercial buildings should be located on less sloping inclusions in the unit.

MDC—Marlow-Dixfield association, strongly sloping, very stony

This very deep unit is on glacial till ridges. Slope ranges from 8 to 15 percent. The Marlow soils are typically on the side slopes of the ridges. The Dixfield soils are typically on the crests and toe slopes of the ridges. Up to 3 percent of the surface of the unit is covered with stones. Slopes are smooth and mainly convex on the Marlow soils. They are smooth and mainly convex on the crests and concave on the toe slopes on the Dixfield soils. Areas of this unit are mainly oval and range from 15 to 250 acres.

This unit consists of 45 percent well drained Marlow soils, 35 percent moderately well drained Dixfield soils, and 20 percent other soils.

Typically, the surface of the Marlow soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderately decomposed organic material over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material, underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam; and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of moderately deep Tunbridge soils, shallow Lyman soils, very shallow Schoodic soils, and a few rock outcrops on ridgetops. These areas make up about 15 percent of the mapped acreage. Also included are areas of somewhat poorly drained Colonel soils and poorly drained Brayton soils in drainageways and depressions. These areas make up about 5 percent of the mapped acreage. In some areas Marlow and Dixfield soils with nonstony surfaces are included in mapping. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in the Marlow soil for short periods in the spring and commonly at a depth of 1.5 to 2 feet in the Dixfield soil from late fall to spring.Permeability of both soils is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium, and available water capacity is moderate. Roots are restricted by the firm substratum.

Most areas of this unit are used for woodland.

This unit is well suited for hardwood production. It has few limitations. Softwoods produce well on this soil but require considerable management to reduce competition from hardwoods. Windthrow hazard is moderate on these soils because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate on this unit, but natural regeneration is usually adequate to overcome the competition.

Marlow soils are a good source of roadfill material. Dixfield soils are a fair source of roadfill material. The main limitation is the high water table.

Marlow soils have moderate limitations and Dixfield soils have severe limitations as sites for roads because of frost action. A coarser grained subgrade to frost

depth is needed to prevent frost action. Roads on this unit should be designed in the contour to lessen the slope.

MDE—Marlow-Dixfield association, steep, very stony

This very deep, moderately steep to steep unit is on the side slopes of glacial till ridges. Slope ranges from 15 to 45 percent on Marlow soils and from 15 to 30 percent on Dixfield soils. Marlow soils are typically on the upper part of the slopes, and Dixfield soils are typically on the toe slopes. Up to 3 percent of the surface of the unit is covered with stones. Slopes are smooth and convex on the Marlow soils and concave on the Dixfield soils. Areas of the unit are mainly oval and range from 15 to 200 acres.

This unit consists of about 50 percent well drained Marlow soils, 25 percent moderately well drained Dixfield soils, and 25 percent other soils.

Typically, the surface layer of the Marlow soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderate decomposed organic material, over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of moderately deep Tunbridge soils, shallow Lyman soils, very shallow Schoodic soils, and rock outcrops on ridgetops. These areas make up about 20 percent of the mapped acreage. Also included are areas of Marlow soils with slopes of more than 45 percent and Marlow and Dixfield soils with nonstony surfaces. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in the Marlow soils for short periods in the spring and commonly at a depth of 1.5 to 2 feet in the Dixfield soils from late fall to spring. Permeability of both soils is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is rapid, and available water capacity is moderate for both soils. Roots are restricted by the firm substratum.

Most areas of this unit are used for woodland.

This unit is fairly well suited for hardwood production. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. The main limitations of this unit are erosion hazard and slope. Severe erosion can occur on skid trails and roads. Laying out skid trails and roads on the contour and using waterbars on the roads will reduce erosion. Equipment is difficult to use on this unit because of slope. Windthrow hazard is moderate on this unit because the compact substratum and high water table cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate, but natural regeneration is usually adequate to overcome the competition.

Marlow soils are a good source of roadfill material. Dixfield soils are a fair source of roadfill material. The main limitation is the high water table.

This unit has severe limitations as a site for roads because of slope and frost action. Roads on this unit should be designed on the contour to lessen the slope. Considerable land shaping and grading will be required. A coarse grained subgrade to frost depth is needed to prevent frost action.

MGC—Marlow-Dixfield association, strongly sloping, extremely bouldery

This very deep, gently sloping to strongly sloping unit is on glacial till ridges. The Marlow soils are typically on the side slopes of the ridges. The Dixfield soils are typically on the crests and toe slopes of the ridges. Stones and boulders cover 3 to 15 percent of the surface of this unit. Slopes are smooth and mainly convex on the Marlow soils. They are smooth and mainly convex on the crests and concave on the toe slopes on the Dixfield soils. Slope ranges from 8 to 15 percent on the Marlow soils and from 3 to 15 percent on the Dixfield soils. Areas of this unit are mainly oval and range from 15 to 250 acres.

This unit consists of about 45 percent well drained Marlow soils, 35 percent moderately well drained Dixfield soils, and 20 percent other soils.

Typically, the surface of the Marlow soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black moderately decomposed organic material, over 2 inches of light

brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of Marlow and Dixfield soils with extremely stony, very stony, or nonstony surfaces. These areas make up about 10 percent of the mapped acreage. Also included in mapping are moderately deep Tunbridge soils, shallow Lyman soils, very shallow Schoodic soils, and rock outcrops on ridgetops. These areas make up about 10 percent of the mapped acreage. Poorly drained Brayton soils and somewhat poorly drained Colonel soils in drainageways and depressions are also included in mapping. These soils make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 2 to 3.5 feet in the Marlow soils for short periods in the spring, and commonly at a depth of 1.5 to 2 feet in the Dixfield soil from late fall to spring. Permeability of both soils is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium; available water capacity is moderate for both soils. Roots are restricted by the firm substratum.

Most areas of this unit are used for woodland.

This unit is fairly well suited for hardwood production. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. The main limitation of this unit is stones and boulders on the surface. Equipment is very difficult to use on this unit because of stones and boulders on the surface. Windthrow hazard is moderate on this unit; the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate on this unit, but natural regeneration is usually adequate to overcome the competition.

Marlow soils are a good source of roadfill material. Dixfield soils are a fair source of roadfill material. The main limitation is the seasonal high water table.

Marlow soils have moderate limitations and Dixfield soils have severe limitations as sites for roads because of frost action. A coarse grained subgrade to frost depth is needed to prevent frost action. Roads on this unit should be designed on the contour to lessen the slope.

MGE—Marlow-Dixfield association, steep, extremely bouldery

This very deep, moderately steep to steep unit is on the side slopes of glacial till ridges. Marlow soils are typically on the upper part of the slopes. Dixfield soils are typically on the toe slopes. Stones and boulders cover 3 to 15 percent of the surface of the unit. Slopes are smooth and convex on the Marlow soils and concave on the Dixfield soils. Slope ranges from 15 to 45 percent on Marlow soils and from 8 to 20 percent on Dixfield soils. Areas of the unit are mainly oval and range from 15 to 200 acres.

This unit consists of 50 percent well drained Marlow soils, 25 percent moderately well drained Dixfield soils, and 25 percent other soils.

Typically, the surface of the Marlow soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 4 inches of black, moderately decomposed organic material, over 2 inches of light brownish gray fine sandy loam. The subsoil is 19 inches thick. It is reddish brown fine sandy loam in the upper part and yellowish brown to light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material, underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of Marlow and Dixfield soils with extremely stony, very stony, or nonstony surfaces. These areas make up about 10 percent of the mapped acreage. Also included are areas of moderately deep Tunbridge soils, shallow Lyman soils, very shallow Schoodic soils, and rock

outcrops on ridgetops. These areas make up about 10 percent of the mapped acreage. Marlow soils with slopes of more than 45 percent, or less than 15 percent are included in mapping. They make up about 5 percent of the mapped acreage.

A perched high water table is at a depth of 2 to 3.5 feet in the Marlow soils for short periods in the spring, and commonly at a depth of 1.5 to 2 feet in the Dixfield soil from late fall to spring. Permeability of both soils is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is rapid; available water capacity is moderate for both soils. Roots are restricted by the firm substratum.

Most areas of this unit are woodland.

This unit is fairly well suited for hardwood production. Softwoods produce well on this unit, but require considerable management to reduce competition from hardwoods. The main limitations of this unit are erosion hazard, slope, and stones and boulders on the surface. Severe erosion can occur on skid trails and roads. Laying out skid trails and roads on the contour and using waterbars on the roads will reduce erosion. Equipment is very difficult to use on this unit because of stones and boulders on the surface and the slope. Windthrow hazard is moderate on this soil because the compact substratum cause trees to be shallow rooted. Care should be taken in harvesting to reduce trees exposed to the prevailing winds. Plant competition is moderate on this unit, but natural regeneration is usually adequate to overcome the competition.

Marlow soils are a good source of roadfill material. Dixfield soils are a fair source of roadfill material. The main limitation is the high water table.

This unit has severe limitations as a site for roads because of slope and frost action. Roads on this unit should be designed on the contour to lessen the slope. Considerable land shaping and grading will be required. A coarse grained subgrade to frost depth is needed to prevent frost action.

MhC—Monadnock-Hermon complex, 3 to 15 percent slopes, extremely bouldery

This very deep, undulating to rolling unit is on ridges of ground moraine. It is around lakes and in valleys at elevations of about 250 to 350 feet above sea level and on a few recessional moraines in coastal areas. Areas are irregularly shaped on ridges and long and narrow on recessional moraines. The areas range from 5 to 200 acres. Slopes are complex. Stones and boulders cover 3 to 15 percent of the surface of the unit.

This unit consists of about 50 percent well drained Monadnock soils, 35 percent somewhat excessively drained Hermon soils, and 15 percent other soils.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown highly decomposed organic material, underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black, moderately decomposed organic material, underlain by 3 inches of very dark grayish brown sandy loam and gray sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Included with this soil in mapping are areas of rubbly, extremely stony, and very stony Monadnock, Hermon, and loamy-skeletal soils. Also included are areas of extremely stony or extremely bouldery Dixfield soils and very stony or very bouldery Dixfield soils in slightly lower positions than the Hermon and Monadnock soils. These areas make up about 15 percent of the mapped acreage. A few areas of very stony or bouldery Colton soils and shallow Lyman soils are included in mapping. These areas make up about 5 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Monadnock soils have moderate permeability in the surface layer and subsoil and moderately rapid permeability in the substratum. Hermon soils have moderately rapid or rapid permeability. Available water capacity is moderate for Monadnock soils and low for Hermon soils. Runoff ranges from medium to rapid for Monadnock soils and slow to medium for Hermon soils.

Most areas of this unit are used for woodland. A few areas are used as sites for residential development and for wild blueberry production.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch generally do not produce as well as other hardwoods and are of poorer quality. Softwoods such as pines will produce well on this unit, but require considerable management to reduce competition from

hardwoods. The main limitations are stones and boulders on the surface, droughtiness, and plant competition. Equipment is difficult to use on this unit because of the stones and boulders on the surface. Hermon soils have severe seedling mortality because of droughtiness and the stones and boulders on the surface. Plant competition is moderate on the Monadnock soils, but natural regeneration is usually adequate to overcome the competition.

In areas of wild blueberries, this unit is fairly well suited for blueberry production. Droughtiness of the Hermon soils will limit yields in dry years unless irrigation is used. Equipment use is limited on this unit because of the extremely bouldery surface.

The large stones and boulders on and in the soil are the major limitations of this unit as a site for most urban uses such as dwellings and roads. Excavation and disposition of the stones may be difficult. The moderately rapid or rapid permeability in the substratum of the Hermon soils may cause pollution of the ground water if this unit is used for septic tank absorption fields. Slope, stones and boulders are also limitations. The absorption field should be designed to conform with the natural slope.

MhE—Monadnock-Hermon complex, 15 to 45 percent slopes, extremely bouldery

This very deep, hilly to steep unit is on side slopes of ridges of ground moraines. It is around lakes and in valleys at elevations of about 250 to 350 feet above sea level and on a few recessional moraines in the coastal areas. Areas are irregularly shaped on ridges and long and narrow on recessional moraines. The areas range from 5 to 200 acres. Slopes are complex. Stones and boulders cover 3 to 15 percent of the surface of the areas.

This unit consists of about 50 percent well drained Monadnock soils, 35 percent somewhat excessively drained Hermon soils, and 15 percent other soils.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown highly decomposed organic material, underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material, underlain by 3 inches of very dark grayish brown sandy loam and gray sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Included with the soil in mapping are areas of rubbly, extremely stony, and very stony Monadnock, Hermon, and loamy-skeletal soils. These areas make up about 10 percent of the mapped acreage. A few areas of very stony or bouldery Colton and Lyman soils are included in mapping. These areas make up 5 percent of the mapped acreage.

Depth to a seasonal high water table is commonly more than 6 feet in both soils. Monadnock soils have moderate permeability in the surface layer and subsoil and moderately rapid permeability in the substratum. Hermon soils have moderately rapid or rapid permeability. Available water capacity is moderate for Monadnock soils and low for Hermon soils. Runoff is rapid for Monadnock soils and medium for Hermon soils.

Most areas of this unit are woodland. A few areas are used as sites for residential development or for wild blueberry production.

This unit is fairly well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are of poorer quality. Softwoods such as pines will produce well on this unit, but require considerable management to reduce competition from hardwoods. The main limitations of this unit are stones and boulders on the surface, slope, erosion hazard, droughtiness, and plant competition. Equipment is difficult to use on this unit because of stones and boulders on the surface and the slope. Severe erosion can occur on skid trails and roads on the steeper slopes in the unit. Erosion can be reduced by locating skid trails and roads on the contour and using waterbars on roads. Hermon soils have severe seedling mortality because of droughtiness and stones and boulders on the surface. Plant competition is moderate on the Monadnock soils, but natural

regeneration is usually adequate to overcome the competition.

In areas of wild blueberries, this unit is fairly well suited for blueberry production. Droughtiness of the Hermon soils will limit yields in dry years unless irrigation is used. Equipment use is limited on this unit because of the extremely bouldery surface and slope.

This unit is poorly suited for most urban uses because of slope, surface stones, and boulders and because the moderately rapid or rapid permeability of the substratum in Hermon soils may cause pollution of the ground water if this unit is used for septic tank absorption fields. Sites for dwellings or small commercial buildings should be located on less sloping areas of Monadnock soils.

MXC—Monadnock-Hermon-Dixfield complex, rolling, extremely bouldery

This very deep, undulating to rolling unit is on ridges of ground moraine mainly around the edges of lakes and valleys in inland areas and on recessional moraines in coastal areas. The unit is typically at elevations of less than 350 feet above sea level. Monadnock and Hermon soils are on side slopes and crests of ridges and knolls. Dixfield soils are on lower slopes. Slopes are complex and range from 3 to 15 percent. Areas of the unit are irregularly shaped on ridges and are long and narrow on recessional moraines. The areas range from 15 to 250 acres. Stones and boulders cover 3 to 15 percent of the surface of the unit.

This unit consists of about 35 percent well drained Monadnock soils, 25 percent somewhat excessively drained Hermon soils, 20 percent moderately well drained Dixfield soils, and 20 percent other soils.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown highly decomposed organic material, underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black moderately decomposed organic material, underlain by 3 inches of very dark grayish brown sandy loam and gray sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material, underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with the unit in mapping are areas of rubbly, extremely stony, and very stony Monadnock, Hermon, and Dixfield soils. These soils make up about 10 percent of the mapped acreage. Also included are a few areas of poorly drained Brayton soils and somewhat poorly drained Colonel soils in depressions and drainageways; moderately well drained, extremely bouldery Sheepscot soils on toe slopes; and shallow Lyman soils and occasional rock outcrops on crests of ridges. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in the Dixfield soil from late fall to spring. In the Monadnock and Hermon soils the seasonal high water table is commonly at a depth of more than 6 feet. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Dixfield soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is medium on the Monadnock and Dixfield soils and slow to medium on the Hermon soil. Available water capacity is moderate for the Monadnock and Dixfield soils and low for the Hermon soil.

Most areas of this unit are used for woodland.

This unit is well suited for woodland and best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are of poorer quality. Softwoods such as pines will produce well on this unit, but require considerable management to reduce competition from hardwoods. The main limitations are stones and boulders on the surface, droughtiness, plant competition, and the high water table in Dixfield soils. Equipment is difficult to use on this unit because of

stones and boulders on the surface. The Hermon soils have severe seedling mortality because of droughtiness and the stones and boulders on the surface. Plant competition is moderate on the Monadnock and Dixfield soils, but natural regeneration is usually adequate to overcome the competition. Windthrow hazard is moderate on the Dixfield soils because the compact substratum and high water table cause trees to be shallow rooted.

This unit is a fair source of roadfill material. The large stones in the Hermon and Monadnock soils are the major limitation for use as roadfill.

Slope and the large stones in Hermon and Monadnock soils are the major limitations if this unit is used for roads. Roads should be designed on the contour to reduce the slope. A coarse grained subgrade to frost depth is needed to prevent frost action in the Dixfield soils.

MXE—Monadnock-Hermon-Dixfield complex, very hilly, extremely bouldery

This very deep unit is on the side slopes of ridges of ground moraine mainly around lakes and in valleys in inland areas and on recessional moraines in coastal areas. The unit is typically at elevations of less than 350 feet above sea level. Monadnock and Hermon soils are on upper slopes. Dixfield soils are on lower slopes. Slopes are complex. Slope ranges from 15 to 45 percent on the Monadnock and Hermon soils and from 8 to 15 percent on the Dixfield soils. Areas of the unit are irregularly shaped on ridges and are long and narrow on recessional moraines. The areas range from 15 to 150 acres. Stones and boulders cover 3 to 15 percent of the surface of the unit.

This unit consists of about 40 percent well drained Monadnock soils, 30 percent somewhat excessively drained Hermon soils, 15 percent moderately well drained Dixfield soils, and 15 percent other soils.

Typically, the surface of the Monadnock soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of dark reddish brown, highly decomposed organic material, underlain by 1 inch of very dark grayish brown fine sandy loam and 5 inches of grayish brown fine sandy loam. The subsoil is 12 inches thick. It is dark brown to light yellowish brown fine sandy loam in the upper part and yellowish brown gravelly sandy loam in the lower part. The substratum is light olive brown very gravelly loamy sand to a depth of 65 inches or more.

Typically, the surface of the Hermon soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 1 inch of black, moderately decomposed organic material, underlain by 3 inches of very dark grayish brown sandy loam and gray sandy loam. The subsoil is 27 inches thick. It is yellowish red sandy loam to strong brown gravelly sandy loam in the upper part and olive brown very gravelly loamy sand in the lower part. The substratum is olive extremely gravelly loamy sand to extremely gravelly coarse sand to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black, highly decomposed organic material, underlain by 4 inches of light gray fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of rubbly, extremely stony, and very stony Monadnock, Hermon, and Dixfield soils. These areas make up about 10 percent of the mapped acreage. Also included are a few areas of poorly drained Brayton soils and somewhat poorly drained Colonel soils in depressions and drainageways; extremely bouldery, moderately well drained Sheepscot soils on toe slopes; and shallow Lyman soils, very shallow Schoodic soils, and an occasional rock outcrop on crests of ridges and on upper side slopes. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.5 feet in the Dixfield soil from late fall to spring. In the Monadnock and Hermon soils the seasonal high water table is commonly at a depth of more than 6 feet. Permeability of the Monadnock soil is moderate in the surface layer and subsoil and moderately rapid in the substratum. Permeability of the Hermon soil is moderately rapid or rapid. Permeability of the Dixfield soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is rapid on the Monadnock soil, medium to rapid on the Dixfield soil, and medium on the Hermon soil. Available water capacity is moderate for the Monadnock and Dixfield soils and low for the Hermon soil.

Most areas of this unit are used for woodland.

This unit is fairly well suited for woodland and is best suited for the less site-demanding hardwoods, such as paper birch and northern red oak. White ash, sugar maple, and yellow birch do not generally produce as well as other hardwoods and are of poorer quality. Softwoods such as pines will produce well on this unit, but require considerable management to reduce

competition from hardwoods. The main limitations on this unit are stones and boulders on the surface, slopes, erosion hazard, droughtiness, plant competition, and the high water table in Dixfield soils. Equipment is difficult to use on this unit because of the stones and boulders on the surface and the slope. Severe erosion can occur on skid trails and roads on the steeper slopes of the unit. Erosion can be reduced by locating skid trails and roads on the contour and by the use of waterbars on roads. Hermon soils have severe seedling mortality because of droughtiness and the extremely bouldery surface. Plant competition is moderate on the Monadnock soils, but natural regeneration is usually adequate to overcome the competition. Windthrow hazard is moderate on the Dixfield soils because the compact substratum and high water table cause trees to be shallow rooted.

This unit is a fair source of roadfill material. The large stones in the Hermon and Monadnock soils are the major limitation for use as roadfill.

Slope and the large stones of the Hermon and Monadnock soils are the major limitations for roads. Roads should be designed on the contour to reduce the slope. A coarse grained subgrade to frost depth is needed to prevent frost action in the Dixfield soils.

NaB—Naskeag-Schoodic complex, 0 to 8 percent slopes, very stony

This nearly level to undulating unit is on low upland glacial till ridges mainly in coastal areas. Naskeag soils are in nearly level areas between ridges of Schoodic soils. Slopes are complex. Slope ranges from 0 to 3 percent on the Naskeag soils and 3 to 8 percent on the Schoodic soils. Up to 3 percent of the surface of the unit is covered with stones. The areas range from 3 to 100 acres.

This unit consists of about 45 percent moderately deep, somewhat poorly and poorly drained Naskeag soils; 30 percent very shallow, excessively drained Schoodic soils; and 25 percent other soils.

Typically, the surface of the Naskeag soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 5 inches of very dusky red highly decomposed organic material, underlain by 11 inches of mottled, light brownish gray fine sandy loam and mottled, brown gravelly loamy sand. The subsoil is 22 inches thick. It is very dusky red to dusky red gravelly loamy sandy in the upper part and mottled, light yellowish brown gravelly loamy sand in the lower part. Hard bedrock is at a depth of 38 inches.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Included with this unit in mapping are areas of soils similar to Schoodic soils, but with less than 35 percent rock fragments; shallow, somewhat excessively drained Lyman soils on ridges; shallow and very shallow, poorly drained or very poorly drained, loamy till soils in depressions and drainageways; very poorly drained Wonsqueak soils in pockets; and rock outcrops. These areas make up about 20 percent of the mapped acreage. Also included are small moraines and knolls of somewhat excessively drained Hermon soils and small ridges of moderately well drained Dixfield soils. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 20 to 40 inches in the Naskeag soil and 1 to 10 inches in the Schoodic soil. A seasonal high water table is commonly within 1.5 feet of the surface in the Naskeag soil from late fall to late spring. Permeability is rapid in both soils. Surface runoff is slow to medium for the Naskeag soil and slow to rapid for the Schoodic soil. Available water capacity is low or very low in the Naskeag soil and very low in the Schoodic soil. Rooting depth is restricted in these soils by the depth to bedrock.

This unit is mainly used for woodland, but a few areas are brushy idle land. A few areas are used for residential development.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main tree species are red spruce, balsam fir, and jack pine. The abundant natural reproduction of the spruce and fir makes the unit suited for pulpwood production. The main limitations of this unit are the high water table in Naskeag soils and the depth to bedrock in Schoodic soils. Seedling mortality is severe on the Schoodic soils due to very shallow soil depth and droughtiness and is moderate on the Naskeag soils because of high water table. Windthrow hazard is severe on this unit because the high water table and very shallow depth of the soils cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the prevailing wind and help to prevent windthrow.

This unit has severe limitations for most urban uses because of the high water table in the Naskeag soil and very shallow depth to bedrock of the Schoodic soils. Dwellings, small commercial buildings, and septic tank absorption fields should be located on deep, well drained to excessively drained inclusions, if available in the unit.

NBB—Naskeag-Schoodic-Lyman complex, undulating, very stony

This nearly level to undulating unit is on glacial till uplands. It is mainly on points, peninsulas, and islands in coastal areas. Naskeag soils are on broad, flat areas. Schoodic and Lyman soils are on the slightly higher ridges and knobs. Up to 3 percent of the surface of the unit is covered with stones. Slopes are mainly complex. Slope ranges from 0 to 8 percent on the Naskeag and Schoodic soils and from 3 to 8 percent on the Lyman soils. Areas of the unit are irregularly shaped and range from 15 to 200 acres.

This unit consists of about 40 percent moderately deep, somewhat poorly drained and poorly drained Naskeag soils; 25 percent excessively drained Schoodic soils; 20 percent shallow, somewhat excessively drained Lyman soils; and 15 percent other soils.

Typically, the surface of the Naskeag soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 5 inches of very dusky red highly decomposed organic material, underlain by 11 inches of mottled, light brownish gray fine sandy loam and mottled, brown gravelly loamy sand. The subsoil is 22 inches thick. It is very dusky red to dusky red gravelly loamy sand in the upper part and mottled, light yellowish brown gravelly loamy sand in the lower part. Hard bedrock is at a depth of 38 inches.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of very dark brown highly decomposed organic material over 1 inch of brown fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Included in mapping are areas of rock outcrop on ridgetops, soils similar to Schoodic soils but with less than 35 percent rock fragments, and small moraines and knolls of Hermon and Dixfield soils. These areas make up about 5 percent of the mapped acreage. Also included are pockets of very poorly drained, loamy till soils; Wonsqueak soils; Bucksport soils; organic soils less than 51 inches thick over bedrock; and very poorly and poorly drained, loamy till soils that are less than 20 inches deep to bedrock. These areas make up about 10 percent of the mapped acreage.

Depth to bedrock is 20 to 40 inches in the Naskeag soil, 1 to 10 inches in the Schoodic soil, and 10 to 20 inches in the Lyman soil. A seasonal high water table is commonly within 1.5 feet of the surface in the Naskeag soil from late fall to late spring. Permeability is rapid in the Naskeag and Schoodic soils and moderately rapid in the Lyman soil. Surface runoff is slow to medium for the Naskeag soil and slow to rapid for the Lyman and Schoodic soils. Available water capacity is low or very low in the Naskeag and Lyman soils and very low in the Schoodic soil. Rooting depth is restricted in these soils by the depth to bedrock.

Most areas of this unit are used for woodland. A few areas are brushy idle land.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main tree species are red spruce, balsam fir, and jack pine. The abundant natural reproduction of the spruce and fir makes the unit best suited for pulpwood production. The main limitations of this unit are the high water table in Naskeag soils and depth to bedrock in Schoodic and Lyman soils. Seedling mortality is severe on the Schoodic soils and moderate on the Lyman soils because of very shallow and shallow soil depth and the droughtiness. It is moderate on the Naskeag soils because of the high water table. Windthrow hazard is severe on the unit because of the high water table and because the very shallow and shallow depth of the soils cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the prevailing wind and help to prevent windthrow.

This unit is a poor source of roadfill material because of the high water table and depth to bedrock.

This unit is a poor site for roads because of the high water table and depth to bedrock of the Naskeag soils and the depth to bedrock and slope of the Lyman and Schoodic soils. If possible, roads should be constructed on deeper and better drained inclusions in the unit. Roads on this unit should be designed on the contour to reduce cuts and lessen slope. Considerable roadfill is needed on this unit to construct a suitable road base.

NcB—Nicholville very fine sandy loam, 3 to 8 percent slopes

This very deep, gently sloping, moderately well drained soil is on terraces in river valleys and on small outwash plains. Slopes are smooth and convex. The

areas are irregularly shaped and range from 3 to 100 acres.

Typically, the surface layer is covered with a mat of leaves and twigs 1 inch thick. The surface layer is 1 inch of black highly decomposed organic material, over 1 inch of light brownish gray very fine sandy loam. The subsoil is 18 inches thick. It is dark brown to dark yellowish brown very fine sandy loam in the upper part and mottled, yellowish brown very fine sandy loam in the lower part. The substratum is mottled, olive silt loam to loamy very fine sand to a depth of 65 inches or more.

Included with this soil in mapping are areas of soils similar to Nicholville soils, but that are somewhat poorly and poorly drained and in depressions and drainageways, or are well drained and in slightly higher positions than the Nicholville soils. These areas make up about 10 percent of the mapped acreage. Also included are areas of somewhat poorly drained Lamoine soils, poorly drained Scantic soils, and somewhat poorly drained and poorly drained soils with 18 to 35 percent clay throughout. These areas make up about 5 percent of the mapped acreage. In a few areas, moderately well drained Dixfield soils, moderately well drained, sandy soils, or well drained to excessively drained Adams soils are included in mapping. Soils with a surface layer and subsoil of loamy sand and a substratum of silt loam to silty clay loam are also included in mapping. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.0 feet in this Nicholville soil from fall to spring. Permeability is moderate. Runoff is slow to medium. Available water capacity is high.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production, cropland, and hay and pasture.

This soil is well suited for hardwood production. The main tree species are sugar maple, white pine, and northern red oak. White ash and yellow birch also produce well on this soil. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods.

This soil is fairly well suited for cropland. The main limitation is erosion hazard. Erosion control measures such as conservation tillage, contour farming, and stripcropping may be needed to prevent erosion.

This soil is well suited for hay and pasture and will produce good yields of forage crops. Grazing in the spring when the soil is wet cause soil compaction.

This soil will produce good yields of wild blueberries. This soil is well suited for flail mowing and mechanical harvesting. In lower parts of the landscape, late spring frosts are a hazard to blueberry blossoms.

The major limitations of this soil when used as a site for dwellings and small commercial buildings are the high water table and high frost action. Installing drains near footings, locating foundations above the high water table, and backfilling to grade will help prevent wet basements and reduce frost heaving. The high water table is the major limitation of this soil as a site for septic tank absorption fields. The system should be located on a better drained inclusion of the unit, or fill should be used to raise the absorption field above the seasonal high water table.

NcC—Nicholville very fine sandy loam, 8 to 15 percent slopes

This very deep, strongly sloping, moderately well drained soil is on terraces in river valleys and on small outwash plains. Slopes are smooth and convex. The areas are irregularly shaped range from 3 to 50 acres.

Typically, the surface layer is covered with a mat of leaves and twigs 1 inch thick. The surface layer is 1 inch of black highly decomposed organic material, over 1 inch of light brownish gray very fine sandy loam. The subsoil is 18 inches thick. It is dark brown to dark yellowish brown very fine sandy loam in the upper part and mottled, yellowish brown very fine sandy loam in the lower part. The substratum is mottled, olive silt loam to loamy very fine sand to a depth of 65 inches or more.

Included with this soil in mapping are areas of somewhat poorly drained and poorly drained soils with less than 18 percent clay in depressions and drainageways and well drained soils with less than 18 percent clay in slightly higher positions than the Nicholville soils. These areas make up about 10 percent of the mapped acreage. Also included are areas of somewhat poorly drained Lamoine soils, poorly drained Scantic soils, and somewhat poorly drained and poorly drained, marine-deposited, silty soils with 18 to 35 percent clay. These areas make up about 5 percent of the mapped acreage. In a few areas moderately well drained Dixfield soils; moderately well drained, sandy soils; or somewhat excessively drained Adams soils are included in mapping. Soils with a surface layer and subsoil of loamy sand and a substratum of silt loam to silty clay loam are included in mapping. These areas make up about 5 percent of the mapped acreage.

A perched high water table is commonly at a depth of 1.5 to 2.0 feet in this Nicholville soil from fall to spring. Permeability is moderate. Runoff is medium. Available water capacity is high.

Most areas of this soil are used for woodland. A few

areas are used for wild blueberry production, cropland, and hay and pasture.

This soil is well suited for hardwood production. The main tree species are sugar maple, beech, and northern red oak. White ash and yellow birch also produce well on this soil. Softwoods produce well on this soil, but require considerable management to reduce competition from hardwoods. The main limitation of this unit is erosion hazard. Erosion will occur on skid trails and roads on the steeper areas of this soil. Erosion can be reduced by locating the skid trails and roads on the contour and by using waterbars on roads.

This soil is fairly well suited for cropland. The main limitation is erosion hazard. Erosion control measures such as conservation tillage, contour farming, and stripcropping are necessary to prevent erosion.

This soil is well suited for hay and pasture and will produce good yields of forage crops. Grazing in the spring when the soil is wet cause soil compaction.

This soil will produce good yields of wild blueberries. This soil is well suited for flail mowing and mechanical harvesting. In lower parts of the landscape, frost is a hazard for blueberry blossoms.

The major limitations of this soil as a site for dwellings and small commercial buildings are the high water table and high frost action. Installing drains near footings, locating foundations above the high water table, and backfilling to grade will help prevent wet basements and reduce frost heaving. The high water table is the major limitation of this soil as a site for septic tank absorption fields. The system should be located on a better drained inclusion of the unit or fill used to raise the absorption field above the seasonal high water table.

Ps—Pits, gravel and sand

This unit consists of open excavations from which soil and underlying material have been removed. The areas are mostly oval or round and range from 3 to 20 acres. They are generally near or surrounded by Colton, Adams, Sheepscot, and Hermon soils. Some areas have been excavated to bedrock, and many have been excavated to the water table.

Sa—Scantic silt loam

This very deep, nearly level, poorly drained soil is in low areas on coastal lowlands and along streams and rivers. Areas are irregularly shaped and range from 3 to 100 acres. Slopes are smooth and slightly convex and range from 0 to 3 percent.

Typically, the surface layer is about 7 inches of dark grayish brown silt loam that is mottled in the lower part. It is underlain by 8 inches of mottled, olive gray silt loam. The subsoil is 20 inches thick. It is mottled, olive gray silty clay loam in the upper part and mottled, olive gray silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Included with the soil in mapping are areas of somewhat poorly drained Lamoine soils in slightly more sloping areas than Scantic soils, and very poorly drained Biddeford soils in depressions. These areas make up about 15 percent of the mapped acreage. Also included in mapping are somewhat poorly drained and poorly drained soils formed in marine sediments with 18 to 35 percent clay, and poorly drained alluvial soils along streams. Soils with a surface layer and subsoil of loamy sand to sandy loam and a substratum of silt loam to silty clay loam are common inclusion where Scantic soils are adjacent to outwash soils. These areas make up about 10 percent of the mapped acreage.

A perched high water table is commonly within 1 foot of the surface of this Scantic soil from fall to late spring. Permeability of this soil is moderate or moderately slow in the surface and subsurface layers and slow or very slow in the subsoil and substratum. The available water capacity is high. Surface runoff is slow.

Most areas of this soil are used for woodland. Some areas are used for hay and pasture or idle fields that are reverting to woodland. A few areas are used for residential development.

This soil is fairly well suited for softwood production. The main tree species are white spruce, balsam fir, and red maple. The abundant reproduction of spruce and fir makes this soil well suited for pulpwood production. The main limitations of this soil are plant competition and the high water table. Seedling mortality is moderate on the soil because of the high water table. Plant competition is severe on this soil, and site preparation and weeding may be needed to suppress hardwoods that are competing with the softwood species. Windthrow hazard is severe on this soil because the high water table cause trees to be shallow rooted. Strip cutting or clearcutting will expose fewer trees to the wind and will help to reduce windthrow. Because of the high water table, harvesting operations should be restricted to the drier months or when the ground is frozen. Equipment is easiest to use and cause the least damage to the soil at these times.

This soil is poorly suited for hay and pasture because of the high water table. Grazing in early spring when the soil is wet will cause soil compaction. Haying

is often delayed to mid-summer or late summer because of the high water table. Use of subsurface drains to lower the water table is difficult in this soil because of very slow or slow permeability, slow surface runoff, and lack of available drainage outlets.

This soil has severe limitations for commercial and residential development because of the high water table and frost action.

SB—Scantic-Biddeford association

This unit consists of very deep, nearly level soils in lower positions of coastal lowlands and river valleys. The Biddeford soils are in shallow depressions within areas of the Scantic soils. Slopes are smooth and mainly concave. Slope ranges from 0 to 3 percent on Scantic soils and 0 to 1 percent on Biddeford soils. Areas of this unit are irregularly shaped and range from 15 to 200 acres.

This unit consists of about 50 percent poorly drained Scantic soils, 30 percent very poorly drained Biddeford soils, and 20 percent other soils.

Typically, the surface layer of the Scantic soil is about 7 inches of dark grayish brown silt loam that is mottled in the lower part. It is underlain by 8 inches of mottled, olive gray silt loam. The subsoil is 20 inches thick. It is mottled, olive gray silty clay loam in the upper part and mottled, olive gray silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Typically, the surface of the Biddeford soil is covered with a mat of mosses and roots 3 inches thick. The surface layer is black muck 9 inches thick. It is underlain by mottled, gray silty clay loam 4 inches thick. The subsoil is 12 inches thick. It is mottled, olive gray silt clay. The substratum is mottled, olive gray and gray silty clay to a depth of 65 inches or more.

Included with this unit in mapping are small areas of moderately well drained Buxton soils and somewhat poorly drained Lamoine soils on hummocks, and small ridges and Wonsqueak and Bucksport soils in deeper pockets. These areas make up about 10 percent of the mapped acreage. Also included are areas of very poorly drained and poorly drained, loamy soils with 18 to 35 percent clay and small areas of stony Scantic and Biddeford soils. These areas make up about 10 percent of the mapped acreage.

A seasonal high water table is commonly perched within 1 foot of the surface in the Scantic soil and is commonly 1 foot above to 6 inches below the surface of the Biddeford soil from early fall to early summer. Permeability of the Scantic soil is moderate or moderately slow in the surface layer and subsurface, and slow or very slow in the subsoil and substratum. Permeability of the Biddeford soil is moderately rapid in the organic layer, moderate or moderately slow in the mineral surface layer, and slow or very slow in the subsoil and substratum. Surface runoff is slow on the Scantic soil and very slow or ponded on the Biddeford soil. Available water capacity is high for both soils.

Most areas of this unit are woodland or shrubby swales.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main tree species on the Biddeford soils are black spruce, balsam fir, tamarack, red maple, and white cedar. The main tree species on the Scantic soils are red spruce, balsam fir, and red maple. The abundant reproduction of spruce and fir makes this unit best suited for pulpwood production. The main limitations of this unit are the high water table and plant competition. Seedling mortality is severe on the Biddeford soils and moderate on Scantic soils because of the high water table. Windthrow hazard is severe on this unit because the high water table cause trees to be shallow rooted. Strip cutting or clearcutting will expose fewer trees to the wind and help to reduce windthrow. Because of the high water, table harvesting operations should be restricted to the drier months or when the ground is frozen; equipment is easiest to use and cause the least damage to the soil.

This unit is poorly suited as a site for roads because of the high water table and frost action. Considerable roadfill must be used to raise the subgrade above the seasonal high water table. A coarse grained subgrade to frost depth is needed to prevent frost action. If possible, roads should be located on a better drained inclusion in the unit.

SdB—Scantic-Lamoine complex, 0 to 8 percent slopes, very stony

This very deep, nearly level to gently sloping unit is in low areas of coastal lowlands and river valleys between or adjacent to glacial till ridges. The Scantic soils are in a slightly lower position on the landscape than the Lamoine soils. Up to 3 percent of the surface of this unit is covered with stones. Slope ranges from 0 to 3 percent on Scantic soils and from 3 to 8 percent on Lamoine soils. Slopes are smooth. The areas are irregularly shaped and range from 3 to 100 acres.

This unit is about 45 percent poorly drained Scantic soils, 35 percent somewhat poorly drained Lamoine soils, and 20 percent other soils.

Typically, the surface layer of the Scantic soil is about 7 inches of dark grayish brown silt loam that is mottled in the lower part. It is underlain by 8 inches of mottled, olive gray silt loam. The subsoil is 20 inches

thick. It is mottled, olive gray silty clay loam in the upper part and mottled, olive gray silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Typically, the surface layer of the Lamoine soil is dark brown silt loam 7 inches thick. The subsoil is 14 inches thick. It is mottled, light olive brown to light yellowish brown silt loam in the upper part and mottled, light olive brown to olive silty clay loam in the lower part. The substratum is mottled, olive silty clay to a depth of 65 inches or more.

Included with this soil in mapping are areas of very stony soils that have a surface layer and subsoil of fine sandy loam to loamy sand, and a substratum of silty clay loam or silty clay and loamy soils that are 18 to 35 percent clay. Also included are Biddeford soils in small depressions. These areas make up 15 percent of the mapped acreage. Also included are small areas of somewhat excessively drained Hermon and Lyman soils and moderately well drained Dixfield and Buxton soils on knolls and small ridges throughout the unit. These areas make up about 10 percent of the mapped acreage.

A perched high water table from late fall to early summer is commonly at a depth of 6 inches to 1.5 feet in the Lamoine soil and commonly within 1 foot of the surface of the Scantic soil. Permeability of the Lamoine soil is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil and in the substratum. Permeability of the Scantic soil is moderate or moderately slow in the surface and subsurface layers and slow or very slow in the subsoil and substratum. Surface runoff is slow on the Scantic soil and medium on the Lamoine soil. The available water capacity is high in both soils.

Most areas of this unit are used for woodland. A few areas are used for residential development.

This unit is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant natural reproduction of spruce and fir makes these soils well suited for pulpwood production. The main limitations of this unit are plant competition and the high water table. Plant competition is severe on this unit. Site preparation and weeding may be needed to suppress hardwoods that are competing with the softwood species. Equipment is difficult to operate on the wetter parts of the unit except during the drier parts of the year or when the ground is frozen. Windthrow hazard is severe on this unit because the high water table cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the wind and help to prevent windthrow.

The unit has severe limitations for most urban uses because of the high water table, stoniness, and frost action.

SEB—Scantic-Lamoine-Dixfield complex, gently sloping, very stony

This unit consists of very deep, nearly level to gently sloping soils in low areas of coastal lowlands and river valleys and on glacial till ridges between or adjacent to these areas. The Lamoine and Dixfield soils are on small knolls and ridges. The Scantic soils are in plane areas and depressions between the knolls and ridges. Up to 3 percent of the surface of the soils in this unit are covered with stones. Slopes are smooth. They are mainly convex on the Lamoine and Dixfield soils and concave on the Scantic soils. Slope ranges from 0 to 3 percent on the Scantic soils, from 3 to 8 percent on the Lamoine soils, and from 3 to 8 percent on the Dixfield soils. Areas of the unit are irregularly shaped and range from 15 to 200 acres.

This unit is about 30 percent poorly drained Scantic soils, 25 percent somewhat poorly drained Lamoine soils, 20 percent moderately well drained Dixfield soils, and 25 percent other soils.

Typically, the surface layer of the Scantic soil is about 7 inches of dark grayish brown silt loam that is mottled in the lower part. It is underlain by 8 inches of mottled, olive gray silt loam. The subsoil is 20 inches thick. It is mottled, olive gray silty clay loam in the upper part and mottled, olive gray silty clay in the lower part. The substratum is mottled, olive gray silty clay to a depth of 65 inches or more.

Typically, the surface layer of the Lamoine soil is dark brown silt loam, 7 inches thick. The subsoil is 14 inches thick. It is mottled, light olive brown to light yellowish brown silt loam in the upper part and mottled, light olive brown to olive silty clay loam in the lower part. The substratum is mottled, olive silty clay to a depth of 65 inches or more.

Typically, the surface of the Dixfield soil is covered with a mat of leaves, needles, and twigs 2 inches thick. The surface layer is 2 inches of black highly decomposed organic material, underlain by 4 inches of light gray, fine sandy loam. The subsoil is 22 inches thick. It is dark reddish brown to brown fine sandy loam in the upper part, and light olive brown fine sandy loam and mottled, light olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more.

Included with this unit in mapping are areas of very stony, moderately well drained, somewhat poorly

drained, and poorly drained, loamy soils with 18 to 35 percent clay and areas that have a surface layer and subsoil of fine sandy loam and a substratum of silty clay loam or silty clay. Also included in depressions are very poorly drained Biddeford, Wonsqueak, and Bucksport soils. These areas make up about 20 percent of the mapped acreage. Also included are somewhat poorly drained Colonel soils on foot slopes and a few small knolls of somewhat excessively drained Hermon soils and shallow Lyman soils. These areas make up about 5 percent of the mapped acreage.

A perched high water table from early fall to summer is commonly at a depth of 6 inches to 1.5 feet in the Lamoine soil, 1.5 to 2.5 feet in the Dixfield soil, and 1 foot or less in the Scantic soil. Permeability of the Scantic soil is moderate or moderately slow in the surface and subsurface layers and slow or very slow in the subsoil and substratum. Permeability of the Lamoine soil is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil and in the substratum. Permeability of the Dixfield soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is slow on the Scantic soil and medium on the Lamoine and Dixfield soils. Available water capacity is high for Scantic and Lamoine soils and moderate for Dixfield soils.

Most areas of this unit are used for woodland.

This unit is fairly well suited for softwood production. The main tree species are red spruce, balsam fir, and red maple. The abundant natural reproduction of spruce and fir make these soils best suited for pulpwood production. The main limitations of this unit are plant competition and the high water table. Seedling mortality is moderate on the Scantic soils because of the high water table. Plant competition is severe on this unit. Site preparation and weeding may be needed to suppress hardwoods that are competing with the softwood species. Equipment is difficult to operate on the wetter parts of the unit except during the drier parts of the year or when the ground is frozen. Windthrow hazard is severe on this unit because the high water table cause trees to be shallow rooted. Harvesting by strip cutting or clearcutting will expose fewer trees to the wind and help prevent windthrow.

This unit is a poor site for roads because of the high water table and frost action of the soils. A coarse grained subgrade to frost depth is needed to prevent frost action.

The Scantic and Lamoine soils are a poor source of roadfill material because of their high water table and low strength. The Dixfield soils are a fair source of roadfill, but have limitations because of their high water table.

SfC—Schoodic-Rock outcrop complex, 0 to 15 percent slopes

This nearly level to rolling unit is on the crests and side slopes of ridges on coastal peninsulas and on the crests of mountains. Slopes are mainly complex. The areas are irregularly shaped and range from 3 to 200 acres.

This unit is about 50 percent Schoodic soils, 25 percent Rock outcrop, and 25 percent other soils.

Typically, the surface layer of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Rock outcrop is exposed areas of mainly granite, diorite, gneiss, gabbro, phyllite. or schist bedrock.

Included with this unit in mapping are areas of a soil similar to Schoodic soils, but with less than 35 percent rock fragments; very shallow, excessively drained organic soils; shallow Lyman soils on the side slopes of ridges; and Bucksport and Wonsqueak soils in depressions.

Depth to bedrock is 1 to 10 inches in the Schoodic soil. Permeability is rapid. Runoff is rapid. Available water capacity is very low. Rooting depth is restricted by depth to bedrock.

Most areas of the unit are wooded or are areas covered with shrubs, mosses, and lichens. Some areas are used for recreational purposes.

The unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main tree species on the unit are red spruce, balsam fir, and jack pine. The main limitation of this unit is depth to rock. Tree growth is very slow on this unit because of the very shallow rooting depth and droughtiness. Seedling mortality is severe because of droughtiness. Ocean breezes provide most of the moisture for the trees during the dry summer months. Windthrow hazard is severe on this unit because the very shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage.

This unit has severe limitations for cropland and urban uses because of the very shallow depth to bedrock.

This unit is used for recreation such as hiking,

especially along coastal areas. The Schoodic soils are fragile due to their shallow depth and droughtiness. Excessive use can destroy the vegetation and expose the soil to erosion. Limiting traffic on these areas may be necessary to prevent degradation of the plant cover.

SfE—Schoodic-Rock outcrop complex, 15 to 65 percent slopes

This hilly to very steep unit is on the side slopes of ridges and mountains. Slopes are mainly complex. Areas are narrow, oval, or irregularly shaped and range from 3 to 100 acres.

This unit is about 50 percent very shallow, excessively drained Schoodic soils; 30 percent Rock outcrop; and 20 percent other soils.

Typically, the surface layer of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Rock outcrop is exposed areas of mainly granite, diorite, gneiss, gabbro, phyllitte, or schist bedrock.

Included with this unit in mapping are areas of a soil similar to Schoodic soils, but with less than 35 percent rock fragments and areas of very shallow, excessively drained organic soils. Also included are a few areas of shallow Lyman soils on the lower slopes.

Depth to bedrock is 1 to 10 inches in the Schoodic soil. Permeability is rapid. Surface runoff is rapid. Available water capacity is very low. Rooting depth is restricted by depth to bedrock.

Most areas of the unit are wooded or are areas covered with shrubs, mosses, and lichens. Some areas are used for recreational purposes.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main limitations of this unit are depth to bedrock, slope, and erosion hazard. The main tree species on the unit are red spruce, balsam fir, and jack pine. Tree growth is very slow on this unit because of the very shallow rooting depth and droughtiness. Ocean breezes supply much of the moisture for the trees during the summer months. Seedling mortality is very severe on the unit because of droughtiness. Windthrow hazard is severe on this unit because the very shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce wind damage. Equipment is difficult to use on this unit because of the steep slopes. Severe erosion can occur on skid trails and roads on the steeper slope in the unit. Erosion can be reduced by locating skid trails and roads on the contour and by the use of waterbars on roads.

This unit has severe limitations for urban uses because of the very shallow depth to bedrock and the slope.

This unit is used for recreation such as hiking. The Schoodic soils are fragile because of their shallow depth to bedrock and the droughtiness. Excessive use can destroy the vegetation and expose the soil to erosion. Limiting traffic on this unit may be necessary to prevent erosion and degradation of the plant cover.

SGE—Schoodic-Rock outcrop-Lyman complex, very steep

This hilly to very steep unit is on the side slopes of glacial till ridges and mountains (fig. 8). Schoodic soils and Rock outcrop are typically on peaks and upper side slopes. Lyman soils are typically on the lower side slopes. Slopes are complex and range from 15 to 65 percent. Areas of the unit are irregularly shaped and range from 3 to 300 acres.

This unit is about 50 percent very shallow, excessively drained Schoodic soils; 25 percent Rock outcrop; 15 percent shallow, somewhat excessively drained Lyman soils; and 10 percent other soils.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Rock outcrop is exposed areas of mainly schists, phyllite, granite, diorite, or gneiss bedrock.

Typically, the surface of the Lyman soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer of the Lyman soil is 2 inches of very dark brown highly decomposed organic material, over 1 inch of brown, fine sandy loam. The subsoil is 16 inches thick. It is reddish brown fine sandy loam in the upper part and dark brown fine sandy loam to dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 19 inches.

Included with this unit in mapping are areas of a soil similar to Schoodic soil, but is a gravelly loamy sand throughout or has less than 35 percent rock fragments; moderately deep, well drained Tunbridge soils; very shallow to shallow, well drained to excessively drained organic soils; and a soil similar to Lyman soils, but is a gravelly loamy sand throughout. Also included are a few small areas of Hermon or Monadnock soils on the lower slopes of the unit.

Depth to bedrock is 1 to 10 inches in the Schoodic

Figure 8.—An area of Schoodic-Rock outcrop-Lyman complex, very steep, in Acadia National Park.

soil and 10 to 20 inches in the Lyman soil. Permeability is moderately rapid for the Lyman soil and rapid for the Schoodic soil. Surface runoff is rapid. Available water capacity is very low for the Schoodic soil and very low or low for the Lyman soil. Rooting depth is restricted by depth to bedrock.

Most areas of this unit are woodland or areas partially covered with shrubs, mosses, and lichens.

This unit is poorly suited for woodland, but if used for this purpose, it is best suited for softwood production. The main limitations of this unit are depth to bedrock, slope, and erosion hazard. The main tree species are red spruce, balsam fir, and jack pine. Tree growth is very slow on the unit because of the very shallow and shallow rooting depth and the droughtiness. Fog and the ocean breezes supply much of the moisture for trees during the summer months. Windthrow hazard is severe on this unit because the very shallow and shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage. Equipment is difficult to use on the unit because of the steep slopes. Severe erosion can occur on skid trails and roads on the steeper slopes in the unit. Erosion can be reduced by locating skid trails and roads on the contour and by the use of waterbars on roads.

This unit has severe limitations for roads because of slope and depth to bedrock. If possible, roads should be located on inclusions of deeper, less sloping soils.

SKC—Schoodic-Rock outcrop-Naskeag complex, rolling

This nearly level to rolling unit is on low glacial till ridges on points, peninsulas, and islands in the coastal areas and on crests and peaks of mountains. Schoodic soils and rock outcrop are on the ridges and peaks. Naskeag soils are in depressions and drainageways. Slopes are complex. They range from 0 to 8 percent on Naskeag soils and from 0 to 15 percent on Schoodic soils and Rock outcrop. Areas of this unit are irregularly shaped and range from 15 to 300 acres.

This unit is about 45 percent very shallow,

excessively drained Schoodic soils; 25 percent Rock outcrop; 15 percent moderately deep, somewhat poorly drained and poorly drained Naskeag soils; and 15 percent other soils.

Typically, the surface of the Schoodic soil is covered with a mat of leaves, needles, and twigs 4 inches thick. The surface layer is 3 inches of dark reddish brown moderately decomposed organic material, over 9 inches of pinkish gray very gravelly fine sandy loam. Hard bedrock is at a depth of 9 inches from the mineral surface.

Rock outcrop is exposed areas of mainly schist, phyllite, granite, diorite, or gneiss bedrock.

Typically, the surface of the Naskeag soil is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer of the Naskeag soil is 5 inches of very dusky red highly decomposed organic material underlain by 11 inches of mottled, light brownish gray fine sandy loam and mottled, brown gravelly loamy sand. The subsoil is 22 inches thick. It is very dusky red to dusky red gravelly loamy sand in the upper part and mottled, light yellowish brown gravelly loamy sand in the lower part. Hard bedrock is at a depth of 38 inches.

Included with this unit in mapping are areas of a soil similar to Schoodic soils, but with less than 35 percent coarse fragments; soils similar to Schoodic and Lyman, but are a gravelly loamy sand throughout and very shallow to shallow; and well drained to excessively drained organic soils. These areas make up about 10 percent of the mapped acreage. Also included are areas of very poorly drained organic soils that have bedrock at a depth of less than 51 inches; very deep Bucksport and Wonsqueak soils; poorly drained and very poorly drained loamy soils that are less 20 inches deep to bedrock in depressions and along drainageways; and a few small areas of Lyman, Tunbridge, Hermon, Monadnock, or Dixfield soils on side slopes of the larger ridges. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 1 to 10 inches in the Schoodic soil and 20 to 40 inches in the Naskeag soil. A seasonal high water table is commonly within 1.5 feet of the surface of the Naskeag soil from late fall to early spring. Permeability is rapid in the Naskeag and Schoodic soils. Surface runoff is slow to rapid on the Schoodic soil and slow to medium on the Naskeag soil. Available water capacity is very low for the Schoodic soil and low or very low for the Naskeag soil. Rooting depth is restricted by the depth to bedrock.

Most areas of this unit are woodland or partially covered with shrubs, mosses, and lichens.

This unit is poorly suited for woodland, but best suited for softwood production. The main limitation of this unit is depth to rock. The main tree species on the unit are red spruce, balsam fir, and jack pine. Tree growth is very slow on the unit because of the shallow rooting depth and droughtiness. Fog and ocean breezes supply much of the moisture for trees during the summer months. Windthrow hazard is severe on this unit because the very shallow and shallow depth to bedrock cause trees to be shallow rooted. Strip or clearcutting will reduce windthrow damage.

The unit has severe limitations for roads because of the depth to bedrock and the slope. Roads on this unit will require considerable roadfill to construct a road base. Roads should be designed on the contour to avoid cuts, and if possible, should be located on inclusions of deeper, less sloping soils.

SmB—Sheepscot sandy loam, 0 to 8 percent slopes

This very deep, nearly level to gently sloping, moderately well drained soil is in low areas of outwash plains. Slopes are smooth and linear to slightly convex. The areas are irregularly shaped or oval and range from 3 to 100 acres.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of black highly decomposed organic material underlain by 2 inches of grayish brown sandy loam. The subsoil is 20 inches thick. It is reddish brown sandy loam to dark yellowish brown gravelly sandy loam in the upper part and mottled, olive brown very gravelly loamy sand in the lower part. The substratum is dark grayish brown very gravelly coarse sand in the upper part, and olive gray extremely gravelly coarse sand in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are small areas of excessively drained Colton soils in slightly higher positions than Sheepscot soils, somewhat poorly drained to poorly drained Kinsman soils and very poorly drained Bucksport and Wonsqueak soils in depressions and kettle holes. These areas make up about 15 percent of the mapped acreage. Also included are very stony, moderately well drained, sandy soils and very stony Sheepscot soils. These areas make up about 5 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of 1.5 to 2.5 feet in this Sheepscot soil from late fall to early spring. Permeability is moderate or moderately rapid in the surface layer and subsoil and rapid or very rapid in the substratum. Surface runoff is slow to medium. The available water capacity is low.

Most areas of this soil are used for woodland. A few

areas are used for wild blueberry production, cropland, hay and pasture and as sites for residential development. This soil is used extensively as a source of gravel.

This soil is well suited for softwood production. The main tree species are white pine, hemlock, and red spruce. Pines respond well to management on this soil. The main limitations of this soil is droughtiness. Seedling mortality is moderate because of droughtiness, but natural reproduction is usually adequate to restock the sites. If seedlings are planted, it should be in spring when soil moisture levels are highest. Hardwoods should be suppressed to enhance the growth of softwood stands.

This soil produces fair to poor yields of blueberries. In dry seasons the water table is well below the rooting zone of the blueberry plants and yields will be reduced because of lack of available moisture. With irrigation, control of weeds, insects, disease, and fertility management, the soil will produce good yields. This soil is well suited for flail mowing and mechanical harvesting. In some areas this soil is in a low position on the landscape and may be subject to frost in late spring.

This soil is fairly well suited for cropland and hay and pasture. The main management needs are a fertility program, surface or subsurface drainage to remove excess moisture in the spring, and irrigation for droughty periods. Additions of organic matter will increase the available water capacity of the soil.

The seasonal high water table is the major limitation of this soil as a site for dwellings. Installing drains near footings, locating foundations above the high water table, and backfilling to grade will help prevent wet basements. The rapid or very rapid permeability of the substratum may cause pollution of the ground water if this soil is used as a site for septic tank absorption fields. This hazard is increased in late fall to early spring when the water table is highest. The absorption field should be located on the highest area of the unit, or loamy fill material should be used to raise the absorption field above the seasonal high water table.

SoB—Sheepscot sandy loam, 3 to 8 percent slopes, very stony

This very deep, gently sloping, moderately well drained soil is on glaciated uplands, small kames, and recessional moraines. Slopes are smooth and convex. The areas are irregularly shaped or oval and range from 3 to 100 acres. Up to 3 percent of the surface of the soil is covered with stones.

Typically, the surface is covered with a mat of leaves, needles, and twigs 1 inch thick. The surface layer is 2 inches of black highly decomposed organic material, over 2 inches of grayish brown sandy loam. The subsoil is 20 inches thick. It is reddish brown sandy loam to dark yellowish brown gravelly sandy loam in the upper part and mottled, olive brown very gravelly loamy sand in the lower part. The substratum is dark grayish brown very gravelly coarse sand in the upper part and olive gray extremely gravelly coarse sand in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are areas of excessively drained Colton soils and somewhat excessively drained Hermon soils on knolls or hummocks. These areas make up about 10 percent of mapped acreage. Also included are small ridges of somewhat excessively drained Lyman soils; shallow, sandy soils; and a few areas of moderately well drained Dixfield soils. These areas make up about 10 percent of the mapped acreage. Small areas of poorly drained Kinsman soil in a slightly lower positions than Sheepscot soil, and a few pockets of Wonsqueak and Bucksport soils are included in mapping. These areas make up about 5 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of 1.5 to 2.5 feet in this Sheepscot soil from late fall to late spring. Permeability is moderate or moderately rapid in the surface layer and subsoil and rapid or very rapid in the substratum. Surface runoff is slow to medium. The available water capacity is low.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production and as sites for residential development.

This soil is well suited for softwood production. The main tree species are white pine, hemlock, and red spruce. Pines respond well to management on this soil. The main limitation of this soil is droughtiness. Seedling mortality is moderate on this soil because of droughtiness, but natural reproduction is usually adequate to restock the site. If seedlings are planted, it should be in spring when moisture levels are highest. Hardwoods should be suppressed to enhance the growth of softwood stands.

This soil is poorly suited for cropland and hay and pasture because of the surface stones. If surface stones are removed, the main limitation is the seasonal high water table.

In areas of wild blueberries, this soil is fairly well suited for blueberry production. Unless the soil is irrigated, decreased yields of blueberries can be expected in dry years because of the droughtiness of the soil. Because of the very stony surface, the soil is unsuited for flail mowing and mechanical harvesting.

The seasonal high water table is the major limitation of this soil for urban uses such as sites for dwellings

and small commercial buildings. Installing drains around the footings, locating footings above the seasonal high water table, and backfilling around the foundation will help to prevent wet basements. Dwellings should be located on well drained inclusions in the unit if available. The rapid or very rapid permeability of the substratum may cause pollution of the ground water if this soil is used for septic tank absorption fields. This hazard is increased from late fall to early spring when the water table is highest. The absorption field should be located on the highest area of the unit, or loamy fill material should be used to raise the absorption field above the high water table.

SoC—Sheepscot sandy loam, 8 to 15 percent slopes, very stony

This very deep, strongly sloping, moderately well drained soil is on glaciated uplands, small kames, and recessional moraines. Slopes are smooth and convex. The areas are irregularly shaped or oval and range from 3 to 100 acres. Up to 3 percent of the surface of the soil is covered with stones.

Typically, the surface is covered with a mat of leaves, needles, and twigs about 1 inch thick. The surface layer is 2 inches of black highly decomposed organic material, over 2 inches of grayish brown sandy loam. The subsoil is 20 inches thick. It is reddish brown sandy loam to dark yellowish brown gravelly sandy loam in the upper part and mottled, olive brown very gravelly loamy sand in the lower part. The substratum is dark grayish brown very gravelly coarse sand in the upper part, and olive gray extremely gravelly coarse sand in the lower part to a depth of 65 inches or more.

Included with this soil in mapping are small areas of excessively drained Colton soils and somewhat excessively drained Hermon soils on knolls or hummocks. These areas make up about 10 percent of the mapped acreage. Also included are small ridges of somewhat excessively drained Lyman soils and shallow, sandy soils and a few areas of moderately well drained Dixfield soils. These areas make up about 10 percent of the mapped acreage. Small areas of poorly drained Kinsman soil in a slightly lower position than Sheepscot soil and a few pockets of Wonsqueak and Bucksport soils are included in mapping. These areas make up about 5 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of 1.5 to 2.5 feet in this Sheepscot soil from late fall to late spring. Permeability is moderate or moderately rapid in the surface layer and subsoil and rapid or very rapid in the substratum. Surface runoff is medium. The available water capacity is low.

Most areas of this soil are used for woodland. A few areas are used for wild blueberry production and residential development.

This soil is well suited for woodland and is best suited for softwood production. The main tree species are white pine, hemlock, and red spruce. Pines respond well to management on this soil. The main limitation of this soil is droughtiness. Seedling mortality is moderate because of droughtiness, but natural reproduction is usually adequate to restock the site. If seedlings are planted, they should be planted in spring when soil moisture levels are highest. Hardwoods should be suppressed to enhance the growth of softwood stands.

This soil is poorly suited for cropland and hay and pasture because of the surface stones. If surface stones are removed, the main limitations are the seasonal high water table and slope.

In areas of wild blueberries, this soil is fairly well suited for blueberry production. Unless the soil is irrigated, decreased yields of blueberries can be expected in dry years because of droughtiness of the soil. Because of the very stony surface, the soil is unsuited for flail mowing and mechanical harvesting.

The seasonal high water table and slopes are the main limitation of this soil for urban uses such as sites for dwellings and small commercial buildings. Installing drains around the footings, locating footings above the seasonal high water table, and backfilling around the foundation will help to prevent wet basements. Dwellings should be located on well drained inclusions in the unit if available.

SrB—Sheepscot-Rock outcrop complex, 0 to 8 percent slopes

This unit consists of very deep, nearly level to gently sloping soils on moraines or kame terraces between or adjacent to rock outcrops. This unit is mainly in coastal areas on islands and peninsulas. The Sheepscot soils are mainly slightly lower in position on the landscape than the Rock outcrop. Slopes are smooth and convex. Some areas are oval or irregularly shaped, but most are elongated. The areas range from 3 to 75 acres.

This unit consists of about 50 percent very deep, moderately well drained Sheepscot soils, 25 percent Rock outcrop, and 25 percent other soils.

Typically, the surface layer of the Sheepscot soils is 2 inches of black highly decomposed organic material over 2 inches of grayish brown sandy loam. The subsoil is 20 inches thick. It is reddish brown sandy loam to dark yellowish brown gravelly sandy loam in the upper part and mottled, olive brown, very gravelly loamy sand in the lower part. The substratum is dark grayish brown

very gravelly coarse sand in the upper part, and olive gray extremely gravelly coarse sand in the lower part to a depth of 65 inches or more.

Rock outcrop is exposed areas of mainly granite, diorite, or gabbro bedrock.

Included with this unit in mapping are somewhat poorly drained to poorly drained, moderately deep Naskeag soils and areas of soils that are similar to Sheepscot soils, but are moderately deep. Also included are shallow Lyman soils, very shallow Schoodic soils, and shallow and very shallow gravelly loamy sand. These soils are transitional between the very deep Sheepscot soils and rock outcrops. They make up about 20 percent of the mapped acreage. Also included are Sheepscot soils with a very stony surface and small pits where soils have been removed. These areas make up about 5 percent of the mapped acreage.

A seasonal high water table is commonly at a depth of 1.5 to 2.5 feet in the Sheepscot soil from late fall to late spring. Permeability is moderate or moderately rapid in the surface layer and subsoil, and rapid or very rapid in the substratum. Surface runoff is slow to medium. The available water capacity is low.

Most areas of this unit are used for woodland. A few areas are used as sites for residential development. Some areas are used extensively as a source of gravel and fill material.

This unit is fairly well suited for softwood production. The main tree species are white pine, hemlock, and red spruce. Pines respond well to management on the Sheepscot soils. The main limitations of this unit are rock outcrop and droughtiness. Rock outcrop and inclusions of shallow soils reduce the value of this unit for woodland. The rock outcrops limit the use of equipment. Droughtiness of the Sheepscot soils and especially of inclusions of shallow soils cause moderate or severe seedling mortality in dry years. Seedling mortality of 50 percent or more may occur during dry years. Windthrow may be severe on inclusions of shallow soils. Moderate competition by hardwoods can be expected on softwood sites because of the seasonal wetness of the Sheepscot soils. Hardwoods should be suppressed to enhance the growth of softwood stands.

This unit is poorly suited for cropland and hay and pasture because of the complex pattern of the soils and rock outcrops. The low available water capacity of the Sheepscot soils cause droughtiness during dry summer months.

The seasonal high water table is the major limitation of the Sheepscot soil for urban uses such as sites for dwellings and small commercial buildings. Installing drains around the footings, locating footings above the seasonal high water table, and backfilling around the foundation will help to prevent wet basements. Dwellings should be located on well drained inclusions in the unit if available. The rapid or very rapid permeability of the substratum may cause pollution of the ground water if this soil is used for septic tank absorption fields. This hazard is increased from late fall to early spring when the water table is highest. The absorption field should be located on the highest area of the unit, or loamy fill material should be used to raise the absorption field above the high water table. Rock outcrop and inclusions of shallow soils are limitations for urban uses.

ThC—Thorndike-Winnecook complex, 0 to 15 percent slopes, very stony

This nearly level to strongly sloping unit is on upland glacial till ridges. The Winnecook soils are mainly in a slightly lower position on the landscape than the Thorndike soils. Up to 3 percent of the surface of the unit is covered with stones. Slopes are smooth and convex. Slope ranges from 0 to 15 percent on Thorndike soils and from 2 to 15 percent on Winnecook soils. Areas are irregularly shaped and range from 3 to 100 acres.

This unit consists of about 45 percent shallow, somewhat excessively drained Thorndike soils; 30 percent moderately deep, well drained Winnecook soils; and 25 percent other soils.

Typically, the Thorndike soil has a surface layer of 2 inches of very dark brown highly decomposed organic material, underlain by 1 inch of pinkish gray channery silt loam. The subsoil is about 15 inches thick. It is dark reddish brown to dark brown very channery silt loam in the upper part, and strong brown extremely channery silt loam in the lower part. Hard bedrock is at a depth of 18 inches.

Typically, the Winnecook soil has a surface layer of 2 inches of very dark brown highly decomposed organic material, underlain by 2 inches of pinkish gray silt loam. The subsoil is about 28 inches thick. It is dark reddish brown to strong brown silt loam in the upper part and yellowish brown very channery silt loam to light olive brown extremely channery silt loam in the lower part. Hard bedrock is at a depth of 32 inches.

Included with this unit in mapping are a few areas of well drained Marlow soils and friable till soils on upper slopes and moderately well drained Dixfield soils and friable till soils on lower toe slopes of the ridges. These areas make up about 10 percent of the mapped acreage. Also included are a few rock outcrops on the crests of ridges, somewhat poorly drained Colonel

soils, poorly drained Brayton soils, and very poorly drained Wonsqueak and Bucksport soils in depressions and pockets. These areas make up about 15 percent of the mapped acreage.

Permeability in these Thorndike and Winnecook soil is moderate. Surface runoff is slow to rapid, depending on slope and depth to bedrock. Available water capacity is low for Thorndike soils and is moderate for Winnecook soils.

Most areas of this unit are used for woodland. A few areas are used as sites for residential development.

This unit is fairly well suited for both softwood and hardwood production. On the shallow Thorndike soils and the very shallow inclusions, shade-tolerant softwoods are the main tree species. On the moderately deep Winnecook soils and the deep inclusions, hardwoods are the main species. The main limitations of this unit are droughtiness and depth to bedrock. Seedling mortality is moderate on the shallow Thorndike soils because of droughtiness. Windthrow hazard is severe on the shallow Thorndike soils and moderate on Winnecook soils because the bedrock limits rooting depth. Strip cutting or clearcutting will reduce trees exposed to the wind and will help to reduce windthrow.

Depth to bedrock is the major limitation of this unit for urban uses. The bedrock may be rippable with large machinery. Excavations should be located in the deeper Winnecook soils or in very deep inclusions if available. Depth to bedrock is a major limitation of this unit as a site for septic tank absorption fields. The system should be located on the deeper Winnecook soil, or if possible, on a very deep, well drained inclusion in the unit.

TuB—Tunbridge-Lyman complex, 3 to 8 percent slopes

This gently sloping unit is on the crests of upland glacial till ridges. Slopes are mainly smooth and convex. Areas are irregularly shaped and range from 3 to 100 acres.

This unit consists of about 50 percent moderately deep, well drained Tunbridge soils; 35 percent shallow, somewhat excessively drained Lyman soils; and 15 percent other soils.

Typically, the surface layer of the Tunbridge soil is dark brown fine sandy loam 6 inches thick. The subsoil is 9 inches thick. It is yellowish red fine sandy loam in the upper part, and yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is olive fine sandy loam. Hard bedrock is at a depth of 29 inches.

Typically, the surface layer of the Lyman soil is dark brown fine sandy loam, 5 inches thick. The subsoil is 12 inches thick. It is dark brown fine sandy loam in the upper part and dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 17 inches.

Included with this unit in mapping are areas of well drained Marlow soils; moderately well drained Dixfield soils; moderately deep, moderately well drained, loamy till soils; and deep, well drained, loamy till soils between the ridges of Tunbridge and Lyman soils. These areas make up about 10 percent of the mapped acreage. Also included are somewhat poorly drained Colonel soils and poorly drained Brayton soils in depressions and drainageways and a few inclusions of very shallow, excessively drained Schoodic soils and rock outcrops on the crests of the ridges. These areas make up about 5 percent of the mapped acreage.

The depth to bedrock is 10 to 20 inches in the Lyman soils and 20 to 40 inches in the Tunbridge soils. Permeability is moderately rapid for Lyman soils and moderate or moderately rapid for Tunbridge soils. The available water capacity is moderate for the Tunbridge soils and low or very low for the Lyman soils. Surface runoff is slow to medium on both soils. Rooting depth is restricted by the depth to bedrock, especially in the Lyman soils.

This unit is used mostly for hay and pasture. A few areas are used as sites for residential development, blueberry production, cropland, and woodland.

This unit is fairly well suited for cultivated crops. The moderately deep Tunbridge soil will produce good yields of crops with few management limitations, but the shallow Lyman soils are droughty. The inclusions of very shallow Schoodic soils and rock outcrop will interfere with farming operations. Rooting depth of deep-rooted crops will be restricted by the shallow depth of the Lyman soil and the inclusions of very shallow soils.

This unit is well suited for hay and pasture. Droughtiness of Lyman soils may limit production in dry years.

This unit will produce fair to good yields of blueberries. During dry years, yields will be reduced because of the droughtiness of the Lyman soils. This unit has few surface stones. Flail mowers and mechanical harvesters can be used.

This unit is fairly well suited for woodland. The moderately deep Tunbridge soils are best suited for hardwood production. The shallow Lyman soils are best suited for softwood production. The main tree species are hardwoods on Tunbridge soils and shade-tolerant softwoods on Lyman soils. If this unit is managed for softwood production, the deeper Tunbridge soils will

require considerable management to reduce competition from hardwoods. Both soils have abundant natural reproduction, especially of spruce and fir. The main limitations of this unit are droughtiness and depth to bedrock. Seedling mortality is moderate on the Lyman soils because of droughtiness. Windthrow hazard is severe on the Lyman soils because the shallow depth to bedrock cause trees to be shallow rooted. Strip cutting or clearcutting will reduce the windthrow damage.

The major limitation of this unit as a site for dwellings is depth to bedrock. Cuts needed to provide essentially level building sites can expose bedrock. Dwellings with basements should be located on inclusions of deep soils in this unit, the bedrock should be removed, or the foundation should be set on the bedrock and backfilled to the established grade. Depth to bedrock is also the major limitation of the unit for septic tank absorption fields. The systems can be located in deeper inclusions in the unit if available, or fill material can be used to raise the level of the absorption field.

TuC—Tunbridge-Lyman complex, 8 to 15 percent slopes

This strongly sloping unit is on the side slopes of upland glacial till ridges. Slopes are mainly smooth and convex, but a few areas are complex. Areas are irregularly shaped and range from 3 to 50 acres.

This unit consists of about 50 percent moderately deep, well drained Tunbridge soils; 30 percent shallow, somewhat excessively drained Lyman soils; and 20 percent other soils.

Typically, the surface layer of the Tunbridge soil is dark brown, fine sandy loam about 6 inches thick. The subsoil is 9 inches thick. It is yellowish red fine sandy loam in the upper part and yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is olive brown fine sandy loam. Hard bedrock is at a depth of 29 inches.

Typically, the surface layer of the Lyman soil is dark brown, fine sandy loam about 5 inches thick. The subsoil is 12 inches thick. It is dark brown fine sandy loam in the upper part and dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 17 inches.

Included with this unit in mapping are areas of well drained Marlow soils; moderately well drained Dixfield soils; moderately deep, moderately well drained, loamy till soils; and deep, friable, well drained, loamy till soils between the ridges of Tunbridge and Lyman soils. These areas make up about 15 percent of the mapped acreage. Also included are somewhat poorly drained Colonel soils and poorly drained Brayton soils in depressions and drainageways, and a few inclusions of very shallow, excessively drained Schoodic soils and rock outcrop on the crests of the ridges. These areas make up about 5 percent of the mapped acreage.

Depth to bedrock is 10 to 20 inches in the Lyman soils and 20 to 40 inches in the Tunbridge soils. Permeability is moderately rapid for Lyman soils and moderate or moderately rapid for Tunbridge soils. The available water capacity is moderate for the Tunbridge soils and low to very low for the Lyman soils. Surface runoff is moderate to rapid on both soils, depending on slope. Rooting depth is restricted by the depth to bedrock, especially in the Lyman soils.

This unit is used mainly for hay and pasture. A few areas are used as sites for residential development, wild blueberry production, woodland, and cropland.

This unit is fairly well suited for cropland. The main limitations are slope and erosion hazard and the droughtiness of Lyman soils. Erosion control measures such as conservation tillage, contour farming, and stripcropping are needed to prevent erosion. The inclusions of very shallow Schoodic soils and rock outcrop will interfere with farming operations. Rooting depth of deep-rooted crops will be restricted by the shallow depth of the Lyman soils and the inclusions of very shallow soils.

The unit is well suited for hay and pasture. Droughtiness of the Lyman soils may limit production in dry years.

This unit will produce fair to good yields of blueberries. During dry years, yields will be reduced because of the droughtiness of the Lyman soils. This unit has few surface stones. Flail mowers and mechanical harvesters can be used.

This unit is fairly well suited for woodland. The moderately deep Tunbridge soils are best suited for hardwood production. The shallow Lyman soils are best suited for softwood production. The main tree species are hardwoods on Tunbridge soils and shade-tolerant softwoods on Lyman soils. If this unit is managed for softwood production, the deeper Tunbridge soils will require considerable management to reduce competition from hardwoods. Both soils have abundant natural reproduction, especially of spruce and fir. The main limitations of this unit are droughtiness and depth to bedrock. Seedling mortality is moderate on the Lyman soils because of droughtiness. Windthrow hazard is severe on the Lyman soils because the shallow depth to bedrock cause trees to be shallow rooted. Strip cutting or clearcutting will reduce the windthrow damage.

The major limitations of this unit as a site for

dwellings are depth to bedrock and slope. Cuts needed to provide essentially level building sites can expose bedrock. Dwellings with basements should be located on inclusions of deep soils in this unit, the bedrock should be removed, or the foundation should be set on the bedrock and backfilled to the established grade. The building should be designed to conform to the natural slope. Depth to bedrock is also the major limitation of the unit for septic tank absorption fields. The system can be located in deeper inclusions in the unit if available, or fill material can be used to raise the level of the absorption field. The system should be designed to conform to the natural slope.

TWC—Tunbridge-Lyman-Marlow complex, strongly sloping

This gently sloping to strongly sloping unit is on upland glacial till ridges and low mountains. The Tunbridge and Lyman soils are typically on the crests and upper side slopes of ridges and mountains. The Marlow soils are typically on the lower side slopes. Slope ranges from 3 to 15 percent on Tunbridge and Lyman soils and from 8 to 15 percent on Marlow soils. Slopes are mainly smooth and convex. Areas of the soil are irregularly shaped and range from 15 to 100 acres.

This unit consists of about 40 percent moderately deep, well drained Tunbridge soils; 25 percent shallow, somewhat excessively drained Lyman soils; 20 percent very deep, well drained Marlow soils; and 15 percent other soils.

Typically, the surface layer of the Tunbridge soil is dark brown fine sandy loam about 6 inches thick. The subsoil is 9 inches thick. It is yellowish red fine sandy loam in the upper part and yellowish brown to light olive brown fine sandy loam in the lower part. The substratum is olive brown fine sandy loam. Hard bedrock is at a depth of 29 inches.

Typically, the surface layer of the Lyman soil is dark brown fine sandy loam about 5 inches thick. The subsoil is 12 inches thick. It is dark brown fine sandy loam in the upper part and dark yellowish brown gravelly fine sandy loam in the lower part. Hard bedrock is at a depth of 17 inches.

Typically, the surface layer of the Marlow soil is dark brown fine sandy loam 8 inches thick. The subsoil is 13 inches thick. It is yellowish brown fine sandy loam in the upper part and light yellowish brown fine sandy loam in the lower part. The substratum is firm, light olive brown fine sandy loam in the upper part and very firm, olive brown gravelly fine sandy loam in the lower part to a depth of 65 inches or more.

Included with this unit in mapping are areas of moderately deep, moderately well drained, loamy soils; moderately well drained Dixfield soils on the sides of ridges; and small areas of somewhat poorly drained Colonel soils and poorly drained Brayton soils in depressions and drainageways. These areas make up about 10 percent of the mapped acreage. Also included are very shallow, excessively drained Schoodic soils, a few rock outcrops on crests of ridges, and soils with short slopes of more than 15 percent. These areas make up about 5 percent of the mapped acreage.

The depth to bedrock is 20 to 40 inches in the Tunbridge soil, 10 to 20 inches in the Lyman soil, and more than 60 inches in the Marlow soil. A seasonal high water table is commonly at a depth of 2 to 3.5 feet in the Marlow soil for a brief period in the spring. Permeability is moderately rapid for Lyman soils and moderate or moderately rapid for Tunbridge soils. Permeability in the Marlow soil is moderate in the surface layer and subsoil and moderately slow or slow in the substratum. Surface runoff is slow to rapid on the Tunbridge and Lyman soils and medium to rapid on the Marlow soils. Available water capacity is moderate for the Tunbridge and Marlow soils and low to very low for the Lyman soils. Rooting depth is restricted by the depth to bedrock in the Tunbridge and Lyman soils and by the firm substratum in the Marlow soils.

Most areas of this unit are used for woodland that has reverted from hayland and pasture.

This unit is well suited for woodland. The very deep Marlow soils and moderately deep Tunbridge soils are best suited for hardwood production. The shallow Lyman soils are best suited for softwood production. The main tree species are hardwoods on Tunbridge and Marlow soils and shade-tolerant softwoods on Lyman soils. If this unit is managed for softwood production Tunbridge and Marlow soils require considerable management to reduce competition from hardwoods. The unit has abundant natural reproduction, especially of spruce and fir. The main limitations of this unit are droughtiness and depth to bedrock of Lyman soils. Seedling mortality is moderate on the Lyman soils because of droughtiness. Windthrow hazard is severe on the Lyman soil because the shallow depth to bedrock cause trees to be shallow rooted. Strip cutting or clearcutting will reduce windthrow damage.

The Marlow soils in this unit are a good source of roadfill material. The Lyman and Tunbridge soils have severe limitations for this use because of depth to bedrock.

Slope and the depth to bedrock of the Lyman and Tunbridge soils are the major limitation of this unit as sites for roads. Roads should be designed on the contour to keep their slope gradients low. Because of

the shallow depth of the Lyman and Tunbridge soils, roads should be planned to reduce cuts as much as possible. The Marlow soils in this unit are the better sites for roads.

Ud—Udorthents-Urban land complex

This unit consists of fill material that has been placed on soils of various drainage classes and parent materials and areas that are covered by streets, parking lots, and buildings. Examples of these areas are airports, industrial areas, and commercial areas of towns and cities. This unit is mainly in the coastal area. Areas are irregular in shape and range from 3 to 300 acres. Slope ranges from 0 to 30 percent.

This unit consists of about 50 percent Udorthents, 30 percent Urban land, and 20 percent other soils.

Udorthents consist of fill material more than 20 inches thick over various soils. Most of the larger towns and cities are on marine terraces, and much of this fill material is over marine sediments. Some areas are fill over glacial till and bedrock. The fill material is mainly gravelly, but includes some other soil materials removed from adjacent areas by excavation for foundations.

Urban land consists of areas covered by concrete, asphalt, buildings, and other impervious surfaces. The underlying soil material is mainly marine sediments, but includes glacial till or bedrock.

Included with this unit in mapping are a few areas of undisturbed Buxton, Lamoine, Scantic, Lyman, Tunbridge, Schoodic, Dixfield or Hermon soils. In a few areas the fill material consists of nonsoil material such as building rubbish, cinders, ash, sawdust, bark, and quarry rubble. Also included are small areas that have slopes of 30 to 60 percent.

Permeability, internal drainage, runoff, and available water capacity of the Udorthents is variable and depends on the characteristics of the type of fill material.

Onsite investigation is needed to determine the potentials and limitations of these areas for any use.

WA—Waskish and Sebago soils

This very deep, nearly level unit is in depressions in glaciated uplands and glaciofluvial deposits. Slopes are smooth and slightly convex. Slope ranges from 0 to 1 percent. Areas of the unit are mainly oval.

Some areas consist of very poorly drained Waskish soils, some of very poorly drained Sebago soils, and some of both soils. The Waskish and Sebago soils were mapped together because they have no major differences in use and management. The total acreage of the unit has about 45 percent Waskish soils, 40 percent Sebago soils, and 15 percent other soils.

Typically, the surface, subsurface, and bottom layers of the Waskish soils are very dusky red or dark reddish brown peat. The peat material extents to a depth of 63 inches or more. Mucky peat material is commonly below 63 inches.

Typically, the surface layer of the Sebago soil is black mucky peat 34 inches thick. The next layer is very dusky red peat to a depth of 54 inches. Below 54 inches is black mucky peat.

Included with this unit in mapping are small areas of well decomposed Wonsqueak and Bucksport soils mainly at the edges of the unit. These areas make up about 10 percent of the mapped acreage. Also included are areas of very poorly drained alluvial soils along streams and very poorly drained Biddeford soils in coastal areas and river valleys. These areas make up about 5 percent of the mapped acreage.

A seasonal high water is commonly within 2 feet of the surface from late fall to summer in the Waskish soil and commonly within 6 inches of the surface from fall to early summer in the Sebago soil. Permeability is rapid or very rapid in the Waskish soil and moderately rapid in the Sebago soil. Surface runoff is very slow on the Sebago soil, or it is ponded. Available water capacity is high for both soils. Waskish soils are extremely acid. Sebago soils range from extremely acid to strongly acid. Plant growth is restricted by the acidity of the soils and the high water table.

These areas are dominated by heath plants and sphagnum moss. A few scattered trees grow around the edges of the units. A few areas have been mined for agricultural peat.

This unit is wetland that has potential for controlling floodwater and erosion, improving water quality and quantity, providing habitat for wetland wildlife, and providing recreational opportunities.

The Waskish soils in this unit have value as a source of horticultural peat, but the small size of many of the units limits the use of mechanical harvesting equipment.

This unit is poorly suited for commercial wood production because of the high water table, acidity, and composition of the organic materials. Trees on this unit are very slow growing and often stunted. Common species growing on the edges of the unit are black spruce, eastern larch, and balsam fir.

This unit has severe limitations as a site for roads because of the high water table and instability of the organic soils.

WkC—Winnecook-Thorndike complex, 3 to 12 percent slopes

This gently sloping to strongly sloping unit is on upland glacial till ridges. The Winnecook soils are mainly in a slightly lower position on the landscape than the Thorndike soils. Slopes are smooth and convex. Areas of the unit are irregularly shaped and range from 3 to 75 acres.

This unit consists of about 55 percent moderately deep, well drained Winnecook soils; 30 percent shallow, somewhat excessively drained Thorndike soils; and 15 percent other soils.

Typically, the Winnecook soil has a surface layer of very dark grayish brown silt loam, 8 inches thick. The subsoil is 22 inches thick. It is strong brown silt loam in the upper part, yellowish brown very channery silt loam in the middle part, and light olive brown extremely channery silt loam in the lower part. Hard bedrock is at a depth of 30 inches.

Typically, the Thorndike soil has a surface layer of dark brown channery silt loam, 7 inches thick. The subsoil is 9 inches thick. It is dark brown very channery silt loam in the upper part and strong brown extremely channery silt loam in the lower part. Hard bedrock is at a depth of 16 inches.

Included with this unit in mapping are areas of well drained Marlow soils on the upper side slopes and moderately well drained Dixfield on the lower side slopes of the ridges. These areas make up about 10 percent of the mapped acreage. Also included are a few areas of rock outcrop on the crests of ridges and a few areas with slopes of more than 12 percent. These areas make up about 5 percent of the mapped acreage.

Permeability of both the Thorndike and Winnecook soils is moderate. Surface runoff is slow to rapid, depending on slope and depth of bedrock. Available water capacity is low for the Thorndike soils and moderate for the Winnecook soils.

Most areas of this unit are used for hayland, pasture, and woodland. Some areas are used as sites for residential development, and a few areas are cropland.

This unit is well suited for cultivated crops. The major limitation is the depth to bedrock in the Thorndike soils. Roots will obtain moisture from the cracks and voids in the bedrock. Erosion control measures such as conservation tillage, farming on the contour, and stripcropping are needed on the steeper slopes to prevent erosion.

This unit is well suited for hay and pasture. Depth to bedrock will reduce rooting depth of deep-rooted legumes such as alfalfa.

This unit is fairly well suited for woodland and is suited for both softwood and hardwood production. The main tree species on Winnecook soils are hardwoods. The main tree species on Thorndike soils are shade-tolerant softwoods. The main limitations of this unit are droughtiness and depth to bedrock. Seedling mortality is moderate on the Thorndike soils because of droughtiness. Windthrow hazard is severe on the Thorndike soils and moderate on Winnecook soils; bedrock limits rooting depth, and trees are shallow rooted. Strip cutting or clearcutting will reduce trees exposed to the wind and reduce windthrow.

Depth to bedrock in the Thorndike soil is the major limitation of this unit as a site for urban uses such as dwellings with basements. The bedrock is rippable with large machinery. This unit is well suited as a site for houses without basements. Depth to bedrock is a major limitation of this unit as a site for septic tank absorption fields. The system should be located on a deeper Winnecook soil, or if possible, on a very deep, well drained inclusion in the unit.

Wo—Wonsqueak muck, flooded

This very deep, nearly level, very poorly drained soil is at the edges of lakes and ponds and adjacent to streams. Areas are long and narrow or irregularly shaped and range from 10 to 200 acres. Slopes are smooth and slightly concave and range from 0 to 1 percent.

Typically, the surface layer is very dark gray muck, 8 inches thick. The subsurface layer is black muck, 24 inches thick. The substratum is gray silt loam to a depth of 65 inches or more.

Included with this soil in mapping are narrow areas of very poorly drained alluvial soils along streams. Also included are small areas of very poorly drained Bucksport and Biddeford soils. Included areas make up about 25 percent of the mapped acreage.

This Wonsqueak soil is frequently flooded for long periods from March through October. A seasonal high water table is commonly 1 foot above the surface to 6 inches below the surface from early fall through summer. Permeability is moderately slow to moderately rapid in the organic material, and moderate or moderately slow in the mineral material. Available water capacity is high. Surface runoff is very slow, or it is ponded.

This unit is wetland that has potential for controlling floodwater, improving water quality and quantity,

providing habitat for wetland wildlife, and providing recreational opportunities.

The vegetation on the unit is mainly grasses, sedges, and wetland shrubs.

This soil has severe limitations for most other uses because of wetness, flooding, and high content of organic material.

Ws—Wonsqueak and Bucksport mucks

This level to nearly level unit is in depressions in glacial ground moraine and glaciofluvial deposits and along the edges of lakes and ponds. Areas are oval or irregularly shaped and range from 3 to 200 acres. Slopes are smooth and slightly convex. Slope ranges from 0 to 1 percent.

Some areas consist mostly of very poorly drained Wonsqueak soils, some mostly of very poorly drained Bucksport soils, and some of both. The Wonsqueak and Bucksport soils were mapped together because they have no major differences in use and management. The total acreage of the unit is about 50 percent Wonsqueak soils, 35 percent Bucksport soils, and 15 percent other soils.

Typically, the Wonsqueak soil has a surface layer that is very dark gray muck, 8 inches thick. The subsurface layer is black muck, 24 inches thick. The substratum is gray silt loam to a depth of 65 inches or more.

Typically, the Bucksport soil has a surface layer that is black muck, 12 inches thick. The subsurface layer is 33 inches thick. It is dark reddish brown muck in the upper part and black muck in the lower part. The bottom layer is black muck to a depth of 65 inches or more.

Included with this unit in mapping are small areas of poorly drained Scantic and Brayton soils, very poorly drained Biddeford and till soils. These soils are mainly at the edges of the unit. Also included are small areas of the less decomposed Sebago soils and knolls of somewhat excessively drained to well drained Hermon soils and excessively drained Colton soils. Included soils make up about 10 percent of the mapped acreage.

A seasonal high water table in these Wonsqueak and Bucksport soils is commonly at 1 foot above the surface to 6 inches below the surface from early fall through summer. Permeability of the Wonsqueak soil is moderately slow to moderately rapid in the organic material and moderate or moderately slow in the underlying mineral soil. Permeability of the Bucksport soil is moderately slow to moderately rapid. Available water capacity is high in both soils. Surface runoff is very slow, or it is ponded. Bucksport soils are extremely acid to slightly acid. Wonsqueak soils are extremely acid to slightly acid in the organic matter and strongly acid to neutral in the mineral soil. Plant growth is restricted by the acidity and high water table.

This unit is wetland that has potential for controlling floodwaters and erosion, improving water quality and quantity, providing habitat for wetland wildlife, and providing recreational opportunities.

This unit is very poorly suited for commercial wood production because of the high water table and organic material. Black spruce, balsam fir, tamarack, northern white cedar, and gray birch are common species on this unit, but growth is very slow and the trees are often stunted.

WT—Wonsqueak, Bucksport and Sebago soils

This very deep, nearly level unit is in depressions in glacial ground moraine and glaciofluvial deposits and along the edges of lakes and ponds. Slopes are smooth and linear or slightly concave. Slope ranges from 0 to 1 percent.

Some areas consist mainly of very poorly drained Wonsqueak soils, some mainly of very poorly drained Bucksport soils, some mainly of very poorly drained Sebago soils, and some of two or more of these soils. These soils were mapped together because they have no major differences in use and management. The total acreage of the unit is about 45 percent Wonsqueak soils, 30 percent Bucksport soils, 15 percent Sebago soils, and 10 percent other soils.

Typically, the Wonsqueak soil has a surface layer that is very dark gray muck 8, inches thick. The subsurface layer is black muck, 24 inches thick. The substratum is gray silt loam to a depth of 65 inches or more.

Typically, the Bucksport soil has a surface layer that is black muck, 12 inches thick. The subsurface layer is 33 inches thick. It is dark reddish brown muck in the upper part and black muck in the lower part. The bottom layer is black muck to a depth of 65 inches or more.

Typically, the Sebago soil has a surface layer and subsurface layer that is black mucky peat, 34 inches thick. The next layer is very dusky red peat to a depth of 54 inches. Below 54 inches is black mucky peat.

Included with this unit in mapping are small areas of poorly drained Scantic or Brayton soils and very poorly drained Biddeford soils and till soils. These soils are mainly at the edges of the unit. A few areas have small knolls of somewhat excessively to well drained Hermon soils, and excessively drained Colton soils. Included

soils make up about 10 percent of the mapped acreage.

A seasonal high water table in these Wonsqueak, Bucksport, and Sebago soils is commonly 1 foot above the surface to 6 inches below the surface from early fall to early summer. Permeability is moderately slow to moderately rapid in the Bucksport soils and moderately rapid in the Sebago soils. Permeability of the Wonsqueak soil is moderately slow to moderately rapid in the organic material, and moderate or moderately slow in the mineral material. Surface runoff is very slow, or it is ponded. Available water capacity is high. These soils are extremely acid to strongly acid. Plant growth is restricted by the acidity of the soil and the high water table.

These areas are bogs. They are dominated by heath plants, shrubs, and some species of trees.

This unit is wetland that has potential for controlling floodwater and erosion, improving water quality and quantity, providing habitat for wetland wildlife, and providing recreational opportunities.

This unit is poorly suited for commercial wood production because of the high water table. Black spruce, balsam fir, tamarack, red maple, northern white cedar, and gray birch are common species, but growth is very slow and the trees are often stunted.

This unit has severe limitations as a site for roads because of the high water table and instability of the organic soils.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in providing the Nation's short- and long-range needs for food and fiber. Because the supply of high quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is the land that is best suited to food, feed, forage, fiber, and oilseed crops. It may be cultivated land, pasture, woodland, or other land, but it is not urban and built-up land or water areas. It either is used for food or fiber crops or is available for those crops. The soil qualities, growing season, and moisture supply are those needed for a well managed soil to produce a sustained high yield of crops in an economic manner. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment.

Prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The level of acidity or alkalinity is acceptable. Prime farmland has few or no rocks and is permeable to water and air. It is not excessively erodible or saturated with water for long periods and is not frequently flooded during the growing season. The slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 87,574 acres in the survey area, or nearly 10 percent of the total acreage, meets the soil requirements for prime farmland. Scattered areas of this land are throughout the survey area, but most are in the southern part.

A recent trend in land use in some parts of the county has been toward the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in table 5. This list does not constitute a recommendation for a particular land use. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps at the back of this publication. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

Soils that have limitations, such as a seasonal high water table, frequent flooding during the growing season, or inadequate rainfall, qualify for prime farmland only in areas where these limitations have been overcome by such measures as drainage, flood control, or irrigation. The need for these measures is indicated after the map unit name in table 5. Onsite evaluation is needed to determine whether or not these limitations have been overcome by corrective measures.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help avoid soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavior characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as woodland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The crops or pasture plants best suited to the soils, including some not commonly grown in the survey area, are identified; the system of land capability classification used by the Natural Resources Conservation Service is explained; and the estimated yields of the main crops and hay and pasture plants are listed for each soil.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under "Detailed Soil Map Units." Specific information can be obtained from the local office of the Natural Resources Conservation Service or the University of Maine Cooperative Extension Service.

Yields Per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 6. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of each map unit also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 6 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local

office of the Natural Resources Conservation Service or of the University of Maine Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for woodland and for engineering purposes.

In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit. Only class and subclass are used in this survey. These levels are defined in the following paragraphs.

Capability classes, the broadest groups, are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class I soils have few limitations that restrict their use.

Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class III soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class IV soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class V soils are not likely to erode but have other limitations, impractical to remove, that limit their use.

Class VI soils have severe limitations that make them generally unsuitable for cultivation.

Class VII soils have very severe limitations that make them unsuitable for cultivation.

Class VIII soils and miscellaneous areas have limitations that nearly preclude their use for commercial crop production.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, IIe. The letter *e* shows that the main limitation is risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class I there are no subclasses because the soils of this class have few limitations. Class V contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class V are subject to little or no erosion. They have other limitations that restrict their use to pasture, woodland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, IIe-4 or IIIe-6.

The capability classification of each map unit is given in table 6.

Woodland Management and Productivity

James Spielman, forester, Natural Resources Conservation Service, helped to prepare this section.

Productive timberland covers 79 percent of the land area of Hancock County. That timberland is 52 percent spruce-fir type, 24 percent northern hardwood (beech-birch-maple), 12 percent white pine, 9 percent aspen-birch, 2 percent oak-hickory, and 1 percent elm-ash-red maple.

In 1982, 44 percent of the timberland in Hancock County was stocked with sawtimber-size stands, 40 percent with pole-size stands, and 15 percent with seedling and sapling-size stands. Approximately 9,700 acres, or 1.2 percent of the timberland in Hancock County, was unstocked.

Approximately 52 percent of the productive timberland in Hancock County is in private nonindustrial ownership. Of the remaining 48 percent, approximately 43 percent is privately owned industrial forestland, 3 percent is in government ownership, and 2 percent is Indian land.

The economy of Hancock County is highly dependent upon forest resources. The forest provides a

variety of benefits to landowners and society in general. These include timber and fiber, recreation, wildlife, water, and esthetic values.

A variety of forest products are harvested. These include, pulpwood, sawtimber, veneer logs, boltwood, cordwood, biomass chips, shingle stock, posts, poles, and rails.

Table 7 can be used by woodland owners or forest managers in planning the use of soils for wood crops. Only those soils suitable for wood crops are listed. The table lists the ordination symbol for each soil. Soils assigned the same ordination symbol require the same general management and have about the same potential productivity.

The first part of the *ordination symbol*, a number, indicates the potential productivity of the soils for an indicator tree species, eastern white pine. The number indicates the volume, in cubic meters per hectare per year, which the indicator species can produce. The number 1 to 5 indicates very low potential productivity; 6, low; 7, medium; 8, high; and 9 and 10, very high. The second part of the symbol, a letter, indicates the major kind of soil limitation. The letter *R* indicates steep slopes; *X*, stoniness or rockiness; *W*, excess water in or on the soil; *D*, restricted rooting depth; *S*, sandy texture; and *F*, a high content of rock fragments in the soil. The letter *A* indicates that limitations or restrictions are insignificant. If a soil has more than one limitation, the priority is as follows: R, X, W, D, S, and F.

In table 7, *slight, moderate,* and *severe* indicate the degree of the major soil limitations to be considered in management.

Erosion hazard is the probability that damage will occur as a result of site preparation and cutting where the soil is exposed along roads, skid trails, fire lanes, and log-handling areas. Forests that have been burned or overgrazed are also subject to erosion. Ratings of the erosion hazard are based on the percent of the slope. A rating of *slight* indicates that no particular prevention measures are needed under ordinary conditions. A rating of *moderate* indicates that erosion-control measures are needed in certain silvicultural activities. A rating of *severe* indicates that special precautions are needed to control erosion in most silvicultural activities.

Equipment limitation reflects the characteristics and conditions of the soil that restrict use of the equipment generally needed in woodland management or harvesting. The chief characteristics and conditions considered in the ratings are slope, stones on the surface, rock outcrops, soil wetness, and texture of the surface layer. A rating of *slight* indicates that under normal conditions the kind of equipment or season of use is not significantly restricted by soil factors. Soil wetness can restrict equipment use, but the wet period does not exceed one month. A rating of *moderate* indicates that equipment use is moderately restricted because of one or more soil factors. If the soil is wet, the wetness restricts equipment use for a period of one to three months. A rating of *severe* indicates that equipment use is severely restricted either as to the kind of equipment that can be used, or the season of use. If the soil is wet, the wetness restricts equipment use for more than three months.

Seedling mortality refers to the death of naturally occurring or planted tree seedlings, as influenced by the kinds of soil, soil wetness, or topographic conditions. The factors used in rating the soils for seedling mortality are texture of the surface layer, depth to a seasonal high water table and the length of the period when the water table is high, rock fragments in the surface layer, effective rooting depth, and slope aspect. A rating of *slight* indicates that seedling mortality is not likely to be a problem under normal conditions. Expected mortality is less than 25 percent. A rating of *moderate* indicates that some problems from seedling mortality can be expected. Extra precautions are advisable. Expected mortality is 25 to 50 percent. A rating of *severe* indicates that seedling mortality is a serious problem. Extra precautions are important. Replanting may be necessary. Expected mortality is more than 50 percent.

Windthrow hazard is the likelihood that trees will be uprooted by the wind because the soil is not deep enough for adequate root anchorage. The main restrictions that affect rooting are a seasonal high water table and the depth to bedrock, a fragipan, or other limiting layers. A rating of *slight* indicates that under normal conditions no trees are blown down by the wind. Strong winds may damage trees, but they do not uproot them. A rating of *moderate* indicates that some trees can be blown down during periods when the soil is wet and winds are moderate or strong. A rating of *severe* indicates that many trees can be blown down during these periods.

Plant competition ratings indicate the degree to which undesirable species are expected to invade and grow when openings are made in the tree canopy. The main factors that affect plant competition are the depth to the water table and the available water capacity. A rating of *slight* indicates that competition from undesirable plants is not likely to prevent natural regeneration or suppress the more desirable species. Planted seedlings can become established without undue competition. A rating of *moderate* indicates that competition may delay the establishment of desirable species. Competition may hamper stand development,

but it will not prevent the eventual development of fully stocked stands. A rating of *severe* indicates that competition can be expected to prevent regeneration unless precautionary measures are applied.

The *potential productivity* of merchantable or *common trees* on a soil is expressed as a *site index* and as a *productivity class* number. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that woodland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability.

The *productivity class*, a number, is the yield likely to be produced by the most important trees. This number, expressed as cubic meters per hectare per year, indicates the amount of fiber produced at the age of culmination of mean annual increment on a fully stocked, unmanaged stand.

The first species listed under *common trees* for a soil is the indicator species for that soil. It is the dominant species on the soil and the one that determines the ordination class.

Trees to plant are those that are suitable for commercial wood production.

Recreation

The soils of the survey area are rated in table 8 according to limitations that affect their suitability for recreation. The ratings are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewerlines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation are also important. Soils subject to flooding are limited for recreation use by the duration and intensity of flooding and the season when flooding occurs. In planning recreation facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

In table 8, the degree of soil limitation is expressed as slight, moderate, or severe. *Slight* means that soil properties are generally favorable and limitations are minor and easily overcome. *Moderate* means that limitations can be overcome or alleviated by planning, design, or special maintenance. *Severe* means that soil properties are unfavorable and limitations can be offset only by costly soil reclamation, special design, intensive maintenance, limited use, or by a combination of these measures.

The information in table 8 can be supplemented by other information in this survey, for example, interpretations for septic tank absorption fields in table 11 and interpretations for dwellings without basements and for local roads and streets in table 10.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The best soils have mild slopes and are not wet or subject to flooding during the period of use. The surface has few or no stones or boulders, absorbs rainfall readily, but remains firm, and is not dusty when dry. Strong slopes and stones or boulders can greatly increase the cost of constructing campsites.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The best soils for picnic areas are firm when wet, are not dusty when dry, are not subject to flooding during the period of use, and do not have slopes, stones or boulders that increase the cost of shaping sites or of building access roads and parking areas.

Playgrounds require soils that can withstand intensive foot traffic. The best soils are almost level and are not wet or subject to flooding during the season of use. The surface is free of stones and boulders, is firm after rains, and is not dusty when dry. If grading is needed, the depth of the soil over bedrock or a firm, dense layer should be considered.

Paths and trails for hiking and horseback riding should require little or no cutting and filling. The best soils are not wet, are firm after rains, are not dusty when dry, and are not subject to flooding more than once a year during the period of use. They have moderate slopes and few or no stones or boulders on the surface.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic (fig. 9). Cutting or filling may be required. The best soils for use as golf fairways are firm when wet, are not dusty when dry, and are not subject to prolonged flooding during the period of use. They have moderate slopes and no stones or boulders on the surface. The suitability of the soil for tees or greens is not considered in rating the soils.

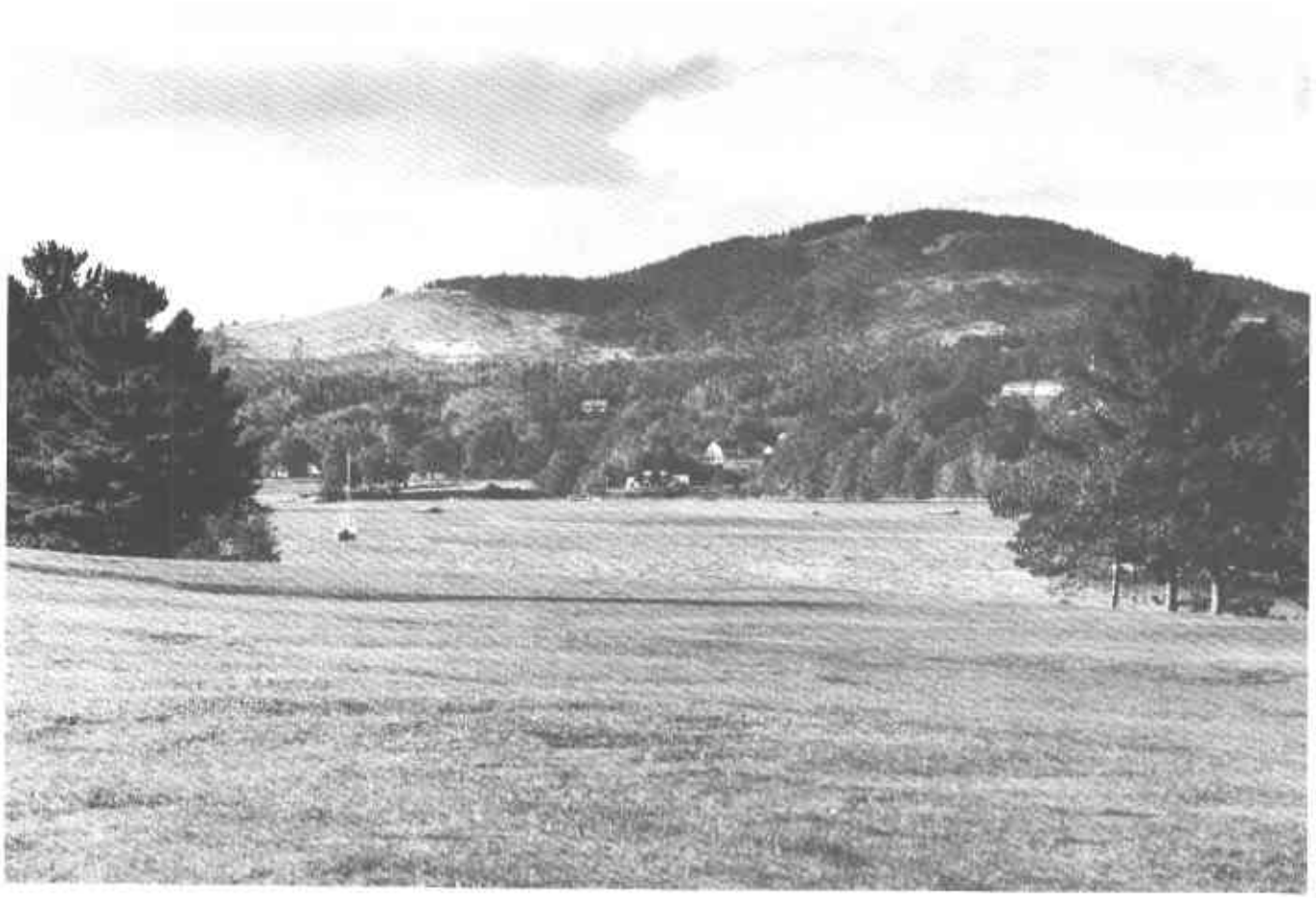

Figure 9.—Golf course on Lamoine silt loam, 3 to 8 percent slopes. Blue Hill Bay and Blue Hill in the background.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 9, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs:

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface

stoniness, and flood hazard. Soil temperature and soil moisture are also considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flood hazard, and slope. Soil temperature and soil moisture are also considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flood hazard. Soil temperature and soil moisture are also considerations. Examples of wild herbaceous plants are mustard, goldenrod, thistle, and milkweed.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are aspen, beech, birch, oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian-olive, autumn-olive, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are hemlock, pine, spruce, fir, cedar, and juniper.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are cattails, smartweed, wild millet, wildrice, saltgrass, cordgrass, rushes, and sedges.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. The wildlife attracted to these areas include woodcock, snowshoe hare, bobolink, hawk, pheasant, meadowlark, field sparrow, and deer.

Habitat for woodland wildlife consists of areas of deciduous plants or coniferous plants or both and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, woodcock, thrushes, woodpeckers, squirrels, red fox, raccoon, moose, deer, and bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are rails, otter, ducks, geese, shore birds, muskrat, mink, and beaver.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. The ratings are given in the following tables: Building site development, Sanitary facilities, Construction materials, and Water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the "Soil Properties" section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil within a depth of 5 or 6 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations need to be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey,

determinations were made about grain-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 6 feet of the surface, soil wetness, depth to a seasonal high water table, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kind of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to (1) evaluate the potential of areas for residential, commercial, industrial, and recreational uses; (2) make preliminary estimates of construction conditions; (3) evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; (4) evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; (5) plan detailed onsite investigations of soils and geology; (6) locate potential sources of gravel, sand, earthfill, and topsoil; (7) plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and (8) predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Table 10 shows the degree and kind of soil limitations that affect shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required. Special feasibility studies may be required where the soil limitations are severe.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for basements, graves, utility lines, open ditches, and other purposes. The ratings are based on soil properties, site features, and observed performance of the soils. The ease of digging, filling, and compacting is affected by the depth to bedrock, a cemented pan, or a very firm dense layer; stone content; soil texture; and slope. The time of the year that excavations can be made is affected by the depth to a seasonal high water table and the susceptibility of the soil to flooding. The resistance of the excavation walls or banks to sloughing or caving is affected by soil texture and the depth to the water table.

Dwellings and small commercial buildings are structures built on shallow foundations on undisturbed soil. The load limit is the same as that for single-family dwellings no higher than three stories. Ratings are made for small commercial buildings without basements, for dwellings with basements, and for dwellings without basements. The ratings are based on soil properties, site features, and observed performance of the soils. A high water table, flooding, shrink-swell potential, and organic layers can cause the movement of footings. A high water table, depth to bedrock or to a cemented pan, large stones, slope, and flooding affect the ease of excavation and construction. Landscaping and grading that require cuts and ills of more than 5 to 6 feet are not considered.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material, a base of gravel, crushed rock, or stabilized soil material, and a flexible or rigid surface. Cuts and fills are generally limited to less than 6 feet. The ratings are based on soil properties, site features, and observed performance of the soils. Depth to bedrock or to a cemented pan, a high water table, flooding, large stones, and slope affect the ease of excavating and grading. Soil strength (as inferred from the engineering classification of the soil), shrink-swell potential, frost action potential, and depth to a high water table affect the traffic supporting capacity.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. The ratings are based on soil properties, site features, and observed performance of the soils. Soil reaction, a high water table, depth to bedrock, and the available water capacity in the upper 40 inches affect plant growth. Flooding, wetness, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer affect trafficability after vegetation is established.

Sanitary Facilities

Table 11 shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, and sanitary landfills. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use, and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required.

Table 11 also shows the suitability of the soils for use as daily cover for landfills. A rating of *good* indicates that soil properties and site features are favorable for the use, and good performance and low maintenance can be expected; *fair* indicates that soil properties and site features are moderately favorable for the use, and one or more soil properties or site features make the soil less desirable than the soils rated good; and *poor* indicates that one or more soil properties or site features are unfavorable for the use, and overcoming the unfavorable properties requires special design, extra maintenance, or costly alteration.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches is evaluated. The ratings are based on soil properties, site features, and observed performance of the soils. Permeability, a high water table, depth to bedrock, and flooding affect absorption of the effluent. Large stones and bedrock interfere with installation.

Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health. Ground water can be polluted if highly permeable sand and gravel or fractured bedrock is less than 4 feet below the base of the absorption field, if slope is excessive, or if the water table is near the surface. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively. Many local ordinances require that this material be of a certain thickness. Septic tank absorption fields should be designed and constructed in accordance with existing State of Maine subsurface wastewater disposal rules.

Sewage lagoons are shallow ponds constructed to hold sewage, while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil.

Lagoons generally are designed to hold the sewage within a depth of 2 to 5 feet. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water.

Table 11 gives ratings for the natural soil that makes up the lagoon floor. The surface layer and, generally, 1 or 2 feet of soil material below the surface layer are excavated to provide material for the embankments. The ratings are based on soil properties, site features, and observed performance of the soils. Considered in the ratings are slope, permeability, a high water table, depth to bedrock, flooding, large stones, and content of organic matter.

Excessive seepage due to rapid permeability of the soil or a water table that is high enough to raise the level of sewage in the lagoon cause a lagoon to function unsatisfactorily. Pollution results if seepage is excessive, or if floodwater overtops the lagoon. A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope and bedrock can cause construction problems, and large stones can hinder compaction of the lagoon floor.

Sanitary landfills are areas where solid waste is disposed of by burying it in soil. There are two types of landfill—trench and area. In a trench landfill, the waste is placed in a trench. It is spread, compacted, and covered daily with a thin layer of soil excavated at the site. In an area landfill, the waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site.

Both types of landfill must be able to bear heavy vehicular traffic. Both types involve a risk of ground water pollution. Ease of excavation and revegetation needs to be considered.

The ratings in table 11 are based on soil properties, site features, and observed performance of the soils. Permeability, depth to bedrock, a high water table, slope, and flooding affect both types of landfill. Texture, stones and boulders, highly organic layers, and soil reaction affect trench type landfills. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, a limitation rated slight or moderate may not be valid. Onsite investigation is needed.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area type sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste.

Soil texture, wetness, coarse fragments, and slope

affect the ease of removing and spreading the material during wet and dry periods. Loamy or silty soils that are free of large stones or excess gravel are the best cover for a landfill. Clayey soils are sticky or cloddy and are difficult to spread; sandy soils are subject to soil blowing.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock or the water table to permit revegetation. The soil material used as final cover for a landfill should be suitable for plants. The surface layer generally has the best workability, more organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

Construction Materials

Table 12 gives information about the soils as a source of roadfill, sand, gravel, and topsoil. The soils are rated *good, fair,* or *poor* as a source of roadfill and topsoil. They are rated as a *probable* or *improbable* source of sand and gravel. The ratings are based on soil properties and site features that affect the removal of the soil and its use as construction material. Normal compaction, minor processing, and other standard construction practices are assumed. Each soil is evaluated to a depth of 5 or 6 feet.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the soil material below the surface layer to a depth of 5 or 6 feet. It is assumed that soil layers will be mixed during excavating and spreading. Many soils have layers of contrasting suitability within their profile. The table showing engineering index properties provides detailed information about each soil layer. This information can help determine the suitability of each layer for use as roadfill. The performance of soil after it is stabilized with lime or cement is not considered in the ratings.

The ratings are based on soil properties, site features, and observed performance of the soils. The thickness of suitable material is a major consideration. The ease of excavation is affected by large stones, a high water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the engineering classification of the soil) and shrink-swell potential.

Soils rated *good* contain significant amounts of sand or gravel or both. They have at least 5 feet of suitable material, low shrink-swell potential, few cobbles and stones, and slopes of 15 percent or less. Depth to the water table is more than 3 feet. Soils rated *fair* are more than 35 percent silt- and clay-sized particles and have a plasticity index of less than 10. They have moderate shrink-swell potential, slopes of 15 to 25 percent, or many stones. Depth to the water table is 1 to 3 feet. Soils rated *poor* have a plasticity index of more than 10, a high shrink-swell potential, many stones, or slopes of more than 25 percent. They are wet, and the depth to the water table is less than 1 foot. They may have layers of suitable material, but the material is less than 3 feet thick.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. Sand and gravel are used in many kinds of construction. Specifications for each use vary widely. In table 12, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material.

The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the engineering classification of the soil), the thickness of suitable material, and the content of rock fragments. Kinds of rock, acidity, and stratification are given in the soil series descriptions. Gradation of grain sizes is given in the table on engineering index properties.

A soil rated as a probable source has a layer of clean sand or gravel or a layer of sand or gravel that is up to 12 percent silty fines. This material must be at least 3 feet thick and less than 50 percent, by weight, large stones. All other soils are rated as an improbable source. Coarse fragments of soft bedrock, such as shale and siltstone, are not considered to be sand and gravel.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area.

Plant growth is affected by toxic material and by such properties as soil reaction, available water capacity, and fertility. The ease of excavating, loading, and spreading is affected by rock fragments, slope, a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, a water table, rock fragments, bedrock, and toxic material.

Soils rated *good* have friable loamy material to a depth of at least 40 inches. They are free of stones and cobbles, have little or no gravel, and have slopes of less

than 8 percent. They are naturally fertile or respond well to fertilizer and are not so wet that excavation is difficult.

Soils rated *fair* are sandy soils, loamy soils that have a relatively high content of clay, soils that have only 20 to 40 inches of suitable material, soils that have an appreciable amount of gravelor stones or soils that have slopes of 8 to 15 percent. The soils are not so wet that excavation is difficult.

Soils rated *poor* are very sandy or clayey, have less than 20 inches of suitable material, have a large amount of gravel or stones, have slopes of more than 15 percent, or have a seasonal water table at or near the surface.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 13 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and are easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increase in construction costs, and possibly increased maintenance are required.

This table also gives for each soil the restrictive features that affect drainage, irrigation, terraces and diversions, and grassed waterways.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders or organic matter. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table and permeability of the aquifer. Depth to bedrock and the content of large stones affect the ease of excavation.

Drainage is the removal of excess surface and subsurface water from the soil. How easily and effectively the soil is drained depends on the depth to bedrock, to a cemented pan, or to other layers that affect the rate of water movement; permeability; depth to a high water table or depth of standing water if the soil is subject to ponding; slope; susceptibility to flooding; subsidence of organic layers; and potential frost action. Excavating and grading and the stability of ditchbanks are affected by depth to bedrock, large stones, slope, and the hazard of cutbanks caving. The productivity of the soil after drainage is adversely affected by extreme acidity. Availability of drainage outlets is not considered in the ratings.

Irrigation is the controlled application of water to supplement rainfall and support plant growth. The design and management of an irrigation system are affected by depth to the water table, the need for drainage, flooding, available water capacity, intake rate, permeability, erosion hazard, and slope. The construction of a system is affected by large stones and depth to bedrock. The performance of a system is affected by the depth of the root zone and soil reaction.

Terraces and diversions are embankments or a combination of channels and ridges constructed across a slope to reduce erosion and conserve moisture by

intercepting runoff. Slope, wetness, large stones, and depth to bedrock affect the construction of terraces and diversions. A restricted rooting depth, a severe hazard of water erosion, an excessively coarse texture, and restricted permeability adversely affect maintenance.

Grassed waterways are natural or constructed channels, generally broad and shallow, that conduct surface water to outlets at a nonerosive velocity. Large stones, wetness, slope, and depth to bedrock affect the construction of grassed waterways. Low available water capacity, restricted rooting depth, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features, listed in tables, are explained on the following pages.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow holes are dug and borings made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine grain-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help characterize key soils.

The estimates of soil properties shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classifications, and the physical and chemical properties of the major layers of each soil. Pertinent soil and water features also are given.

Engineering Index Properties

Table 14 gives estimates of the engineering classification and of the range of index properties for the major layers of each soil in the survey area. Most soils have layers of contrasting properties within the upper 5 or 6 feet.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given for each soil series under "Soil Series and Their Morphology."

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is as much as about 15 percent, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (*2*) and the system adopted by the American Association of State Highway and Transportation Officials (*1*).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Rock fragments larger than 3 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits)

indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of grain-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is omitted in the table.

Physical and Chemical Properties

Table 15 shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each major soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay greatly affect the fertility and physical condition of the soil. They determine the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, and plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3-bar moisture tension. Weight is determined after drying the soil at 105 degrees C. In this table, the estimated moist bulk density of each major soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. A bulk density of more than 1.6 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability refers to the ability of a soil to transmit water or air. The estimates indicate the rate of downward movement of water when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems, septic tank absorption fields, and construction where the rate of water movement under saturated conditions affects behavior.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each major soil layer. The capacity varies, depending on soil properties that affect the retention of water and the depth of the root zone. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Soil reaction is a measure of acidity or alkalinity and is expressed as a range in pH values. The range in pH of each major horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Shrink-swell potential is the potential for volume change in a soil with a loss or gain in moisture. Volume change occurs mainly because of the interaction of clay minerals with water and varies with the amount and type of clay minerals in the soil. The size of the load on the soil and the magnitude of the change in soil moisture content influence the amount of swelling of soils in place. Laboratory measurements of swelling of undisturbed clods were made for many soils. For others, swelling was estimated on the basis of the kind and amount of clay minerals in the soil and on measurements of similar soils.

If the shrink-swell potential is rated moderate to very high, shrinking and swelling can cause damage to buildings, roads, and other structures. Special design is often needed.

Shrink-swell potential classes are based on the change in length of an unconfined clod as moisture content is increased from air-dry to field capacity. The change is based on the soil fraction less than 2 millimeters in diameter. The classes are *low*, a change of less than 3 percent; *moderate*, 3 to 6 percent; and *high*, more than 6 percent. *Very high*, greater than 9 percent, is sometimes used.

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The

estimates are based primarily on percentage of silt, sand, and organic matter (up to 4 percent) and on soil structure and permeability. Values of K range from 0.05 to 0.69. The higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Organic matter is the plant and animal residue in the various stages of decomposition. In table 15, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. Organic matter content is given for map units that have no stones on the surface.

The content of organic matter in a soil can be maintained or increased by returning crop residue to the soil. Organic matter affects the available water capacity, infiltration rate, and tilth. It is a source of nitrogen and other nutrients for crops.

Soil and Water Features

Table 16 gives estimates of various soil and water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are used to estimate runoff from precipitation. Soils not protected by vegetation are assigned to one of four groups. They are grouped according to the intake of water when the soils are thoroughly wet and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a permanent high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Flooding, the temporary inundation of an area, is caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, nor is water in swamps and marshes.

Table 16 gives the frequency and duration of flooding and the time of year when flooding is most likely.

Frequency, duration, and probable dates of occurrence are estimated. Frequency is expressed as none, rare, occasional, and frequent. *None* means that flooding is not probable; *rare* that it is unlikely but possible under unusual weather conditions; *occasional* that it occurs, on the average, once or less in 2 years; and *frequent* that it occurs, on the average, more than once in 2 years. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, and *long* if more than 7 days. Probable dates are expressed in months; November-May, for example, means that flooding can occur during the period November through May.

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic distinctive horizons that form in soils that are not subject to flooding.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

High water table (seasonal) is the highest level of a saturated zone in the soil in most years. The depth to a seasonal high water table applies to undrained soils. The estimates are based mainly on the evidence of a saturated zone, namely grayish colors or mottles in the soil. Indicated in table 16 are the depth to the seasonal high water table; the kind of water table—that is, perched or apparent; and the months of the year that the water table commonly is high. A water table that is seasonally high for less than 1 month is not indicated in table 16.

An *apparent* water table is a thick zone of free water in the soil. It is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil. A *perched* water table is water standing above an unsaturated zone. In places an upper, or perched, water table is separated from a lower one by a dry zone.

Only saturated zones within a depth of about 6 feet are indicated. A plus sign preceding the range in depth indicates that the water table is above the surface of the soil. The first numeral in the range indicates how high the water rises above the surface. The second numeral indicates the depth below the surface.

Depth to bedrock is given if bedrock is within a depth of 5 feet. The depth is based on many soil borings and on observations during soil mapping. The rock is either soft or hard. If the rock is soft or fractured, excavations can be made with trenching machines, backhoes, or small rippers. If the rock is hard or massive, blasting or special equipment generally is needed for excavation.

Total subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. Table 16 shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which usually is a result of oxidation.

Not shown in the table is subsidence caused by an imposed surface load or by the withdrawal of ground water throughout an extensive area as a result of lowering the water table.

Potential frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage mainly to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that dissolves or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors creates a severe corrosion environment. The steel in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than steel in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion is also expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (*12, 13*). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 17 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Ten soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Inceptisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth, or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Aquept (*Aqu*, meaning water, plus *ept*, from Inceptisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Haplaquepts (*Hapl*, meaning minimal horizonation, plus *aquept*, the suborder of the Inceptisols that has an aquic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic is the central concept of the great group; it is not necessarily the most extensive. Integrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group, but do not indicate transitions to any other known kind of soil. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Aeric* identifies the subgroup that is less wet than is typical of the great group. An example is Aeric Haplaquepts.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Mostly the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineral content, temperature regime, depth of the root zone, consistence, moisture equivalent, slope, and permanent cracks. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine, illitic, nonacid, frigid Aeric Haplaquepts.

SERIES. The series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The texture of the surface layer or of the substratum can differ within a series. The Lamoine series is an example of the fine, illitic, nonacid, frigid family of Aeric Haplaquepts.

Samples of Buxton, Colton, Hermon, Marlow, and Scantic soils were taken at selected sites in this survey area and were analyzed in the laboratory. Five sites were sampled for Marlow soils, one for Hermon soils (*8*), two each for Buxton and Scantic soils (*7, 10*), and one for Colton soils (*9*). Data obtained from these sites were used to aid in the classification of the soils.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. The descriptions are arranged in alphabetic order.

Characteristics of the soil and the material in which it formed are identified for each series. The soil is compared with similar soils and with nearby soils of other series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the *Soil Survey Manual* (*14*). Many of the technical terms used in the descriptions are defined in *Soil Taxonomy* (*12*) and in *Keys to Soil Taxonomy* (*13*). Unless otherwise stated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of

the soils in the series. The relationship of each series to its landscape position, parent material, and drainage is shown in table 18.

The map units of each soil series are described in the section "Detailed Soil Map Units."

Adams Series

The Adams series consists of very deep, somewhat excessively drained soils that formed in glaciofluvial sands. The soils are on kame terraces, deltas, outwash plains, and old beaches. Slopes range from 0 to 45 percent.

Adams soils are adjacent to Colton, Kinsman, Nicholville, and Sheepscot, soils. Adams soils are better drained than Kinsman, Nicholville, or Sheepscot soils and have fewer rock fragments than Colton soils.

Typical pedon of Adams loamy sand in an area of Colton-Adams-Sheepscot association, strongly sloping, in the edge of a sand pit in a blueberry field in the town of Mariaville, 1.25 miles south of Goodwin Bridge on Maine Route 180, 1,300 feet northwest of highway:

Oa—0 to 1 inch; black (5YR 2/1) highly decomposed organic material; weak very fine granular structure; very friable; many very fine and fine and medium roots; very strongly acid; abrupt wavy boundary.

E—1 to 3 inches; light gray (5YR 6/1) loamy sand; weak very fine granular structure; very friable; many very fine and fine and medium roots; very strongly acid; abrupt wavy boundary.

Bh—3 to 4 inches; dark reddish brown (2.5YR 3/4) loamy sand; weak very fine granular structure; very friable; many very fine and fine roots; very strongly acid; abrupt wavy boundary.

Bs1—4 to 8 inches; yellowish red (5YR 5/6) loamy sand; weak very fine granular structure; very friable; many very fine and fine roots; strongly acid; clear wavy boundary.

Bs2—8 to 14 inches; yellowish brown (10YR 5/6) sand; single grain; loose; many very fine and fine roots; moderately acid; gradual wavy boundary.

BC—14 to 24 inches; light olive brown (2.5Y 5/4) sand; single grain; loose; common very fine and fine roots; moderately acid; gradual wavy boundary.

C—24 to 65 inches; light brownish gray (2.5Y 6/2) sand; single grain; loose; moderately acid.

The solum thickness ranges from 16 to 27 inches. These soils are typically free of rock fragments, but some pedons have up to 5 percent gravel to a depth of 20 inches and up to 20 percent gravel below that depth. Reaction in unlimed areas is extremely acid to moderately acid in the surface layer, very strongly acid to moderately acid in the solum, and very strongly acid to slightly acid in the substratum.

Some pedons have an Ap horizon that has a hue of 10YR, value of 4 or 5, and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 5 to 7, and chroma of 1 or 2.

The Bh horizon has hue of 2.5YR or 5YR, value of 3, and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. The B horizon is loamy fine sand or loamy sand in the upper part and loamy fine sand to sand in the lower part.

The BC horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6. It is sand.

The C horizon has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 to 4. It is fine sand to coarse sand in the fine-earth fraction.

Biddeford Series

The Biddeford series consists of very deep, very poorly drained soils formed in glaciomarine or glaciolacustrine sediments. The soils are in basin areas of coastal lowlands and river valleys. Slopes range from 0 to 1 percent.

Biddeford soils are adjacent to Bucksport, Buxton, Charles, Gouldsboro, Lamoine, Scantic, and Wonsqueak soils. Buxton, Lamoine, and Scantic soils are better drained and in a higher position on the landscape than Biddeford soils. Bucksport and Wonsqueak are organic soils. Charles soils are alluvial soils on flood plains. Gouldsboro soils are high in content of sulfur and salts and are in tidal marshes.

Typical pedon of Biddeford muck in an area of Scantic-Biddeford association in a forested area in the town of Hancock, 3.0 miles north of the junction of U.S. Route 1 and Maine Route 182, 0.8 mile southwest of the northeast corner of the Town of Hancock, 100 feet north of railroad track:

Oi—3 inches to 0; undecomposed sphagnum mosses and roots.

Oa—0 to 9 inches; black (10YR 2/1) muck; weak very fine granular structure; very friable; many very fine and fine and medium roots and common coarse roots; very strongly acid; abrupt wavy boundary.

Eg—9 to 13 inches; gray (5Y 5/1) silty clay loam; common fine prominent yellowish brown (10YR 5/8) and light brownish gray (10YR 6/2) mottles; weak thick platy structure parting to weak fine angular blocky; firm, sticky, plastic; common very fine and fine roots; strongly acid; clear wavy boundary.

Bg—13 to 19 inches; olive gray (5Y 5/2) silty clay; many medium prominent yellowish brown (10YR 5/8) mottles and many medium faint light gray (5Y 6/1) mottles; weak fine and medium angular blocky

structure; firm, sticky, plastic; few very fine and fine roots; strongly acid; clear wavy boundary.

BCg—19 to 25 inches; olive gray (5Y 5/2) silty clay; many medium prominent yellowish brown (10YR 5/6) mottles and common fine faint light gray (5Y 6/1) mottles; massive; firm, sticky, plastic; common fine prominent dark reddish brown (5YR 3/4) oxide stains; slightly acid; gradual wavy boundary.

Cg1—25 to 49 inches; olive gray (5Y 5/2) silty clay; common medium prominent yellowish brown (10YR 5/6) mottles and common medium faint light olive gray (5Y 6/2) mottles; massive; firm, sticky, plastic; common fine prominent dark reddish brown (5YR 3/4) oxide stains; neutral; gradual wavy boundary.

Cg2—49 to 65 inches; gray (5Y 5/1) silty clay; few medium prominent yellowish brown (10YR 5/8) mottles and few medium faint light olive gray (5Y 6/2) mottles; massive; firm; sticky, plastic; neutral.

The solum thickness ranges from 15 to 35 inches. The soil ranges from very strongly acid to slightly acid in the surface layer, strongly acid to neutral in the subsurface layer, strongly acid to mildly alkaline in the subsoil, and slightly acid to mildly alkaline in the substratum.

The Oa horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The Eg horizon has hue of 5Y or 5GY, value of 3 to 5, and chroma of 1 or 2. It is silt loam, silty clay loam, or silty clay. It has weak thin to thick platy, weak or moderate fine granular, or weak fine blocky structure, or it is massive. It is friable or firm.

The Bg and Bcg horizons have hue of 5Y or 5GY, value of 4 to 6, and chroma of 1 or 2. The soils are silty clay loam or silty clay. They have weak or moderate, medium or coarse prismatic, or weak fine and medium blocky structure that grades to massive with depth.

The Cg horizon is neutral or has hue of 5Y, 5GY, 5G, or 5BG, value of 4 or 5, and chroma of 0 to 2. It is silty clay loam, silty clay, or clay. It has weak medium platy structure parting to blocky, or it is massive.

Brayton Series

The Brayton series consists of very deep, poorly drained soils formed in compact glacial till in depressions and on toe slopes of glaciated uplands. Slopes range from 0 to 8 percent.

Brayton soils are adjacent to Charles, Colonel, Dixfield, Lyman, Marlow, Schoodic, Thorndike, and Tunbridge soils. All of those are better drained and in higher positions on the landscape than Brayton soils, except Charles soils, which are poorly drained and on flood plains.

Typical pedon of Brayton fine sandy loam in an area of Brayton-Colonel association, gently sloping, very stony, in a forested area in the town of Mariaville on Maine Route 181, 1.3 miles north of Goodwin Bridge, 500 feet southeast of highway:

Oi—1 inch to 0; litter of leaves, needles, and twigs.

Oa—0 to 4 inches; black (5YR 2/1) highly decomposed organic material; weak very fine granular structure; very friable; many very fine and fine and medium roots and common coarse roots; extremely acid; abrupt wavy boundary.

A—4 to 6 inches; very dark gray (10YR 3/1) fine sandy loam, light gray (10YR 6/1) dry; weak fine and medium granular structure; very friable; many very fine and fine and medium roots and common coarse roots; 10 percent rock fragments; extremely acid; abrupt wavy boundary.

Eg—6 to 9 inches; gray (10YR 5/1) gravelly fine sandy loam; few medium prominent pinkish gray (5YR 6/2) mottles and few fine faint light gray (10YR 6/1) mottles; weak very fine subangular blocky structure; friable; many very fine and fine roots and common medium roots; 20 percent rock fragments; extremely acid; abrupt wavy boundary.

Bg—9 to 15 inches; grayish brown (2.5Y 5/2) fine sandy loam; many medium prominent dark yellowish brown (10YR 4/6) mottles and few fine distinct light gray (10YR 6/1) mottles; weak very fine and fine subangular blocky structure; friable; common very fine and fine roots; 10 percent rock fragments; strongly acid; clear wavy boundary.

BC—15 to 22 inches; light olive brown (2.5Y 5/4) fine sandy loam; many medium distinct dark yellowish brown (10YR 4/4) mottles and few fine prominent light gray (10YR 6/1) and strong brown (7.5YR 5/6) mottles; weak thin platy structure; firm; 10 percent rock fragments; moderately acid; clear wavy boundary.

Cd1—22 to 28 inches; olive (5Y 5/3) fine sandy loam; many medium prominent yellowish brown (10YR5/6) mottles; common medium prominent dark yellowish brown (10YR 4/4) mottles and few fine prominent light gray (10YR 6/1) mottles; moderate medium and thick platy structure; firm; 10 percent rock fragments; slightly acid; clear wavy boundary.

Cd2—28 to 65 inches; olive (5Y 4/3) fine sandy loam; common medium prominent dark yellowish brown (10YR 4/4) mottles and few fine prominent light gray (10YR 6/1) mottles; massive; very firm; 10 percent rock fragments; slightly acid.

The solum thickness ranges from 10 to 25 inches.

The content of rock fragments ranges from 5 to 35 percent throughout the profile. Reaction in unlimed areas is extremely acid to moderately acid in the surface and subsurface layers, strongly acid to slightly acid in the subsoil, and moderately acid to neutral in the substratum.

The A horizon has hue of 10YR, value of 3 or 4, and chroma of 1 or 2.

The Eg horizon has hue of 10YR to 5Y, value of 5 or 6, and chroma of 1or 2.

The B horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam, very fine sandy loam, fine sandy loam, or sandy loam in the fine-earth fraction.

The BC horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 4. It is silt loam, fine sandy loam, or sandy loam in the fine-earth fraction.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 4. It is loam, fine sandy loam, or sandy loam in the fine-earth fraction. It is platy or has primary structure that is prismatic parting to platy, or it is massive. It is firm or very firm.

Bucksport Series

The Bucksport series consists of very deep, very poorly drained soils that formed in decomposed organic material more than 51 inches thick. The soils are in depressions in glacial ground moraine, shallow till ridges, and glaciofluvial deposits. They have slopes of 0 to 1 percent.

Bucksport soils are adjacent to Biddeford, Gouldsboro, Kinsman, Naskeag, Sebago, Waskish, and Wonsqueak soils. Biddeford, Kinsman, and Naskeag soils are mineral soils that are mainly in slightly higher positions on the landscape. Gouldsboro soils are higher in content of sulfur and salts and are on tidal marshes. Sebago, Waskish, and Wonsqueak soils are in similar landscape positions.

Typical pedon of Bucksport muck in an area of Wonsqueak and Bucksport mucks in the town of Bucksport, 4,000 feet southwest of Stubbs Brook on unnamed highway northeast of Bucksport village:

Oa1—0 to 12 inches; black (5YR 2/1) broken face and rubbed, muck (sapric material); about 40 percent fiber, 10 percent rubbed; massive; nonsticky; about 50 percent herbaceous and 50 percent woody fibers; 10 percent partially decomposed wood fragments; light yellowish brown (10YR 6/4) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; clear smooth boundary.

Oa2—12 to 25 inches; dark reddish brown (5YR 3/2) broken face and rubbed, muck (sapric material); about 40 percent fiber, less than 5 percent rubbed; massive; slightly sticky; about 50 percent herbaceous and 50 percent woody fibers; 10 percent partially decomposed wood fragments; pale brown (10YR 6/3) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; clear smooth boundary.

Oa3—25 to 45 inches; black (5YR 2/1) broken face and rubbed, muck (sapric material); about 30 percent fiber, less than 5 percent rubbed; massive; slightly sticky; about 60 percent herbaceous and 40 percent woody fibers; dark yellowish brown (10YR 4/4) sodium pyrophosphate test; very strongly acid in 0.01M calcium chloride; clear smooth boundary.

Oa4—45 to 65 inches; black (5YR 2/1) broken face and rubbed, muck (sapric material); about 50 percent fiber, less than 5 percent rubbed; massive; slightly sticky; about 70 percent herbaceous and 30 percent woody fibers; pale brown (10YR 6/3) sodium pyrophosphate test; very strongly acid in 0.01M calcium chloride.

The thickness of the organic material is greater than 51 inches and ranges to more than 12 feet. The content of wood fragments ranges from 0 to 20 percent throughout the soil and consists of twigs, branches, and stumps. The content of mineral material ranges from 0 to 20 percent throughout. Fibers are typically of herbaceous and woody origin, and in some pedons fibers from sphagnum mosses make up 70 percent of the surface tier and may also make up thin layers in the subsurface and bottom tiers.

The surface tier is neutral or has hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 0 to 2. It is massive or has weak fine granular or weak thin platy structure. Consistence is nonsticky or slightly sticky. The surface tier ranges from extremely acid to strongly acid in 0.01M calcium chloride.

The subsurface layer and bottom tier have hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 1 to 3. The soils are typically sapric material, but some pedons have thin layers of fibric material with a total thickness of less than 5 inches or thin layers of hemic material with a total thickness of less than 10 inches. The subsurface layer and bottom tier are massive or have weak thin to very thick platy structure.

Consistence is nonsticky or slightly sticky. Reaction of the subsurface layer tier ranges from extremely acid to moderately acid, and reaction of the bottom tier ranges from very strongly acid to slightly acid in 0.01M calcium chloride.

Buxton Series

The Buxton series consists of very deep, moderately well drained soils formed in glaciolacustrine or glaciomarine sediments in coastal lowlands and river valleys. Slopes range from 5 to 30 percent.

Buxton soils are adjacent to Biddeford, Lamoine, Nicholville, Scantic, and Tunbridge soils. Buxton soils are better drained than Biddeford, Lamoine, and Scantic soils and deeper to bedrock than Tunbridge soils. Buxton soils are higher in clay content than Nicholville or Tunbridge soils.

Typical pedon of Buxton silt loam, 8 to 15 percent slopes, in an abandoned hayfield in the town of Hancock, 1 mile west of the junction of U.S. Route 1 and Maine Route 182, 200 feet north of U.S. Route 1:

Ap—0 to 8 inches; dark brown (10YR 3/3) silt loam; pale brown (10YR 6/3) dry; strong medium granular structure; friable; many very fine roots and common fine and medium roots; moderately acid; abrupt smooth boundary.

Bw1—8 to 16 inches; dark yellowish brown (10YR 4/4) silt loam; moderate very fine and fine granular structure; friable; common very fine roots and few fine and medium roots; slightly acid; abrupt wavy boundary.

Bw2—16 to 21 inches; light olive brown (2.5Y 5/4) silty clay loam; common medium prominent olive gray (5Y 5/2) and dark brown (7.5YR 4/4) mottles; moderate thin and medium platy structure parting to weak very fine angular blocky; firm; common very fine roots; slightly acid; clear wavy boundary.

BC—21 to 35 inches; olive (5Y 5/3) silty clay; common medium faint olive gray (5Y 5/2) mottles and common medium prominent dark brown (7.5YR 4/4) mottles; weak very coarse prismatic structure parting to weak fine and medium angular blocky; firm; few very fine roots; light brownish gray (2.5Y 6/2) faces of prisms and a few faint silt films on faces of peds within prisms; common prominent dark reddish brown (5YR 2/2) oxide coatings on faces of peds within prisms; slightly acid; gradual wavy boundary.

C—35 to 65 inches; olive gray (5Y 4/2) silty clay; common medium prominent yellowish brown (10YR 5/6) mottles that increase in size and abundance with depth; weak very coarse prismatic structure parting to weak fine and medium angular blocky; very firm; olive gray (5Y 5/2) faces of prisms; many prominent dark reddish brown (5YR 2/2) oxide coatings on faces of peds within prisms; slightly acid.

The solum thickness ranges from 20 to 40 inches. Reaction in unlimed areas is very strongly acid to slightly acid in the surface layer, strongly acid to neutral in the subsoil, and moderately acid to neutral in the substratum. Rock fragments make up less than 5 percent of the soil and are mainly pebbles.

The Ap or A horizon has hue of 10YR or 7.5YR and value and chroma of 3 or 4.

The B horizon has hue of 7.5YR to 2.5Y, value of 4 or 5, and chroma of 4 to 6. It is silt loam, silty clay loam, or silty clay. It has weak or moderate very fine to medium granular, very fine to medium blocky, or thin to thick platy structure. It is friable or firm.

The BC horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam, silty clay loam, or silty clay. Structure is blocky or platy, or primary structure is prismatic. It is firm or very firm.

The C horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 or 3. It is silty clay loam, silty clay, or clay. Structure is blocky, platy, or prismatic, all of which is inherited. It is firm or very firm.

Charles Series

The Charles series consists of very deep, poorly drained soils formed in recent alluvium on flood plains. Slopes range from 0 to 2 percent.

Charles soils are adjacent to Brayton, Biddeford, Colonel, and Scantic soils. Biddeford and Scantic soils have more clay than Charles soils and are on glaciomarine and glaciolacustrine terraces. Colonel and Brayton soils are coarser textured than Charles soils and are on till ridges and plains.

Typical pedon of Charles silt loam in idleland in the town of Amherst, 4000 feet west of junction of Maine Route 9 and Maine Route 181, 500 feet south of Maine Route 9 on west side of the West Branch Union River:

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; common fine faint grayish brown (10YR 5/2) mottles; moderate medium granular structure; very friable; many very fine and fine roots and common medium and coarse roots; extremely acid; abrupt wavy boundary.

Cg1—6 to 14 inches; grayish brown (2.5Y 5/2) silt loam; many medium prominent reddish gray (5YR 5/2) and yellowish brown (10YR 5/6) mottles; weak fine granular structure; very friable; few very fine

and fine and medium roots; strongly acid; clear wavy boundary.

Cg2—14 to 28 inches; olive gray (5Y 5/2) silt loam; many fine prominent dark yellowish brown (10YR 4/4) mottles and few fine distinct light brownish gray (2.5Y 6/2) mottles; massive; very friable; few very fine and fine and medium roots; many fine prominent dusky red (2.5YR 3/2) carbon pieces; strongly acid; clear wavy boundary.

Cg3—28 to 34 inches; gray (5Y 5/1) very fine sandy loam; many medium prominent brown (10YR 4/3) mottles; massive; very friable; moderately acid; clear wavy boundary.

Cg4—34 to 46 inches; olive gray (5Y 5/2) loamy very fine sand; many medium prominent dark brown (10YR 3/3) mottles; massive; very friable; moderately acid; abrupt wavy boundary.

Cg5—46 to 65 inches; greenish gray (5BG 5/1) very fine sandy loam and thin strata of loamy fine sand and loamy sand; massive; very friable; moderately acid.

Reaction in unlimed areas is extremely acid to slightly acid in the surface layer and substratum, but some subhorizon within the control section has a reaction of moderately acid or slightly acid. Some pedons have buried horizons.

The A or Ap horizon has hue of 10YR to 5Y, value of 3 or 4, and chroma of 1 to 3.

The Cg, horizon has hue of 2.5Y, 5Y, or 5BG, value of 4 to 6, and chroma of 1 or 2. It is silt loam, very fine sandy loam, or loamy very fine sand. Below a depth of 40 inches there are strata of silt loam to fine gravel in some pedons. The upper part of the Cg horizon has weak fine or medium granular structure, or it is massive. The lower part of the Cg horizon is massive or single grain. It is loose or friable.

Colonel Series

The Colonel series consists of very deep, somewhat poorly drained soils that formed in compact loamy glacial till. The soils are on the lower toe slopes of till ridges and on gently sloping crests of broad till ridges. Slopes range from 3 to 8 percent.

Colonel soils are adjacent to Brayton, Charles, Dixfield, Marlow, Monadnock, Tunbridge, and Winnecook soils. Colonel soils are wetter than Dixfield, Marlow, Monadnock, Tunbridge, or Winnecook soils and better drained than Brayton soils. Charles soils are on flood plains.

Typical pedon of Colonel fine sandy loam in a wooded area of Brayton-Colonel association, gently sloping, very stony, in the town of Waltham, 2.1 miles south of Webb Brook on Maine Route 179, 1.3 miles southeast of highway:

Oi—1 inch to 0; leaf litter, needles and twigs.

Oa—0 to 2 inches; very dusky red (2.5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; very strongly acid; abrupt smooth boundary.

E—2 to 3 inches; light gray (5YR 6/1) fine sandy loam; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; 10 percent rock fragments; very strongly acid; abrupt broken boundary.

Bh—3 to 5 inches; dark reddish brown (5YR 3/3) fine sandy loam; moderate fine granular structure; very friable; many very fine and fine roots and common medium roots, 10 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bs1—5 to 11 inches; dark brown (75YR 4/4) fine sandy loam; moderate fine granular structure; very friable; many very fine and fine roots and common medium roots; 10 percent rock fragments; strongly acid; clear wavy boundary.

Bs2—11 to 15 inches; yellowish brown (10YR 5/4) fine sandy loam; common fine prominent light brownish gray (2.5Y 6/2) and yellowish red (5YR 5/6) mottles; moderate fine granular structure; very friable; common very fine and fine and medium roots; 10 percent rock fragments; strongly acid; clear wavy boundary.

BC—15 to 20 inches; light olive brown (2.5Y 5/4) fine sandy loam; common medium prominent yellowish brown (10YR 5/6) mottles and common fine distinct light brownish gray (2.5Y 6/2) motties; weak thin platy structure parting to weak fine granular; friable; common very fine and fine roots; 10 percent rock fragments; strongly acid; clear wavy boundary.

Cd1—20 to 29 inches; olive (5Y 5/3) fine sandy loam; common fine distinct light brownish gray (2.5Y 6/2) mottles and common medium prominent brown (7.5YR 4/4) mottles; weak very coarse prismatic parting to moderate thin platy structure; firm; faces of prisms light brownish gray (10YR 6/2) with yellowish red (5YR 5/6) edges; 10 percent rock fragments; strongly acid; clear wavy boundary.

Cd2—29 to 65 inches; olive (5Y 5/3) fine sandy loam; common fine distinct light brownish gray (2.5Y 6/2) mottles and common fine prominent yellowish red (5YR 5/6) mottles; strong very coarse prismatic structure; very firm; faces of prisms light brownish gray (10YR 6/2) with yellowish red (5YR 5/6) edges; 10 percent rock fragments; strongly acid.

The solum thickness ranges from 10 to 24 inches.

Rock fragments make up 5 to 30 percent of the soil and are mainly gravel and cobbles. Reaction is extremely acid to slightly acid in the surface layer and subsoil and very strongly acid to slightly acid in the substratum.

The O horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

Some pedons have an A or Ap horizon that has hue of 7.5YR or 10YR and value and chroma of 2 or 3.

The E horizon has hue of 5YR to 10YR, value of 5 or 6, and chroma of 1 or 2.

The Bh horizon has hue of 5YR or 7.5YR, value of 2 to 5, and chroma of 2 to 6. The Bs horizon has hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 6. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 6. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction. It is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction. It has weak to strong, thin to thick platy, or weak to strong very coarse prismatic structure that in some pedons parts to weak thin to thick platy, or it is massive. It is firm or very firm.

Colton Series

The Colton series consists of very deep, excessively drained soils on kame terraces, kames, outwash plains, deltas, and eskers. The soils formed in glaciofluvial sand and gravel. Slope ranges from 0 to 45 percent.

Colton soils are adjacent to Adams, Hermon, Kinsman, Nicholville, Sebago, Sheepscot, and Waskish soils and rock outcrop. Colton soils are better drained than Sheepscot and Kinsman soils. They have more rock fragments than Adams and Nicholville soils and are more stratified than Hermon soils. Sebago and Waskish soils are organic soils in depression.

Typical pedon of Colton gravelly sandy loam, 0 to 8 percent slopes, in a blueberry field in the town of Hancock, 1000 feet north of the junction of U.S. Route 1 and the Washington Junction Road, 500 feet west of the road:

Oa—0 to 1 inch; black (5YR 2/1) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; very strongly acid; abrupt wavy boundary.

A—1 to 2 inches; dark reddish brown (5YR 2/2) gravelly sandy loam; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; 15 percent gravel; extremely acid; abrupt broken boundary.

E—2 to 4 inches; brown (7.5YR 5/2) gravelly sandy loam; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; 15 percent gravel; extremely acid; abrupt broken boundary.

Bhs—4 to 5 inches; dark reddish brown (5YR 3/3) gravelly coarse sandy loam; weak fine granular structure; very friable; common very fine and fine roots; 20 percent gravel; extremely acid; abrupt broken boundary.

Bs1—5 to 8 inches; yellowish red (5YR 4/6) gravelly coarse sandy loam; weak fine granular structure; very friable; common very fine and fine roots; 20 percent gravel; extremely acid; abrupt wavy boundary.

Bs2—8 to 11 inches; strong brown (7.5YR 5/6) gravelly loamy sand; weak very fine granular structure; very friable; common very fine and fine roots; 20 percent gravel; very strongly acid; clear wavy boundary.

Bs3—11 to 16 inches; dark yellowish brown (10YR 4/4) gravelly sand; single grain; loose; few very fine and fine roots; 20 percent gravel; very strongly acid; clear wavy boundary.

BC—16 to 20 inches; olive brown (2.5Y 4/4) gravelly sand; single grain; loose; few very fine roots; 25 percent gravel; very strongly acid; clear wavy boundary.

C1—20 to 30 inches; olive (5Y 5/4) extremely gravelly coarse sand; single grain; loose; 65 percent gravel; very strongly acid; clear wavy boundary.

C2—30 to 65 inches; olive (5Y 5/3) very gravelly coarse sand; single grain; loose; 50 percent gravel; very strongly acid.

The solum thickness ranges from 18 to 30 inches. Rock fragments are mainly gravel and cobbles and make up 15 to 55 percent of the solum and 35 to 70 percent of the substratum. Reaction is extremely acid to moderately acid in the solum and very strongly to slightly acid in the substratum.

The E horizon has hue of 5YR to 10YR, value of 5 or 6, and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 to 3. Some pedons have a Bh horizon that has hue of 2.5YR or 5YR, value of 2 to 4, and chroma of 1 to 4. The Bhs horizon and Bh horizon, where present, are coarse sandy loam, sandy loam, or sand in the fine-earth fraction. Some pedons have discontinuous cementation. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8. Within 10 inches of the surface, it is coarse sandy loam, sandy loam, loamy sand, or sand in the fine-

earth fraction. Below 10 inches it is loamy fine sand, loamy sand, sand, or coarse sand in the fine-earth fraction.

The BC horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6. It is loamy fine sand, loamy sand, sand, or coarse sand in the fine-earth fraction.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 6. Texture of the fine-earth fraction is loamy sand, sand, or coarse sand. The horizon has varying degrees of stratification.

Dixfield Series

The Dixfield series consists of very deep, moderately well drained soils that formed in compact loamy glacial till. The soils are on the crests and side slopes of upland till ridges. Slopes range from 3 to 30 percent.

Dixfield soils are adjacent to Brayton, Colonel, Hermon, Lamoine, Marlow, Monadnock, Scantic, and Tunbridge soils. Dixfield soils are wetter than Hermon, Marlow, Monadnock, and Tunbridge soils and are better drained than Brayton, Colonel, Lamoine, and Scantic soils. Dixfield soils are also deeper to bedrock than Tunbridge soils.

Typical pedon of Dixfield fine sandy loam in a forested area of Marlow-Dixfield association, strongly sloping, very stony, in the town of Dedham, 3.5 miles northeast of U.S. Route 1 on the Jenkins Beach to Beech Hill Pond Road, 1,100 feet south of this road:

Oi—2 inches to 0; leaf litter and twigs.

Oa—0 to 2 inches; black (5YR 2/1) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine and medium roots; very strongly acid; abrupt wavy boundary.

E—2 to 6 inches; light gray (5YR 6/1) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots, 5 percent rock fragments; very strongly acid, abrupt broken boundary.

Bhs—6 to 9 inches; dark reddish brown (5YR 3/3) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; clear wavy boundary.

Bs—9 to 13 inches; brown (7.5YR 4/4) fine sandy loam; moderate medium granular structure; friable; many very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; clear wavy boundary.

BC1—13 to 20 inches; light olive brown (2.5Y 5/4) fine sandy loam; moderate fine granular structure; friable; common very fine and fine roots; 10 percent rock fragments; very strongly acid; clear wavy boundary.

BC2—20 to 29 inches; light olive brown (2.5Y 5/4) gravelly fine sandy loam; few fine prominent light brownish gray (10YR 6/2) mottles and common fine prominent strong brown (7.5YR 5/6) mottles; weak thin platy structure; firm; few very fine and fine roots; 25 percent rock fragments; very strongly acid; clear wavy boundary.

Cd—28 to 65 inches; olive (5Y 5/3) gravelly fine sandy loam; massive; very firm; 20 percent rock fragments; strongly acid.

The solum thickness ranges from 18 to 36 inches. Rock fragments make up 5 to 30 percent of the soil and are mainly gravel and cobbles. Reaction in unlimed areas is extremely acid to slightly acid in the surface and subsurface layers and very strongly acid to slightly acid in the subsoil and substratum.

The O horizon has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 or 2.

Some pedons have an A or Ap horizon that has hue of 5YR to 10YR and value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 7, and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR or 5YR and value and chroma of 2 or 3. Some pedons have a Bh horizon that has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 6. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 3 or 4. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction. It has weak or moderate, fine or medium granular or weak thin or medium platy structure. It is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction. It has weak or moderate, thin to thick platy structure or strong very coarse prismatic structure, which in some pedons parts to weak or moderate, thin to thick platy, or it is massive. It is firm or very firm.

Gouldsboro Series

The Gouldsboro series consists of very deep, very poorly drained soils formed in silty marine sediments. The soils are in tidal marshes subject to frequent inundation by saltwater. Slopes range from 0 to 1 percent.

Gouldsboro soils are adjacent to Biddeford,

Bucksport, and Wonsqueak soils and beaches. Gouldsboro soils are higher in content of sulfur and salts than all of these soils. Gouldsboro soils also have less organic matter than Bucksport and Wonsqueak soils.

Typical pedon of Gouldsboro silt loam in the town of Gouldsboro, 1.2 miles north of the junction of Maine Route 186 and Maine Route 195; 0.6 mile east of Maine Route 186 in a tidal marsh, 200 feet west of Dike Brook:

A—0 to 5 inches; dark grayish brown (10YR 4/2) silt loam; massive; slightly sticky; slightly plastic; many very fine and fine and medium roots; slightly acid, extremely acid after hydrogen peroxide treatment; abrupt smooth boundary.

Cg1—5 to 16 inches; dark grayish brown (2.5Y 4/2) silt loam; massive; slightly sticky, slightly plastic; common very fine and fine and medium roots; moderately acid, extremely acid after hydrogen peroxide treatment; abrupt smooth boundary.

Cg2—16 to 36 inches; dark gray (5Y 4/1) silt loam; massive; sticky, plastic; 5 percent black (N 2/0) fine carbon particles; mildly alkaline, extremely acid after hydrogen peroxide treatment; abrupt smooth boundary.

Cg3—36 to 65 inches; gray (5Y 5/1) silt loam; massive; slightly sticky, slightly plastic; dark yellowish brown (10YR 4/4) sapric material less than 1 inch thich; moderately alkaline, extremely acid after hydrogen peroxide treatment.

Reaction ranges from strongly acid to slightly acid in the surface layer and moderately acid to moderately alkaline in the substratum. After treatment with hydrogen peroxide the soil becomes extremely acid throughout. The content of organic carbon to a depth of 40 inches ranges from 3 to 12 percent, and layers of organic material less than 16 inches thick are common in many pedons.

The A horizon has hue of 10YR to 5Y, value of 2 to 6, and chroma of 1 to 3.

The C horizon is neutral or has hue of 2.5Y to 5BG, value of 3 to 5, and chroma of 0 to 3. It is silt loam, silty clay loam, or their mucky analogs. Shell fragments, herbaceous fibers, and black carbon particles are common in some pedons.

Hermon Series

The Hermon series consists of very deep, somewhat excessively drained soils formed in loose glacial till. The soils are on hillsides and ridgetops around lake basins and on moraines. Slopes range from 3 to 45 percent.

Hermon soils are adjacent to Colton, Dixfield, Lyman, Monadnock, Naskeag, and Tunbridge soils and rock outcrop. Hermon soils are deeper to bedrock than Lyman, Naskeag, and Tunbridge soils and are better drained and coarser textured than Dixfield soils. Monadnock soils have a finer textured solum than Hermon soils. Colton soils have a stratified substratum.

Typical pedon of Hermon sandy loam in an area of Monadnock-Hermon complex, 3 to 15 percent slopes, extremely bouldery, in a wooded area in the town of Dedham, on the east side of Phillips Lake at the junction of old U.S. Route 1A and the railroad track, 50 feet east of the road:

Oi—2 inches to 1 inch; litter of leaves, twigs, and branches.

Oe—1 inch to 0; black (N 2/0) moderately decomposed organic material; weak fine granular structure; very friable; many very fine and fine and medium roots; very strongly acid; abrupt wavy boundary.

A—0 to 1 inch; very dark grayish brown (10YR 3/2) sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary.

E—1 to 3 inches; gray (10YR 6/1) sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt broken boundary.

Bs1—3 to 6 inches; yellowish red (5YR 4/6) sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bs2—6 to 12 inches; strong brown (7.5YR 5/6) gravelly sandy loam, weak fine granular structure; very friable; many very fine and fine roots and common medium roots; 25 percent rock fragments; moderately acid; clear wavy boundary.

BC—12 to 30 inches; olive brown (2.5Y 4/4) very gravelly loamy sand; weak fine granular structure; very friable; many very fine and fine roots and few medium roots; 40 percent rock fragments; moderately acid; clear wavy boundary.

C1—30 to 35 inches; olive (5Y 5/3) extremely gravelly loamy sand; single grain; loose; common very fine and fine roots; 70 percent rock fragments; moderately acid; clear wavy boundary.

C2—35 to 65 inches; olive (5Y 4/3) extremely gravelly coarse sand; single grain; loose; 70 percent rock fragments; moderately acid.

The solum thickness ranges from 16 to 35 inches. Reaction is extremely acid to strongly acid in the upper

part of the solum and extremely acid to moderately acid in the lower part of the solum and in the substratum. The weighted average of rock fragments in the soil ranges from 35 to 65 percent. Rock fragments are mainly gravel and cobbles but include some stones.

The A horizon has hue of 10YR, value of 2 or 3, and chroma of 1 to 3. Some pedons have an Ap horizon that has hue of 10YR, value of 3 or 4, and chroma of 2 or 3.

The E horizon has hue of 5YR to 10YR, value of 5 to 7, and chroma of 1 or 2.

Some pedons have a Bh horizon that has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 4. Some pedons have a Bhs horizon that has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 to 3. The Bh or Bhs horizons are fine sandy loam, sandy loam, or coarse sandy loam in the fine-earth fraction. The Bs horizon has hue of 5YR to 10YR and value and chroma of 4 to 6. It is fine sandy loam, sandy loam, or coarse sandy loam in the fine-earth fraction. The B horizon mainly is loose to friable, but some pedons have discontinuous cementation.

The BC horizon has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 to 6. It is fine sandy loam, sandy loam, or coarse sand in the fine-earth fraction. It is mainly loose to firm, but some pedons have discontinuous cementation.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 7, and chroma of 2 to 4. It is loamy sand to coarse sand in the fine-earth fraction. It has weak thin or medium platy structure, or it is single grain or massive. It is loose to firm.

Kinsman Series

The Kinsman series consists of very deep, poorly drained soils. The soils formed in glaciofluvial sands in depressional areas on outwash plains, deltas, and kame terraces. Slopes range from 0 to 3 percent.

Kinsman soils are adjacent to Adams, Bucksport, Colton, Sheepscot, and Wonsqueak soils. Kinsman soils are wetter than Adams, Colton, and Sheepscot soils and are better drained and have less organic matter than Bucksport and Wonsqueak soils. Kinsman soils also have fewer rock fragments than Colton or Sheepscot soils.

Typical pedon of Kinsman loamy sand in a forested area of Kinsman-Wonsqueak association, in the town of Sedgwick, 0.5 mile north of the junction of Maine Route 15 and Maine Route 175, 0.4 mile east of Maine Route 175:

Oe—0 to 4 inches; dark reddish brown (5YR 2/2) moderately decomposed organic material; weak very fine granular structure; very friable; many very fine and fine and medium roots; extremely acid; abrupt wavy boundary.

E—4 to 7 inches; grayish brown (10YR 5/2) loamy sand, weak very fine granular structure; very friable; common very fine and fine roots; very strongly acid; abrupt wavy boundary.

Bhs—7 to 13 inches; dark reddish brown (5YR 3/2) loamy sand; few fine distinct very dusky red (2.5YR 2/2) mottles and few fine faint dark reddish brown (5YR 3/3) mottles; single grain; loose; few very fine and fine roots; strongly acid; clear wavy boundary.

Bs1—13 to 20 inches; reddish brown (5YR 4/4) sand; common fine prominent brown (7.5YR 5/2) mottles and common fine faint dark reddish brown (5YR 3/3) mottles; single grain; loose; few very fine and fine roots; strongly acid; clear wavy boundary.

Bs2—20 to 28 inches; dark yellowish brown (10YR 4/4) sand; common medium prominent yellowish red (5YR 5/8) mottles and few fine distinct grayish brown (10YR 5/2) mottles; single grain; loose; moderately acid; clear wavy boundary.

BC—28 to 37 inches; light olive brown (2.5Y 5/4) sand; common coarse prominent weak red (2.5YR 5/2) mottles and common coarse faint yellowish brown (10YR 5/4) mottles; single grain; loose; moderately acid; clear wavy boundary.

Cg1—37 to 40 inches; olive gray (5Y 5/2) sand; common coarse faint light olive gray (5Y 6/2) mottles; single grain; loose; 5 percent gravel; moderately acid; clear wavy boundary.

Cg2—45 to 65 inches; olive gray (5Y 5/2) gravelly coarse sand; single grain; loose; 15 percent gravel; moderately acid.

The solum thickness ranges from 18 to 40 inches. Reaction is extremely acid to moderately acid in the solum and very strongly acid to moderately acid in the substratum. Content of rock fragments ranges from 0 to 15 percent in the solum and 5 to 35 percent in the substratum.

The E horizon has hue of 5YR to 10YR, value of 4 to 7, and chroma of 1 or 2.

The Bhs horizon has hue of 5YR to 7.5YR and value and chroma of 2 or 3. The Bs horizon has hue of 5YR to 10YR and value and chroma of 4 to 6. In some pedons up to 40 percent of the Bhs and Bs horizons is cemented. The B horizon is loamy fine sand, loamy sand, or sand.

The BC horizon has hue of 2.5Y or 5Y, value of 4 or

5, and chroma of 3 to 6. It is loamy fine sand, loamy sand, or sand.

The C horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 4. It is loamy sand, sand, or coarse sand in the fine-earth fraction.

Lamoine Series

The Lamoine series consists of very deep, somewhat poorly drained soils that formed in glaciolacustrine or glaciomarine sediments in coastal lowlands and river valleys. Slopes range from 0 to 8 percent.

Lamoine soils are adjacent to Biddeford, Buxton, Dixfield, Nicholville, and Scantic soils. Lamoine soils are better drained than Biddeford and Scantic soils and are poorer drained than Buxton, Dixfield, and Nicholville soils.

Typical pedon of Lamoine silt loam, 3 to 8 percent slopes, in the city of Ellsworth, west of the Union River, 1,300 feet north of the junction of U.S. Route 1A and Gilpatrick Brook, in an abandoned hayfield between the road and railroad track:

Ap—0 to 7 inches; dark brown (10YR 3/3) silt loam; pale brown (10YR 6/3) dry; moderate fine granular structure; friable; many very fine roots and common fine roots; moderately acid; abrupt smooth boundary.

Bw1—7 to 9 inches; light olive brown (2.5Y 5/4) silt loam; few fine prominent light olive gray (5Y 6/2) mottles; common fine and medium distinct olive (5Y 5/3) mottles; and common medium prominent yellowish brown (10YR 5/6) mottles; weak fine granular structure; friable; many very fine roots and few fine roots; moderately acid; abrupt wavy boundary.

Bw2—9 to 12 inches; light yellowish brown (2.5Y 6/4) silt loam; common fine prominent yellowish red (5YR 5/6) mottles and common medium prominent light olive gray (5Y 6/2) mottles; weak very fine subangular blocky structure; friable; many very fine roots; olive (5Y 5/3) faces of peds; moderately acid; abrupt wavy boundary.

Bg—12 to 17 inches; light olive brown (2.5Y 5/4) silty clay loam; few medium prominent yellowish red (5YR 4/6) mottles, common medium prominent gray (5Y 6/1) mottles, and many coarse prominent light olive gray (5Y 6/2) mottles; moderate very fine and fine subangular blocky structure; firm, common very fine roots between peds; light olive gray (5Y 6/2) faces of peds; few prominent dark reddish brown (5YR 2/2) oxide coats on faces of peds; moderately acid; clear wavy boundary.

BCg—17 to 21 inches; olive (5Y 4/3) silty clay loam; common medium faint olive gray (5Y 5/2) mottles and common medium prominent yellowish brown (10YR 5/6) mottles; strong very coarse prismatic structure parting to weak thin and medium platy; firm; olive gray (5Y 5/2) faces of peds; few very fine roots between peds; gray (5Y 6/1) faces of prisms; common prominent dark reddish brown (5YR 2/2) oxide coats on faces of peds within prisms; slightly acid; clear wavy boundary.

Cg1—21 to 32 inches; olive (5Y 4/3) silty clay; common medium distinct gray (5Y 5/1) mottles; strong very coarse prismatic structure parting to weak thin and medium platy; firm; few very fine roots between peds; olive gray (5Y 4/2) faces of peds within prisms; gray (5Y 6/1) faces of prisms, many prominent black (5YR 2/1) oxide coats on faces of peds within prisms; common fine prominent yellowish brown (10YR 5/6) colors associated with oxide coats; neutral; gradual wavy boundary.

Cg2—32 to 50 inches; olive (5Y 5/3) silty clay; common coarse distinct gray (5Y 5/1) and common coarse prominent yellowish brown (10YR 5/6) mottles; weak thin platy structure; firm; olive gray (5Y 5/2) faces of peds; many prominent black (5YR 2/1) oxide coats on faces of peds; common fine prominent yellowish brown (10YR 5/6) colors associated with oxide coats; neutral; diffuse wavy boundary.

Cg3—50 to 65 inches; olive (5Y 5/3) silty clay; common medium faint olive gray (5Y 5/2) mottles; weak thin platy structure; firm; olive (5Y 4/3) faces of peds; many prominent black (5YR 2/1) oxide coats on faces of peds; common fine prominent yellowish brown (10YR 5/6) colors associated with oxide coats; neutral.

Solum thickness ranges from 16 to 55 inches. Content of rock fragments ranges from 0 to 5 percent. Reaction in unlimed areas is very strongly acid to slightly acid in the surface layer, strongly acid to neutral in the subsoil, and moderately acid to neutral in the substratum.

The Ap horizon or A horizon has hue of 10YR or 2.5Y and value and chroma of 2 to 4.

The B horizon has hue of 10YR to 5Y, value of 3 to 7, and chroma of 2 to 6. It is silt loam, silty clay loam, or silty clay. The B horizon has weak to strong, fine or medium granular, very fine to coarse subangular blocky,

or medium or thick platy structure. Some pedons have primary structure that is coarse or very coarse prismatic. Consistence is friable or firm.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 1 to 4. It is silt loam, silty clay loam, or silty clay. Structure is blocky or platy, or primary structure is prismatic. Consistence is firm or very firm.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 4. It is silty clay loam, silty clay, or clay. Structure is blocky, platy, or prismatic, all of which are considered inherited, or the horizon is massive. Consistence is firm or very firm. Common to many black to dark reddish brown oxide coats are on faces of peds. Some pedons have fine silt films on faces of peds.

Lyman Series

The Lyman series consists of shallow to bedrock, somewhat excessively drained soils. The soils formed in glacial till on upland ridges and mountains. Slope ranges from 3 to 65 percent.

Lyman soils are adjacent to Brayton, Hermon, Marlow, Monadnock, Naskeag, Scantic, Schoodic, and Tunbridge soils and rock outcrop. Lyman soils are shallower to bedrock than Brayton, Hermon, Marlow, Monadnock, Naskeag, Scantic, and Tunbridge soils. They have less clay than Scantic soils. Lyman soils are deeper to bedrock than Schoodic soils.

Typical pedon of Lyman fine sandy loam in a wooded area of Lyman-Tunbridge-complex, 0 to 15 percent slopes, very stony, in the town of Mariaville on Maine Route 181, 1 mile north of Garland Brook, 300 feet east of the road:

Oi—1 inch to 0; loose litter of leaves and twigs.

Oa—0 to 2 inches; very dark brown (10YR 2/2) highly decomposed organic material; weak very fine granular structure; very friable; many very fine and fine roots; common medium roots and few coarse roots; 5 percent rock fragments; very strongly acid; abrupt wavy boundary.

E—2 to 3 inches; brown (7.5YR 5/2) fine sandy loam; weak very fine granular structure; very friable; many very fine and fine roots and common medium and coarse roots; 5 percent rock fragments; very strongly acid; abrupt broken boundary.

Bh—3 to 5 inches; reddish brown (5YR 4/3) fine sandy loam; weak fine granular structure; very friable; many very fine and fine roots and common medium and coarse roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary.

Bs1—5 to 13 inches; dark brown (7.5YR 4/4) fine sandy loam; weak fine granular structure; very friable; common very fine and fine and medium roots; 10 percent rock fragments; strongly acid; clear wavy boundary.

Bs2—13 to 19 inches; dark yellowish brown (10YR 4/4) gravelly fine sandy loam; weak fine granular structure; very friable; common very fine and fine roots; 25 percent rock fragments; strongly acid; abrupt wavy boundary.

R—19 inches; schistose bedrock.

The solum thickness and depth to bedrock range from 10 to 20 inches. Content of rock fragments ranges from 5 to 35 percent throughout the soil and is mainly angular gravel and cobbles. Reaction in unlimed areas is extremely acid to moderately acid.

Some pedons have an A horizon that is neutral or has hue of 5YR to 10YR, value of 2 or 3, and chroma of 0 to 2. Some pedons have an Ap horizon that has hue of 5YR to 10YR and value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bh horizon has hue of 2.5YR to 10Yr, value of 2 to 4, and chroma of 2 to 6. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction.

Some pedons have a BC horizon that has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 3 or 4. It is sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction.

The R layer is schist, phyllite, gneiss, or granite.

Marlow Series

The Marlow series consists of very deep, well drained loamy glacial till that has a compact substratum. The soils are on side slopes of upland till ridges. Slopes range from 3 to 45.

Marlow soils are adjacent to Brayton, Colonel, Dixfield, Lyman, Thorndike, Tunbridge, and Winnecook soils. Marlow soils are better drained than Brayton, Colonel, and Dixfield soils and are deeper to bedrock than Lyman, Thorndike, Tunbridge, and Winnecook soils.

Typical pedon of Marlow fine sandy loam in an area of Marlow-Dixfield association, strongly sloping, very stony, in the town of Mariaville, 1 mile north of Jones Bridge and 4,800 feet west of Maine Route 179 on jeep trail:

Oi—5 to 4 inches; litter of leaves, twigs, and needles.

Oe—4 inches to 0; black (5YR 2/1) moderately decomposed organic material; weak very fine granular structure; very friable; many very fine and fine and medium roots; very strongly acid; abrupt smooth boundary.
E—0 to 2 inches; light brownish gray (10YR 6/2) fine sandy loam; weak very fine granular structure; very friable; many very fine and fine and medium roots; 5 percent rock fragments; very strongly acid; abrupt broken boundary.
Bh—2 to 3 inches; reddish brown (5YR 4/3) fine sandy loam; weak fine and medium granular structure; very friable; many very fine and fine and medium roots; 5 percent rock fragments; very strongly acid; abrupt wavy boundary.
Bs—3 to 12 inches; yellowish brown (10YR 5/6) fine sandy loam; weak fine granular structure; friable; many very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; clear wavy boundary.
BC—12 to 21 inches; light yellowish brown (2.5Y 6/4) fine sandy loam; weak fine granular structure; friable; few very fine and fine roots; 10 percent rock fragments; strongly acid; clear wavy boundary.
Cd1—21 to 31 inches; light olive brown (2.5Y 5/4) fine sandy loam; weak thin platy structure; firm; few very fine roots; 10 percent rock fragments; strongly acid; abrupt wavy boundary.
Cd2—31 to 65 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; massive; very firm; 15 percent rock fragments; strongly acid.

The solum thickness ranges from 18 to 36 inches. Content of rock fragments ranges from 5 to 30 percent throughout the profile. Reaction in unlimed areas is extremely acid to moderately acid.

The O horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

Some pedons have an A horizon or Ap horizon that has hue of 10YR and value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 7, and chroma of 1 or 2.

The Bh horizon has hue of 5YR to 7.5YR, value of 2 to 4, and chroma of 1 to 3. Some pedons have a Bhs horizon that has hue of 5YR to 7.5YR and value and chroma of 2 or 3. The Bs horizon has hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is fine sandy loam, loam, or sandy loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 3 to 6. It is fine sandy loam, loam, or sandy loam in the fine-earth fraction.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is fine sandy loam, loam, or sandy loam in the fine-earth fraction. It has platy structure, or it is massive. In some pedons less than 20 percent of the matrix of the Cd horizon is lenses of loose sand. Consistence is firm or very firm.

Monadnock Series

The Monadnock series consist of very deep, well drained soils that formed in a loamy mantle underlain by sandy glacial till. The soils are on hillsides and ridgetops around lake basins and valleys and on moraines. Slopes range from 3 to 45 percent.

Monadnock soils are adjacent to Colonel, Dixfield, Hermon, Lyman, and Tunbridge soils. Monadnock soils are deeper to bedrock than Lyman and Tunbridge soils and coarser textured in the substratum and better drained than Colonel and Dixfield soils. Monadnock soils have a finer textured solum than Hermon soils.

Typical pedon of Monadnock fine sandy loam, in a forested area of Monadnock-Hermon-Dixfield complex, rolling, extremely bouldery, in the town of Eastbrook, 2 miles east of Maine Route 200 on the Molasses Pond Road, 2.6 miles south on camp road; east side of the road:

Oi—1 inch to 0; litter of leaves, needles, and twigs.
Oa—0 to 2 inches; dark reddish brown (5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; extremely acid; abrupt wavy boundary.
A—2 to 3 inches; very dark grayish brown (10YR 3/2) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; extremely acid; abrupt wavy boundary.
E—3 to 8 inches; grayish brown (10YR 5/2) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; extremely acid; abrupt broken boundary.
Bs1—8 to 11 inches; dark brown (7.5YR 4/4) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots; 10 percent rock fragments; extremely acid; clear wavy boundary.
Bs2—11 to 18 inches; light yellowish brown (10YR 6/4) fine sandy loam; moderate medium platy structure parting to moderate very fine angular blocky; friable; many very fine and fine roots and common medium roots; 10 percent rock fragments; extremely acid; clear wavy boundary.
BC—18 to 20 inches; yellowish brown (10YR 5/4) gravelly sandy loam; moderate medium platy structure; friable; common very fine and fine roots;

20 percent rock fragments; extremely acid; abrupt wavy boundary.
2C1—20 to 36 inches; light olive brown (2.5 5/4) very gravelly loamy sand; single grain; loose; 50 percent rock fragments; very strongly acid; clear wavy boundary.
2C2—36 to 65 inches; light olive brown (2.5Y 5/4) very gravelly loamy sand; single grain; firm in place, loose when removed; 55 percent rock fragments; very strongly acid.

The solum thickness ranges from 15 to 30 inches. Content of rock fragments ranges from 0 to 30 percent in the solum and 35 to 60 percent in the substratum. Reaction in unlimed areas is extremely acid to moderately acid.

The A horizon has hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 to 3. Some pedons have an Ap horizon that has hue of 10YR and value and chroma of 2 to 4.

The E horizon has hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2.

Some pedons have a Bh horizon that has hue of 2.5YR to 7.5YR and value and chroma of 3 to 5. The Bs horizon has hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 4 to 8. Texture of the B horizon is dominantly fine sandy loam, loam, or very fine sandy loam in the fine-earth fraction.

The BC horizon has hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 to 6. It is fine sandy loam or sandy loam in the fine-earth fraction and is less than 5 inches thick.

The 2C horizon has hue of 10YR to 5Y, value of 4 to 7, and chroma of 2 to 4. It is loamy sand or loamy fine sand in the fine-earth fraction. In some pedons a thin C horizon of fine sandy loam or sandy loam in the fine-earth fraction overlies the contrasting 2C horizon. The 2C horizon is massive or single grain. It is loose to firm.

Naskeag Series

The Naskeag series consists of moderately deep to bedrock and somewhat poorly drained and poorly drained soils. The soils formed in glacial till in depressions between shallow to bedrock glaciated ridges on coastal peninsulas and islands. Slopes range from 0 to 8 percent.

Naskeag soils are adjacent to Bucksport, Hermon, Lyman, Schoodic, and Wonsqueak soils and rock outcrop. Naskeag soils are shallower to bedrock than Bucksport, Hermon, and Wonsqueak soils and are deeper to bedrock than Lyman and Schoodic soils. Naskeag soils are also less well drained than Hermon, Lyman, and Schoodic soils and have less organic matter than Bucksport and Wonsqueak soils.

Typical pedon of Naskeag fine sandy loam, in an area of Naskeag-Schoodic-Lyman complex, undulating, very stony, in a wooded area in the town of Brooklin, 1.8 miles west of Brooklin Village on Maine Route 175, 0.3 mile north on an old town road, 50 feet west of the road:

Oi—1 inch to 0; litter of leaves, needles, and twigs.
Oa—0 to 5 inches; very dusky red (2.5YR 2/2) muck; about 15 percent fibers, 5 percent rubbed; weak very fine granular structure; very friable; many very fine and fine roots and common medium and coarse roots; extremely acid; abrupt wavy boundary.
E1—5 to 13 inches; light brownish gray (10YR 6/2) fine sandy loam; many fine prominent light gray (5YR 7/1) mottles; weak fine granular structure; very friable; common fine roots; 10 percent rock fragments; very strongly acid; clear wavy boundary.
E2—13 to 16 inches; brown (7.5YR 5/2) gravelly loamy sand; many fine distinct pinkish gray (5YR 6/2) mottles; weak fine granular structure; very friable; few fine roots; 15 percent rock fragments; strongly acid; abrupt wavy boundary.
Bh1—16 to 20 inches; very dusky red (2.5YR 2/2) gravelly loamy sand; moderate fine granular structure; very friable; few fine roots; 20 percent rock fragments; strongly acid; clear wavy boundary.
Bh2—20 to 26 inches; dusky red (2.5YR 3/2) gravelly loamy sand; massive and single grain; less than 50 percent weakly cemented, remainder loose; 20 percent rock fragments; strongly acid; abrupt wavy boundary.
R—38 inches; schistose bedrock.

The depth to bedrock including the decomposed organic horizon ranges from 20 to 40 inches. Content of rock fragments ranges from 5 to 30 percent throughout. Reaction is extremely acid to strongly acid in the surface and subsurface layers and very strongly acid or strongly acid in the subsoil.

Some pedons have an A horizon that has hue of 10YR, value of 4, and chroma of 2 or 3.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bh horizon and Bhs horizon, where present, have hue of 2.5YR and value and chroma of 2 or 3. The soils are loamy sand or gravelly loamy sand. The soils are loose, very friable, or weakly cemented in less than 50 percent of the horizon. Some pedons have a Bs horizon that has hue of 2.5YR or 5YR, value of 3 to 5, and chroma of 3 to 6. It is loamy sand or gravelly loamy sand and is loose or weakly cemented in less than 50 percent of the horizon.

The BC horizon has hue of 7.5YR or 10YR, value of 3 to 6, and chroma of 4. It is gravelly loamy sand or

gravelly sand. It is loose or weakly cemented in less than 50 percent of the horizon.

The R layer is mainly schist, diorite, or granite.

Nicholville Series

The Nicholville series consists of very deep, moderately well drained soils formed in water-deposited materials on the edges of glaciofluvial plains and terraces. Slopes range from 3 to 15 percent.

Nicholville soils are adjacent to Adams, Buxton, Colton, Lamoine, Scantic, and Sheepscot soils. Nicholville soils are finer textured than Adams, Colton, and Sheepscot soils and better drained than Scantic soils. Nicholville soils have less clay than Buxton, Lamoine, and Scantic soils.

Typical pedon of Nicholville very fine sandy loam, 3 to 8 percent slopes, in a forested area in T8 (SD) 2 miles northeast of the junction of Maine Routes 179 and 180, 1,500 feet south of Maine Route 179:

Oi—1 inch to 0; litter of leaves and twigs.

Oa—0 to 1 inch; black (10YR 2/1) highly decomposed organic material; weak very fine granular structure; very friable; many very fine and fine and medium roots; extremely acid; abrupt wavy boundary.

E—1 to 2 inches; light brownish gray (10YR 6/2) very fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots and few coarse roots; extremely acid; abrupt broken boundary.

Bh—2 to 5 inches; dark brown (7.5YR 4/4) very fine sandy loam; weak fine granular structure; very friable; many very fine and fine and medium roots and few coarse roots; very strongly acid; clear wavy boundary.

Bs1—5 to 17 inches; dark yellowish brown (10YR 4/4) very fine sandy loam; weak fine granular structure; friable; many very fine and fine and medium roots; very strongly acid; abrupt wavy boundary.

Bs2—17 to 20 inches; yellowish brown (10YR 5/4) very fine sandy loam; few fine prominent strong brown (7.5YR 5/8) mottles and few fine distinct light brownish gray (10YR 6/2) mottles; weak fine granular structure; friable; many very fine and fine roots; strongly acid; abrupt wavy boundary.

C1—20 to 24 inches; olive (5Y 5/3) silt loam; few fine distinct light olive brown (2.5Y 5/4) mottles; moderate medium platy structure; firm; strongly acid; abrupt wavy boundary.

C2—24 to 38 inches; olive (5Y 5/3) loamy very fine sand; few fine prominent dark yellowish brown (10YR 4/6) mottles; massive; very friable; strongly acid; clear wavy boundary.

C3—38 to 65 inches; olive (5Y 4/3) loamy very fine sand; massive; very friable; thin varves of olive (5Y 5/3) very fine sandy loam; strongly acid.

The solum thickness ranges from 16 to 30 inches. Content of rock fragments ranges from 0 to 10 percent throughout the soil. Reaction is extremely acid to moderately acid in the surface and subsurface layers, very strongly acid to moderately acid in the subsoil, and very strongly acid to slightly acid in the substratum.

Some pedons have an A or Ap horizon that has hue of 10YR, value of 3 or 4, and chroma of 2 or 3.

The E horizon has hue of 10YR, value of 5 or 6, and chroma of 1 or 2.

The Bh horizon has hue of 5YR to 10YR, value of 3 or 4, and chroma of 3 to 6. The Bs horizon has hue of 7.5YR to 2.5Y, value of 4 or 5, and chroma of 4 to 6. The B horizon is loamy very fine sand, very fine sandy loam, or silt loam. It is very friable to firm.

The C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam, loamy very fine sand, or fine sand. It has weak or moderate medium platy structure associated with depositional layers, or it is massive. It is very friable to firm.

Scantic Series

The Scantic series consists of very deep, poorly drained soils formed in glaciomarine or glaciolacustrine sediments. The soils are in low areas of coastal lowlands and river valleys. Slopes range from 0 to 3 percent.

Scantic soils are adjacent to Buxton, Biddeford, Charles, Dixfield, Lamoine, Lyman, and Nicholville soils. Scantic soils are wetter than Buxton, Lamoine, and Nicholville soils and better drained than Biddeford soils. Scantic soils are in a lower position on the landscape and have more clay than Dixfield and Lyman soils. Charles soils are on flood plains.

Typical pedon of Scantic silt loam, 0 to 3 percent slopes, in the town of Lamoine on Maine Route 204, 0.3 mile east of Mud Creek Road, 0.2 mile north of this road in a hayfield:

Ap1—0 to 4 inches; dark grayish brown (10YR 4/2) silt loam; moderate fine granular structure; very friable; many very fine roots and common fine and medium roots; strongly acid; abrupt smooth boundary.

Ap2—4 to 7 inches; dark grayish brown (10YR 4/2) silt loam; common coarse faint grayish brown (10YR 5/2) mottles and few fine prominent yellowish brown (10YR 5/8) mottles; moderate fine granular structure; very friable; many very fine roots and common fine and medium roots; strongly acid; abrupt smooth boundary.

Eg—7 to 15 inches; olive gray (5Y 5/2) silt loam; common medium prominent light olive brown (2.5Y 5/6) mottles; moderate fine and medium granular structure; friable; common very fine roots and few fine and medium roots; strongly acid; abrupt wavy boundary.

Bg1—15 to 22 inches; olive gray (5Y 5/2) silty clay loam; common medium prominent light olive brown (2.5Y 5/6) mottles; moderate very fine subangular blocky structure; common very fine roots; thin gray (5Y 5/1) silt films in channels and pores and on 75 percent of faces of peds; common prominent dark reddish brown (5YR 2/2) oxide coatings on faces of peds; moderately acid; clear wavy boundary.

Bg2—22 to 30 inches; olive gray (5Y 4/2) silty clay loam; common medium prominent light olive brown (2.5Y 5/6) mottles; moderate very fine and fine subangular blocky structure; firm; few very fine roots; thin gray (5Y 5/1) silt films in channels and pores and on 50 percent of faces of peds; common prominent dark reddish brown (5YR 2/2) oxide coatings on faces of peds; neutral; clear wavy boundary.

Cg—35 to 65 inches; olive gray (5Y 4/2) silty clay; few fine distinct olive (5Y 5/6) mottles; weak medium platy structure; firm; thin olive gray (5Y 5/2) silt films on 50 percent of faces of peds; many prominent black (5YR 2/1) oxide coatings on faces of peds; neutral.

The solum thickness ranges from 30 to 40 inches. Reaction in unlimed areas is very strongly acid to slightly acid in the surface and subsurface layers, strongly acid to neutral in the subsoil, and moderately acid to neutral in the substratum.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 to 4, and chroma of 1 or 2. Some pedons have an A horizon that has hue of 10YR, value of 3, and chroma of 1 or 2.

The Eg horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 1 or 2. It has weak or moderate, thin to thick platy or weak or moderate, fine or medium granular structure.

The Bg horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 1 or 2. It is silty clay loam, silt loam, silty clay, or clay. It has weak to strong, thin to thick platy, or very fine to fine subangular blocky structure.

The BCg horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 1 or 2. It is silt loam, silty clay loam, silty clay, or clay. The structure is mainly platy or angular blocky. In many pedons primary structure is coarse or very coarse prismatic.

The Cg horizon is neutral or has hue of 2.5Y or 5Y, value of 4, and chroma of 0 to 2. It is silty clay loam, silty clay, or clay. It has weak to strong, medium to very thick platy, or moderate to strong coarse or very coarse prismatic structure, or it is massive.

Schoodic Series

The Schoodic series consists of very shallow to bedrock, excessively drained soils formed in a very thin mantle of glacial till. The soils are on the crests and side slopes of ridges and mountains. Slopes range from 0 to 65 percent.

Schoodic soils are adjacent to Brayton, Lyman, Naskeag, Tunbridge, and Wonsqueak soils and rock outcrop. Schoodic soils are shallower to bedrock than all of these soils.

Typical pedon of Schoodic very gravelly fine sandy loam in an area of Schoodic-Rock outcrop complex, 0 to 15 percent slopes, in the town of Gouldsboro, 0.6 mile south of Maine Route 186 on the Prospect Point Road, 50 feet south of the road:

Oi—7 to 3 inches; litter of needles and twigs.

Oe—3 inches to 0; dark reddish brown (5YR 2/2) moderately decomposed organic material; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; extremely acid; abrupt wavy boundary.

E—0 to 9 inches; pinkish gray (5YR 7/2) very gravelly fine sandy loam; moderate fine and medium granular structure; friable; many very fine roots; common fine roots and few medium roots; 25 percent angular gravel and 15 percent angular cobbles; extremely acid; abrupt wavy boundary.

R—9 inches; granitic bedrock.

Solum thickness ranges from 1 to 10 inches. Content of rock fragments ranges from 35 to 50 percent and is mainly angular gravel and cobbles. Reaction ranges from extremely acid to strongly acid throughout.

The O horizon has hue of 2.5YR or 5YR, value of 2, and chroma of 1 or 2.

The E horizon has hue of 2.5YR to 10YR, value of 4 to 7, and chroma of 1 or 2. It has weak or moderate, very fine to medium granular structure, or it is massive.

Some pedons have a B horizon with a lower boundary within 5 inches of the surface. It has hue of 2.5YR to 7.5YR and value and chroma of 2 to 4. It is fine sandy loam or sandy loam with less than 45 percent silt in the fine-earth fraction. It has weak or

moderate, very fine to medium granular structure, or it is massive.

The R layer is granite, gabbro, gneiss, diorite, phyllite, or schist.

Sebago Series

The Sebago series consists of very deep, very poorly drained organic soils more than 51 inches thick. The soils are in bogs in depressions of glaciated upland and glaciofluvial deposits. Slopes range from 0 to 1 percent.

Sebago soils are adjacent to Bucksport, Colton, Sheepscot, Waskish, and Wonsqueak soils. Colton and Sheepscot soils are mineral soils that are better drained and are in a higher position on the landscape. Bucksport, Waskish, and Wonsqueak soils are organic soils in similar landscape positions.

Typical pedon of Sebago mucky peat in an area of Waskish and Sebago soils in the town of Sullivan, 1.8 miles north of the junction of U.S. Route 1 and Maine Route 200, 1,600 feet east of the highway:

Oe1—0 to 10 inches; black (5YR 2/1) broken face and rubbed, mucky peat (hemic material), dark reddish brown (5YR 2/2) pressed; 80 percent fiber, 50 percent rubbed; massive, nonsticky; about 60 percent woody fibers, 30 percent herbaceous fibers; very pale brown (10YR 7/4) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Oe2—10 to 34 inches; black (5YR 2/1) broken face, rubbed and pressed, mucky peat (hemic material); 60 percent fiber, 35 percent rubbed; massive; slightly sticky; about 50 percent herbaceous and 30 percent woody fibers; light gray (10YR 7/2) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Oi1—34 to 54 inches; very dusky red (2.5YR 2/2) broken face and rubbed, peat (fibric material), dark reddish brown (5YR 3/2) pressed; 80 percent fiber, 50 percent rubbed; massive; nonsticky; about 50 percent sphagnum fiber and 40 percent herbaceous fiber; white (10YR 8/1) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Oe3—54 to 65 inches; black (5YR 2/1) broken face, rubbed and pressed, mucky peat (hemic material) 60 percent fiber, 25 percent rubbed; massive; slightly sticky; about 50 percent woody fibers and 40 percent herbaceous fibers; very pale brown (10YR 7/3) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

The thickness of the organic deposit exceeds 51 inches. Content of wood fragments ranges from 0 to 15 percent throughout and consists of branches, logs, and stumps.

The surface tier has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 or 2.

The subsurface layer and bottom tiers have hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 to 4. The soils are massive or have weak thick platy structure. Hemic materials dominate the subsurface layer tier, but 10 inches or more of the subsurface layer and bottom tiers are fibric materials.

Sheepscot Series

The Sheepscot series consists of very deep, moderately well drained soils formed in glaciofluvial sand and gravel. The soils are in low positions of outwash plains, deltas, and kame terraces. Slopes range from 0 to 15 percent.

Sheepscot soils are adjacent to Adams, Colton, Kinsman, Nicholville, Sebago, and Waskish soils and rock outcrop. Sheepscot soils are poorer drained than Colton and Adams soils and better drained than Kinsman soils. Sheepscot soils are coarser textured than Nicholville soils. Sebago and Waskish soils are organic soils in depressions.

Typical pedon of Sheepscot sandy loam in an area of Colton-Adams-Sheepscot Association, strongly sloping, in a forested area in the town of Otis, 300 feet southwest of the junction of Maine Route 180 and Mosquito Brook:

Oi—1 inch to 0; litter of needles, leaves, and twigs.

Oa—0 to 2 inches; black (10YR 2/1) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; extremely acid; abrupt smooth boundary.

E—2 to 4 inches; grayish brown (10YR 5/2) sandy loam; weak fine granular structure; very friable; many very fine and fine roots and common medium roots; 5 percent gravel; extremely acid; abrupt broken boundary.

Bs1—4 to 7 inches; reddish brown (5YR 4/4) sandy loam, moderate fine granular structure; very friable; many very fine and fine roots and common medium roots; 10 percent gravel; extremely acid; clear wavy boundary.

Bs2—7 to 18 inches; dark yellowish brown (10YR 4/4) gravelly sandy loam; weak fine granular structure; very friable; common very fine and fine roots; 20 percent gravel; extremely acid; clear wavy boundary.

BC—18 to 24 inches; olive brown (2.5Y 4/4) very

gravelly loamy sand; common fine prominent brown (7.5YR 4/4) and grayish brown (10YR 5/2) mottles; single grain; loose; few very fine and fine roots; 40 percent gravel; very strongly acid; gradual wavy boundary.

C1—24 to 36 inches; dark grayish brown (2.5Y 4/2) very gravelly coarse sand; single grain; loose; 50 percent gravel; very strongly acid; gradual wavy boundary.

C2—36 to 65 inches; olive gray (5Y 4/2) extremely gravelly coarse sand; single grain; loose; 65 percent gravel; very strongly acid.

Solum thickness ranges from 14 to 30 inches. Content of rock fragments ranges from 5 to 50 percent in the upper part of the solum and 35 to 65 percent in the lower part of the solum and in the substratum. Reaction in unlimed areas is extremely acid to slightly acid in the solum and very strongly acid to slightly acid in the substratum.

Some pedons have an Ap horizon that has hue of 10YR, value of 3 or 4, and chroma of 2 or 4 or an A horizon that has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2.

The E horizon has hue of 5YR to 10YR, value of 5 to 7, and chroma of 1 or 2.

Some pedons have a Bh horizon that has hue of 2.5YR to 7.5YR, value of 3 or 4, and chroma of 2 to 4 or a Bhs horizon that has hue of 2.5YR to 7.5YR, value of 3, and chroma of 2 or 3.

The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 6. The B horizon within a depth of 10 inches of the mineral surface is fine sandy loam to coarse sandy loam in the fine-earth fraction and from 10 to 17 inches is fine sandy loam to coarse sand in the fine-earth fraction. Below 17 inches it is loamy sand to coarse sand in the fine-earth fraction. The B horizon is mainly very friable or friable in the upper part, but some pedons have discontinuous cementation in less than 50 percent of the horizon. The lower part of the B horizon is loose to friable.

The BC horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 4 to 6. It is loamy sand to coarse sand in the fine-earth fraction. It is loose or very friable.

The C horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 6. It mainly is loamy sand, coarse sand, or sand in the fine-earth fraction. Some pedons have stratification of these textures or strata of gravel and cobbles with sand in the interstices.

Thorndike Series

The Thorndike series consists of shallow to bedrock, somewhat excessively drained soils formed in a thin mantle of glacial till on upland till ridges. The soils are derived mainly from phyllite and slate. Slopes range from 0 to 15 percent.

Thorndike soils are adjacent to Brayton, Marlow, and Winnecook soils and rock outcrops. Thorndike soils are shallower to bedrock than all of these soils.

Typical pedon of Thorndike channery silt loam in an old pasture in an area of Winnecook-Thorndike complex, 3 to 12 percent slopes, in the town of Bucksport, on the Silver Lake Road, 0.8 mile from Central Street, 50 feet west of the road:

Ap—0 to 7 inches; dark brown (10YR 3/3) channery silt loam; moderate fine granular structure; very friable; many very fine and fine roots; common medium roots and few coarse roots; 25 percent rock fragments; strongly acid; abrupt wavy boundary.

Bs1—7 to 9 inches; dark brown (7.5YR 4/4) very channery silt loam; moderate fine and medium granular structure; friable; many very fine and fine roots; common medium roots and few coarse roots; 55 percent rock fragments; strongly acid; clear wavy boundary.

R—16 inches; phyllite bedrock.

Solum thickness ranges from 10 to 20 inches and corresponds to the thickness to bedrock. The content of rock fragments in the control section ranges from 35 to 80 percent. Reaction in unlimed areas is extremely acid to moderately acid.

The Ap horizon has hue of 10YR, value of 3 to 5, and chroma of 2 to 6. Some pedons have an A horizon that has hue of 10YR, value of 3 or 4, and chroma of 1 to 3.

Some pedons have an E horizon that has hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2.

Some pedons have a Bh horizon that has hue of 5YR or 7.5YR, value of 3 to 5, and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8. It is silt loam to loam in the fine-earth fraction.

Some pedons have a BC horizon that has hue of 2.5Y and value and chroma of 4 to 6. It is silt loam to loam in the fine-earth fraction.

The bedrock is generally phyllite or slate that is fractured in the upper part.

Tunbridge Series

The Tunbridge series consists of moderately deep to bedrock, well drained soils that formed in loamy glacial till. The soils are on upland till ridges and mountains. Slopes range from 0 to 15 percent.

Tunbridge soils are adjacent to Brayton, Buxton, Colonel, Dixfield, Hermon, Lyman, Marlow, Monadnock, and Schoodic soils. Tunbridge soils are deeper to bedrock than Lyman and Schoodic soils and shallower

to bedrock than Brayton, Buxton, Colonel, Dixfield, Hermon, Marlow, and Monadnock soils.

Typical pedon of Tunbridge fine sandy loam is an area of Lyman-Tunbridge-Schoodic complex, rolling, very stony, in a forested area in the town of Hancock, 1500 feet north of the junction of U.S. Route 1 and Mud Creek Road on a gravel woods road, 75 feet west of road:

Oa—0 to 4 inches; black (5YR 2/1) highly decomposed organic material; weak very fine granular structure; very friable; many very fine roots and common fine and medium roots; extremely acid; abrupt wavy boundary.

E—4 to 6 inches; reddish gray (5YR 5/2) fine sandy loam; weak very fine granular structure; very friable; many very fine roots and common fine medium and coarse roots; 10 percent rock fragments; extremely acid; abrupt wavy boundary.

Bhs—6 to 7 inches; dark reddish brown (5YR 3/3) fine sandy loam; moderate very fine granular structure; very friable; common very fine and fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt broken boundary.

Bs1—7 to 10 inches; yellowish red (5YR 4/6) fine sandy loam; moderate very fine granular structure; very friable; common very fine and fine and medium roots; 10 percent rock fragments; strongly acid; clear wavy boundary.

Bs2—10 to 12 inches; yellowish red (5YR 5/6) fine sandy loam; moderate very fine granular structure; very friable; common very fine and fine roots; 5 percent rock fragments; moderately acid; clear smooth boundary.

Bs3—12 to 15 inches; yellowish brown (10YR 5/6) fine sandy loam; weak very fine granular structure; friable; common very fine and fine roots; 5 percent rock fragments; moderately acid; clear smooth boundary.

BC—15 to 19 inches; light olive brown (2.5Y 5/6) fine sandy loam; weak very fine granular structure; friable; few very fine and fine roots; 10 percent rock fragments; moderately acid; clear smooth boundary.

C—19 to 33 inches; olive (5Y 5/3) gravelly fine sandy loam; massive; friable; common prominent light olive brown (2.5Y 5/6) root stains; 20 percent rock fragments; moderately acid.

R—33 inches; schistose bedrock.

The solum thickness ranges from 14 to 36 inches. Depth to bedrock ranges from 20 to 40 inches. Content of rock fragments ranges from 5 to 35 percent throughout the profile. Reaction in unlimed areas is extremely acid to moderately acid in the solum and strongly acid to slightly acid in the substratum.

Some pedons have an A horizon that is neutral or has hue of 5YR to 10YR, value of 2 to 5, and chroma of 0 to 4. Some pedons have an AP horizon that has hue of 5YR to 10YR and value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 5 or 6, and chroma of 1 or 2.

The Bhs horizon has hue of 5YR to 10YR and value and chroma of 3 or less. Some pedons have a Bh horizon that has hue of 5YR to 10YR, value of 3 or 4, and chroma of 2 or 3. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. It is fine sandy loam, sandy loam, loam or silt loam in the fine-earth fraction.

The BC horizon has hue of 10YR or 2.5Y, value of 4 or 5 and chroma of 3 to 8. It is fine sandy loam, sandy loam, loam, or silt loam in the fine-earth fraction.

The C horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 6. It is fine sandy loam, sandy loam, loam, or silt loam in the fine-earth fraction.

Udorthents

Udorthents consist of moderately deep to very deep, excessively drained to well drained fill areas over bedrock or soil. The fill material differs greatly from place to place, but generally is compacted gravel, sand, loamy sand, sandy loam, or mixed combinations of these materials. These materials have more than 35 percent rock fragments. The underlying soil generally is moderately well drained to poorly drained, but ranges to excessively drained. Slopes dominantly range from 0 to 30 percent.

Udorthents are adjacent to various other soils, but mainly to those that are moderately well drained to poorly drained.

Udorthents differ from area to area and thus a typical pedon is not given. The soils are more than 20 inches thick and generally are 30 to 60 inches thick. Depth to bedrock is 20 inches or more. Reaction is very strongly acid to neutral.

The surface layer to a depth of as much as 10 inches may be applied topsoil or a mixture of topsoil and gravelly fill. Thickness, color, texture, and gravel content differ greatly.

The underlying layers dominantly are neutral or have hue of 7.5YR to 5Y, value of 5 to 8, and chroma of 0 to

4. These layers are commonly discontinuous. Generally, they are sandy loam to coarse sand in the fine-earth fraction.

Waskish Series

The Waskish series consists of very deep, very poorly drained organic soils formed in slightly decomposed organic material derived mainly from sphagnum moss. The soils are on raised bogs in depressions in glaciated uplands and on glaciofluvial deposits. Slopes range from 0 to 1 percent.

Waskish soils are adjacent to Bucksport, Colton, Sebago, Sheepscot, and Wonsqueak soils. Waskish soils have fewer decomposed organic fibers than Bucksport, Sebago, and Wonsqueak soils. Waskish are organic soils; Colton and Sheepscot are mineral soils on surrounding landscapes.

Typical pedon of Waskish peat in an area of Waskish and Sebago soils in the town of Blue Hill, 1,000 feet south of the junction of Maine Route 177 and the Blue Hill townline in Wight Heath:

Oi1—0 to 18 inches; very dusky red (2.5YR 2/2), broken face and rubbed, peat (fibric material), dusky red (2.5YR 3/2) pressed; about 90 percent fiber, 85 percent rubbed; massive; nonsticky; mainly sphagnum moss fibers, less than 10 percent herbaceous; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Oi2—18 to 37 inches; dark reddish brown (2.5YR 3/4), broken face, peat (fibric material), dark reddish brown (5YR 3/2) rubbed and pressed; about 90 percent fiber, 80 percent rubbed; massive; nonsticky; mainly sphagnum moss fibers, less than 10 percent herbaceous; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Oi3—37 to 47 inches; very dusky red (2.5YR 2/2), broken face, rubbed and pressed, peat (fibric material); about 80 percent fiber, 60 percent rubbed; massive; slightly sticky; mainly phagnum moss fibers, less than 10 percent herbaceous; white (10YR 8/1) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Oi4—47 to 65 inches; dark reddish brown (2.5YR 2/4), broken face, peat (fibric material), dark reddish brown (5YR 3/2) rubbed and dark brown (7.5YR 3/2) pressed; about 90 percent fiber, 80 percent rubbed; massive; nonsticky; mainly sphagnum moss fibers, less than 10 percent herbaceous; extremely acid in 0.01M calcium chloride; abrupt smooth boundary.

Depth of the soil ranges from 63 inches to 20 feet. The content of woody fragments ranges from 0 to 10 percent. Fibric materials are dominant in the control section, but layers of sapric and hemic materials, with a total thickness of less than 5 inches, are common in many pedons. Hemic material is common in many pedons below a depth of 63 inches.

The surface layer, subsurface layer, and bottom tier have hue of 2.5YR to 7.5YR, value of 2 to 7, and chroma of 2 to 4. The fiber content ranges from 75 to 100 percent unrubbed and from 60 to 95 percent after rubbing. The fiber is mostly from sphagnum moss. Less than 10 percent is derived from herbaceous and woody plants.

Winnecook Series

The Winnecook series consists of moderately deep to bedrock, well drained soils formed in glacial till derived mainly from phyllite and slate. The soils are on upland till ridges. Slopes range from 2 to 15 percent.

Winnecook soils are adjacent to Colonel, Marlow, and Thorndike soils. Winnecook soils are deeper to bedrock than Thorndike soils. Winnecook soils are not as deep to bedrock as Colonel and Marlow soils.

Typical pedon of Winnecook silt loam in an area of Winnecook-Thorndike complex, 3 to 12 percent slopes, in the town of Bucksport, on the Silver Lake Road, 0.8 mile from Central Street, 75 feet west of the road in an old pasture:

Ap—0 to 8 inches; very dark grayish brown (10YR 3/2) silt loam; moderate fine and medium granular structure; friable; many very fine and fine roots; common medium roots and few coarse roots; 10 percent channers; moderately acid; clear wavy boundary.

Bs1—8 to 12 inches; strong brown (7.5YR 5/6) silt loam; moderate fine and medium granular structure; friable; many very fine and fine roots and common medium roots; 10 percent channers; moderately acid; clear wavy boundary.

Bs2—12 to 20 inches; yellowish brown (10YR 5/4) very channery silt loam; moderate fine and medium granular structure; friable; many very fine and fine roots and common medium roots; 35 percent channers; moderately acid; clear wavy boundary.

BC—20 to 30 inches; light olive brown (2.5Y 5/4) extremely channery silt loam; weak fine and medium granular structure; friable; few very fine and fine roots; 65 percent channers; moderately acid; clear wavy boundary.

R—30 inches; fractured phyllite bedrock.

Depth to bedrock ranges from 20 to 40 inches.

Solum thickness ranges from 18 to 35 inches. Content of rock fragments ranges from 10 to 70 percent, but the weighted average of the control section is over 35 percent. Reaction in unlimed areas is extremely acid to moderately acid throughout the soil.

The Ap has hue of 10YR, value of 3 to 5, and chroma of 2 to 4. Some pedons have an A horizon that has hue of 10YR, value of 3 or 4, and chroma of 2 or 3.

Some pedons have an E horizon that has hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 1 or 2.

Some pedons have a Bh horizon that has hue of 5YR or 7.5YR, value of 3 or 4, and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. Texture is silt loam or loam in the fine-earth fraction.

The BC horizon has hue of 10YR to 5Y, value of 5 or 6, and chroma of 2 to 6. Texture is silt loam or loam in the fine-earth fraction.

Some pedons have a C horizon that has hue of 10YR to 5Y, value of 5 or 6, and chroma of 2 to 6. Texture is silt loam or loam in the fine-earth fraction.

Some pedons have a C horizon that has hue of 10YR to 5Y, value of 5 or 6, and chroma of 2 to 6. Texture is silt loam or loam in the fine-earth fraction.

The bedrock is phyllite or slate that is fractured in the upper part.

Wonsqueak Series

The Wonsqueak series consists of very deep, very poorly drained soils that formed in a mantle of decomposed organic material over loamy mineral soil material. The soils are in depressions in glacial ground moraine, shallow till ridges, and glaciofluvial deposits. Slopes range from 0 to 1 percent.

Wonsqueak soils are adjacent to Biddeford, Bucksport, Gouldsboro, Kinsman, Naskeag, Waskish, Schoodic, and Sebago soils. Bucksport, Waskish, and Sebago soils are in similar landscape positions. Gouldsboro soils are higher in content of sulfur and salt and are on tidal marshes. Biddeford, Kinsman, Naskeag, and Schoodic are mineral soils and are in higher landscape positions.

Typical pedon of Wonsqueak muck in an area of Wonsqueak and Bucksport mucks in the town of Tremont, 2,000 feet northwest of Baldwin Corners:

Oa1—0 to 8 inches; very dark gray (5YR 3/1), broken face and rubbed, muck (sapric material); about 30 percent fiber, 5 percent rubbed; massive; slightly sticky; dominantly herbaceous fibers; about 5 percent mineral material; yellowish brown (10YR 5/4) sodium pyrophosphate test; moderately acid in 0.01M calcium chloride; clear smooth boundary.

Oa2—8 to 32 inches; black (5YR 2/1), broken face and rubbed, muck (sapric material); about 20 percent fiber, 5 percent rubbed; massive; slightly sticky; dominantly herbaceous fibers; 5 percent mineral material; dark brown (10YR 4/3) sodium pyrophosphate test; slightly acid in 0.01M calcium chloride; abrupt smooth boundary.

Cg—32 to 65 inches; gray (N 5/0) silt loam; massive; slightly sticky, slightly plastic; less than 5 percent gravel; neutral.

The thickness of the organic soil material and the depth to the mineral substratum range from 16 to 51 inches. The content of woody fragments ranges from 0 to 20 percent. The content of mineral material ranges from 0 to 20 percent. The fiber is typically of herbaceous origin, but the fibers in some layers are of woody origin. In some pedons, fibers from sphagnum moss are dominant in the surface tier and make up thin layers in the subsurface layer and bottom tier.

The surface tier has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. It is massive or has weak fine granular structure. Consistence is nonsticky or slightly sticky. The surface tier ranges from extremely acid to slightly acid in 0.01M calcium chloride.

The subsurface layer and bottom tiers have hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. The soils are typically sapric material, but some pedons have thin layers of fibric material with a total thickness of less than 5 inches or thin layers of hemic material with a total thickness of less than 10 inches. The subsurface layer and bottom tier are massive or have weak thin platy structure. Consistence is nonsticky or slightly sticky. Reaction ranges from very strongly acid to slightly acid in 0.01M calcium chloride.

The Cg horizon is neutral or has hue of 5YR to 5GY, value of 3 to 5, and chroma of 0 to 2. It is silt loam, fine sandy loam, or silty clay loam. Consistence is slightly sticky or sticky and nonplastic to plastic. Content of rock fragments ranges from 0 to 15 percent and is mainly gravel. Reaction ranges from strongly acid to neutral.

Formation of the Soils

This section describes the major processes of soil formation in the survey area.

Factors of Soil Formation

Soil is formed by the interaction of five major soil-forming factors: climate, parent material, plant and animal life, topography, and time. Each of these factors from place to place influences the soil-forming processes differently. In some places one factor dominates in the formation of a soil and determines most of its properties. The differing influence of each of the five factors cause the local variations in the soil in the survey area.

Climate

Climate influences the weathering process and vegetation, which in turn further modify the soil-forming process. Climatic data for the survey area are given in the section General Nature of the Survey Area.

Rainfall influences soil formation through erosion losses and solution losses. Solution losses are caused by leaching and chemical reaction, in which water is a necessary component. Many constituents are leached from the soil. These include, in varying amounts, the soluble salts and the basic ions of calcium, magnesium, potassium, and sodium, which were released by the weathering of minerals. In the coarse of a year, water percolating through the soil may remove, via solution, several tons of minerals per square mile. As a result of this leaching the soils in the survey area are mainly slightly acid to extremely acid.

Physical weathering in the form of alternate freezing and thawing takes place from fall to spring. This helps to granulate soil material, break rock fragments, and improve structure in soils that have been compacted by the use of heavy equipment.

The survey area is at a latitude just south of midpoint between the North Pole and the Equator. The soils, therefore, are more highly weathered and are deeper than those in polar regions. They are not, however, so highly weathered or deep as most soils in tropical latitudes, where climate commonly masks the influence of different parent material.

Parent Material

The parent material of the soils in the survey area and the inherent landscape features have resulted largely from the Wisconsin Glaciation. The five major kinds of parent material of soils in the survey area are glacial till, glaciofluvial deposits, glociomarine or glaciolacustrine sediments, organic material, and recent alluvium.

Soils that formed in friable glacial till, such as Hermon soils, show evidence of the gouging , scraping, and transportation action of the glacier that deposited this material across the landscape. Colonel, Dixfield, Marlow, and Brayton soils formed in dense, compact glacial till derived mainly from schist, phyllite, and granite. Colonel, Dixfield, and Marlow soils are on till ridges. Brayton soils are in depressions on these ridges.

Glaciofluvial deposits are stratified sandy, loamy, or gravelly material in deltas, outwash plains, kame terraces, kames, and eskers. This material was picked up by the glacier and then sorted and deposited by glacial meltwater. Adams and Colton soils formed dominantly in glaciofluvial deposits.

Glaciomarine and glaciolacustrine sediments are material deposited in quiet bodies of water. Buxton, Lamoine, and Scantic are soils formed in sediments of silt and clay.

Organic material accumulated in depressions that were ponded at one time and subsequently became filled with plant remains. Wonsqueak and Bucksport soils formed in highly decomposed plant material derived from mosses, grasses, and other herbaceous and woody plants. Wonsqueak soils are underlain by mineral material at a depth of less than 51 inches.

Alluvium is postglacial material deposited along streams and rivers. Charles soils formed in recent alluvium.

Plant and Animal Life

The presence of living plants and animals and the decaying remains of plants and animals in a mineral soil are among the features that distinguish the soil from its parent material. Plants generally supply the organic matter that gives color to the surface layer. In

poorly drained and very poorly drained areas, organic matter generally collects on the surface in thick, organic layers.

Decaying plants and animals also supply nutrients to the soil. Trees and other plants take up nutrients and store them in leaves, stems, and roots. When the trees and plants die, they are acted on by bacteria or fungi, and thus the nutrients are returned to the soil. Fungi produce some of the organic acids in soils such as Adams and Hermon soils, especially where the soils have not been plowed.

Earthworms, insects, rodents, and other animals that live in the soil help to mix the soil layers. In particular, earthworms help to aerate and granulate the soil. They also help to decompose organic matter.

Human activities also change the soil. The layers of soil are mixed through plowing. In some areas compact, impermeable layers have formed within the soil because of plowing or use of machinery. On some soils, accelerated erosion in cultivated areas has resulted in the loss of the original surface layer. Soils that have been limed and fertilized for long periods have become less acid. Where drainage systems have been installed, the soil has often become more aerated and warmer and the organic matter content in the surface layer has decreased.

Topography

The influence of topography on the soils can be seen by comparing soils where the parent material and the climate are the same, but where topography and drainage are different.

Brayton and Dixfield soils, for example, formed in compact glacial till. Brayton soils are poorly drained. They are in depressions and on lower slopes of ridges. Slopes mainly are concave. Dixfield soils are moderately well drained. They are on the crest and side slopes of ridges. Slopes mainly are slightly convex.

Time

The degree of development, or maturity, of a soil commonly reflects the length of time that parent material has been in place. In this survey area, the formation of most upland soils in their present state began about 13,500 years ago with the retreat of the last glacier.

Most soils on flood plains are continually being reworked and are considered immature. Their layers are not always well defined, there are only slight differences in their colors, and structure is weak. Charles soils are an example of soil on flood plains.

Some soils show evidence of change and maturity, such as the formation of a distinct dark reddish brown layer. This layer indicates the accumulation of organic matter and of iron and aluminum oxides over a period. Colton soils have such a layer.

Processes of Soil Formation

By Robert V. Rourke, senior soil scientist, University of Maine.

The soils of Hancock County have developed distinct horizons as a result of soil formation processes. The soils reflect the addition of organic matter; translocation of organic matter, iron, and aluminum; some weathering of primary minerals to clay-size particles; and the formation of soil structure.

In wooded areas there is an 0 (organic) horizon that is an accumulation of materials, such as, leaves, twigs, or other humified matter on the mineral soil surface. The amount and rate of organic accumulation relates to the type of vegetation and aspect, climate, and drainage. Excessively drained soils generally have a thinner organic horizon than do poorly drained or wetter soils.

When organic matter is incorporated into the mineral surface, the A horizon forms. An A horizon that has been destroyed by cultivation is called an Ap horizon.

The weathering process, important in the formation of horizons in the excessively drained to somewhat poorly drained soils of Hancock County, involves the movement of organic matter and iron and aluminium oxides from the A horizon to the B horizon. Leaching of soluble cations and the decomposition of organic matter in the A horizon create acidity which dissolves sesquioxides (iron and aluminum oxides), reduces iron, and forms soluble metal-organic complexes. These complexes, or soluble ions, are leached from the A horizon into the B horizon, where they are precipitated by physical, chemical, and biological processes (*3*). In some areas, a light grayish, leached E horizon forms over an accumulation of humus and sesquioxides in the B horizon. Adams, Colton, Dixfield, and Hermon soils, for example, all show evidence of the accumulation of humus and sesquioxides in the B horizon.

In some soils, such as Buxton soils, the B horizon is formed mainly by alteration of the original material rather than as a result of illuviation. The alteration can be caused by the weathering of the parent material, the oxidation of iron to give rusty colors, or the development of soil structure in place of the original rock or sediment structure.

In poorly drained soils or soils subject to wetness, gray subsoil horizons indicate the reduction of iron to the ferrous form. These grayish layers have been chemically reduced, and the iron has changed to a more soluble form while under anaerobic conditions. The iron was then leached from the soils, or moved to a different horizon, or concentrated and partly reoxidized.

Mottles in the soil result from the reduction of reoxidation. Grayish layers are common in such soils as poorly drained Brayton or Scantic soils.

Marlow and Dixfield soils have a compact substratum. Soil particles in the substratum are tightly packed, bulk density is high, and pore space is low. It is believed that the compact substratum was formed, in part, as a result of high pressure from glacial ice. The eluvial-illuvial sequence is above the dense layer and is frequently separated from the dense zone by a second area of eluviation. The compact substratum continues from a depth of about 20 to 24 inches to many feet. This dense zone is nearly impervious to plant roots and is slowly permeable to water.

Physiography and Geology

By D. Bruce Champeon, geologist, Natural Resources Conservation Service, Orono, Maine.

This section describes the physiography and geology in the survey area.

Physiography

Hancock County is in the New England physiographic province. (*4*) A line drawn approximately from the southern end of Verona Island to the northern end of Graham Lake and then eastward separates the county into two sections within the province. The New England Uplands section is to the north of the line, and the Seaboard Lowlands section is to the south.

The New England Uplands section is an area of moderate relief characterized by hills and low mountains with summit elevations from a few hundred feet to about 1,500 feet. Landscape drainage is well developed, and the topography is mature.

The Seaboard Lowlands section has generally low relief and elevations typically of less than 400 feet, except for occasional hills and low mountains such as Blue Hill (elev. 934 feet) and Mt. Cadillac (elev. 1,528 feet). The low landscapes are generally poorly drained. These elevation contrasts, and the many peninsulas typical of a drowned, glaciated coastline controlled by bedrock, give the Hancock County coastal area a scenic beauty.

Bedrock Geology

Several hundred million years of the earth's geologic history are represented by the many bedrock units in Hancock County. (*5*) Muddy, sandy, and limy sediments and chemical precipitates were deposited in shallow, subsiding ocean basins where they eventually formed sedimentary rocks such as pelite, various types of sandstone, and carbonate rocks. Other rocks were formed from lava, fragments, and ash of volcanic origin. All bedrock is probably within the age of 800 million to 300 million years old, or Pre-Cambrian to Carboniferous in age.

Exact ages of these rocks are difficult to determine because they were deformed, folded, and subjected to extreme temperatures and pressures associated with major movements of the earth's crust and episodes of mountain-building, the most intense of which was the Acadian Revolution of Early Devonian age. New rock types such as phyllite, schist, gneiss, quartzite, and amphibolite were formed during this process of change called metamorphism. Many features within the original sedimentary rocks, including animal fossils generally used for relative age determinations, were destroyed during metamorphism.

Most of the county's metamorphic rocks are in the formations of Bar Harbor, Bucksport, Castine, Ellsworth, Penobscot, and Vassalboro.

Molten rock from deep within the earth pushed and melted its way into the existing rocks where it cooled and solidified, forming large bodies of igneous rocks such as granite, quartz monzonite, and monzodiorite. All of these bodies, called plutons, have been determined through radiometric dating to be Devonian in age and were emplaced from 400 million to 350 million years ago. Most of the large boulders common on the surface throughout the county were derived from these plutons. Many of the higher summits, including Bald, Cadillac, Sabao, and Schoodic mountains, are in granitic plutons.

A major northeast-southwest-trending fault zone, known as the Norumbega Fault Zone, separates the rocks of the coastal Lithotectonic Block in the central and southern parts of the county from those of the Kearsarge-Central Maine Synclinorium in the extreme northern part of the county.

Surficial Geology

Although the slow but persistent process of erosion removed a significant amount of bedrock in the last 300 million years, the present landscape of Hancock County is a result mainly of the events of the Pleistocene epoch, which began about 1.6 million years ago. (*11*) Continental ice sheets advanced and retreated over the area probably as many as four times during that epoch, but evidence remains only of the last major glaciation, known as the Wisconsin stage.

The Laurentide ice sheet of Late Wisconsin age had spread southeast to its maximum extent on the continental shelf by about 18,000 years ago. As it advanced, the glacier ground up the rocks beneath it and deposited this newly eroded material under the ice sheet as a compact blanket of glacial till, a mixture of rock fragments ranging from clay-sized material to

boulders. Marlow and Dixfield soils are examples of soils developed in this dense basal till that is throughout the county.

The sheer weight of a massive sheet of ice thousands of feet thick depressed the land surface significantly, but the extent of the lowering is not known. The great quantities of moisture locked up in the glacial ice resulted in a general worldwide lowering of sea level by about 300 to 350 feet. Eventually the climate warmed and the rate of melting exceeded the rate of advance, resulting in a net retreat of the glacial margin. By about 13,900 years ago, the ice margin had receded to approximately the position of the county's outer islands.

As recession continued inland, small ridges known as moraines were sometimes formed from material deposited when the ice margin stabilized temporarily during the overall retreat. Some moraines were formed under water and were later wave-washed as the land emerged from the sea. They are most prevalent in the immediate vicinity of the coast. Hermon soils are an example of soils formed in those areas.

Lowlands and valleys were flooded by rising seas until about 11,200 years ago. Large quantities of clay- and silt-size sediment were deposited in these low areas, forming the familiar "blue clays" of the coastal zone and major river valleys. The most significant area of glaciomarine deposits occurs in the lowlands between the north end of Graham Lake and the northern end of Mt. Desert Island. Buxton and Lamoine soils are an example of soils developed on these glaciomarine sediments.

During glacial retreat, large amounts of meltwater carried and eventually deposited sand and gravel as kame terraces, kames, deltas, and eskers in contact with the remaining ice. Sand was sometimes deposited in front of the ice margin as outwash plains. Colton soils are an example of soils formed in ice-contact deposits; Adams soils formed in sandy material on outwash plains.

When meltwater quantities decreased, not all eroded material in the ice was able to be transported, but remained to form a thin, but firm, cover of till on some of the upland ridges and slopes. Monadnock soils formed in this ablation till.

As the ice melted and its weight was removed, the land began to rebound and emerge from the sea. Emergence began about 13,000 years ago and continued until about 10,000 years ago, when sea level was about 180 feet below its present level. Since that time, a slow submergence has brought the sea up to today's level. During the period of emergence, many lakes, ponds, and other wetlands were formed. Some still exist, but others have been filled with glaciolacustrine sediments or organic materials. The extent of these deposits is limited in Hancock County. Biddeford soils formed on the lake sediments, and Bucksport soils formed in the organic materials.

The process of erosion, sedimentation, and landscape alteration is an ongoing one. Soils continue to form in "modern" (postglacial) materials. Alluvial soils, such as Charles soils, formed in river and stream bottom deposits, and Gouldsboro soils formed in tidal marshes.

Economic Geology

Quarrying of the granitic plutons for building and decorative stone, monuments, and paving stone was once a major enterprise in coastal Hancock County, but has largely disappeared. (*6*) Over 50 separate quarries have been operated, the majority of them in the vicinity of Stonington, Swan's Island, Mt. Desert Island, and Franklin.

Copper, lead, manganese, molybdenum, silver, and zinc have all been mined in the past from both plutonic and volcanic rocks. The most recent mining operations have been at Harborside and Blue Hill.

The mining of ice-contact and outwash deposits for sand and gravel for use in the construction industry continues to be of minor economic importance. Several peat deposits have been identified and may be exploited for use as fuel or soil conditioners.

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Glossary

ABC soil. A soil having an A, a B, and a C horizon.

Ablation till. Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Area reclaim (in tables). An area difficult to reclaim after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Association, soil. A group of soils geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 40-inch profile or to a limiting layer is expressed as—

Very low	0 to 2.4
Low	2.4 to 3.2
Moderate	3.2 to 5.2
High	more than 5.2

Basal till. Compact glacial till deposited beneath the ice.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Bedding planes. Fine stratifications, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediments.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Broad-base terrace. A ridge-type terrace built to control erosion by diverting runoff along the contour at a nonscouring velocity. The terrace is 10 to 20 inches high and 15 to 30 feet wide and has gently sloping sides, a rounded crown, and a dish-shaped channel along the upper side. It may be nearly level or have a grade toward one or both ends.

California bearing ratio (CBR). The load-supporting capacity of a soil as compared to that of a standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or ""chain," of soils on a landscape that formed in similar kinds of parent material, but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100

grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil. A soil that is, by volume, more than 15 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches along the longest axis. A single piece is called a channer.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan is commonly hard when dry and plastic or stiff when wet.

Climax vegetation. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse fragments. If round, mineral or rock particles 2 millimeters to 25 centimeters (10 inches) in diameter; if flat, mineral or rock particles (flagstone) 15 to 38 centimeters (6 to 15 inches) long.

Coarse textured soil. Sand or loamy sand.

Cobblestone (or cobble). A rounded or partly rounded fragment of rock 3 to 10 inches (7.5 to 25 centimeters) in diameter.

Colluvium. Soil material, rock fragments, or both moved by creep, slide, or local wash and deposited at the base of steep slopes.

Compact substratum. The dense zone under the solum.

Complex slope. Irregular or variable slope. Planning or constructing terraces, diversions, and other water-control measures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils are somewhat similar in all areas.

Compressible (in tables). Excessive decrease in volume of soft soil under load.

Concretions. Grains, pellets, or nodules of various sizes, shapes, and colors consisting of concentrated compounds or cemented soil grains. The composition of most concretions is unlike that of the surrounding soil. Calcium carbonate and iron oxide are common compounds in concretions.

Congeliturbate. Soil material disturbed by frost action.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. The feel of the soil and the ease with which a lump can be crushed by the fingers. Terms commonly used to describe consistence are:

Loose.—Noncoherent when dry or moist; does not hold together in a mass.

Friable.—When moist, crushes easily under gentle pressure between thumb and forefinger and can be pressed together into a lump.

Firm.—When moist, crushes under moderate pressure between thumb and forefinger, but resistance is distinctly noticeable.

Plastic.—When wet, readily deformed by moderate pressure but can be pressed into a lump; will form a ""wire" when rolled between thumb and forefinger.

Sticky.—When wet, adheres to other material and tends to stretch somewhat and pull apart rather than to pull free from other material.

Hard.—When dry, moderately resistant to pressure; can be broken with difficulty between thumb and forefinger.

Soft.—When dry, breaks into powder or individual grains under very slight pressure.

Cemented.—Hard; little affected by moistening.

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosive. High risk of corrosion to uncoated steel or deterioration of concrete.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth to rock (in tables). Bedrock is too near the surface for the specified use.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of periods of saturation or partial saturation during soil formation, as opposed to altered drainage, which is commonly the result of artificial drainage or irrigation, but may be caused by the sudden deepening of channels or the blocking of drainage outlets. Seven classes of natural soil drainage are recognized:

Excessively drained.—Water is removed from the soil very rapidly. Excessively drained soils are commonly very coarse textured, rocky, or shallow. Some are steep. All are free of the mottling related to wetness.

Somewhat excessively drained.—Water is removed from the soil rapidly. Many somewhat excessively drained soils are sandy and rapidly pervious. Some are shallow. Some are so steep that much of the water they receive is lost as runoff. All are free of the mottling related to wetness.

Well drained.—Water is removed from the soil readily, but not rapidly. It is available to plants throughout most of the growing season, and wetness does not inhibit growth of roots for significant periods during most growing seasons. Well drained soils are commonly medium textured. They are mainly free of mottling.

Moderately well drained.—Water is removed from the soil somewhat slowly during some periods. Moderately well drained soils are wet for only a short time during the growing season, but periodically they are wet long enough that most mesophytic crops are affected. They commonly have a slowly pervious layer within or directly below the solum, or periodically receive high rainfall, or both.

Somewhat poorly drained.—Water is removed slowly enough that the soil is wet for significant periods during the growing season. Wetness markedly restricts the growth of mesophytic crops unless artificial drainage is provided. Somewhat poorly drained soils commonly have a slowly pervious layer, a high water table, additional water from seepage, nearly continuous rainfall, or a combination of these.

Poorly drained.—Water is removed so slowly that the soil is saturated periodically during the growing season or remains wet for long periods. Free water is commonly at or near the surface for long enough during the growing season that most mesophytic crops cannot be grown unless the soil is artificially drained. The soil is not continuously saturated in layers directly below plow depth. Poor drainage results from a high water table, a slowly pervious layer within the profile, seepage, nearly continuous rainfall, or a combination of these.

Very poorly drained.—Water is removed from the soil so slowly that free water remains at or on the surface during most of the growing season. Unless the soil is artificially drained, most mesophytic crops cannot be grown. Very poorly drained soils are commonly level or depressed and are frequently ponded. Yet, where rainfall is high and nearly continuous, they can have moderate or high slope gradients.

Drainage, surface. Runoff, or surface flow of water, from an area.

Drumlin. A low, smooth, elongated oval hill, mound, or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of the activities of man or other animals or of a catastrophe in nature, for example, fire, that exposes the surface.

Erosion pavement. A layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.

Esker (geology). A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.

Excess alkali (in tables). Excess exchangeable sodium in the soil. The resulting poor physical properties restrict the growth of plants.

Excess fines (in tables). Excess silt and clay in the soil. The soil is not a source of gravel or sand for construction purposes.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grains are grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fast intake (in tables). The rapid movement of water into the soil.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity.*

Fine textured soil. Sandy clay, silty clay, and clay.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist, 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Foot slope. The inclined surface at the base of a hill.

Forb. Any herbaceous plant not a grass or a sedge.

Fragile (in tables). A soil that is easily damaged by use or disturbance.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay, but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Glacial drift (geology). Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.

Glacial outwash (geology). Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.

Glacial till (geology). Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.

Glaciofluvial deposits (geology). Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors and mottles.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock up to 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that is 15 to 50 percent, by volume, rounded or angular rock fragments, not prominently flattened, up to 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water (geology). Water filling all the unblocked pores of underlying material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey

and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric and the more decomposed sapric material.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. The major horizons are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, any plowed or disturbed surface layer.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an O, A, or E horizon. The B horizon is in part a layer of transition from the overlying horizon to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) granular, prismatic, or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying horizon. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Hard, consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon but can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff-producing characteristics. The chief consideration is the inherent capacity of soil bare of vegetation to permit infiltration. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff. Soils are assigned to four groups. In group A are soils having a high infiltration rate when thoroughly wet and having a low runoff potential. They are mainly deep, well drained, and sandy or gravelly. In group D, at the other extreme, are soils having a very slow infiltration rate and thus a high runoff potential. They have a claypan or clay layer at or near the surface, have a permanent high water table, or are shallow over nearly impervious bedrock or other material. A soil is assigned to two hydrologic groups if part of the acreage is artificially drained and part is undrained.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant, but is a variable depending on the net irrigation application. The rate of water intake in inches per hour is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.
Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.
Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.
Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.
Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.
Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.
Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.
Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.
Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Kame (geology). An irregular, short ridge or hill of stratified glacial drift.

Lacustrine deposit (geology). Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Low strength. The soil is not strong enough to support loads.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, and fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, and silty clay loam.

Moraine (geology). An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Mottling generally indicates poor aeration and impeded drainage. Descriptive terms are as follows: abundance—*few, common,* and *many*; size—*fine, medium,* and *coarse*; and contrast—*faint, distinct,* and *prominent.* The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Muck. Dark colored, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color of 10YR hue, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value between 6.6 and 7.3. (See Reaction, soil.)

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

Outwash, glacial. Stratified sand and gravel produced by glaciers and carried, sorted, and deposited by glacial meltwater.

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it is generally low in relief.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan.*

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called ""a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The downward movement of water through the soil.

Percs slowly (in tables). The slow movement of water through the soil, adversely affecting the specified use.

Permafrost. Layers of soil, or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed continuously for a long time.

Permeability. The quality of the soil that enables water to move downward through the profile. Permeability is measured as the number of inches per hour that water moves downward through the saturated soil. Terms describing permeability are:

Very slow	less than 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management. For example, slope, stoniness, and thickness.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poor filter (in tables). Because of rapid permeability, the soil may not adequately filter effluent from a waste disposal system.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Poor outlets (in tables). Refers to areas where surface or subsurface drainage outlets are difficult or expensive to install.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Extremely acid	below 4.5
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Medium acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Mildly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Regolith. The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rill. A steep-sided channel resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery.

Rippable. Bedrock or hardpan can be excavated using a single-tooth ripping attachment mounted on a tractor with a 200-300 draw bar horsepower rating.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rooting depth (in tables). Shallow root zone. The soil is shallow over a layer that greatly restricts roots.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-size particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite (soil science). Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Seepage (in tables). The movement of water through the soil. Seepage adversely affects the specified use.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer or of the underlying material. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shrink-swell. The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75 feet.

Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks,

prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil is generally silty or clayey, is slippery when wet, and is low in productivity.

Slippage (in tables). Soil mass susceptible to movement downslope when loaded, excavated, or wet.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 3 percent
Gently sloping	3 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 45 percent
Very steep	45 percent and higher

Classes for complex slopes are as follows:

Nearly level	0 to 3 percent
Undulating	3 to 8 percent
Rolling	8 to 15 percent
Hilly	15 to 25 percent
Steep	25 to 45 percent
Very steep	45 percent and higher

Slope (in tables). Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.

Sloughed till. Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.

Slow intake (in tables). The slow movement of water into the soil.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Small stones (in tables). Rock fragments less than 3 inches (7.6 centimeters) in diameter. Small stones adversely affect the specified use of the soil.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the underlying material. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stripcropping. Growing crops in a systematic arrangement of strips or bands which provide vegetative barriers to wind and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Breaking up a compact subsoil by pulling a special chisel through the soil.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from about 4 to 10 inches (10 to 25 centimeters). Frequently designated as the ""plow layer," or the ""Ap horizon."

Surface soil. The A, E, AB, and EB horizons. It includes all subdivisions of these horizons.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior.

Terminal moraine. A belt of thick glacial drift that generally marks the termination of important glacial advances.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay.* The sand, loamy sand, and sandy loam classes may be further divided by specifying ""coarse," ""fine," or ""very fine."

Thin layer (in tables). Otherwise suitable soil material too thin for the specified use.

Till plain. An extensive flat to undulating area underlain by glacial till.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toe slope. The outermost inclined surface at the base of a hill; part of a foot slope.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, are in soils in extremely small amounts. They are essential to plant growth.

Unstable fill (in tables). Risk of caving or sloughing on banks of fill material.

Upland (geology). Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variant, soil. A soil having properties sufficiently different from those of other known soils to justify a new series name, but occurring in such a limited geographic area that creation of a new series is not justified.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve. A sedimentary layer of a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Water table, apparent. A thick zone of free water in the soil, indicated by the level at which water stands in an uncased borehole after adeqaute time is allowed for adjustment in the surrounding soil.

Water table, perched. A water table standing above an unsaturated zone in the soil.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Tables

Table 1.--Temperature and Precipitation

(Recorded in the period 1951-81 at Ellsworth, Maine)

Month	Temperature						Precipitation				
				2 years in 10 will have--				2 years in 10 will have--			
	Average daily maximum	Average daily minimum	Average daily	Maximum temperature higher than--	Minimum temperature lower than--	Average number of growing degree days*	Average	Less than--	More than--	Average number of days with 0.10 inch or more	Average snowfall
	oF	oF	oF	oF	oF	Units	In	In	In		In
January-----	29.9	10.6	20.3	49	-18	0	4.06	2.11	5.77	8	15.7
February----	31.5	11.8	21.4	51	-16	0	3.81	2.40	5.08	7	19.0
March-------	40.4	23.8	31.7	59	-3	12	3.70	1.94	5.23	8	14.5
April-------	51.3	31.9	41.6	71	10	85	3.89	2.35	5.27	8	3.4
May---------	63.3	41.0	52.6	86	28	391	3.47	1.94	4.82	8	.3
June--------	72.8	51.0	61.9	92	36	657	2.89	1.48	4.11	7	.0
July--------	77.7	57.0	67.4	93	49	849	3.29	1.26	4.99	7	.0
August------	76.8	56.1	66.5	92	42	822	2.84	1.52	3.89	6	.0
September---	68.2	48.1	58.2	85	31	546	1.92	2.34	5.33	6	.0
October-----	57.7	39.3	40.5	77	22	268	4.20	2.67	5.58	7	.3
November----	45.7	30.3	38.0	64	12	60	5.21	3.21	7.80	9	2.4
December----	33.5	16.5	25.0	54	-12	11	5.03	2.99	6.85	9	14.0
Yearly:											
Average---	54.1	34.7	44.4	---	---	---	---	---	---	---	---
Extreme---	---	---	---	95	-21	---	---	---	---	---	---
Total-----	---	---	---	---	---	3,702	46.31	38.36	51.00	90	69.6

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1951-81 at Ellsworth, Maine)

Probability	Temperature		
	24 oF or lower	28 oF or lower	32 oF or lower
Last freezing temperature in spring:			
1 year in 10 later than--	Apr. 23	May 7	May 23
2 years in 10 later than--	Apr. 20	May 2	May 18
5 years in 10 later than--	Apr. 13	Apr. 24	May 10
First freezing temperature in fall:			
1 year in 10 earlier than--	Oct. 21	Oct. 5	Sep. 21
2 years in 10 earlier than--	Oct. 26	Oct. 9	Sep. 26
5 years in 10 earlier than--	Nov. 4	Oct. 19	Oct. 5

TABLE 3.--GROWING SEASON

(Recorded in the period 1951-81 at Ellsworth, Maine)

Probability	Daily minimum temperature during growing season		
	Higher than 24 oF	Higher than 28 oF	Higher than 32 oF
	Days	Days	Days
9 years in 10	184	156	112
8 years in 10	191	163	137
5 years in 10	204	177	149
2 years in 10	219	191	163
1 year in 10	228	208	169

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AdB	Adams loamy sand, 0 to 8 percent slopes	1,445	0.2
AdC	Adams loamy sand, 8 to 15 percent slopes	939	0.1
Bd	Biddeford muck	2,039	0.2
BfB	Brayton fine sandy loam, 0 to 8 percent slopes	769	0.1
BgB	Brayton fine sandy loam, 0 to 8 percent slopes, very stony	12,536	1.4
BhB	Brayton fine sandy loam, 0 to 8 percent slopes, rubbly	1,400	0.2
BSB	Brayton-Colonel association, gently sloping, very stony	34,360	3.9
BTB	Brayton-Colonel association, gently sloping, rubbly	7,534	0.9
BwC	Buxton silt loam, 8 to 15 percent slopes	5,464	0.6
BwD	Buxton silt loam, 15 to 30 percent slopes, eroded	737	0.1
Ch	Charles silt loam	1,312	0.1
CoB	Colton gravelly sandy loam, 0 to 8 percent slopes	5,004	0.6
CoC	Colton gravelly sandy loam, 8 to 15 percent slopes	2,678	0.3
CoE	Colton gravelly sandy loam, 15 to 45 percent slopes	1,525	0.2
CRE	Colton-Adams association, steep	535	0.1
CSC	Colton-Adams-Sheepscot association, strongly sloping	8,329	0.9
DaB	Dixfield fine sandy loam, 3 to 8 percent slopes	2,447	0.3
DaC	Dixfield fine sandy loam, 8 to 15 percent slopes	1,693	0.2
DbC	Dixfield fine sandy loam, 8 to 15 percent slopes, very stony	6,682	0.8
DsB	Dixfield-Colonel complex, 3 to 8 percent slopes	9,553	1.1
DtB	Dixfield-Colonel complex, 3 to 8 percent slopes, very stony	26,928	3.1
DWB	Dixfield-Colonel-Tunbridge complex, gently sloping, very stony	5,684	0.6
Go	Gouldsboro silt loam	904	0.1
Gt	Gouldsboro-Beaches complex	482	0.1
HcC	Hermon-Colton-Rock outcrop complex, 3 to 15 percent slopes, very stony	4,499	0.5
HmB	Hermon-Monadnock complex, 3 to 8 percent slopes	1,584	0.2
HmC	Hermon-Monadnock complex, 8 to 15 percent slopes	1,062	0.1
HtB	Hermon-Monadnock complex, 3 to 8 percent slopes, very stony	4,367	0.5
HtC	Hermon-Monadnock complex, 8 to 15 percent slopes, very stony	7,378	0.8
HtE	Hermon-Monadnock complex, 15 to 45 percent slopes, very stony	2,138	0.2
HVC	Hermon-Monadnock-Dixfield complex, strongly sloping, very stony	26,771	3.0
HVE	Hermon-Monadnock-Dixfield complex, very hilly, very stony	1,181	0.1
Kn	Kinsman loamy sand	2,188	0.2
KW	Kinsman-Wonsqueak association	2,850	0.3
LaB	Lamoine silt loam, 3 to 8 percent slopes	24,179	2.7
LbB	Lamoine-Scantic complex, 0 to 8 percent slopes	4,783	0.5
LCB	Lamoine-Scantic-Buxton association, gently sloping	23,867	2.7
LgB	Lyman-Brayton complex, 0 to 15 percent slopes, very stony	936	0.1
LHC	Lyman-Brayton-Schoodic complex, rolling, very stony	3,684	0.4
LsE	Lyman-Schoodic complex, 15 to 45 percent slopes, very stony	8,739	1.0
LTE	Lyman-Schoodic-Rock outcrop complex, very hilly, very stony	11,103	1.3
LuC	Lyman-Tunbridge complex, 0 to 15 percent slopes, very stony	32,608	3.7
LWC	Lyman-Tunbridge-Schoodic complex, rolling, very stony	27,056	3.1
MaC	Marlow fine sandy loam, 8 to 15 percent slopes	2,777	0.3
MaD	Marlow fine sandy loam, 15 to 25 percent slopes	380	*
MbC	Marlow fine sandy loam, 8 to 15 percent slopes, very stony	7,325	0.8
MbE	Marlow fine sandy loam, 15 to 45 percent slopes, very stony	3,344	0.4
McC	Marlow fine sandy loam, 3 to 15 percent slopes, extremely bouldery	610	0.1
McE	Marlow fine sandy loam, 15 to 45 percent slopes, extremely bouldery	253	*
MDC	Marlow-Dixfield association, strongly sloping, very stony	46,677	5.3
MDE	Marlow-Dixfield association, steep, very stony	8,834	1.0
MGC	Marlow-Dixfield association, strongly sloping, extremely bouldery	4,372	0.5
MGE	Marlow-Dixfield association, steep, extremely bouldery	3,420	0.4
MhC	Monadnock-Hermon complex, 3 to 15 percent slopes, extremely bouldery	5,466	0.6
MhE	Monadnock-Hermon complex, 15 to 45 percent slopes, extremely bouldery	1,769	0.2
MXC	Monadnock-Hermon-Dixfield complex, rolling, extremely bouldery	18,492	2.1
MXE	Monadnock-Hermon-Dixfield complex, very hilly, extremely bouldery	5,762	0.7
NaB	Naskeag-Schoodic complex, 0 to 8 percent slopes, very stony	12,460	1.4
NBB	Naskeag-Schoodic-Lyman complex, undulating, very stony	9,692	1.1
NcB	Nicholville very fine sandy loam, 3 to 8 percent slopes	2,480	0.3
NcC	Nicholville very fine sandy loam, 8 to 15 percent slopes	551	0.1
Ps	Pits, gravel and sand	1,333	0.2
Sa	Scantic silt loam	19,292	2.2
SB	Scantic-Biddeford association	13,247	1.5

See footnote at end of table.

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
ScB	Scantic-Lamoine complex, 0 to 8 percent slopes, very stony	8,622	1.0
SEB	Scantic-Lamoine-Dixfield complex, gently sloping, very stony	19,418	2.2
SfC	Schoodic-Rock outcrop complex, 0 to 15 percent slopes	19,273	2.2
SfE	Schoodic-Rock outcrop complex, 15 to 65 percent slopes	9,075	1.0
SGE	Schoodic-Rock outcrop-Lyman complex, very steep	13,310	1.5
SKC	Schoodic-Rock outcrop-Naskeag complex, rolling	10,901	1.2
SmB	Sheepscot sandy loam, 0 to 8 percent slopes	4,072	0.5
SoB	Sheepscot sandy loam, 3 to 8 percent slopes, very stony	357	*
SoC	Sheepscot sandy loam, 8 to 15 percent slopes, very stony	624	0.1
SrB	Sheepscot-Rock outcrop complex, 0 to 8 percent slopes	1,194	0.1
ThC	Thorndike-Winnecook complex, 0 to 15 percent slopes, very stony	309	*
TuB	Tunbridge-Lyman complex, 3 to 8 percent slopes	11,196	1.3
TuC	Tunbridge-Lyman complex, 8 to 15 percent slopes	3,935	0.4
TWC	Tunbridge-Lyman-Marlow complex, strongly sloping	4,276	0.5
Ud	Udorthents-Urban land complex	1,874	0.2
WA	Waskish and Sebago soils	3,762	0.4
WkC	Winnecook-Thorndike complex, 3 to 12 percent slopes	188	*
Wo	Wonsqueak muck, flooded	3,737	0.4
Ws	Wonsqueak and Bucksport mucks	11,824	1.3
WT	Wonsqueak, Bucksport and Sebago soils	7,627	0.9
W	Water	242,388	27.4
	Total	881,668	100.0

* Less than 0.1 percent.

TABLE 5.--PRIME FARMLAND

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
AdB	Adams loamy sand, 0 to 8 percent slopes (where irrigated)
CoB	Colton gravelly sandy loam, 0 to 8 percent slopes (where irrigated)
CSC	Colton-Adams-Sheepscot association, strongly sloping (where irrigated)*
DaB	Dixfield fine sandy loam, 3 to 8 percent slopes
DsB	Dixfield-Colonel complex, 3 to 8 percent slopes (where the Colonel soil is irrigated)
HmB	Hermon-Monadnock complex, 3 to 8 percent slopes (where the Hermon soil is irrigated)
LaB	Lamoine silt loam, 3 to 8 percent slopes (where drained)
LbB	Lamoine-Scantic complex, 0 to 8 percent slopes (where the Lamoine soil is drained)
LCB	Lamoine-Scantic-Buxton association, gently sloping (where the Lamoine soil is drained)
SmB	Sheepscot sandy loam, 0 to 8 percent slopes (where irrigated)
TuB	Tunbridge-Lyman complex, 3 to 8 percent slopes (where the Lyman soil is irrigated)
WkC	Winnecook-Thorndike complex, 3 to 12 percent slopes (where the Thorndike soil is irrigated)

* Steeper areas within these map units are not prime farmland.

Table 6.--Land Capability Classes and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Soil name and map symbol	Land capability	Blueberries	Grass legume hay	Grass hay	Pasture
		Lbs	Tons	Tons	AUM*
AdB---------- Adams	IIIs	1,000	4.0	2.5	4.5
AdC---------- Adams	IVe	1,000	4.0	2.5	4.5
Bd---------- Biddeford	Vw	---	---	---	---
BfB---------- Brayton	IVw	---	---	---	3.4
BgB---------- Brayton	VIIs	---	---	---	2.7
BhB---------- Brayton	VIIs	---	---	---	---
BSB**:					
Brayton----------	VIIs	---	---	---	---
Colonel----------	VIs	---	---	---	---
BTB**:					
Brayton----------	VIIs	---	---	---	---
Colonel----------	VIIs	---	---	---	---
BwC---------- Buxton	IIIe	---	3.5	4.5	6.5
BwD---------- Buxton	IVe	---	3.0	4.0	5.5
Ch---------- Charles	IVw	---	2.5	3.0	4.8
CoB---------- Colton	IIIs	1,000	2.0	2.0	5.0
CoC---------- Colton	IVe	1,000	2.0	2.0	5.0
CoE---------- Colton	VIIe	800	---	---	---
CRE**:					
Colton----------	VIIe	---	---	---	---
Adams----------	VIIe	---	---	---	---
CSC**:					
Colton----------	IIIs	---	---	---	---
Adams----------	IIIs	---	---	---	---
Sheepscot----------	IIe	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability Classes and Yields per Acre of Crops and Pasture--Continued

Soil name and map symbol	Land capability	Blueberries	Grass legume hay	Grass hay	Pasture
		Lbs	Tons	Tons	AUM*
DaB, DaC Dixfield	IIIe	2,000	4.0	4.0	8.0
DbC Dixfield	VIs	2,000	---	---	---
DsB**:					
Dixfield	IIw	2,000	4.0	4.0	8.0
Colonel	IIIw	1,000	3.0	3.0	5.5
DtB**:					
Dixfield	VIs	2,000	---	---	---
Colonel	VIs	1,000	---	---	---
DWB**:					
Dixfield	VIs	---	---	---	---
Colonel	VIs	---	---	---	---
Tunbridge	VIs	---	---	---	---
Go Gouldsboro	VIIIw	---	---	---	---
Gt**:					
Gouldsboro	VIIIw	---	---	---	---
Beaches	VIIIw	---	---	---	---
HcC**:					
Hermon	VIs	---	---	---	---
Colton	IVe	---	---	---	---
Rock outcrop	VIIIs	---	---	---	---
HmB**:					
Hermon	IIs	1,500	3.0	3.0	5.7
Monadnock	IIe	1,500	4.0	3.5	6.6
HmC**:					
Hermon	IIIe	1,500	3.0	3.0	5.7
Monadnock	IIIe	1,500	3.5	3.0	5.7
HtB**, HtC**:					
Hermon	VIs	1,500	---	---	---
Monadnock	VIe	1,500	---	---	---
HtE**:					
Hermon	VIIs	1,200	---	---	---
Monadnock	VIIs	1,200	---	---	---
HVC**:					
Hermon	VIs	---	---	---	---
Monadnock	VIs	---	---	---	---
Dixfield	VIs	---	---	---	---
HVE**:					
Hermon	VIIs	---	---	---	---
Monadnock	VIIs	---	---	---	---
Dixfield	VIs	---	---	---	---
Kn Kinsman	IVw	---	---	---	4.5

See footnote at end of table.

Table 6.--Land Capability Classes and Yields per Acre of Crops and Pasture--Continued

Soil name and map symbol	Land capability	Blueberries	Grass legume hay	Grass hay	Pasture
		Lbs	Tons	Tons	AUM*
KW**:					
Kinsman	IVw	---	---	---	---
Wonsqueak	VIIw	---	---	---	---
LaB	IIIw	---	3.5	4.0	6.5
Lamoine					
LbB**:					
Lamoine	IIIw	---	3.5	4.0	6.5
Scantic	IVw	---	---	3.0	5.0
LcB**:					
Lamoine	IIIw	---	---	---	---
Scantic	IVw	---	---	---	---
Buxton	IIIe	---	---	---	---
LgB**:					
Lyman	VIs	800	---	---	---
Brayton	VIIs	---	---	---	---
LhC**:					
Lyman	VIs	---	---	---	---
Brayton	VIIs	---	---	---	---
Schoodic	VIIs	---	---	---	---
LsE**:					
Lyman	VIIs	500	---	---	---
Schoodic	VIIe	---	---	---	---
LtE**:					
Lyman	VIIs	---	---	---	---
Schoodic	VIIs	---	---	---	---
Rock outcrop	VIIIs	---	---	---	---
LuC**:					
Lyman	VIs	800	---	---	---
Tunbridge	VIe	1,200	---	---	---
LwC**:					
Lyman	VIs	---	---	---	---
Tunbridge	VIs	---	---	---	---
Schoodic	VIIs	---	---	---	---
MaC	IIIe	2,000	4.0	4.0	7.8
Marlow					
MaD	IVe	1,800	3.5	3.5	6.8
Marlow					
MbC	VIs	2,000	---	---	---
Marlow					
MbE, McC, McE	VIIs	1,800	---	---	---
Marlow					

See footnote at end of table.

Table 6.--Land Capability Classes and Yields per Acre of Crops and Pasture--Continued

Soil name and map symbol	Land capability	Blueberries	Grass legume hay	Grass hay	Pasture
		Lbs	Tons	Tons	AUM*
MDC**:					
Marlow	VIs	---	---	---	---
Dixfield	VIs	---	---	---	---
MDE**:					
Marlow	VIIs	---	---	---	---
Dixfield	VIs	---	---	---	---
MGC**, MGE**:					
Marlow	VIIs	---	---	---	---
Dixfield	VIIs	---	---	---	---
MhC**, MhE**:					
Monadnock	VIIs	1,200	---	---	---
Hermon	VIIs	1,200	---	---	---
MXC**, MXE**:					
Monadnock	VIIs	---	---	---	---
Hermon	VIIs	---	---	---	---
Dixfield	VIIs	---	---	---	---
NaB**:					
Naskeag	VIIs	---	---	---	---
Schoodic	VIIe	---	---	---	---
NBB**:					
Naskeag	VIIs	---	---	---	---
Schoodic	VIIs	---	---	---	---
Lyman	VIs	---	---	---	---
NcB	IIe	2,000	4.0	3.5	7.5
Nicholville					
NcC	IIIe	2,000	3.5	3.5	6.5
Nicholville					
Ps**	VIIIs	---	---	---	---
Pits					
Sa	IVw	---	---	3.0	5.0
Scantic					
SB**:					
Scantic	IVw	---	---	---	---
Biddeford	Vw	---	---	---	---
SdB**:					
Hermon	VIIs	---	---	---	---
Monadnock	VIs	---	---	---	---
SEB**:					
Scantic	VIIs	---	---	---	---
Lamoine	VIs	---	---	---	---
Dixfield	VIs	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability Classes and Yields per Acre of Crops and Pasture--Continued

Soil name and map symbol	Land capability	Blueberries	Grass legume hay	Grass hay	Pasture
		Lbs	Tons	Tons	AUM*
SfC**, SfE**:					
Schoodic	VIIs	---	---	---	---
Rock outcrop	VIIIs	---	---	---	---
SGE**:					
Schoodic	VIIs	---	---	---	---
Rock outcrop	VIIIs	---	---	---	---
Lyman	VIIs	---	---	---	---
SkC**:					
Schoodic	VIIs	---	---	---	---
Rock outcrop	VIIIs	---	---	---	---
Naskeag	VIIs	---	---	---	---
SmB	IIe	1,000	3.4	4.0	6.5
Sheepscot					
SoB, SoC	VIs	1,000	---	---	---
Sheepscot					
SrB**:					
Sheepscot	IIe	1,000	3.4	4.0	6.5
Rock outcrop	VIIIs	---	---	---	---
ThC**:					
Thorndike	VIs	---	---	---	---
Winnecook	VIe	---	---	---	---
TuB**:					
Tunbridge	IIe	1,200	3.5	3.5	6.3
Lyman	IIIe	800	2.5	2.0	6.1
TuC**:					
Tunbridge	IIIe	1,200	3.5	3.5	6.1
Lyman	IVe	800	2.5	2.0	5.7
TwC**:					
Tunbridge	---	---	---	---	---
Lyman	---	---	---	---	---
Marlow	---	---	---	---	---
Ud**:					
Udorthents	---	---	---	---	---
Urban land	VIIIs	---	---	---	---
WA**:					
Waskish	VIIIw	---	---	---	---
Sebago	VIIIw	---	---	---	---
WkC**:					
Winnecook	IIIe	---	3.5	3.0	6.0
Thorndike	IIIe	---	3.0	---	5.7
Wo	VIIw	---	---	---	---
Wonsqueak					
Ws**:					
Wonsqueak	VIIw	---	---	---	---
Bucksport	VIIw	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability Classes and Yields per Acre of Crops and Pasture--Continued

Soil name and map symbol	Land capability	Blueberries	Grass legume hay	Grass hay	Pasture
		Lbs	Tons	Tons	AUM*
WT**:					
Wonsqueak	VIIw	---	---	---	---
Bucksport	VIIw	---	---	---	---
Sebago	VIIIw	---	---	---	---

* Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

** See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 7.--Woodland Management and Productivity

(Only the soils suitable for production of commercial trees are listed. Absence of an entry indicates that information was not available)

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
AdB, AdC---------- Adams	8S	Slight	Slight	Severe	Slight	Slight	Eastern white pine--	66	8	Eastern white pine, red pine, European larch.
							Sugar maple----------	61	3	
							Red maple----------	---	--	
							American beech------	---	--	
							Eastern hemlock-----	---	8	
Bd---------- Biddeford	6W	Slight	Severe	Severe	Severe	Severe	Eastern white pine--	54	6	
							Balsam fir----------	40	5	
							Red maple----------	48	2	
							White spruce--------	49	7	
							Tamarack-----------	---	--	
							Black spruce--------	---	--	
BfB, BgB, BhB------ Brayton	8W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine--	67	8	Red spruce, black spruce, tamarack.
							Red spruce----------	50	8	
							White spruce--------	48	7	
							Black spruce--------	---	--	
							Balsam fir----------	68	9	
							Red maple----------	65	3	
							Paper birch---------	60	4	
							Tamarack-----------	60	4	
BSB**: Brayton----------	8W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine--	67	8	Red spruce, black spruce, tamarack.
							Red spruce----------	50	8	
							White spruce--------	48	7	
							Black spruce--------	---	--	
							Balsam fir----------	68	9	
							Red maple----------	65	3	
							Paper birch---------	60	4	
							Tamarack-----------	60	4	
Colonel----------	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine--	64	8	Eastern white pine, black spruce, European larch, tamarack.
							Red maple----------	64	3	
							Paper birch---------	55	4	
							Red spruce----------	45	7	
							Balsam fir----------	54	7	
BTB**: Brayton----------	8W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine--	67	8	Red spruce, black spruce, tamarack.
							Red spruce----------	50	8	
							White spruce--------	48	7	
							Black spruce--------	---	--	
							Balsam fir----------	68	9	
							Red maple----------	65	3	
							Paper birch---------	60	4	
							Tamarack-----------	60	4	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
BTB**:										
Colonel	8X	Slight	Moderate	Moderate	Severe	Severe	Eastern white pine	64	8	Eastern white pine, black spruce, European larch, tamarack.
							Red maple	64	3	
							Paper birch	55	4	
							Red spruce	45	7	
							Balsam fir	54	7	
BwC	8D	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	62	8	Eastern white pine, white spruce.
Buxton							Balsam fir	55	8	
							Paper birch	57	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Northern red oak	60	3	
BwD	8R	Moderate	Moderate	Slight	Moderate	Moderate	Eastern white pine	62	8	Eastern white pine, white spruce.
Buxton							Balsam fir	55	8	
							Paper birch	57	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Northern red oak	60	3	
Ch	7W	Slight	Severe	Moderate	Moderate	Severe	Eastern white pine	60	7	Red spruce, black spruce, European larch, tamarack.
Charles							Balsam fir	50	7	
							Red spruce	40	6	
							Black spruce	50	3	
							Tamarack	---	--	
							Red maple	55	2	
CoB, CoC	7S	Slight	Slight	Severe	Slight	Slight	Eastern white pine	58	7	Eastern white pine, red pine, European larch.
Colton							Sugar maple	61	3	
							Red spruce	39	6	
							Red pine	52	6	
							White spruce	52	8	
CoE	7S	Slight	Moderate	Severe	Slight	Slight	Eastern white pine	58	7	Eastern white pine, red pine, European larch.
Colton							Sugar maple	61	3	
							Red spruce	39	6	
							Red pine	52	6	
							White spruce	52	8	
CRE**:										
Colton	7S	Slight	Moderate	Severe	Slight	Slight	Eastern white pine	58	7	Eastern white pine, red pine, European larch.
							Sugar maple	61	3	
							Red spruce	39	6	
							Red pine	52	6	
							White spruce	52	8	
Adams	8S	Slight	Moderate	Severe	Slight	Slight	Eastern white pine	66	8	Eastern white pine, red pine, European larch.
							Sugar maple	61	3	
							Red maple	---	--	
							American beech	---	--	
							Eastern hemlock	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
CSC**:										
Colton	7S	Slight	Slight	Severe	Slight	Slight	Eastern white pine	58	7	Eastern white pine, red pine, European larch.
							Sugar maple	61	3	
							Red spruce	39	6	
							Red pine	52	6	
							White spruce	52	8	
Adams	8S	Slight	Slight	Severe	Slight	Slight	Eastern white pine	66	8	Eastern white pine, red pine, European larch.
							Sugar maple	61	3	
							Red maple	---	--	
							American beech	---	--	
							Eastern hemlock	66	8	
Sheepscot	8A	Slight	Slight	Moderate	Slight	Moderate	Eastern white pine	68	8	Eastern white pine, white spruce, European larch, tamarack.
							White spruce	55	9	
							Red spruce	45	7	
							Balsam fir	55	8	
							Eastern hemlock	---	--	
							American beech	55	2	
							Paper birch	55	4	
							Sugar maple	55	2	
							Yellow birch	55	2	
							Northern whitecedar	55	6	
DaB, DaC Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Red spruce	54	8	
							White spruce	64	10	
							Balsam fir	64	9	
DbC Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
DsB**:										
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Red spruce	54	8	
							White spruce	64	10	
							Balsam fir	64	9	
Colonel	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	64	8	Eastern white pine, black spruce, European larch, tamarack.
							Red maple	64	3	
							Paper birch	55	4	
							Red spruce	45	7	
							Balsam fir	54	7	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
DtB**:										
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
Colonel	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	64	8	Eastern white pine, black spruce, European larch, tamarack.
							Red maple	64	3	
							Paper birch	55	4	
							Red spruce	45	7	
							Balsam fir	54	7	
DWB**:										
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
Colonel	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	64	8	Eastern white pine, black spruce, European larch, tamarack.
							Red maple	64	3	
							Paper birch	55	4	
							Red spruce	45	7	
							Balsam fir	54	7	
Tunbridge	8A	Slight	Slight	Slight	Moderate	Slight	Eastern white pine	65	8	Eastern white pine, red spruce, white spruce, balsam fir.
							Sugar maple	60	3	
							Northen red oak	50	6	
							Red spruce	50	8	
							Yellow birch	55	2	
							Paper birch	---	--	
							White spruce	55	9	
							Balsam fir	---	--	
							White ash	65	3	
HcC**:										
Hermon	7S	Slight	Slight	Moderate	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
Colton	7S	Slight	Slight	Severe	Slight	Slight	Eastern white pine	58	7	Eastern white pine, red pine, European larch.
							Sugar maple	61	3	
							Red spruce	39	6	
							Red pine	52	6	
							White spruce	52	8	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
Rock outcrop.										
HmB**, HmC**, HtB**, HtC**:										
Hermon	7S	Slight	Slight	Moderate	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
Monadnock	8A	Slight	Slight	Slight	Slight	Moderate	Eastern white pine	63	8	Eastern white pine, red pine, white spruce.
							Northern red oak	55	3	
							Red pine	60	7	
							White spruce	55	9	
HtE**:										
Hermon	7R	Moderate	Moderate	Moderate	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
Monadnock	8R	Moderate	Moderate	Slight	Slight	Moderate	Eastern white pine	63	8	Eastern white pine, red pine, white spruce.
							Northern red oak	55	3	
							Red pine	60	7	
							White spruce	55	9	
HVC**:										
Hermon	7S	Slight	Slight	Moderate	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
Monadnock	8A	Slight	Slight	Slight	Slight	Moderate	Eastern white pine	63	8	Eastern white pine, red pine, white spruce.
							Northern red oak	55	3	
							Red pine	60	7	
							White spruce	55	9	
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
HVE**:										
Hermon	7R	Moderate	Moderate	Moderate	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
HVE**:										
Monadnock	8R	Moderate	Moderate	Slight	Slight	Moderate	Eastern white pine	63	8	Eastern white pine, red pine, white spruce.
							Northern red oak	55	3	
							Red pine	60	7	
							White spruce	55	9	
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
Kn Kinsman	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	56	7	Norway spruce, eastern white pine.
							White spruce	50	8	
							Red maple	60	3	
KW**:										
Kinsman	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	56	7	Norway spruce, eastern white pine.
							White spruce	50	8	
							Red maple	60	3	
Wonsqueak	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	20	2	
							Tamarack	---	--	
							Northern whitecedar	---	--	
							Balsam fir	---	--	
							Balsam poplar	---	--	
							Quaking aspen	---	--	
							Red maple	---	--	
LaB Lamoine	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	65	8	Eastern white pine, northern whitecedar, black spruce.
							Balsam fir	55	8	
							Paper birch	58	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Red spruce	45	7	
							Red maple	58	3	
							Yellow birch	50	2	
							Sugar maple	50	2	
							Gray birch	---	--	
							Quaking aspen	---	--	
							Bigtooth aspen	---	--	
LbB**:										
Lamoine	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	65	8	Eastern white pine, northern whitecedar, black spruce.
							Balsam fir	55	8	
							Paper birch	58	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Red spruce	45	7	
							Red maple	58	3	
							Yellow birch	50	2	
							Sugar maple	50	2	
							Gray birch	---	--	
							Quaking aspen	---	--	
							Bigtooth aspen	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
LbB**:										
Scantic	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	58	7	Eastern white pine, white spruce, balsam fir, northern whitecedar, tamarack, black spruce, red spruce.
							White spruce	60	10	
							Balsam fir	60	8	
							White ash	67	2	
							Red maple	55	2	
LCB**:										
Lamoine	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	65	8	Eastern white pine, northern whitecedar, black spruce.
							Balsam fir	55	8	
							Paper birch	58	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Red spruce	45	7	
							Red maple	58	3	
							Yellow birch	50	2	
							Sugar maple	50	2	
							Gray birch	---	--	
							Quaking aspen	---	--	
							Bigtooth aspen	---	--	
Scantic	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	58	7	Eastern white pine, white spruce, balsam fir, northern whitecedar, tamarack, black spruce, red spruce.
							White spruce	60	10	
							Balsam fir	60	8	
							White ash	67	2	
							Red maple	55	2	
Buxton	8D	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	62	8	Eastern white pine, white spruce.
							Balsam fir	55	8	
							Paper birch	57	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Northern red oak	60	3	
LgB**:										
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	60	8	
							Red spruce	40	6	
Brayton	8W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	67	8	Red spruce, black spruce, tamarack.
							Red spruce	50	8	
							White spruce	48	7	
							Black spruce	---	--	
							Balsam fir	68	9	
							Red maple	65	3	
							Paper birch	60	4	
							Tamarack	60	4	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
LHC**:										
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	68	8	
							Red spruce	40	6	
Brayton	8W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	67	8	Red spruce, black spruce, tamarack.
							Red spruce	50	8	
							White spruce	48	7	
							Black spruce	---	--	
							Balsam fir	68	9	
							Red maple	65	3	
							Paper birch	60	4	
							Tamarack	60	4	
Schoodic	5D	Slight	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
LsE**:										
Lyman	7D	Moderate	Moderate	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	60	8	
							Red spruce	40	6	
Schoodic	5D	Moderate	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
LTE**:										
Lyman	7D	Moderate	Moderate	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	60	8	
							Red spruce	40	6	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
LTE**:										
Schoodic	5D	Moderate	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
Rock outcrop.										
LuC**:										
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	60	8	
							Red spruce	40	6	
Tunbridge	8A	Slight	Slight	Slight	Moderate	Slight	Eastern white pine	68	8	Eastern white pine, red spruce, white spruce, balsam fir.
							Sugar maple	60	3	
							Northern red oak	---	---	
							Red spruce	50	8	
							Yellow birch	55	2	
							Paper birch	---	--	
							White spruce	55	9	
							Balsam fir	---	--	
							White ash	65	3	
LWC**:										
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	60	8	
							Red spruce	40	6	
Tunbridge	8A	Slight	Slight	Slight	Moderate	Slight	Eastern white pine	68	8	Eastern white pine, red spruce, white spruce, balsam fir.
							Sugar maple	60	3	
							Northern red oak	---	---	
							Red spruce	50	8	
							Yellow birch	55	2	
							Paper birch	---	--	
							White spruce	55	9	
							Balsam fir	---	--	
							White ash	65	3	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
LWC**:										
Schoodic	5D	Slight	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
MaC Marlow	8A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	
MaD Marlow	8R	Moderate	Moderate	Slight	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	
MbC Marlow	8A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
MbE---------- Marlow	8R	Moderate	Moderate	Slight	Moderate	Moderate	Eastern white pine--	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir----------	58	8	
							Red spruce----------	48	7	
							Sugar maple---------	60	3	
							Red pine------------	65	8	
							Yellow birch--------	60	3	
							Paper birch---------	65	5	
							White spruce--------	60	10	
							White ash-----------	67	3	
							American beech------	60	3	
							Northern red oak----	67	3	
							American basswood---	56	2	
McC---------- Marlow	8X	Slight	Severe	Moderate	Moderate	Moderate	Eastern white pine--	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir----------	58	8	
							Red spruce----------	48	7	
							Sugar maple---------	60	3	
							Red pine------------	65	8	
							Yellow birch--------	60	3	
							Paper birch---------	65	5	
							White spruce--------	60	10	
							White ash-----------	67	3	
							American beech------	60	3	
							Northern red oak----	67	3	
							American basswood---	56	2	
McE---------- Marlow	8R	Moderate	Severe	Moderate	Moderate	Moderate	Eastern white pine--	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir----------	58	8	
							Red spruce----------	48	7	
							Sugar maple---------	60	3	
							Red pine------------	65	8	
							Yellow birch--------	60	3	
							Paper birch---------	65	5	
							White spruce--------	60	10	
							White ash-----------	67	3	
							American beech------	60	3	
							Northern red oak----	67	3	
							American basswood---	56	2	
MDC**:										
Marlow----------	8A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine--	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir----------	58	8	
							Red spruce----------	48	7	
							Sugar maple---------	60	3	
							Red pine------------	65	8	
							Yellow birch--------	60	3	
							Paper birch---------	65	5	
							White spruce--------	60	10	
							White ash-----------	67	3	
							American beech------	60	3	
							Northern red oak----	67	3	
							American basswood---	56	2	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
MDC**:										
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
MDE**:										
Marlow	8R	Moderate	Moderate	Slight	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	
Dixfield	9R	Moderate	Moderate	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	
MGC**:										
Marlow	8X	Slight	Severe	Moderate	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	
Dixfield	9X	Slight	Severe	Moderate	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Red spruce	54	8	
							White spruce	64	10	
							Balsam fir	64	9	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
MGE**:										
Marlow	8R	Moderate	Severe	Moderate	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	
Dixfield	9X	Slight	Severe	Moderate	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Red spruce	54	8	
							White spruce	64	10	
							Balsam fir	64	9	
MhC**:										
Monadnock	8X	Slight	Moderate	Slight	Slight	Moderate	Eastern white pine	63	8	Red pine, white spruce, eastern white pine.
							Northern red oak	53	3	
							Red pine	60	7	
							White spruce	55	9	
Hermon	7X	Slight	Severe	Severe	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
MhE**:										
Monadnock	8X	Moderate	Severe	Slight	Slight	Moderate	Eastern white pine	63	8	Red pine, white spruce, eastern white pine.
							Northern red oak	53	3	
							Red pine	60	7	
							White spruce	55	9	
Hermon	7X	Moderate	Severe	Severe	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
MXC**:										
Monadnock	8X	Slight	Moderate	Slight	Slight	Moderate	Eastern white pine	63	8	Red pine, white spruce, eastern white pine.
							Northern red oak	53	3	
							Red pine	60	7	
							White spruce	55	9	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
MXC**:										
Hermon	7X	Slight	Severe	Severe	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
Dixfield	9X	Slight	Severe	Moderate	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Red spruce	54	8	
							White spruce	64	10	
							Balsam fir	64	9	
MXE**:										
Monadnock	8X	Moderate	Severe	Slight	Slight	Moderate	Eastern white pine	63	8	Red pine, white spruce, eastern white pine.
							Northern red oak	53	3	
							Red pine	60	7	
							White spruce	55	9	
Hermon	7X	Moderate	Severe	Severe	Slight	Slight	Eastern white pine	59	7	Eastern white pine, red pine, European larch.
							White spruce	45	7	
							Red spruce	46	7	
							Red pine	59	7	
							Sugar maple	55	2	
Dixfield	9X	Slight	Severe	Moderate	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Red spruce	54	8	
							White spruce	64	10	
							Balsam fir	64	9	
NaB**:										
Naskeag	7W	Slight	Moderate	Moderate	Severe	Severe	Eastern white pine	61	7	Eastern white pine, white spruce, black spruce.
							Red spruce	45	7	
							White spruce	55	9	
							Balsam fir	55	8	
							Red maple	65	3	
							White ash	55	2	
Schoodic	5D	Slight	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
NBB**:										
Naskeag	7W	Slight	Moderate	Moderate	Severe	Severe	Eastern white pine	61	7	Eastern white pine, white spruce, black spruce.
							Red spruce	45	7	
							White spruce	55	9	
							Balsam fir	55	8	
							Red maple	65	3	
							White ash	55	2	
Schoodic	5D	Slight	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	55	9	
							Balsam fir	60	8	
							Red spruce	40	6	
NcB	10A	Slight	Slight	Slight	Slight	Moderate	Eastern white pine	75	10	Norway spruce, eastern white pine, European larch, white spruce.
Nicholville							Sugar maple	65	3	
							Northern red oak	70	4	
NcC	10R	Moderate	Slight	Slight	Slight	Moderate	Eastern white pine	75	10	Norway spruce, eastern white pine, European larch, white spruce.
Nicholville							Sugar maple	65	3	
							Northern red oak	70	4	
Sa	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	58	7	Eastern white pine, white spruce, balsam fir, northern whitecedar, tamarack, black spruce, red spruce.
Scantic							White spruce	60	10	
							Balsam fir	60	8	
							White ash	67	2	
							Red maple	55	2	
SB**:										
Scantic	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	58	7	Eastern white pine, white spruce, balsam fir, northern whitecedar, tamarack, black spruce, red spruce.
							White spruce	60	10	
							Balsam fir	60	8	
							White ash	67	2	
							Red maple	55	2	
Biddeford	6W	Slight	Severe	Severe	Severe	Severe	Eastern white pine	54	6	
							Balsam fir	40	5	
							Red maple	48	2	
							White spruce	49	7	
							Tamarack	---	--	
							Black spruce	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
SdB**:										
Scantic	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	58	7	Eastern white pine, white spruce, balsam fir, northern whitecedar, tamarack, black spruce, red spruce.
							White spruce	60	10	
							Balsam fir	60	8	
							White ash	67	2	
							Red maple	55	2	
Lamoine	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	65	8	Eastern white pine, northern whitecedar, black spruce.
							Balsam fir	55	8	
							Paper birch	58	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Red spruce	45	7	
							Red maple	58	3	
							Yellow birch	50	2	
							Sugar maple	50	2	
							Gray birch	---	--	
							Quaking aspen	---	--	
							Bigtooth aspen	---	--	
SEB**:										
Scantic	7W	Slight	Severe	Moderate	Severe	Severe	Eastern white pine	58	7	Eastern white pine, white spruce, balsam fir, northern whitecedar, tamarack, black spruce, red spruce.
							White spruce	60	10	
							Balsam fir	60	8	
							White ash	67	2	
							Red maple	55	2	
Lamoine	8W	Slight	Moderate	Slight	Severe	Severe	Eastern white pine	65	8	Eastern white pine, northern whitecedar, black spruce.
							Balsam fir	55	8	
							Paper birch	58	4	
							White spruce	55	9	
							Eastern hemlock	---	--	
							Red spruce	45	7	
							Red maple	58	3	
							Yellow birch	50	2	
							Sugar maple	50	2	
							Gray birch	---	--	
							Quaking aspen	---	--	
							Bigtooth aspen	---	--	
Dixfield	9A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	70	9	Eastern white pine, European larch, black spruce.
							Sugar maple	62	3	
							Paper birch	62	5	
							Paper birch	62	5	
							Red spruce	54	8	
							Balsam fir	64	9	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
SfC**:										
Schoodic	5D	Slight	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
Rock outcrop.										
SfE**:										
Schoodic	5R	Severe	Severe	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
Rock outcrop.										
SGE**:										
Schoodic	5R	Severe	Severe	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	
Rock outcrop.										
Lyman	7R	Severe	Severe	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine, red pine.
							Sugar maple	50	2	
							White spruce	50	9	
							Balsam fir	60	8	
SkC**:										
Schoodic	5D	Slight	Moderate	Severe	Severe	Slight	Eastern white pine	45	5	
							Jack pine	---	--	
							Red spruce	30	4	
							White spruce	35	5	
							Balsam fir	30	4	
							Paper birch	40	3	
							Eastern hemlock	---	--	
							Northern red oak	40	2	
							Eastern hophornbeam	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
SkC**:										
Rock outcrop.										
Naskeag	7W	Slight	Moderate	Moderate	Severe	Severe	Eastern white pine	61	7	Eastern white pine, white spruce, black spruce.
							Red spruce	45	7	
							White spruce	55	9	
							Balsam fir	55	8	
							Red maple	65	3	
							White ash	55	2	
SmB, SoB, SoC	8A	Slight	Slight	Moderate	Slight	Moderate	Eastern white pine	68	8	Eastern white pine, white spruce, European larch, tamarack.
Sheepscot							White spruce	55	9	
							Red spruce	45	7	
							Balsam fir	55	8	
							Eastern hemlock	---	--	
							American beech	55	2	
							Paper birch	55	4	
							Sugar maple	55	2	
							Yellow birch	55	2	
							Northern whitecedar	55	6	
SrB**:										
Sheepscot	8A	Slight	Slight	Moderate	Slight	Moderate	Eastern white pine	68	8	Eastern white pine, white spruce, European larch, tamarack.
							White spruce	55	9	
							Red spruce	45	7	
							Balsam fir	55	8	
							Eastern hemlock	---	--	
							American beech	55	2	
							Paper birch	55	4	
							Sugar maple	55	2	
							Yellow birch	55	2	
							Northern whitecedar	55	6	
Rock outcrop.										
ThC**:										
Thorndike	8X	Slight	Slight	Moderate	Severe	Slight	Eastern white pine	62	8	Eastern white pine.
							White spruce	56	9	
							Red spruce	46	7	
							Paper birch	56	4	
Winnecook	8P	Slight	Slight	Moderate	Moderate	Slight	Eastern white pine	63	8	Eastern white pine, red spruce, red pine.
							White spruce	48	7	
							Balsam fir	55	8	
							Paper birch	57	4	
							Northern whitecedar	57	6	
							Sugar maple	57	2	
							Yellow birch	57	2	
							Red spruce	44	6	
TuB**, TuC**:										
Tunbridge	8A	Slight	Slight	Slight	Moderate	Slight	Eastern white pine	68	8	Eastern white pine, red spruce, white spruce, balsam fir, Norway spruce.
							Sugar maple	60	3	
							Northern red oak	68	4	
							Red spruce	45	7	
							Yellow birch	60	3	
							Paper birch	78	3	
							White spruce	55	9	
							Balsam fir	---	--	
							White ash	65	3	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Productivity class*	Trees to plant
TuB**, TuC**:										
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine.
							Sugar maple	---	--	
							White spruce	55	9	
							Balsam fir	48	8	
							Red spruce	42	6	
							Northern red oak	54	3	
							Paper birch	---	--	
							Eastern hemlock	---	--	
							American beech	---	--	
TWC**:										
Tunbridge	8A	Slight	Slight	Slight	Moderate	Slight	Eastern white pine	68	8	Eastern white pine, red spruce, white spruce, balsam fir, Norway spruce.
							Sugar maple	60	3	
							Northern red oak	68	4	
							Red spruce	45	7	
							Yellow birch	60	3	
							Paper birch	78	3	
							White spruce	55	9	
							Balsam fir	---	--	
							White ash	65	3	
Lyman	7D	Slight	Slight	Moderate	Severe	Moderate	Eastern white pine	58	7	White spruce, balsam fir, eastern white pine.
							Sugar maple	---	--	
							White spruce	55	9	
							Balsam fir	48	8	
							Red spruce	42	6	
							Northern red oak	54	3	
							Paper birch	---	--	
							Eastern hemlock	---	--	
							American beech	---	--	
Marlow	8A	Slight	Slight	Slight	Moderate	Moderate	Eastern white pine	66	8	Eastern white pine, white spruce, red pine.
							Balsam fir	58	8	
							Red spruce	48	7	
							Sugar maple	60	3	
							Red pine	65	8	
							Yellow birch	60	3	
							Paper birch	65	5	
							White spruce	60	10	
							White ash	67	3	
							American beech	60	3	
							Northern red oak	67	3	
							American basswood	56	2	
WA**:										
Waskish	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	25	2	Black spruce, tamarack.
							Tamarack	30	1	
Sebago	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	20	2	
							Tamarack	---	--	
							Northern whitecedar	---	--	
							Balsam fir	---	--	
							Balsam poplar	---	--	
							Quaking aspen	---	--	
							Red maple	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
WkC**:										
Winnecook	8A	Slight	Slight	Slight	Moderate	Slight	Eastern white pine	63	8	Eastern white pine, red spruce, red pine.
							White spruce	48	7	
							Balsam fir	55	8	
							Paper birch	57	4	
							Northern whitecedar	57	6	
							Sugar maple	57	2	
							Yellow birch	57	2	
							Red spruce	44	6	
Thorndike	8D	Slight	Slight	Moderate	Severe	Slight	Eastern white pine	62	8	Eastern white pine, white spruce.
							White spruce	56	9	
							Red spruce	46	7	
							Paper birch	56	4	
Wo	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	20	2	
Wonsqueak							Tamarack	---	--	
							Northern whitecedar	---	--	
							Balsam fir	---	--	
							Balsam poplar	---	--	
							Quaking aspen	---	--	
							Red maple	---	--	
Ws**:										
Wonsqueak	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	20	2	
							Tamarack	---	--	
							Northern whitecedar	---	--	
							Balsam fir	---	--	
							Balsam poplar	---	--	
							Quaking aspen	---	--	
							Red maple	---	--	
Bucksport	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	25	2	
							Balsam fir	30	4	
							Northern whitecedar	---	--	
							Tamarack	---	--	
							Red maple	---	--	
							Gray birch	---	--	
WT**:										
Wonsqueak	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	20	2	
							Tamarack	---	--	
							Northern whitecedar	---	--	
							Balsam fir	---	--	
							Balsam poplar	---	--	
							Quaking aspen	---	--	
							Red maple	---	--	

See footnotes at end of table.

TABLE 7.--Woodland Management and Productivity--Continued

Soil name and map symbol	Ordination symbol	Management concerns					Potential productivity			Trees to plant
		Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Common trees	Site index	Productivity class*	
WT**:										
Bucksport	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	25	2	
							Balsam fir	30	4	
							Northern whitecedar	---	--	
							Tamarack	---	--	
							Red maple	---	--	
							Gray birch	---	--	
Sebago	2W	Slight	Severe	Severe	Severe	Severe	Black spruce	20	2	
							Tamarack	---	--	
							Northern whitecedar	---	--	
							Balsam fir	---	--	
							Balsam poplar	---	--	
							Quaking aspen	---	--	
							Red maple	---	--	

* Productivity class is the yield in cubic meters per hectare per year calculated at the age of culmination of mean annual increment for fully stocked natural stands.

** See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 8.--Recreational Development

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated)

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
AdB Adams	Slight	Slight	Moderate: slope.	Slight	Severe: droughty.
AdC Adams	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight	Severe: droughty.
Bd Biddeford	Severe: ponding, percs slowly.	Severe: ponding, excess humus, percs slowly.	Severe: excess humus, ponding, percs slowly.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
BfB Brayton	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
BgB Brayton	Severe: wetness.	Severe: wetness.	Severe: large stones, small stones.	Severe: wetness.	Severe: wetness.
BhB Brayton	Severe: wetness.	Severe: wetness.	Severe: small stones.	Severe: wetness.	Severe: wetness.
BSB*: Brayton	Severe: wetness.	Severe: wetness.	Severe: large stones, small stones.	Severe: wetness.	Severe: wetness.
Colonel	Severe: wetness.	Moderate: wetness, large stones.	Severe: large stones, small stones.	Moderate: wetness.	Moderate: small stones, large stones.
BTB*: Brayton	Severe: wetness.	Severe: wetness.	Severe: small stones.	Severe: wetness.	Severe: wetness.
Colonel	Severe: large stones, wetness.	Severe: large stones.	Severe: large stones, small stones.	Moderate: large stones, wetness.	Moderate: small stones, large stones.
BwC Buxton	Severe: percs slowly.	Severe: percs slowly.	Severe: slope, percs slowly.	Moderate: wetness.	Moderate: wetness, slope.
BwD Buxton	Severe: slope, percs slowly.	Severe: slope, percs slowly.	Severe: slope, percs slowly.	Moderate: wetness, slope.	Severe: slope.
Ch Charles	Severe: flooding, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.
CoB Colton	Moderate: small stones.	Moderate: small stones.	Severe: small stones.	Slight	Severe: small stones, droughty.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
CoC---------- Colton	Moderate: small stones, slope.	Moderate: small stones, slope.	Severe: slope, small stones.	Slight----------	Severe: small stones, droughty.
CoE---------- Colton	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: small stones, droughty, slope.
CRE*: Colton----------	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: small stones, droughty, slope.
Adams----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, droughty.
CSC*: Colton----------	Moderate: small stones.	Moderate: small stones.	Severe: slope, small stones.	Slight----------	Severe: small stones, droughty.
Adams----------	Slight----------	Slight----------	Severe: slope.	Slight----------	Severe: droughty.
Sheepscot----------	Moderate: wetness.	Moderate: wetness.	Moderate: slope,	Moderate: wetness.	Severe: droughty.
DaB---------- Dixfield	Moderate: wetness.	Moderate: wetness.	Moderate; slope, small stones.	Moderate: wetness.	Moderate: wetness.
DaC---------- Dixfield	Moderate: slope, wetness.	Moderate: slope, wetness.	Severe: slope.	Moderate: wetness.	Moderate: wetness, slope.
DbC---------- Dixfield	Moderate: slope, large stones.	Moderate: slope, wetness, large stones.	Severe: large stones, slope, small stones.	Moderate: wetness.	Moderate: small stones, large stones, slope.
DsB*: Dixfield----------	Moderate: wetness.	Moderate: wetness.	Moderate: slope, small stones.	Moderate: wetness.	Moderate: wetness.
Colonel----------	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness.	Moderate: wetness.
DtB*: Dixfield----------	Moderate: large stones, small stones.	Moderate: wetness, large stones.	Severe: large stones, small stones.	Moderate: wetness.	Moderate: small stones, large stones.
Colonel----------	Severe: wetness.	Moderate: wetness, large stones.	Severe: large stones, small stones.	Moderate: wetness.	Moderate: small stones, large stones.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
DWB*:					
Dixfield	Moderate: large stones, small stones.	Moderate: wetness, large stones.	Severe: large stones, small stones.	Moderate: wetness.	Moderate: small stones, large stones.
Colonel	Severe: wetness.	Moderate: wetness, large stones.	Severe: large stones, small stones.	Moderate: wetness.	Moderate: small stones, large stones.
Tunbridge	Moderate: small stones.	Moderate: small stones.	Severe: large stones, small stones.	Slight	Moderate: small stones, large stones, droughty.
Go	Severe: flooding, ponding, percs slowly.	Severe: ponding, excess salt, percs slowly.	Severe: ponding, flooding, percs slowly.	Severe: ponding.	Severe: excess salt, excess sulfur, ponding.
Gouldsboro					
Gt*:					
Gouldsboro	Severe: flooding, ponding, percs slowly.	Severe: ponding, excess salt, percs slowly.	Severe: ponding, flooding, percs slowly.	Severe: ponding.	Severe: excess salt, excess sulfur, ponding.
Beaches	Severe: flooding, small stones, wetness.	Severe: wetness, too sandy, small stones.	Severe: small stones, too sandy, wetness.	Severe: wetness, too sandy, small stones.	Severe: small stones, wetness, droughty.
HcC*:					
Hermon	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: droughty.
Colton	Moderate: small stones, slope.	Moderate: small stones, slope.	Severe: slope, small stones.	Slight	Severe: small stones, droughty.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock.	Severe: slope, depth to rock.	Slight	Severe: depth to rock.
HmB*:					
Hermon	Slight	Slight	Moderate: slope, small stones.	Slight	Severe: droughty.
Monadnock	Slight	Slight	Moderate: slope, small stones.	Slight	Slight.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
HmC*:					
Hermon	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight	Severe: droughty.
Monadnock	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight	Moderate: slope.
HtB*:					
Hermon	Moderate: large stones, small stones.	Moderate: large stones, small stones.	Severe: large stones, small stones.	Moderate: large stones.	Severe: droughty.
Monadnock	Moderate: large stones.	Moderate: large stones.	Severe: small stones.	Slight	Moderate: large stones.
HtC*:					
Hermon	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: droughty.
Monadnock	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope, small stones.	Slight	Moderate: large stones, slope.
HtE*:					
Hermon	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: droughty, slope.
Monadnock	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
HVC*:					
Hermon	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: droughty.
Monadnock	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope, small stones.	Slight	Moderate: large stones, slope.
Dixfield	Moderate: slope, large stones.	Moderate: slope, wetness, large stones.	Severe: large stones, slope, small stones.	Moderate: wetness.	Moderate: small stones, large stones, slope.
HVE*:					
Hermon	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: droughty, slope.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
HVE*:					
Monadnock	Severe: slope.	Severe: slope.	Severe: slope, small stones.	Severe: slope.	Severe: slope.
Dixfield	Moderate: slope, large stones.	Moderate: slope, wetness, large stones.	Severe: large stones, slope, small stones.	Moderate: wetness.	Moderate: small stones, large stones, slope.
Kn Kinsman	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
KW*:					
Kinsman	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
Wonsqueak	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
LaB Lamoine	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
LbB*:					
Lamoine	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
Scantic	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
LCB*:					
Lamoine	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
Scantic	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
Buxton	Severe: percs slowly.	Severe: percs slowly.	Severe: slope, percs slowly.	Moderate: wetness.	Moderate: wetness, slope.
LgB*:					
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: large stones, slope, depth to rock.	Slight	Severe: depth to rock.
Brayton	Severe: wetness.	Severe: wetness.	Severe: large stones, small stones.	Severe: wetness.	Severe: wetness.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
LHC*:					
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: large stones, slope, depth to rock.	Slight	Severe: depth to rock.
Brayton	Severe: wetness.	Severe: wetness.	Severe: large stones, small stones.	Severe: wetness.	Severe: wetness.
Schoodic	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: small stones.	Severe: small stones, depth to rock.
LsE*:					
Lyman	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: large stones, slope, depth to rock.	Severe: slope.	Severe: slope, depth to rock.
Schoodic	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones.	Severe: small stones, slope, depth to rock.
LTE*:					
Lyman	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: large stones, slope, depth to rock.	Severe: slope.	Severe: slope, depth to rock.
Schoodic	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones.	Severe: small stones, slope, depth to rock.
Rock outcrop	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope.	Severe: depth to rock.
LuC*:					
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: large stones, slope, depth to rock.	Slight	Severe: depth to rock.
Tunbridge	Moderate: small stones.	Moderate: small stones.	Severe: large stones, slope, small stones.	Slight	Moderate: small stones, large stones, droughty.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
LWC*:					
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: large stones, slope, depth to rock.	Slight	Severe: depth to rock.
Tunbridge	Moderate: slope, small stones.	Moderate: slope, small stones.	Severe: large stones, slope, small stones.	Slight	Moderate: small stones, large stones, droughty.
Schoodic	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: small stones.	Severe: small stones, depth to rock.
MaC Marlow	Moderate: slope, percs slowly.	Moderate: slope, percs slowly.	Severe: slope.	Slight	Moderate: slope.
MaD Marlow	Severe: slope.	Severe: slope.	Severe: slope.	Moderate: slope.	Severe: slope.
MbC Marlow	Moderate: slope, percs slowly.	Moderate: slope, percs slowly.	Severe: slope.	Slight	Moderate: large stones, slope.
MbE Marlow	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
McC Marlow	Severe: large stones.	Severe: large stones.	Severe: large stones, slope.	Moderate: large stones.	Severe: large stones.
McE Marlow	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.	Severe: slope.	Severe: large stones, slope.
MDC*:					
Marlow	Moderate: slope, percs slowly.	Moderate: slope, percs slowly.	Severe: slope.	Slight	Moderate: large stones, slope.
Dixfield	Moderate: slope, large stones.	Moderate: slope, wetness, large stones.	Severe: large stones, slope, small stones.	Moderate: wetness.	Moderate: small stones, large stones, slope.
MDE*:					
Marlow	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Dixfield	Severe: slope.	Severe: slope.	Severe: large stones, slope, small stones.	Moderate: wetness, slope.	Severe: slope.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
MGC*:					
Marlow	Severe: large stones.	Severe: large stones.	Severe: large stones, slope.	Moderate: large stones.	Severe: large stones.
Dixfield	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones, wetness.	Moderate: small stones, large stones, slope.
MGE*:					
Marlow	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope.	Severe: slope.	Severe: large stones, slope.
Dixfield	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones, wetness.	Moderate: small stones, large stones, slope.
MhC*:					
Monadnock	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: large stones.
Hermon	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: large stones, droughty.
MhE*:					
Monadnock	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Hermon	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, droughty, slope.
MXC*:					
Monadnock	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: large stones.
Hermon	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones.	Severe: large stones, droughty.
Dixfield	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones, wetness.	Moderate: small stones, large stones, slope.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
MXE*:					
Monadnock	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, slope.
Hermon	Severe: slope, large stones.	Severe: slope, large stones.	Severe: large stones, slope, small stones.	Severe: slope.	Severe: large stones, droughty, slope.
Dixfield	Severe: large stones.	Severe: large stones.	Severe: large stones, slope, small stones.	Moderate: large stones, wetness.	Moderate: small stones, large stones, slope.
NaB*:					
Naskeag	Severe: wetness.	Severe: wetness.	Severe: large stones, small stones.	Severe: wetness.	Severe: wetness.
Schoodic	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: small stones.	Severe: small stones, depth to rock.
NBB*:					
Naskeag	Severe: wetness.	Severe: wetness.	Severe: large stones, small stones.	Severe: wetness.	Severe: wetness.
Schoodic	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: small stones.	Severe: small stones, depth to rock.
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: large stones, depth to rock.	Slight	Severe: depth to rock.
NcB Nicholville	Slight	Slight	Moderate: slope.	Slight	Slight.
NcC Nicholville	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight	Moderate: slope.
Ps* Pits	Severe: small stones, too sandy.	Severe: too sandy, small stones.	Severe: small stones, too sandy.	Severe: too sandy, small stones.	Severe: small stones, droughty.
Sa Scantic	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.
SB*:					
Scantic	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
SB*:					
Biddeford	Severe: ponding, percs slowly.	Severe: ponding, excess humus, percs slowly.	Severe: excess humus, ponding, percs slowly.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
SdB*:					
Scantic	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: large stones, wetness.	Severe: wetness.	Severe: wetness.
Lamoine	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: large stones, wetness.	Severe: wetness.	Severe: wetness.
SEB*:					
Scantic	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: large stones, wetness.	Severe: wetness.	Severe: wetness.
Lamoine	Severe: wetness, percs slowly.	Severe: wetness, percs slowly.	Severe: large stones, wetness.	Severe: wetness.	Severe: wetness.
Dixfield	Moderate: large stones, small stones.	Moderate: wetness, large stones.	Severe: large stones, small stones.	Moderate: wetness.	Moderate: small stones, large stones.
SfC*:					
Schoodic	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: small stones.	Severe: small stones, depth to rock.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock.	Severe: slope, depth to rock.	Slight	Severe: depth to rock.
SfE*:					
Schoodic	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones.	Severe: small stones, slope, depth to rock.
Rock outcrop	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope.	Severe: depth to rock.
SGE*:					
Schoodic	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Severe: slope, small stones.	Severe: small stones, slope, depth to rock.
Rock outcrop	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope.	Severe: depth to rock.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
SmB---------- Sheepscot	Moderate: wetness.	Moderate: wetness.	Moderate: slope, small stones.	Moderate: wetness.	Severe: droughty.
SoB---------- Sheepscot	Severe: small stones.	Severe: small stones.	Severe: large stones, small stones.	Moderate: wetness.	Severe: small stones, droughty.
SoC---------- Sheepscot	Severe: small stones.	Severe: small stones.	Severe: large stones, slope, small stones.	Moderate: wetness.	Severe: small stones, droughty.
SrB*:					
Sheepscot----------	Moderate: wetness.	Moderate: wetness.	Moderate: slope, small stones.	Moderate: wetness.	Severe: droughty.
Rock outcrop----------	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Slight----------	Severe: depth to rock.
ThC*:					
Thorndike----------	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: large stones, slope, small stones.	Slight----------	Severe: small stones, depth to rock.
Winnecook----------	Severe: small stones.	Severe: small stones.	Severe: large stones, slope, small stones.	Slight----------	Severe: small stones.
TuB*:					
Tunbridge----------	Slight----------	Slight----------	Moderate: slope, small stones.	Slight----------	Moderate: droughty.
Lyman----------	Severe: depth to rock.	Severe: depth to rock.	Severe: small stones, depth to rock.	Slight----------	Severe: depth to rock.
TuC*:					
Tunbridge----------	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight----------	Moderate: droughty, slope.
Lyman----------	Severe: depth to rock.	Severe: depth to rock.	Severe: slope, small stones, depth to rock.	Slight----------	Severe: depth to rock.
TWC*:					
Tunbridge----------	Moderate: slope.	Moderate: slope.	Severe: slope.	Slight----------	Moderate: droughty, slope.
Lyman----------	Severe: depth to rock.	Severe: depth to rock.	Severe: slope, small stones, depth to rock.	Slight----------	Severe: depth to rock.

See footnote at end of table.

TABLE 8.--Recreational Development--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
TWC*:					
Marlow	Moderate: slope, percs slowly.	Moderate: slope, percs slowly.	Severe: slope.	Slight	Moderate: slope.
Ud*:					
Udorthents	Variable	Variable	Variable	Variable	Variable.
Urban land	Variable	Variable	Variable	Variable	Variable.
WA*:					
Waskish	Severe: wetness, excess humus, too acid.	Severe: wetness, excess humus, too acid.	Severe: excess humus, wetness, too acid.	Severe: wetness, excess humus.	Severe: too acid, wetness, excess humus.
Sebago	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
WkC*:					
Winnecook	Slight	Slight	Severe: slope.	Slight	Moderate: droughty.
Thorndike	Severe: small stones, depth to rock.	Severe: small stones, depth to rock.	Severe: slope, small stones, depth to rock.	Slight	Severe: small stones, depth to rock.
Wo Wonsqueak	Severe: flooding, ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding, flooding.	Severe: ponding, excess humus.	Severe: ponding, flooding, excess humus.
Ws*:					
Wonsqueak	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
Bucksport	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
WT*:					
Wonsqueak	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
Bucksport	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.
Sebago	Severe: ponding, excess humus.	Severe: ponding, excess humus.	Severe: excess humus, ponding.	Severe: ponding, excess humus.	Severe: ponding, excess humus.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 9.--Wildlife Habitat

(See text for definitions of "good," "fair," "poor," and "very poor." Absence of an entry indicates that the soil was not rated)

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
AdB, AdC---------- Adams	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Bd---------- Biddeford	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
BfB---------- Brayton	Poor	Fair	Fair	Fair	Fair	Poor	Very poor.	Fair	Fair	Very poor.
BgB---------- Brayton	Very poor.	Poor	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
BhB---------- Brayton	Very poor.	Very poor.	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
BSB*:										
Brayton----------	Very poor.	Poor	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
Colonel----------	Very poor.	Poor	Good	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
BTB*:										
Brayton----------	Very poor.	Very poor.	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
Colonel----------	Very poor.	Very poor.	Good	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
BwC---------- Buxton	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
BwD---------- Buxton	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Ch---------- Charles	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
CoB, CoC---------- Colton	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Fair	Poor	Very poor.
CoE---------- Colton	Very poor.	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
CRE*:										
Colton----------	Very poor.	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Adams----------	Very poor.	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
CSC*:										
Colton----------	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Fair	Poor	Very poor.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
CSC*:										
Adams	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Sheepscot	Fair	Good	Good	Fair	Fair	Poor	Very poor.	Good	Fair	Very poor.
DaB Dixfield	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
DaC Dixfield	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
DbC Dixfield	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
DsB*:										
Dixfield	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Colonel	Fair	Good	Good	Fair	Fair	Poor	Very poor.	Good	Fair	Very poor.
DtB*:										
Dixfield	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
Colonel	Very poor.	Poor	Good	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
DWB*:										
Dixfield	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
Colonel	Very poor.	Poor	Good	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
Tunbridge	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
Go Gouldsboro	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Gt*:										
Gouldsboro	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Beaches	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
HcC*:										
Hermon	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Colton	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Fair	Poor	Very poor.
Rock outcrop	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
HmB*:										
Hermon	Fair	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Monadnock	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
HmC*:										
Hermon	Fair	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Monadnock	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
HtB*:										
Hermon	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Monadnock	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
HtC*, HtE*:										
Hermon	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Monadnock	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
HVC*, HVE*:										
Hermon	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Monadnock	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Dixfield	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Kn Kinsman	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
KW*:										
Kinsman	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
Wonsqueak	Very poor.	Poor	Poor	Very poor.	Very poor.	Good	Good	Poor	Very poor.	Good.
LaB Lamoine	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
LbB*:										
Lamoine	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Scantic	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
LCB*:										
Lamoine	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Scantic	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
Buxton	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
LgB*:										
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Brayton	Very poor.	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair.
LHC*:										
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Brayton	Very poor.	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair.
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
LsE*:										
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
LTE*:										
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Rock outcrop	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
LuC*:										
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Tunbridge	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
LWC*:										
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Tunbridge	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
MaC---------- Marlow	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
MaD, MbC---------- Marlow	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
MbE---------- Marlow	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
McC, McE---------- Marlow	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
MDC*:										
Marlow----------	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Dixfield----------	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
MDE*:										
Marlow----------	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Dixfield----------	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
MGC*, MGE*:										
Marlow----------	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Dixfield----------	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
MhC*, MhE*:										
Monadnock---------	Very poor.	Poor	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.
Hermon----------	Very poor.	Very poor.	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
MXC*, MXE*:										
Monadnock---------	Very poor.	Poor	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.
Hermon----------	Very poor.	Very poor.	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Dixfield----------	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
NaB*:										
Naskeag----------	Very poor.	Very poor.	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair.
Schoodic----------	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
NBB*:										
Naskeag----------	Very poor.	Very poor.	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
NcB Nicholville	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
NcC Nicholville	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Ps* Pits	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Sa Scantic	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
SB*:										
Scantic	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
Biddeford	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
ScB*:										
Scantic	Very poor.	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair.
Lamoine	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
SEB*:										
Scantic	Very poor.	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair.
Lamoine	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
Dixfield	Very poor.	Poor	Good	Good	Good	Poor	Very poor.	Poor	Good	Very poor.
SfC*, SfE*:										
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Rock outcrop	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
SGE*:										
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Rock outcrop	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Lyman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
SKC*:										
Schoodic	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Rock outcrop	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Naskeag	Very poor.	Very poor.	Fair	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
SmB---------- Sheepscot	Fair	Good	Good	Fair	Fair	Poor	Very poor.	Good	Fair	Very poor.
SoB---------- Sheepscot	Very poor.	Poor	Good	Fair	Fair	Poor	Very poor.	Poor	Fair	Very poor.
SoC---------- Sheepscot	Very poor.	Poor	Good	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
SrB*:										
Sheepscot	Fair	Good	Good	Fair	Fair	Poor	Very poor.	Good	Fair	Very poor.
Rock outcrop	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
ThC*:										
Thorndike	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Winnecook	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
TuB*:										
Tunbridge	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Lyman	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
TuC*:										
Tunbridge	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Lyman	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
TWC*:										
Tunbridge	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Lyman	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Marlow	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.

See footnote at end of table.

TABLE 9.--Wildlife Habitat--Continued

Soil name and map symbol	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
Ud*:										
Udorthents.										
Urban land.										
WA*:										
Waskish	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Sebago	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
WkC*:										
Winnecook	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Thorndike	Poor	Fair	Fair	Poor	Poor	Very poor.	Very poor.	Fair	Poor	Very poor.
Wo	Very poor.	Poor	Poor	Very poor.	Very poor.	Good	Good	Poor	Very poor.	Good.
Wonsqueak										
Ws*:										
Wonsqueak	Very poor.	Poor	Poor	Very poor.	Very poor.	Good	Good	Poor	Very poor.	Good.
Bucksport	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
WT*:										
Wonsqueak	Very poor.	Poor	Poor	Very poor.	Very poor.	Good	Good	Poor	Very poor.	Good.
Bucksport	Very poor.	Very poor.	Poor	Very poor.	Very poor	Good	Good	Very poor.	Very poor.	Good.
Sebago	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 10.--Building Site Development

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
AdB---- Adams	Severe: cutbanks cave.	Slight----	Slight----	Moderate: slope.	Slight----	Severe: droughty.
AdC---- Adams	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: droughty.
Bd---- Biddeford	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: low strength, ponding, frost action.	Severe: ponding, excess humus
BfB, BgB, BhB---- Brayton	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, frost action.	Severe: wetness.
BSB*, BTB*: Brayton----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, frost action.	Severe: wetness.
Colonel----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: frost action.	Moderate: small stones large stones
BwC---- Buxton	Severe: wetness.	Moderate: wetness, shrink-swell, slope.	Severe: wetness.	Severe: slope.	Severe: low strength, frost action.	Moderate: wetness, slope.
BwD---- Buxton	Severe: wetness, slope.	Severe: slope.	Severe: wetness, slope.	Severe: slope.	Severe: low strength, slope, frost action.	Severe: slope.
Ch---- Charles	Severe: cutbanks cave, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding, frost action.	Severe: wetness.
CoB---- Colton	Severe: cutbanks cave.	Slight----	Slight----	Moderate: slope.	Slight----	Severe: small stones droughty.
CoC---- Colton	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: small stones droughty.
CoE---- Colton	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: small stones droughty, slope.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
CRE*:						
Colton	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: small stones droughty, slope.
Adams	Severe: slope, cutbanks cave.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope, droughty.
CSC*:						
Colton	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight	Severe: small stones droughty.
Adams	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight	Severe: droughty.
Sheepscot	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: wetness.	Severe: droughty.
DaB Dixfield	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.	Moderate: wetness.
DaC Dixfield	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: wetness, slope.
DbC Dixfield	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
DsB*:						
Dixfield	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.	Moderate: wetness.
Colonel	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: frost action.	Moderate: wetness.
DtB*:						
Dixfield	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.	Moderate: small stones large stones
Colonel	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: frost action.	Moderate: small stones large stones
DWB*:						
Dixfield	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.	Moderate: small stones large stones
Colonel	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: frost action.	Moderate: small stones large stones

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
DWB*:						
Tunbridge	Severe: depth to rock.	Moderate: depth to rock.	Severe: depth to rock.	Moderate: slope, depth to rock.	Moderate: depth to rock, frost action.	Moderate: small stones large stones droughty.
Go	Severe: ponding, excess humus.	Severe: flooding, ponding, low strength.	Severe: flooding, ponding, low strength.	Severe: flooding, ponding, low strength.	Severe: low strength, ponding, flooding.	Severe: excess salt, excess sulfur, ponding.
Gt*:						
Gouldsboro	Severe: ponding, excess humus.	Severe: flooding, ponding, low strength.	Severe: flooding, ponding, low strength.	Severe: flooding, ponding, low strength.	Severe: low strength, ponding, flooding.	Severe: excess salt, excess sufur ponding.
Beaches	Severe: cutbanks cave, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: wetness, flooding.	Severe: small stones wetness, droughty.
HcC*:						
Hermon	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: droughty.
Colton	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Severe: small stones droughty.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock.
HmB*:						
Hermon	Severe: cutbanks cave.	Moderate: large stones.	Moderate: large stones.	Moderate: slope, large stones.	Moderate: large stones.	Severe: droughty.
Monadnock	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight	Slight.
HmC*:						
Hermon	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: droughty.
Monadnock	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Moderate: slope.
HtB*:						
Hermon	Severe: cutbanks cave.	Moderate: large stones.	Moderate: large stones.	Moderate: slope, large stones.	Moderate: large stones.	Severe: droughty.
Monadnock	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight	Moderate: large stones

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
HtC*:						
Hermon	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: droughty.
Monadnock	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Moderate: large stones slope.
HtE*:						
Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: droughty, slope.
Monadnock	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
HVC*:						
Hermon	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: droughty.
Monadnock	Severe: cutbanks cave.	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope.	Moderate: large stones slope.
Dixfield	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
HVE*:						
Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: droughty, slope.
Monadnock	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Dixfield	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
Kn	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
Kinsman						
KW*:						
Kinsman	Severe: cutbanks cave, wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, droughty.
Wonsqueak	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
LaB---- Lamoine	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: low strength, wetness, frost action.	Severe: wetness.
LbB*:						
Lamoine----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: low strength, wetness, frost action.	Severe: wetness.
Scantic----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, low strength, frost action.	Severe: wetness.
LCB*:						
Lamoine----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: low strength, wetness, frost action.	Severe: wetness.
Scantic----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, low strength, frost action.	Severe: wetness.
Buxton----	Severe: wetness.	Moderate: wetness, shrink-swell, slope.	Severe: wetness.	Severe: slope.	Severe: low strength, frost action.	Moderate: wetness, slope.
LgB*:						
Lyman----	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.
Brayton----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, frost action.	Severe: wetness.
LHC*:						
Lyman----	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.
Brayton----	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, frost action.	Severe: wetness.
Schoodic----	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: small stones depth to rock.
LsE*:						
Lyman----	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: slope, depth to rock.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
LsE*:						
Schoodic	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: small stones slope, depth to rock.
LTE*:						
Lyman	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: slope, depth to rock.
Schoodic	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: small stones slope, depth to rock.
Rock outcrop	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock
LuC*:						
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock
Tunbridge	Severe: depth to rock.	Moderate: depth to rock.	Severe: depth to rock.	Moderate: slope, depth to rock.	Moderate: depth to rock, frost action.	Moderate: small stones large stones droughty.
LWC*:						
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.
Tunbridge	Severe: depth to rock.	Moderate: slope, depth to rock.	Severe: depth to rock.	Severe: slope.	Moderate: depth to rock, slope, frost action.	Moderate: small stones large stones droughty.
Schoodic	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: small stones depth to rock.
MaC Marlow	Moderate: dense layer, slope, wetness	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: frost action, slope.	Moderate: slope.
MaD Marlow	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
MbC Marlow	Moderate: dense layer, wetness, slope.	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: slope, frost action.	Moderate: large stones slope.
MbE Marlow	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
McC---------- Marlow	Moderate: dense layer, slope, wetness	Moderate: slope.	Moderate: slope.	Severe: slope.	Moderate: slope, frost action.	Severe: large stones
McE---------- Marlow	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones slope.
MDC*:						
Marlow----------	Moderate: dense layer, wetness, slope.	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: slope, frost action.	Moderate: large stones slope.
Dixfield---------	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
MDE*:						
Marlow----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
Dixfield---------	Severe: wetness, slope.	Severe: slope.	Severe: wetness, slope.	Severe: slope.	Severe: slope, frost action.	Severe: slope.
MGC*:						
Marlow----------	Moderate: dense layer, slope, wetness	Moderate: slope.	Moderate: slope, wetness.	Severe: slope.	Moderate: slope, frost action.	Severe: large stones slope.
Dixfield---------	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
MGE*:						
Marlow----------	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones slope.
Dixfield---------	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
MhC*:						
Monadnock--------	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: large stones
Hermon----------	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: large stones droughty.
MhE*:						
Monadnock--------	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones slope.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
MhE*:						
Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones droughty, slope.
MXC*:						
Monadnock	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: large stones
Hermon	Severe: cutbanks cave.	Moderate: slope, large stones.	Moderate: slope, large stones.	Severe: slope.	Moderate: slope, large stones.	Severe: large stones droughty.
Dixfield	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
MXE*:						
Monadnock	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones slope.
Hermon	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: large stones droughty, slope.
Dixfield	Severe: wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Severe: frost action.	Moderate: small stones large stones slope.
NaB*:						
Naskeag	Severe: depth to rock, cutbanks cave, wetness.	Severe: wetness.	Severe: wetness, depth to rock.	Severe: wetness.	Severe: wetness.	Severe: wetness.
Schoodic	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: small stones depth to rock
NBB*:						
Naskeag	Severe: depth to rock, cutbanks cave, wetness.	Severe: wetness.	Severe: wetness, depth to rock.	Severe: wetness.	Severe: wetness.	Severe: wetness.
Schoodic	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: small stones depth to rock
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
NcB---------- Nicholville	Severe: wetness.	Severe: frost action.	Severe: wetness.	Severe: frost action.	Severe: frost action.	Slight.
NcC---------- Nicholville	Severe: wetness.	Severe: frost action.	Severe: wetness.	Severe: slope, frost action.	Severe: frost action.	Moderate: slope.
Ps*---------- Pits	Severe: cutbanks cave.	Slight---------	Slight---------	Slight---------	Slight---------	Severe: small stones droughty.
Sa---------- Scantic	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, low strength, frost action.	Severe: wetness.
SB*:						
Scantic----------	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, low strength, frost action.	Severe: wetness.
Biddeford--------	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: ponding.	Severe: low strength, ponding, frost action.	Severe: ponding, excess humus
SdB*:						
Scantic----------	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, low strength, frost action.	Severe: wetness.
Lamoine----------	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: low strength, wetness, frost action.	Severe: wetness.
SEB*:						
Scantic----------	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness, low strength, frost action.	Severe: wetness.
Lamoine----------	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: low strength, wetness, frost action.	Severe: wetness.
Dixfield----------	Severe: wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Severe: frost action.	Moderate: small stones large stones
SfC*:						
Schoodic----------	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: small stones depth to rock.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
SfC*:						
Rock outcrop-----	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.
SfE*:						
Schoodic---------	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: small stones slope, depth to rock.
Rock outcrop-----	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.
SGE*:						
Schoodic---------	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: small stones slope, depth to rock.
Rock outcrop-----	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.
Lyman------------	Severe: depth to rock, slope.	Severe: slope, depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: slope, depth to rock.
SKC*:						
Schoodic---------	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: small stones depth to rock.
Rock outcrop-----	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.
Naskeag----------	Severe: depth to rock, cutbanks cave, wetness.	Severe: wetness.	Severe: wetness, depth to rock.	Severe: wetness.	Severe: wetness.	Severe: wetness.
SmB--------------- Sheepscot	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: wetness.	Severe: droughty.
SoB--------------- Sheepscot	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: wetness.	Severe: small stones droughty.
SoC--------------- Sheepscot	Severe: cutbanks cave, wetness.	Moderate: wetness, slope.	Severe: wetness.	Severe: slope.	Moderate: wetness, slope.	Severe: small stones droughty.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
SrB*:						
Sheepscot	Severe: cutbanks cave, wetness.	Moderate: wetness.	Severe: wetness.	Moderate: wetness, slope.	Moderate: wetness.	Severe: droughty.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.
ThC*:						
Thorndike	Severe: depth to rock.	Moderate: depth to rock, large stones.	Severe: depth to rock.	Moderate: slope, depth to rock, large stones.	Moderate: depth to rock, frost action.	Severe: small stones depth to rock.
Winnecook	Moderate: depth to rock, slope.	Moderate: slope.	Moderate: depth to rock, slope.	Severe: slope.	Moderate: slope, frost action.	Severe: small stones
TuB*:						
Tunbridge	Severe: depth to rock.	Moderate: depth to rock.	Severe: depth to rock.	Moderate: slope, depth to rock.	Moderate: depth to rock, frost action.	Moderate: droughty.
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.
TuC*:						
Tunbridge	Severe: depth to rock.	Moderate: slope, depth to rock.	Severe: depth to rock.	Severe: slope.	Moderate: depth to rock, slope, frost action.	Moderate: droughty, slope.
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.
TWC*:						
Tunbridge	Severe: depth to rock.	Moderate: slope, depth to rock.	Severe: depth to rock.	Severe: slope.	Moderate: depth to rock, slope, frost action.	Moderate: droughty, slope.
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.
Marlow	Moderate: dense layer, slope.	Moderate: slope.	Moderate: wetness, slope.	Severe: slope.	Moderate: frost action.	Moderate: slope.
Ud*:						
Udorthents.						
Urban land	Variable	Variable	Variable	Variable	Variable	Variable.

See footnote at end of table.

TABLE 10.--Building Site Development--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
WA*:						
Waskish	Severe: excess humus, wetness.	Severe: wetness, low strength.	Severe: wetness, low strength.	Severe: wetness, low strength.	Severe: wetness, frost action.	Severe: too acid, wetness, excess humus
Sebago	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus
WkC*:						
Winnecook	Moderate: depth to rock.	Slight	Moderate: depth to rock.	Moderate: slope.	Moderate: frost action.	Moderate: droughty.
Thorndike	Severe: depth to rock.	Moderate: depth to rock, large stones.	Severe: depth to rock.	Moderate: slope, depth to rock, large stones.	Moderate: depth to rock, frost action.	Severe: small stones depth to rock.
Wo	Severe: excess humus, ponding.	Severe: flooding, ponding, low strength.	Severe: flooding, ponding.	Severe: flooding, ponding, low strength.	Severe: ponding, flooding, frost action.	Severe: ponding, flooding, excess humus
Wonsqueak						
Ws*:						
Wonsqueak	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus
Bucksport	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus
WT*:						
Wonsqueak	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus
Bucksport	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus
Sebago	Severe: excess humus, ponding.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, low strength.	Severe: ponding, frost action.	Severe: ponding, excess humus

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 11.--Sanitary Facilities

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "good," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
AdB---- Adams	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
AdC---- Adams	Severe: poor filter.	Severe: slope, seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Bd---- Biddeford	Severe: ponding, percs slowly.	Severe: excess humus, ponding.	Severe: ponding, too clayey.	Severe: ponding.	Poor: too clayey, hard to pack, ponding.
BfB, BgB, BhB---- Brayton	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: small stones, wetness.
BSB*, BTB*: Brayton----	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: small stones, wetness.
Colonel----	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
BwC---- Buxton	Severe: wetness, percs slowly.	Severe: slope.	Severe: wetness, too clayey.	Moderate: wetness, slope.	Poor: too clayey.
BwD---- Buxton	Severe: wetness, percs slowly, slope.	Severe: slope.	Severe: wetness, slope, too clayey.	Severe: slope.	Poor: too clayey, slope.
Ch---- Charles	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
CoB---- Colton	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
CoC---- Colton	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
CoE---- Colton	Severe: poor filter, slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, small stones.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
CRE*:					
Colton	Severe: poor filter, slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, small stones.
Adams	Severe: poor filter, slope.	Severe: slope, seepage.	Severe: slope, seepage, too sandy.	Severe: slope, seepage.	Poor: seepage, too sandy, slope.
CSC*:					
Colton	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Adams	Severe: poor filter.	Severe: slope, seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
Sheepscot	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, small stones.
DaB	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Fair: small stones, wetness.
DaC Dixfield	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Fair: small stones, slope, wetness.
DbC Dixfield	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.
DsB*:					
Dixfield	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Fair: small stones, wetness.
Colonel	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
DtB*:					
Dixfield	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Poor: small stones.
Colonel	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
DWB*:					
Dixfield	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Poor: small stones.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
DWB*:					
Colonel	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
Tunbridge	Severe: depth to rock.	Severe: seepage, depth to rock.	Severe: depth to rock, seepage.	Severe: depth to rock, seepage.	Poor: area reclaim.
Go	Severe: flooding, ponding, percs slowly.	Severe: flooding, ponding.	Severe: flooding, ponding, excess humus.	Severe: flooding, ponding.	Poor: ponding, excess salt, hard to pack.
Gt*:					
Gouldsboro	Severe: flooding, ponding, percs slowly.	Severe: flooding, ponding.	Severe: flooding, ponding, excess humus.	Severe: flooding, ponding.	Poor: ponding, excess salt, hard to pack.
Beaches	Severe: flooding, wetness, poor filter.	Severe: seepage, flooding, wetness.	Severe: flooding, seepage, wetness.	Severe: flooding, seepage, wetness.	Poor: seepage, too sandy, small stones.
HcC*:					
Hermon	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Colton	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock.
HmB*:					
Hermon	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Monadnock	Slight	Severe: seepage.	Severe: seepage.	Severe: seepage.	Poor: seepage.
HmC*:					
Hermon	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Monadnock	Moderate: slope.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Poor: seepage.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
HtB*:					
Hermon	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Monadnock	Slight	Severe: seepage.	Severe: seepage.	Severe: seepage.	Poor: seepage.
HtC*:					
Hermon	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Monadnock	Moderate: slope.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Poor: seepage.
HtE*:					
Hermon	Severe: poor filter, slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, small stones.
Monadnock	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Poor: seepage, slope.
HVC*:					
Hermon	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Monadnock	Moderate: slope.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Poor: seepage.
Dixfield	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.
HVE*:					
Hermon	Severe: poor filter, slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, small stones.
Monadnock	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Poor: seepage, slope.
Dixfield	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
Kn Kinsman	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
KW*: Kinsman	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
Wonsqueak	Severe: ponding, percs slowly.	Severe: seepage, excess humus.	Severe: ponding.	Severe: seepage, ponding.	Poor: ponding.
LaB Lamoine	Severe: wetness, percs slowly.	Moderate: slope.	Severe: wetness, too clayey.	Severe: wetness.	Poor: too clayey, wetness.
LbB*: Lamoine	Severe: wetness, percs slowly.	Moderate: slope.	Severe: wetness, too clayey.	Severe: wetness.	Poor: too clayey, wetness.
Scantic	Severe: percs slowly, wetness.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: wetness, too clayey.
LCB*: Lamoine	Severe: wetness, percs slowly.	Moderate: slope.	Severe: wetness, too clayey.	Severe: wetness.	Poor: too clayey, wetness.
Scantic	Severe: percs slowly, wetness.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: wetness, too clayey.
Buxton	Severe: wetness, percs slowly.	Severe: slope.	Severe: wetness, too clayey.	Moderate: wetness, slope.	Poor: too clayey.
LgB*: Lyman	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock.
Brayton	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: small stones, wetness.
LhC*: Lyman	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock.
Brayton	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: small stones, wetness.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
LHC*:					
Schoodic	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock.	Poor: depth to rock.
LsE*:					
Lyman	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock, seepage, slope.	Poor: depth to rock, slope.
Schoodic	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, slope.	Poor: depth to rock, slope.
LTE*:					
Lyman	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock, seepage, slope.	Poor: depth to rock, slope.
Schoodic	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, slope.	Poor: depth to rock, slope.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock, slope.
LuC*:					
Lyman	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock.
Tunbridge	Severe: depth to rock.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock, seepage.	Poor: area reclaim.
LWC*:					
Lyman	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock.
Tunbridge	Severe: depth to rock.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock, seepage.	Poor: area reclaim.
Schoodic	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock.	Poor: depth to rock.
MaC	Severe: percs slowly.	Severe: slope.	Moderate: slope.	Moderate: wetness, slope.	Fair: small stones, slope, wetness.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
MaD---------- Marlow	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
MbC---------- Marlow	Severe: percs slowly.	Severe: slope.	Moderate: slope.	Moderate: slope, wetness.	Fair: small stones, slope, wetness.
MbE---------- Marlow	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
McC---------- Marlow	Severe: percs slowly.	Severe: slope.	Moderate: slope.	Moderate: slope, wetness.	Poor: small stones, wetness.
McE---------- Marlow	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
MDC*:					
Marlow----------	Severe: percs slowly.	Severe: slope.	Moderate: slope.	Moderate: slope.	Fair: small stones, slope.
Dixfield----------	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.
MDE*:					
Marlow----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Dixfield----------	Severe: wetness, percs slowly, slope.	Severe: slope, wetness.	Severe: wetness, slope.	Severe: slope.	Poor: small stones, slope.
MGC*:					
Marlow----------	Severe: percs slowly.	Severe: slope.	Moderate: slope.	Moderate: slope.	Poor: small stones, slope.
Dixfield----------	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.
MGE*:					
Marlow----------	Severe: percs slowly, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: small stones, slope.
Dixfield----------	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
MhC*:					
Monadnock	Moderate: large stones, slope.	Severe: seepage, slope, large stones.	Severe: seepage, large stones.	Severe: seepage.	Poor: seepage.
Hermon	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
MhE*:					
Monadnock	Severe: slope.	Severe: seepage, slope, large stones.	Severe: seepage, slope, large stones.	Severe: seepage, slope.	Poor: seepage, slope.
Hermon	Severe: poor filter, slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, small stones.
MXC*:					
Monadnock	Moderate: large stones, slope.	Severe: seepage, slope, large stones.	Severe: seepage, large stones.	Severe: seepage.	Poor: seepage.
Hermon	Severe: poor filter.	Severe: seepage, slope.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy, small stones.
Dixfield	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.
MXE*:					
Monadnock	Severe: slope.	Severe: seepage, slope, large stones.	Severe: seepage, slope, large stones.	Severe: seepage, slope.	Poor: seepage, slope.
Hermon	Severe: poor filter, slope.	Severe: seepage, slope.	Severe: seepage, slope, too sandy.	Severe: seepage, slope.	Poor: seepage, too sandy, small stones.
Dixfield	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Poor: small stones.
NaB*:					
Naskeag	Severe: depth to rock, wetness, poor filter.	Severe: seepage, depth to rock.	Severe: depth to rock, seepage, wetness.	Severe: depth to rock, seepage, wetness.	Poor: depth to rock, seepage, wetness.
Schoodic	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Severe: depth to rock.	Poor: depth to rock.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
NBB*:					
Naskeag	Severe: depth to rock, wetness, poor filter.	Severe: seepage, depth to rock.	Severe: depth to rock, seepage, wetness.	Severe: depth to rock, seepage, wetness.	Poor: depth to rock, seepage, wetness.
Schoodic	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Severe: depth to rock.	Poor: depth to rock.
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock.
NcB	Severe: wetness.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Good.
Nicholville					
NcC	Severe: wetness.	Severe: slope, wetness.	Severe: wetness.	Moderate: slope, wetness.	Fair: slope.
Nicholville					
Ps*	Severe: poor filter.	Severe: seepage.	Severe: seepage, too sandy.	Slight	Poor: seepage, too sandy, small stones.
Pits					
Sa	Severe: percs slowly, wetness.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: wetness, too clayey.
Scantic					
SB*:					
Scantic	Severe: percs slowly, wetness.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: wetness, too clayey.
Biddeford	Severe: ponding, percs slowly.	Severe: excess humus, ponding.	Severe: ponding, too clayey.	Severe: ponding.	Poor: too clayey, hard to pack, ponding.
SdB*:					
Scantic	Severe: wetness, percs slowly.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: wetness, too clayey.
Lamoine	Severe: wetness, percs slowly.	Moderate: slope.	Severe: wetness, too clayey.	Severe: wetness.	Poor: too clayey, wetness.
SEB*:					
Scantic	Severe: wetness, percs slowly.	Slight	Severe: wetness, too clayey.	Severe: wetness.	Poor: wetness, too clayey.
Lamoine	Severe: wetness, percs slowly.	Moderate: slope.	Severe: wetness, too clayey.	Severe: wetness.	Poor: too clayey, wetness.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
SEB*:					
Dixfield	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Poor: small stones.
SfC*:					
Schoodic	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock.	Poor: depth to rock.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock.
SfE*:					
Schoodic	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, slope.	Poor: depth to rock, slope.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock, slope.
SGE*:					
Schoodic	Severe: depth to rock, slope.	Severe: depth to rock, slope.	Severe: depth to rock, seepage, slope.	Severe: depth to rock, slope.	Poor: depth to rock, slope.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock, slope.
Lyman	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock, seepage, slope.	Poor: depth to rock, slope.
SKC*:					
Schoodic	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock.	Poor: depth to rock.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock.
Naskeag	Severe: depth to rock, wetness, poor filter.	Severe: seepage, depth to rock.	Severe: depth to rock, seepage, wetness.	Severe: depth to rock, seepage, wetness.	Poor: depth to rock, seepage, wetness.
SmB, SoB Sheepscot	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, small stones.
SoC Sheepscot	Severe: wetness, poor filter.	Severe: seepage, slope, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, small stones.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
SrB*:					
Sheepscot	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, small stones.
Rock outcrop	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock.
ThC*:					
Thorndike	Severe: depth to rock.	Severe: depth to rock, slope, large stones.	Severe: depth to rock, large stones.	Severe: depth to rock.	Poor: depth to rock, seepage, small stones.
Winnecook	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock, small stones.
TuB*:					
Tunbridge	Severe: depth to rock.	Severe: seepage, depth to rock.	Severe: depth to rock, seepage.	Severe: depth to rock, seepage.	Poor: depth to rock.
Lyman	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock, small stones.
TuC*:					
Tunbridge	Severe: depth to rock.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock, seepage.	Poor: depth to rock.
Lyman	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock, small stones.
TWC*:					
Tunbridge	Severe: depth to rock.	Severe: seepage, depth to rock, slope.	Severe: depth to rock, seepage.	Severe: depth to rock, seepage.	Poor: depth to rock.
Lyman	Severe: depth to rock.	Severe: slope, depth to rock.	Severe: depth to rock.	Severe: depth to rock, seepage.	Poor: depth to rock, small stones.
Marlow	Severe: percs slowly.	Severe: slope.	Moderate: slope.	Moderate: wetness, slope.	Fair: small stones, slope, wetness.
Ud*:					
Udorthents	Variable	Variable	Variable	Variable	Variable.
Urban land	Variable	Variable	Variable	Variable	Variable.

See footnote at end of table.

TABLE 11.--Sanitary Facilities--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
WA*:					
Waskish	Severe: wetness, poor filter.	Severe: seepage, excess humus, wetness.	Severe: seepage, wetness, excess humus.	Severe: seepage, wetness.	Poor: wetness, excess humus, too acid.
Sebago	Severe: ponding.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.
WkC*:					
Winnecook	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock, small stones.
Thorndike	Severe: depth to rock.	Severe: depth to rock, slope.	Severe: depth to rock.	Severe: depth to rock.	Poor: depth to rock, seepage, small stones.
Wo	Severe: flooding, ponding, percs slowly.	Severe: seepage, flooding, excess humus.	Severe: flooding, ponding.	Severe: flooding, seepage, ponding.	Poor: ponding.
Wonsqueak					
Ws*:					
Wonsqueak	Severe: ponding, percs slowly.	Severe: seepage, excess humus.	Severe: ponding.	Severe: seepage, ponding.	Poor: ponding.
Bucksport	Severe: ponding, percs slowly.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.
WT*:					
Wonsqueak	Severe: ponding, percs slowly.	Severe: seepage, excess humus.	Severe: ponding.	Severe: seepage, ponding.	Poor: ponding.
Bucksport	Severe: ponding, percs slowly.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.
Sebago	Severe: ponding.	Severe: seepage, excess humus, ponding.	Severe: seepage, ponding, excess humus.	Severe: seepage, ponding.	Poor: ponding, excess humus.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 12.--Construction Materials

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "good," "fair," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
AdB, AdC Adams	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Bd Biddeford	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
BfB, BgB, BhB Brayton	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, wetness.
BSB*, BTB*: Brayton	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, wetness.
Colonel	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim, small stones.
BwC Buxton	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey.
BwD Buxton	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, slope.
Ch Charles	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness.
CoB, CoC Colton	Good	Probable	Probable	Poor: small stones, too sandy.
CoE Colton	Poor: slope.	Probable	Probable	Poor: slope, small stones, too sandy.
CRE*: Colton	Poor: slope.	Probable	Probable	Poor: slope, small stones, too sandy.
Adams	Poor: slope.	Probable	Improbable: too sandy.	Poor: slope, too sandy.
CSC*: Colton	Good	Probable	Probable	Poor: small stones, too sandy.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
CSC*:				
Adams	Good	Probable	Improbable: too sandy.	Poor: too sandy.
Sheepscot	Fair: wetness.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
DaB, DaC Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
DbC Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
DsB*:				
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Colonel	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim, small stones.
DtB*:				
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
Colonel	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim, small stones.
DWB*:				
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
Colonel	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: area reclaim, small stones.
Tunbridge	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Go Gouldsboro	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess salt, wetness.
Gt*:				
Gouldsboro	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess salt, wetness.
Beaches	Poor: wetness.	Probable	Probable	Poor: too sandy, small stones, area reclaim.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
HcC*:				
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Colton	Good	Probable	Probable	Poor: small stones, too sandy.
Rock outcrop	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock.
HmB*:				
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Monadnock	Good	Probable	Improbable: too sandy.	Fair: small stones.
HmC*:				
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Monadnock	Good	Probable	Improbable: too sandy.	Fair: small stones, slope.
HtB*, HtC*:				
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Monadnock	Good	Probable	Improbable: too sandy.	Poor: small stones.
HtE*:				
Hermon	Poor: slope.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Monadnock	Poor: slope.	Probable	Improbable: too sandy.	Poor: small stones, slope.
HVC*:				
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Monadnock	Good	Probable	Improbable: too sandy.	Poor: small stones.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
HVC*:				
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
HVE*:				
Hermon	Poor: slope.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Monadnock	Poor: slope.	Probable	Improbable: too sandy.	Poor: small stones, slope.
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
Kn	Poor: wetness.	Probable	Improbable: too sandy.	Poor: small stones, wetness.
Kinsman				
KW*:				
Kinsman	Poor: wetness.	Probable	Improbable: too sandy.	Poor: small stones, wetness.
Wonsqueak	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
LaB	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
Lamoine				
LbB*:				
Lamoine	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
Scantic	Poor: wetness, low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness, too clayey.
LCB*:				
Lamoine	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
Scantic	Poor: wetness, low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness, too clayey.
Buxton	Poor: low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey.
LgB*:				
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
LgB*:				
Brayton	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, wetness.
LHC*:				
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Brayton	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, wetness.
Schoodic	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
LsE*:				
Lyman	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Schoodic	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
LTE*:				
Lyman	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Schoodic	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Rock outcrop	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, slope.
LuC*:				
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Tunbridge	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
LWC*:				
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Tunbridge	Poor: area reclaim.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
LWC*:				
Schoodic	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
MaC---Marlow	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
MaD---Marlow	Fair: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
MbC---Marlow	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
MbE---Marlow	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
McC---Marlow	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
McE---Marlow	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
MDC*:				
Marlow	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
MDE*:				
Marlow	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, slope.
Dixfield	Fair: wetness, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.
MGC*:				
Marlow	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
MGE*:				
Marlow	Poor: slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim, slope.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
MGE*:				
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
MhC*:				
Monadnock	Fair: large stones.	Probable	Improbable: too sandy.	Poor: large stones, small stones.
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
MhE*:				
Monadnock	Poor: slope.	Probable	Improbable: too sandy.	Poor: large stones, small stones, slope.
Hermon	Poor: slope.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
MXC*:				
Monadnock	Fair: large stones.	Probable	Improbable: too sandy.	Poor: large stones, small stones.
Hermon	Fair: large stones.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
MXE*:				
Monadnock	Poor: slope.	Probable	Improbable: too sandy.	Poor: large stones, small stones, slope.
Hermon	Poor: slope.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
NaB*:				
Naskeag	Poor: depth to rock, wetness.	Improbable: thin layer.	Improbable: too sandy.	Poor: small stones, wetness.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
NaB*:				
Schoodic	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
NBB*:				
Naskeag	Poor: depth to rock, wetness.	Improbable: thin layer.	Improbable: too sandy.	Poor: small stones, wetness.
Schoodic	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
NcB Nicholville	Poor: frost action.	Improbable: excess fines.	Improbable: excess fines.	Good.
NcC Nicholville	Poor: frost action.	Improbable: excess fines.	Improbable: excess fines.	Fair: slope.
Ps* Pits	Good	Probable	Probable	Poor: too sandy, small stones, area reclaim.
Sa Scantic	Poor: wetness, low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness, too clayey.
SB*:				
Scantic	Poor: wetness, low strength.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness, too clayey.
Biddeford	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
SdB*:				
Scantic	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness, too clayey.
Lamoine	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.
SEB*:				
Scantic	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: wetness, too clayey.
Lamoine	Poor: low strength, wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: too clayey, wetness.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
SEB*:				
Dixfield	Fair: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones, area reclaim.
SfC*:				
Schoodic	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Rock outcrop	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock.
SfE*:				
Schoodic	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Rock outcrop	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, slope.
SGE*:				
Schoodic	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
Rock outcrop	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, slope.
Lyman	Poor: depth to rock, slope.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones, slope.
SkC*:				
Schoodic	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, small stones.
Rock outcrop	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock.
Naskeag	Poor: depth to rock, wetness.	Improbable: thin layer.	Improbable: too sandy.	Poor: small stones, wetness.
SmB, SoB, SoC: Sheepscot	Fair: wetness.	Probable	Probable	Poor: too sandy, small stones, area reclaim.
SrB*:				
Sheepscot	Fair: wetness.	Probable	Probable	Poor: too sandy, small stones, area reclaim.

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
SrB*:				
Rock outcrop	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock.
ThC*:				
Thorndike	Poor: depth to rock.	Improbable: thin layer.	Improbable: thin layer.	Poor: depth to rock, small stones.
Winnecook	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
TuB*, TuC*:				
Tunbridge	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, area reclaim, small stones.
TWC*:				
Tunbridge	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Lyman	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: depth to rock, area reclaim, small stones.
Marlow	Good	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Ud*:				
Udorthents	Variable	Variable	Variable	Variable.
Urban land	Variable	Variable	Variable	Variable.
WA*:				
Waskish	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness, too acid.
Sebago	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
WkC*:				
Winnecook	Poor: depth to rock.	Improbable: excess fines.	Improbable: excess fines.	Poor: small stones.
Thorndike	Poor: depth to rock.	Improbable: thin layer.	Improbable: thin layer.	Poor: depth to rock, small stones.
Wo	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
Wonsqueak				

See footnote at end of table.

TABLE 12.--Construction Materials--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
Ws*:				
Wonsqueak	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
Bucksport	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
WT*:				
Wonsqueak	Poor: wetness.	Improbable: excess fines.	Improbable: excess fines.	Poor: excess humus, wetness.
Bucksport	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.
Sebago	Poor: wetness.	Improbable: excess humus.	Improbable: excess humus.	Poor: excess humus, wetness.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 13.--Water Management

(Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not evaluated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
AdB---- Adams	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, slope.	Too sandy------	Droughty.
AdC---- Adams	Severe: seepage, slope.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, slope.	Slope, too sandy.	Slope, droughty.
Bd---- Biddeford	Slight---------	Severe: piping, hard to pack, ponding.	Severe: slow refill.	Ponding, percs slowly, frost action.	Ponding, percs slowly.	Erodes easily, ponding, percs slowly.	Wetness, erodes easily, percs slowly.
BfB---- Brayton	Moderate: seepage, slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Wetness, percs slowly.	Wetness, droughty.
BgB, BhB---- Brayton	Moderate: seepage, slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Wetness, percs slowly.	Wetness.
BSB*, BTB*: Brayton----	Moderate: seepage, slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Wetness, percs slowly.	Wetness.
Colonel----	Moderate: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Wetness, rooting depth.
BwC, BwD---- Buxton	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, erodes easily, wetness.	Slope, erodes easily, droughty.
Ch---- Charles	Moderate: seepage.	Severe: piping, wetness.	Severe: cutbanks cave.	Flooding, frost action, cutbanks cave.	Wetness, flooding.	Erodes easily, wetness.	Wetness, erodes easily.
CoB---- Colton	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Droughty-------	Large stones, too sandy.	Large stones droughty.
CoC, CoE---- Colton	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Droughty-------	Slope, large stones, too sandy.	Large stones slope, droughty.
CRE*: Colton----	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Droughty-------	Slope, large stones, too sandy.	Large stones slope, droughty.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
CRE*:							
Adams	Severe: seepage, slope.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, slope.	Slope, too sandy.	Slope, droughty.
CSC*:							
Colton	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Droughty	Large stones, too sandy.	Large stones droughty.
Adams	Severe: seepage.	Severe: seepage, piping.	Severe: no water.	Deep to water	Droughty, fast intake, slope.	Too sandy	Droughty.
Sheepscot	Severe: seepage.	Severe: seepage, wetness.	Severe: cutbanks cave.	Large stones, slope, cutbanks cave.	Slope, wetness, droughty.	Large stones, wetness.	Large stones droughty.
DaB Dixfield	Moderate: slope, seepage.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Rooting depth, percs, slowly.
DaC, DbC Dixfield	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, wetness, percs slowly.	Slope, rooting depth, percs slowly
DsB*, DtB*:							
Dixfield	Moderate: seepage, slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Rooting depth, percs slowly.
Colonel	Moderate: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Wetness, rooting depth
DWB*:							
Dixfield	Moderate: seepage, slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Rooting depth, percs slowly
Colonel	Moderate: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Wetness, rooting depth.
Tunbridge	Severe: seepage.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.
Go Gouldsboro	Slight	Severe: piping, ponding, excess humus.	Severe: slow refill, salty water.	Ponding, percs slowly, flooding.	Ponding, percs slowly, flooding.	Erodes easily, ponding, percs slowly.	Wetness, excess salt erodes easily.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Gt*:							
Gouldsboro	Slight	Severe: piping, ponding, excess humus.	Severe: slow refill, salty water.	Ponding, percs slowly, flooding.	Ponding, percs slowly, flooding.	Erodes easily, ponding, percs slowly.	Wetness, excess salt erodes easily.
Beaches	Severe: seepage.	Severe: seepage, wetness.	Moderate: cutbanks cave.	Flooding, cutbanks cave.	Wetness, droughty, fast intake.	Wetness, too sandy.	Wetness, droughty.
HcC*:							
Hermon	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Slope, large stones, too sandy.	Large stones slope, droughty.
Colton	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Droughty	Slope, large stones, too sandy.	Large stones slope, droughty.
Rock outcrop	Severe: depth to rock, slope.	Slight	Severe: no water.	Deep to water	Slope, depth to rock.	Slope, depth to rock.	Slope, depth to rock.
HmB*:							
Hermon	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Large stones, too sandy.	Large stones droughty.
Monadnock	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Slope	Too sandy	Favorable.
HmC*:							
Hermon	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Slope, large stones, too sandy.	Large stones slope, droughty.
Monadnock	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope	Slope, too sandy.	Slope.
HtB*:							
Hermon	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Large stones, too sandy.	Large stones droughty.
Monadnock	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Slope	Too sandy	Favorable.
HtC*, HtE*:							
Hermon	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Slope, large stones, too sandy.	Large stones slope, droughty.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
HtC*, HtE*:							
Monadnock	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope	Slope, too sandy.	Slope.
HVC*, HVE*:							
Hermon	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Slope, large stones, too sandy.	Large stones slope, droughty.
Monadnock	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope	Slope, too sandy.	Slope.
Dixfield	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, wetness, percs slowly.	Slope, rooting depth, percs slowly.
Kn Kinsman	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy.	Wetness, droughty.
KW*:							
Kinsman	Severe: seepage.	Severe: seepage, piping, wetness.	Severe: cutbanks cave.	Cutbanks cave	Wetness, droughty, fast intake.	Wetness, too sandy.	Wetness, droughty.
Wonsqueak	Severe: seepage.	Severe: piping, ponding.	Severe: slow refill.	Ponding, frost action.	Ponding	Erodes easily, ponding.	Wetness, erodes easily.
LaB Lamoine	Moderate: slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Erodes easily, wetness.	Wetness, erodes easily.
LbB*:							
Lamoine	Moderate: slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Erodes easily, wetness.	Wetness, erodes easily.
Scantic	Slight	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, percs slowly.	Wetness, percs slowly, erodes easily.	Wetness, rooting depth, erodes easily.
LCB*:							
Lamoine	Moderate: slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Erodes easily, wetness.	Wetness, erodes easily.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
LCB*:							
Scantic	Slight	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, percs slowly.	Wetness, percs slowly, erodes easily.	Wetness, rooting depth, erodes easily.
Buxton	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, erodes easily, wetness.	Slope, erodes easily, droughty.
LgB*:							
Lyman	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
Brayton	Moderate: seepage.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, droughty.	Wetness, percs slowly.	Wetness.
LHC*:							
Lyman	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
Brayton	Moderate: seepage.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, droughty.	Wetness, percs slowly.	Wetness.
Schoodic	Severe: depth to rock, slope.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones slope, droughty.
LsE*:							
Lyman	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
Schoodic	Severe: depth to rock, slope.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones slope, droughty.
LTE*:							
Lyman	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
Schoodic	Severe: depth to rock, slope.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones slope, droughty.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
LTE*:							
Rock outcrop-----	Severe: depth to rock, slope.	Slight---------	Severe: no water.	Deep to water	Slope, depth to rock.	Slope, depth to rock.	Slope, depth to rock.
LuC*:							
Lyman----------	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
Tunbridge--------	Severe: seepage.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.
LWC*:							
Lyman----------	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
Tunbridge--------	Severe: seepage, slope.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones slope, droughty.
Schoodic---------	Severe: depth to rock.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.
MaC, MaD, MbC, MbE---------- Marlow	Severe: slope.	Severe: piping.	Severe: no water.	Deep to water	Percs slowly, rooting depth, slope.	Slope, percs slowly.	Slope, rooting depth, percs slowly.
McC, McE---------- Marlow	Severe: slope.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, percs slowly.	Slope, large stones, percs slowly.	Large stones slope, droughty.
MDC*, MDE*:							
Marlow----------	Severe: slope.	Severe: piping.	Severe: no water.	Deep to water	Percs slowly, rooting depth, slope.	Slope, percs slowly.	Slope, rooting depth, percs slowly.
Dixfield---------	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, wetness, percs slowly.	Slope, rooting depth, percs slowly

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
MGC*, MGE*:							
Marlow	Severe: slope.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, percs slowly.	Slope, large stones, percs slowly.	Large stones slope, droughty.
Dixfield	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, wetness, percs slowly.	Slope, rooting depth, percs slowly.
MhC*, MhE*:							
Monadnock	Severe: seepage, slope.	Severe: seepage, large stones.	Severe: no water.	Deep to water, large stones.	Large stones, slope.	Slope, large stones, too sandy.	Large stones slope.
Hermon	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Slope, large stones, too sandy.	Large stones slope, droughty.
MXC*, MXE*:							
Monadnock	Severe: seepage, slope.	Severe: seepage, large stones.	Severe: no water.	Deep to water, large stones.	Large stones, slope.	Slope, large stones, too sandy.	Large stones slope.
Hermon	Severe: seepage, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Slope, large stones, too sandy.	Large stones slope, droughty.
Dixfield	Severe: slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Slope, wetness, percs slowly.	Slope, rooting depth, percs slowly.
NaB*:							
Naskeag	Severe: seepage.	Severe: seepage, wetness.	Severe: depth to rock, cutbanks cave.	Depth to rock, cutbanks cave.	Wetness, droughty.	Depth to rock, wetness, too sandy.	Wetness, droughty, depth to rock.
Schoodic	Severe: depth to rock.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.
NBB*:							
Naskeag	Severe: seepage.	Severe: seepage, wetness.	Severe: depth to rock, cutbanks cave.	Depth to rock, slope, cutbanks cave.	Slope, wetness, droughty.	Depth to rock, wetness, too sandy.	Wetness, droughty, depth to rock.
Schoodic	Severe: depth to rock.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for--			Features affecting--			
	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions	Grassed waterways
NBB*:							
Lyman	Severe: depth to rock.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Depth to rock	Droughty, depth to rock.
NcB Nicholville	Moderate: seepage, slope.	Severe: piping.	Severe: no water.	Cutbanks cave	Erodes easily	Erodes easily	Erodes easily.
NcC Nicholville	Severe: slope.	Severe: piping.	Severe: no water.	Slope, cutbanks cave.	Slope, erodes easily.	Erodes easily	Slope, erodes easily.
Ps* Pits	Severe: seepage.	Severe: seepage.	Severe: no water.	Deep to water	Droughty, fast intake.	Large stones, too sandy.	Large stones droughty.
Sa Scantic	Slight	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, percs slowly.	Wetness, percs slowly, erodes easily.	Wetness, rooting depth, erodes easily.
SB*:							
Scantic	Slight	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, percs slowly.	Wetness, percs slowly, erodes easily.	Wetness, rooting depth, erodes easily
Biddeford	Slight	Severe: piping, hard to pack, ponding.	Severe: slow refill.	Ponding, percs slowly, frost action.	Ponding, percs slowly.	Erodes easily, ponding, percs slowly.	Wetness, erodes easily, percs slowly.
SdB*:							
Scantic	Slight	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, percs slowly.	Wetness, percs slowly, erodes easily.	Wetness, rooting depth erodes easily.
Lamoine	Moderate: slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Erodes easily, wetness.	Wetness, erodes easily.
SEB*:							
Scantic	Slight	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action.	Wetness, percs slowly.	Wetness, percs slowly, erodes easily.	Wetness, rooting depth, erodes easily

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
SEB*:							
Lamoine	Moderate: slope.	Severe: piping, wetness.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, droughty.	Erodes easily, wetness.	Wetness, erodes easily.
Dixfield	Moderate: seepage, slope.	Severe: piping.	Severe: no water.	Percs slowly, frost action, slope.	Slope, wetness, percs slowly.	Wetness, percs slowly.	Rooting depth, percs slowly.
SfC*:							
Schoodic	Severe: depth to rock.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.
Rock outcrop	Severe: depth to rock.	Slight	Severe: no water.	Deep to water	Slope, depth to rock.	Depth to rock	Depth to rock.
SfE*:							
Schoodic	Severe: depth to rock, slope.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones slope, droughty.
Rock outcrop	Severe: depth to rock, slope.	Slight	Severe: no water.	Deep to water	Slope, depth to rock.	Slope, depth to rock.	Slope, depth to rock.
SGE*:							
Schoodic	Severe: depth to rock, slope.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, large stones, depth to rock.	Large stones slope, droughty.
Rock outcrop	Severe: depth to rock, slope.	Slight	Severe: no water.	Deep to water	Slope, depth to rock.	Slope, depth to rock.	Slope, depth to rock
Lyman	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Droughty, depth to rock, slope.	Slope, depth to rock.	Slope, droughty, depth to rock.
SKC*:							
Schoodic	Severe: depth to rock.	Severe: thin layer.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Large stones, depth to rock.	Large stones droughty.
Rock outcrop	Severe: depth to rock.	Slight	Severe: no water.	Deep to water	Slope, depth to rock.	Depth to rock	Depth to rock.
Naskeag	Severe: seepage.	Severe: seepage, wetness.	Severe: depth to rock, cutbanks cave.	Depth to rock, slope, cutbanks cave.	Slope, wetness, droughty.	Depth to rock, wetness, too sandy.	Wetness, droughty, depth to rock.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
SmB, SoB---------- Sheepscot	Severe: seepage.	Severe: seepage, wetness.	Severe: cutbanks cave.	Large stones, slope, cutbanks cave.	Slope, wetness, droughty.	Large stones, wetness.	Large stones droughty.
SoC---------- Sheepscot	Severe: seepage, slope.	Severe: seepage, wetness.	Severe: cutbanks cave.	Large stones, slope, cutbanks cave.	Slope, wetness, droughty.	Slope, large stones, wetness.	Large stones slope, droughty.
SrB*: Sheepscot--------	Severe: seepage.	Severe: seepage, wetness.	Severe: cutbanks cave.	Large stones, slope, cutbanks cave.	Slope, wetness, droughty.	Large stones, wetness.	Large stones droughty.
Rock outcrop-----	Severe: depth to rock.	Slight---------	Severe: no water.	Deep to water	Slope, depth to rock.	Depth to rock	Depth to rock.
ThC*: Thorndike--------	Severe: depth to rock.	Severe: seepage, large stones.	Severe: no water.	Deep to water	Slope, large stones, droughty.	Large stones, depth to rock.	Large stones droughty.
Winnecook--------	Severe: slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, depth to rock.	Slope, droughty.
TuB*: Tunbridge--------	Severe: seepage.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Depth to rock	Droughty, depth to rock.
Lyman----------	Severe: depth to rock.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Depth to rock	Droughty, depth to rock.
TuC*: Tunbridge--------	Severe: seepage, slope.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, depth to rock.	Slope, droughty, depth to rock.
Lyman----------	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, depth to rock.	Slope, droughty, depth to rock.
TWC*: Tunbridge--------	Severe: seepage, slope.	Severe: piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, depth to rock.	Slope, droughty, depth to rock.
Lyman----------	Severe: depth to rock, slope.	Severe: thin layer, piping.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Slope, depth to rock.	Slope, droughty, depth to rock.

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
TWC*:							
Marlow	Severe: slope.	Severe: piping.	Severe: no water.	Deep to water	Percs slowly, rooting depth, slope.	Slope, percs slowly.	Slope, rooting depth, percs slowly.
Ud*	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
Udorthents.							
Urban land	Variable	Variable	Variable	Variable	Variable	Variable	Variable.
WA*:							
Waskish	Severe: seepage.	Severe: excess humus, wetness.	Slight	Frost action, too acid.	Wetness, too acid.	Wetness	Wetness.
Sebago	Severe: seepage.	Severe: excess humus, ponding.	Slight	Ponding, frost action.	Ponding	Ponding	Wetness.
WkC*:							
Winnecook	Moderate: seepage, depth to rock, slope.	Severe: seepage.	Severe: no water.	Deep to water	Slope, droughty, depth to rock.	Depth to rock	Droughty, depth to rock.
Thorndike	Severe: depth to rock.	Severe: seepage.	Severe: no water.	Deep to water	Slope, large stones, depth to rock.	Large stones, depth to rock.	Large stones depth to rock.
Wo	Severe: seepage.	Severe: piping, ponding.	Severe: slow refill.	Ponding, flooding, frost action.	Ponding, flooding.	Erodes easily, ponding.	Wetness, erodes easily.
Wonsqueak							
Ws*:							
Wonsqueak	Severe: seepage.	Severe: piping, ponding.	Severe: slow refill.	Ponding, frost action.	Ponding	Erodes easily, ponding.	Wetness, erodes easily.
Bucksport	Severe: seepage.	Severe: excess humus, ponding.	Severe: slow refill.	Ponding, frost action.	Ponding	Ponding	Wetness.
WT*:							
Wonsqueak	Severe: seepage.	Severe: piping, ponding.	Severe: slow refill.	Ponding, frost action.	Ponding	Erodes easily, ponding.	Wetness, erodes easily

See footnote at end of table.

TABLE 13.--Water Management--Continued

Soil name and map symbol	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
WT*:							
Bucksport	Severe: seepage.	Severe: excess humus, ponding.	Severe: slow refill.	Ponding, frost action.	Ponding	Ponding	Wetness.
Sebago	Severe: seepage.	Severe: excess humus, ponding.	Slight	Ponding, frost action.	Ponding	Ponding	Wetness.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 14.--Engineering Index Properties

(The symbol < means less than; > means more than. Absence of an entry indicates that data were not estimated)

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
AdB, AdC---------- Adams	0-3	Loamy sand----	SM, SP-SM	A-1, A-2, A-3, A-4	0	0	95-100	95-100	45-85	5-40	---	NP
	3-24	Loamy sand, sand, loamy fine sand.	SM, SP-SM	A-1, A-2, A-3, A-4	0	0	95-100	95-100	35-95	5-40	---	NP
	24-65	Fine sand, coarse sand, gravelly sand.	SP-SM, SW-SM, SP	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	---	NP
Bd---------- Biddeford	0-9	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	9-19	Silt loam, silty clay loam, silty clay.	MH, ML	A-4, A-6, A-7	0	0	100	100	90-100	85-100	30-65	5-25
	19-49	Silty clay, silty clay loam, clay.	CL, MH, ML, CL-ML	A-6, A-7, A-4	0	0	100	100	95-100	90-100	25-55	5-20
	49-65	Silty clay loam, silty clay, clay.	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-15
BfB---------- Brayton	0-9	Fine sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4	0-1	0-5	85-100	80-95	50-85	25-55	<30	NP-10
	9-18	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	18-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, GM, SC	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	NP-10
BgB---------- Brayton	0-9	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	<30	NP-10
	9-22	Fine sandy loam, gravelly sandy loam, silt loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	22-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	---

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 10 inches	Fragments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
BhB---------- Brayton	0-9	Rubbly fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	25-45	5-25	65-95	55-90	35-90	20-80	<30	NP-10
	9-22	Fine sandy loam, gravelly sandy loam, silt loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	22-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	NP-10
BSB*:												
Brayton------	0-9	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	<30	NP-10
	9-22	Fine sandy loam, gravelly sandy loam, silt loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	22-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	---
Colonel------	0-3	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	3-20	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
BTB*:												
Brayton------	0-9	Rubbly fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	25-45	5-25	65-95	55-90	35-90	20-80	<30	NP-10
	9-22	Fine sandy loam, gravelly sandy loam, silt loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	22-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
BTB*:												
Colonel------	0-3	Extremely stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	5-25	5-30	75-95	60-90	35-85	20-70	<25	NP-10
	3-20	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
BwC---------- Buxton	0-8	Silt loam-----	ML, MH	A-4, A-5, A-7	0	0	98-100	95-100	95-100	85-100	36-55	5-15
	8-16	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	16-35	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	35-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35
BwD---------- Buxton	0-4	Silt loam-----	ML, MH	A-4, A-5, A-7	0	0	98-100	95-100	95-100	85-100	36-55	5-15
	4-12	Silt loam, silty clay loam, silty clay.	ML, CL, MH,	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	12-31	Silt loam, silty clay loam, silty clay.	ML, CL, MH,	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	31-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35
Ch---------- Charles	0-6	Silt loam-----	ML, CL-ML, CL	A-4, A-6	0	0	100	100	95-100	80-95	<40	NP-15
	6-65	Silt loam, very fine sandy loam, loamy very fine sand.	ML, CL-ML, CL	A-4, A-6	0	0	100	100	95-100	60-95	<40	NP-15

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
CoB, CoC, CoE-Colton	0-4	Gravelly sandy loam.	SM, GM, GW-GM, SW-SM	A-2, A-4, A-1	0	0-5	35-80	30-75	20-65	10-40	<10	NP-2
	4-8	Gravelly coarse sandy loam, very gravelly sandy loam, very gravelly sand.	GM, SM, GW-GM, GP-GM	A-1, A-2, A-3	0-1	5-20	30-80	25-75	20-60	5-35	<10	NP-2
	8-20	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand.	SM, GM, SP, GP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	---	NP
	20-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand.	GP, SP, GW, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	---	NP
CRE*:												
Colton-------	0-4	Gravelly sandy loam.	SM, GM, GW-GM, SW-SM	A-2, A-4, A-1	0	0-5	35-80	30-75	20-65	10-40	<10	NP-2
	4-8	Gravelly coarse sandy loam, very gravelly sandy loam, very gravelly sand.	GM, SM, GW-GM, GP-GM	A-1, A-2, A-3	0-1	5-20	30-80	25-75	20-60	5-35	<10	NP-2
	8-20	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand.	SM, GM, SP, GP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	---	NP
	20-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand.	GP, SP, GW, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	---	NP
Adams--------	0-3	Loamy sand----	SM, SP-SM	A-1, A-2, A-3, A-4	0	0	95-100	95-100	45-85	5-40	---	NP
	3-24	Loamy sand, sand, loamy fine sand.	SM, SP-SM	A-1, A-2, A-3, A-4	0	0	95-100	95-100	35-95	5-40	---	NP
	24-65	Fine sand, coarse sand, gravelly sand.	SP-SM, SW-SM, SP	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	---	NP

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
CSC*:												
Colton-------	0-4	Gravelly sandy loam.	SM, GM, GW-GM, SW-SM	A-2, A-4, A-1	0	0-5	35-80	30-75	20-65	10-40	<10	NP-2
	4-8	Gravelly coarse sandy loam, very gravelly sandy loam, very gravelly sand.	GM, SM, GW-GM, GP-GM	A-1, A-2, A-3	0-1	5-20	30-80	25-75	20-60	5-35	<10	NP-2
	8-20	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand.	SM, GM, SP, GP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	---	NP
	20-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand.	GP, SP, GW, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	---	NP
Adams--------	0-3	Loamy sand----	SM, SP-SM	A-1, A-2, A-3, A-4	0	0	95-100	95-100	45-85	5-40	---	NP
	3-24	Loamy sand, sand, loamy fine sand.	SM, SP-SM	A-1, A-2, A-3, A-4	0	0	95-100	95-100	35-95	5-40	---	NP
	24-65	Fine sand, coarse sand, gravelly sand.	SP-SM, SW-SM, SP	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	---	NP
Sheepscot----	0-7	Sandy loam----	SC-SM, SM, ML, CL-ML	A-1, A-2, A-4	0	0-5	80-95	75-90	45-85	20-60	<15	NP-5
	7-18	Gravelly fine sandy loam, fine sandy loam, very gravelly coarse sandy loam.	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3, A-4	0-1	0-5	40-95	35-90	20-75	5-50	<15	NP-5
	18-24	Very gravelly sand, very gravelly loamy sand, extremely gravelly coarse sand.	GP, GM, SP, SM	A-1	0-1	5-25	20-55	15-50	5-40	1-15	---	NP
	24-65	Extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand.	GP, GM, SP, SM	A-1	0-1	5-30	20-55	15-50	5-40	1-15	---	NP

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
DaB, DaC----- Dixfield	0-6	Fine sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	<25	NP-10
	6-26	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	26-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
DbC----- Dixfield	0-6	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
DsB*:												
Dixfield-----	0-6	Fine sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	<25	NP-10
	6-26	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	26-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
Colonel-----	0-6	Fine sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	<25	NP-10
	6-18	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-5	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	18-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
DtB*:												
Dixfield-----	0-6	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
Colonel------	0-3	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	3-20	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
DWB*:												
Dixfield-----	0-6	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
Colonel------	0-3	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	3-20	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
DWB*:												
Tunbridge----	0-6	Very stony fine sandy loam.	SM, ML, GM	A-4, A-2	1-5	5-25	55-100	50-95	35-90	20-60	<20	NP-2
	6-19	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-5, A-2	0-5	0-15	70-100	60-95	35-95	20-85	<50	NP-6
	19-33	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	<20	NP-2
	33-37	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Go---------- Gouldsboro	0-5	Silt loam-----	CL, CL-ML, OL	A-4, A-6 A-7	0	0	100	98-100	90-100	70-95	25-50	5-25
	5-65	Silt loam, silty clay loam, mucky silt loam.	CL, CL-ML, OL	A-4, A-6, A-7	0	0	100	98-100	90-100	70-95	25-45	5-25
Gt*:												
Gouldsboro---	0-5	Silt loam-----	CL, CL-ML, OL	A-4, A-6	0	0	100	98-100	90-100	70-95	25-50	5-25
	5-65	Silt loam, silty clay loam, mucky silt loam.	CL, CL-ML, OL	A-4, A-6, A-7	0	0	100	98-100	90-100	70-95	25-45	5-25
Beaches------	0-6	Extremely gravelly coarse sand.	GP	A-1	0	0-10	10-30	10-25	0-10	0	---	NP
	6-60	Gravelly coarse sand, very gravelly coarse sand, extremely gravelly coarse sand.	GP, SP	A-1	0	0-10	10-80	10-75	0-40	0-5	---	NP
HcC*:												
Hermon-------	0-3	Very stony sandy loam.	SM, GM	A-2, A-4, A-1	1-5	5-30	60-95	50-90	30-80	15-45	<40	NP-10
	3-12	Fine sandy loam, sandy loam, very gravelly coarse sandy loam.	SM, GM	A-1, A-2, A-4	0-15	5-30	60-95	50-90	30-80	15-45	<40	NP-10
	12-65	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam.	SM, GM, SP-SM, GP-GM	A-2, A-4, A-1	5-20	10-30	40-80	30-75	15-65	10-40	<40	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
HcC*:												
Colton-------	0-4	Gravelly sandy loam.	SM, GM, GW-GM, SW-SM	A-2, A-4, A-1	0	0-5	35-80	30-75	20-65	10-40	<10	NP-2
	4-8	Gravelly coarse sandy loam, very gravelly sandy loam, very gravelly sand.	GM, SM, GW-GM, GP-GM	A-1, A-2, A-3	0-1	5-20	30-80	25-75	20-60	5-35	<10	NP-2
	8-20	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand.	SM, GM, SP, GP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	---	NP
	20-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand.	GP, SP, GW, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	---	NP
Rock outcrop-	0-60	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
HmB*, HmC*:												
Hermon-------	0-6	Sandy loam----	SM	A-2, A-4	0-1	0-5	80-95	75-90	50-80	15-45	<40	NP-10
	6-65	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam.	SM, GM, SP-SM, GP-GM	A-2, A-4, A-1	5-15	10-30	40-80	30-75	15-65	10-40	<40	NP-10
Monadnock----	0-8	Fine sandy loam.	SM, ML	A-2, A-4	0-1	0-5	90-100	85-100	55-85	30-60	<40	NP-4
	8-18	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	0-15	80-100	70-100	50-85	30-60	<40	NP-4
	18-65	Loamy sand, loamy fine sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-25	0-20	65-100	50-100	20-60	10-35	---	NP

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
HtB*, HtC*, HtE*:												
Hermon------	0-3	Very stony sandy loam.	SM, GM	A-2, A-4, A-1	1-5	5-30	60-95	50-90	30-80	15-45	<40	NP-10
	3-12	Fine sandy loam, sandy loam, very gravelly coarse sandy loam.	SM, GM	A-1, A-2, A-4	0-15	5-30	60-95	50-90	30-80	15-45	<40	NP-10
	12-65	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam.	SM, GM, SP-SM, GP-GM	A-2, A-4, A-1	5-20	10-30	40-80	30-75	15-65	10-40	<40	NP-10
Monadnock---	0-8	Very stony fine sandy loam.	SM, ML	A-2, A-4	1-5	5-15	80-100	70-90	50-85	30-60	<40	NP-4
	8-20	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	0-15	80-95	70-90	50-85	30-60	<40	NP-4
	20-65	Loamy sand, loamy fine sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-25	0-20	65-85	50-80	20-60	10-35	---	NP
HVC*, HVB*:												
Hermon-------	0-3	Very stony sandy loam.	SM, GM	A-2, A-4, A-1	1-5	5-30	60-95	50-90	30-80	15-45	<40	NP-10
	3-12	Fine sandy loam, sandy loam, very gravelly coarse sandy loam.	SM, GM	A-1, A-2, A-4	0-15	5-30	60-95	50-90	30-80	15-45	<40	NP-10
	12-65	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam.	SM, GM, SP-SM, GP-GM	A-2, A-4, A-1	5-20	10-30	40-80	30-75	15-65	10-40	<40	NP-10
Monadnock----	0-8	Very stony fine sandy loam.	SM, ML	A-2, A-4	1-5	5-15	80-100	70-90	50-85	30-60	<40	NP-4
	8-20	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	0-15	80-95	70-90	50-85	30-60	<40	NP-4
	20-65	Loamy sand, loamy fine sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-25	0-20	65-85	50-80	20-60	10-35	---	NP

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
HVC*, HVE*:												
Dixfield-----	0-6	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
Kn----------- Kinsman	0-7	Loamy sand----	SM, SW-SM, SP-SM	A-2, A-3, A-4	0	0	90-100	80-100	50-85	5-45	---	NP
	7-37	Loamy fine sand, loamy sand, sand.	SM, SP-SM, SW-SM	A-1, A-2, A-3	0	0	90-100	80-100	45-85	5-35	---	NP
	37-65	Loamy sand, sand, gravelly coarse sand.	SM, SP-SM, SW-SM	A-1, A-2, A-3	---	0-5	90-95	55-90	45-75	5-25	---	NP
KW*:												
Kinsman------	0-7	Loamy sand----	SM, SW-SM, SP-SM	A-2, A-3, A-4	0	0	90-100	80-100	50-85	5-45	---	NP
	7-37	Loamy fine sand, loamy sand, sand.	SM, SP-SM, SW-SM	A-1, A-2, A-3	0	0	90-100	80-100	45-85	5-35	---	NP
	37-65	Loamy sand, sand, gravelly coarse sand.	SM, SP-SM, SW-SM	A-1, A-2, A-3	---	0-5	90-95	55-90	45-75	5-25	---	NP
Wonsqueak----	0-8	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	8-32	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	32-65	Silt loam, fine sandy loam, silty clay loam.	ML, SM, CL-ML, CL	A-4, A-2, A-6	0	0-5	85-100	75-100	50-100	30-95	<40	NP-20
LaB---------- Lamoine	0-7	Silt loam-----	ML, MH	A-4, A-5, A-7	0	0	98-100	95-100	95-100	85-100	36-55	5-15
	7-17	Silt loam, silty clay loam, silty clay.	ML, CL, MH,	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	17-21	Silt loam, silty clay loam, silty clay.	ML, CL, MH, CL-ML	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	21-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
LbB*:												
Lamoine------	0-7	Silt loam-----	ML, MH	A-4, A-5, A-7	0	0	98-100	95-100	95-100	85-100	36-55	5-15
	7-17	Silt loam, silty clay loam, silty clay.	ML, CL, MH,	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	17-21	Silt loam, silty clay loam, silty clay.	ML, CL, MH,	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	21-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35
Scantic------	0-15	Silt loam-----	ML, MH	A-4, A-7, A-5	0	0	100	95-100	90-100	70-100	36-55	5-20
	15-35	Silty clay loam, silt loam, clay.	CL, CH	A-7, A-6, A-4	0	0	100	95-100	95-100	85-100	30-55	8-35
	35-65	Clay, silty clay loam, silty clay.	CL, CH	A-6, A-7	0	0	100	95-100	95-100	90-100	35-60	15-35
LCB*:												
Lamoine------	0-7	Silt loam-----	ML, MH	A-4, A-5, A-7	0	0	98-100	95-100	95-100	85-100	36-55	5-15
	7-17	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	17-21	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	21-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35
Scantic------	0-15	Silt loam-----	ML, MH	A-4, A-7, A-5	0	0	100	95-100	90-100	70-100	36-55	5-20
	15-35	Silty clay loam, silt loam, clay.	CL, CH	A-7, A-6, A-4	0	0	100	95-100	95-100	85-100	30-55	8-35
	35-65	Clay, silty clay loam, silty clay.	CL, CH	A-6, A-4	0	0	100	95-100	95-100	90-100	35-60	15-35
Buxton-------	0-8	Silt loam-----	ML, MH	A-4, A-5, A-7	0	0	98-100	95-100	95-100	85-100	36-55	5-15
	8-16	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	16-35	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	35-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
LgB*:												
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Brayton------	0-9	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	<30	NP-10
	9-22	Fine sandy loam, gravelly sandy loam, silt loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	22-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	---
LHC*:												
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Brayton------	0-9	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	<30	NP-10
	9-22	Fine sandy loam, gravelly sandy loam, silt loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	<30	NP-10
	22-65	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	<30	---
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
LsE*:												
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
LTE*:												
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Rock outcrop-	0-60	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
LuC*:												
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
LuC*:												
Tunbridge----	0-6	Very stony fine sandy loam.	SM, ML, GM	A-4, A-2	1-5	5-25	55-100	50-95	35-90	20-60	<20	NP-2
	6-19	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-5, A-2	0-5	0-15	70-100	60-95	35-95	20-85	<50	NP-6
	19-33	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	<20	NP-2
	33-37	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
LWC*:												
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Tunbridge----	0-6	Very stony fine sandy loam.	SM, ML, GM	A-4, A-2	1-5	5-25	55-100	50-95	35-90	20-60	<20	NP-2
	6-19	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-5, A-2	0-5	0-15	70-100	60-95	35-95	20-85	<50	NP-6
	19-33	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	<20	NP-2
	33-37	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
MaC, MaD------ Marlow	0-8	Fine sandy loam.	SM, ML, CL-ML, SC	A-2, A-4	0-1	0-10	90-100	75-90	50-90	30-80	<30	NP-10
	8-21	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	21-65	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	70-90	60-85	35-80	20-60	<30	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 10 inches	Fragments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
MbC, MbE------ Marlow	0-2	Very stony fine sandy loam.	SM, ML, CL-ML, SC	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	<30	NP-10
	2-21	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	21-65	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	70-90	60-85	35-80	20-60	<30	NP-10
McC, McE------ Marlow	0-2	Extremely bouldery fine sandy loam.	SM, ML, CL-ML, SC	A-2, A-4	5-25	15-35	90-100	75-90	45-85	25-65	<30	NP-10
	2-21	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, CL-ML, SC-SM	A-1, A-2, A-4	0-10	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	21-65	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, CL-ML, SC-SM	A-1, A-2, A-4	0-10	0-15	70-90	60-85	35-80	20-60	<30	NP-10
MDC*, MDE*: Marlow-------	0-2	Very stony fine sandy loam.	SM, ML, CL-ML, SC	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	<30	NP-10
	2-21	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	21-65	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	70-90	60-85	35-80	20-60	<30	NP-10
Dixfield-----	0-6	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
MGC*, MGE*:												
Marlow-------	0-2	Extremely bouldery fine sandy loam.	SM, ML, CL-ML, SC	A-2, A-4	5-25	15-35	90-100	75-90	45-85	25-65	<30	NP-10
	2-21	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, CL-ML, SC-SM	A-1, A-2, A-4	0-10	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	21-65	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, CL-ML, SC-SM	A-1, A-2, A-4	0-10	0-15	70-90	60-85	35-80	20-60	<30	NP-10
Dixfield-----	0-6	Extremely bouldery fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	5-25	5-30	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
MhC*, MhE*:												
Monadnock----	0-8	Extremely bouldery fine sandy loam.	SM, ML	A-2, A-4	5-25	20-25	80-95	70-90	40-85	25-60	<40	NP-4
	8-20	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	0-15	80-95	70-90	50-85	30-60	<40	NP-4
	20-65	Loamy sand, loamy fine sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-25	0-20	65-85	50-80	20-60	10-35	---	NP
Hermon-------	0-3	Extremely bouldery sandy loam.	SM, GM	A-1, A-2, A-4	5-25	10-50	60-95	50-90	30-80	15-45	<40	NP-10
	3-12	Fine sandy loam, sandy loam, very gravelly coarse sandy loam.	SM	A-1, A-2, A-4	0-15	5-30	70-95	50-90	30-80	15-45	<40	NP-10
	12-65	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam.	SM, GM, SP-SM, GP-GM	A-1, A-2, A-4	5-20	10-30	40-80	30-75	15-65	10-40	<40	NP-10

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
MXC*, MXE*:												
Monadnock----	0-8	Extremely bouldery fine sandy loam.	SM, ML	A-2, A-4	5-25	20-35	80-95	70-90	40-85	25-60	<40	NP-4
	8-20	Fine sandy loam, loam, gravelly fine sandy loam.	SM, ML	A-2, A-4	0-15	0-15	80-95	70-90	50-85	30-60	<40	NP-4
	20-65	Loamy sand, loamy fine sand, very gravelly loamy sand.	SM, SP-SM, SW-SM	A-1, A-2	0-25	0-20	65-85	50-80	20-60	10-35	---	NP
Hermon-------	0-3	Extremely bouldery sandy loam.	SM, GM	A-1, A-2, A-4	5-25	10-50	60-95	50-90	30-80	15-45	<40	NP-10
	3-12	Fine sandy loam, sandy loam, very gravelly coarse sandy loam.	SM	A-1, A-2, A-4	0-15	5-30	70-95	50-90	30-80	15-45	<40	NP-10
	12-65	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam.	SM, GM, SP-SM, GP-GM	A-1, A-2, A-4	5-20	10-30	40-80	30-75	15-65	10-40	<40	NP-10
Dixfield-----	0-6	Extremely bouldery fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	5-25	5-30	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
NaB*:												
Naskeag------	0-16	Very stony fine sandy loam.	SM, SW-SM	A-1, A-2, A-4	1-5	0-10	75-95	65-90	30-75	10-50	<40	NP-4
	16-38	Loamy sand, gravelly loamy sand. gravelly sand	SM, SW-SM, SW	A-1, A-2, A-3	0-5	0-10	75-95	65-90	30-70	3-30	---	NP
	38-42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
NBB*:												
Naskeag------	0-16	Very stony fine sandy loam.	SM, SW-SM	A-1, A-2, A-4	1-5	0-10	75-95	65-90	30-75	10-50	<40	NP-4
	16-38	Loamy sand, gravelly loamy sand. gravelly sand	SM, SW-SM, SW	A-1, A-2 A-3	0-5	0-10	75-95	65-90	30-70	3-30	---	NP
	38-42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
NcB, NcC------ Nicholville	0-2	Very fine sandy loam.	ML, CL-ML	A-4, A-6	0	0	90-100	85-100	70-100	60-90	20-40	2-12
	2-20	Silt loam, very fine sandy loam, loamy very fine sand.	ML, CL-ML	A-4	0	0	90-100	85-100	75-100	60-90	15-25	NP-5
	20-65	Loamy very fine sand, silt loam, very fine sand.	ML, CL-ML, SM, SC-SM	A-4, A-2	0	0	90-100	85-100	65-100	30-90	15-25	NP-5
Ps*---------- Pits	0-6	Extremely gravelly sand.	GP, GW	A-1	---	0-25	10-25	5-25	0-15	0-5	---	NP
	6-60	Extremely gravelly sand, extremely gravelly coarse sand, very gravelly coarse sand.	GP, GW, SP, SW	A-1	---	0-25	10-55	5-50	0-15	0-5	---	NP
Sa---------- Scantic	0-15	Silt loam-----	ML, MH	A-4, A-7, A-5	0	0	100	95-100	90-100	70-100	36-55	5-20
	15-35	Silty clay loam, silt loam, clay.	CL, CH	A-7, A-6, A-4	0	0	100	95-100	95-100	85-100	30-55	8-35
	35-65	Clay, silty clay loam, silty clay.	CL, CH	A-6, A-7	0	0	100	95-100	95-100	90-100	35-60	15-35

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
SB*:												
Scantic------	0-15	Silt loam-----	ML, MH	A-4, A-7, A-5	0	0	100	95-100	90-100	70-100	36-55	5-20
	15-35	Silty clay loam, silt loam, clay.	CL, CH	A-7, A-6, A-4	0	0	100	95-100	95-100	85-100	30-55	8-35
	35-65	Clay, silty clay loam, silty clay.	CL, CH	A-6, A-7	0	0	100	95-100	95-100	90-100	35-60	15-35
Biddeford----	0-9	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	9-19	Silt loam, silty clay loam, silty clay.	MH, ML	A-4, A-6, A-7	0	0	100	100	90-100	85-100	30-65	5-25
	19-49	Silty clay, silty clay loam, clay.	CL, MH, ML, CL-ML	A-6, A-7, A-4	0	0	100	100	95-100	90-100	25-55	5-20
	49-65	Silty clay loam, silty clay, clay.	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-15
ScB*:												
Scantic------	0-15	Very stony silt loam.	ML, MH	A-4, A-5, A-7	1-5	1-10	95-100	95-100	90-100	70-100	36-55	5-20
	15-35	Silty clay loam, silt loam, clay.	CL, CH,	A-4, A-6, A-7	0	0	100	95-100	95-100	85-100	30-55	8-35
	35-65	Clay, silty clay loam, silty clay.	CL, CH	A-7, A-6	0	0	100	95-100	95-100	90-100	35-60	15-35
Lamoine------	0-7	Very stony silt loam.	ML, MH	A-4, A-5, A-7	1-5	1-10	95-100	95-100	95-100	85-100	36-55	5-15
	7-17	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	17-21	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	21-65	Silty clay, silty clay loam, clay.	CL, CH	A-7, A-6	0	0	98-100	95-100	95-100	90-100	35-60	15-35
SEB*:												
Scantic------	0-15	Very stony silt loam.	ML, MH	A-4, A-5, A-7	1-5	1-10	95-100	95-100	90-100	70-100	36-55	5-20
	15-35	Silty clay loam, silt loam, clay.	CL, CH	A-4, A-6, A-7	0	0	100	95-100	95-100	85-100	30-55	8-35
	35-65	Clay, silty clay loam, silty clay.	CL, CL-ML	A-7, A-6	0	0	100	95-100	95-100	90-100	35-65	15-35

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
SEB*:												
Lamoine------	0-7	Very stony silt loam.	ML, MH	A-4, A-5, A-7	1-5	1-10	95-100	95-100	95-100	85-100	36-55	5-15
	7-17	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	17-21	Silt loam, silty clay loam, silty clay.	ML, CL, MH	A-4, A-6, A-7	0	0	98-100	95-100	95-100	85-100	28-55	8-25
	21-65	Silty clay, silty clay loam, clay.	CL, CH	A-6, A-7	0	0	98-100	95-100	95-100	90-100	35-60	15-35
Dixfield-----	0-6	Very stony fine sandy loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	<25	NP-10
	6-28	Fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	<25	NP-10
	28-65	Gravelly fine sandy loam, gravelly sandy loam, loam.	SM, ML, SC-SM, CL-ML	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	<25	NP-10
SfC*, SfE*:												
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Rock outcrop-	0-60	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
SGE*:												
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Rock outcrop-	0-60	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Lyman--------	0-3	Very stony fine sandy loam.	SM, ML, GM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	<30	NP-6
	3-19	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	19-23	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
SKC*:												
Schoodic-----	0-9	Very gravelly fine sandy loam.	GM, GW-GM, SM, SW-SM	A-1, A-2	0-1	5-25	35-65	25-55	15-50	10-30	<15	NP-2
	9-13	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Rock outcrop-	0-60	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Naskeag------	0-16	Very stony fine sandy loam.	SM, SW-SM	A-1, A-2, A-4	1-5	0-10	75-95	65-90	30-75	10-50	<40	NP-4
	16-38	Loamy sand, gravelly loamy sand. gravelly sand	SM, SW-SM, SW	A-1, A-2 A-3	0-5	0-10	75-95	65-90	30-70	3-30	---	NP
	38-42	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
SmB----------	0-7	Sandy loam----	SC-SM, SM, ML, CL-ML	A-1, A-2, A-4	0	0-5	80-95	75-90	45-85	20-60	<15	NP-5
Sheepscot	7-18	Gravelly fine sandy loam, fine sandy loam, very gravelly coarse sandy loam.	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3, A-4	0-1	0-5	40-95	35-90	20-75	5-50	<15	NP-5
	18-24	Very gravelly sand, very gravelly loamy sand, extremely gravelly coarse sand.	GP, GM, SP, SM	A-1	0-1	5-25	20-55	15-50	5-40	1-15	---	NP
	24-65	Extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand.	GP, GM, SP, SM	A-1	0-1	5-30	20-55	15-50	5-40	1-15	---	NP

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
SoB, SoC----- Sheepscot	0-7	Very stony sandy loam.	GM, SM, ML, CL-ML	A-1, A-2, A-4	1-5	0-5	40-95	35-90	25-85	15-60	<15	NP-5
	7-18	Very gravelly fine sandy loam, fine sandy loam, very gravelly coarse sandy loam.	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3, A-4	0-1	0-5	40-95	35-90	20-75	5-50	<15	NP-5
	18-24	Very gravelly sand, very gravelly loamy sand, extremely gravelly coarse sand.	GP, GM, SP, SM	A-1	0-1	5-25	20-55	15-50	5-40	1-15	---	NP
	24-65	Extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand.	GP, GM, SP, SM	A-1	0-1	5-30	20-55	15-50	5-40	1-15	---	NP
SrB*: Sheepscot----	0-7	Sandy loam----	SC-SM, SM, ML, CL-ML	A-1, A-2, A-4	0	0-5	80-95	75-90	45-85	20-60	<15	NP-5
	7-18	Gravelly fine sandy loam, fine sandy loam, very gravelly coarse sandy loam.	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3, A-4	0-1	0-5	40-95	35-90	20-75	5-50	<15	NP-5
	18-24	Very gravelly sand, very gravelly loamy sand, extremely gravelly coarse sand.	GP, GM, SP, SM	A-1	0-1	5-25	20-55	15-50	5-40	1-15	---	NP
	24-65	Extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand.	GP, GM, SP, SM	A-1	0-1	5-30	20-55	15-50	5-40	1-15	---	NP
Rock outcrop-	0-60	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
ThC*:												
Thorndike----	0-3	Very stony silt loam.	GM, SM, ML	A-2, A-4	1-5	1-20	55-90	45-85	40-80	30-70	<40	NP-8
	3-18	Channery silt loam, very channery silt loam, extremely channery loam.	GM, GP-GM, SM, SP-SM	A-1, A-2, A-4	1-5	10-40	30-80	20-70	15-60	10-50	<40	NP-8
	18-22	Weathered bedrock.	---	---	---	---	---	---	---	---	---	---
Winnecook----	0-4	Very stony silt loam.	GM, SM, ML	A-1, A-2, A-4	1-5	5-10	40-95	30-90	25-85	20-80	<40	NP-7
	4-32	Channery silt loam, extremely channery loam, very channery silt loam.	GM, SM, ML	A-1, A-2, A-4	0-5	0-25	30-75	20-70	20-65	15-60	<40	NP-4
	32-36	Weathered bedrock.	---	---	---	---	---	---	---	---	---	---
TuB*, TuC*:												
Tunbridge----	0-6	Fine sandy loam.	SM, ML	A-4, A-2	0-1	0-5	85-100	80-95	55-95	30-85	<20	NP-2
	6-15	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-5	0-5	0-15	70-100	60-95	35-95	20-85	<50	NP-6
	15-29	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	<20	NP-2
	29-33	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Lyman--------	0-5	Fine sandy loam.	ML, SM	A-4, A-1, A-2	0-1	0-15	80-95	70-90	40-85	20-80	<35	NP-6
	5-17	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-2, A-4, A-1	0-5	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	17-21	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
TWC*:												
Tunbridge----	0-6	Fine sandy loam.	SM, ML	A-4, A-2	0-1	0-5	85-100	80-95	55-95	30-85	<20	NP-2
	6-15	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-5	0-5	0-15	70-100	60-95	35-95	20-85	<50	NP-6
	15-29	Silt loam, gravelly sandy loam, channery fine sandy loam.	SM, ML	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	<20	NP-2
	29-33	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Lyman--------	0-5	Fine sandy loam.	ML, SM	A-4, A-1, A-2	0-1	0-15	80-95	70-90	40-85	20-80	<35	NP-6
	5-17	Loam, channery sandy loam, silt loam.	SM, ML, GM	A-2, A-4, A-1	0-5	0-20	65-95	60-90	35-85	20-80	<30	NP-4
	17-21	Unweathered bedrock.	---	---	---	---	---	---	---	---	---	---
Marlow-------	0-8	Fine sandy loam.	SM, ML, CL-ML, SC	A-2, A-4	0-1	0-10	90-100	75-90	50-90	30-80	<30	NP-10
	8-21	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	75-95	60-90	40-85	20-65	<30	NP-10
	21-65	Fine sandy loam, loam, gravelly sandy loam.	SM, ML, SC-SM, CL-ML	A-2, A-4, A-1-B	0-10	0-15	70-90	60-85	35-80	20-60	<30	NP-10
Ud*:												
Udorthents---	0-65	Gravelly sandy loam.	ML, SM, GM, GP	A-1, A-2, A-3, A-4	---	0-30	25-100	20-100	10-90	2-80	15-35	NP-10
Urban land---	0-6	Variable------	---	---	---	---	---	---	---	---	---	---
WA*:												
Waskish------	0-65	Peat----------	PT	A-8	0	0	---	---	---	---	---	---
Sebago-------	0-34	Mucky-peat----	PT	A-8	---	0-15	---	---	---	---	---	---
	34-65	Hemic material, fibric material, mucky-peat.	PT	A-8	---	0-15	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Frag-ments > 10 inches	Frag-ments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
WkC*:												
Winnecook----	0-12	Silt loam-----	SM, ML	A-4	0-5	0-5	85-100	75-90	65-85	45-80	<40	NP-7
	12-30	Channery silt loam, extremely channery loam, very channery loam.	GM, SM, ML	A-2, A-1, A-4	---	0-25	30-75	20-70	20-60	15-60	<40	NP-4
	30-34	Weathered bedrock.	---	---	---	---	---	---	---	---	---	---
Thorndike----	0-7	Channery silt loam.	GM, SM, ML	A-2, A-4	0-1	0-20	55-90	45-85	40-80	30-70	<40	NP-8
	7-16	Channery silt loam, extremely channery loam, very channery silt loam.	GM, GP-GM, SM, SP-SM	A-1, A-2, A-4	1-5	10-40	30-80	20-70	15-60	10-50	<40	NP-8
	16-20	Weathered bedrock.	---	---	---	---	---	---	---	---	---	---
Wo----------	0-8	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
Wonsqueak	8-32	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	32-65	Silt loam, fine sandy loam, silty clay loam.	ML, SM, CL-ML, CL	A-4, A-2, A-6	0	0-5	85-100	75-100	50-100	30-95	<40	NP-20
Ws*:												
Wonsqueak----	0-8	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	8-32	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	32-65	Silt loam, fine sandy loam, silty clay loam.	ML, SM, CL-ML, CL	A-4, A-2, A-6	0	0-5	85-100	75-100	50-100	30-95	<40	NP-20
Bucksport----	0-12	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	12-25	Muck, sapric material.	PT	A-8	0	0	---	---	---	---	---	---
	25-65	Muck, sapric material.	PT	A-8	0	0	---	---	---	---	---	---
WT*:												
Wonsqueak----	0-8	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	8-32	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	32-65	Silt loam, fine sandy loam, silty clay loam.	ML, SM, CL-ML, CL	A-4, A-2, A-6	0	0-5	85-100	75-100	50-100	30-95	<40	NP-20
Bucksport----	0-12	Muck----------	PT	A-8	0	0	---	---	---	---	---	---
	12-25	Muck, sapric material.	PT	A-8	0	0	---	---	---	---	---	---
	25-65	Muck, sapric material.	PT	A-8	0	0	---	---	---	---	---	---

See footnote at end of table.

TABLE 14.--Engineering Index Properties--Continued

Soil name and map symbol	Depth	USDA texture	Classification		Fragments > 10 inches	Fragments 3-10 inches	Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO			4	10	40	200		
	In				Pct	Pct					Pct	
WT*:												
Sebago-------	0-34	Mucky-peat----	PT	A-8	---	0-15	---	---	---	---	---	---
	34-65	Hemic material, fibric material, mucky-peat.	PT	A-8	---	0-15	---	---	---	---	---	---

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 15.--Physical and Chemical Properties of the Soils

(The symbol < means less than; > means more than. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Organic matter" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated)

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
AdB, AdC----------	0-3	0-5	1.00-1.30	6.0-20	0.06-0.12	3.6-6.0	Low----------	0.17	5	2-5
Adams	3-24	0-5	1.10-1.45	6.0-20	0.03-0.10	4.5-6.0	Low----------	0.17		
	24-65	0-5	1.20-1.50	>20	0.03-0.04	4.5-6.5	Low----------	0.17		
Bd----------	0-9	---	0.10-0.30	0.2-6.0	0.20-0.45	4.5-6.5	----------	----	1	30-99
Biddeford	9-19	20-50	0.90-1.20	0.2-2.0	0.24-0.34	5.1-7.3	Low----------	0.32		
	19-49	35-55	1.30-1.70	<0.2	0.13-0.23	5.1-7.8	Moderate-----	0.49		
	49-65	35-55	1.40-1.80	<0.2	0.06-0.16	6.1-7.8	Moderate-----	0.49		
BfB----------	0-9	4-10	1.00-1.30	0.6-2.0	0.18-0.25	3.6-6.0	Low----------	0.24	3	2-8
Brayton	9-18	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low----------	0.32		
	18-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low----------	0.24		
BgB----------	0-9	4-10	1.00-1.30	0.6-2.0	0.18-0.28	3.6-6.0	Low----------	0.20	3	---
Brayton	9-22	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low----------	0.32		
	22-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low----------	0.24		
BhB----------	0-9	4-10	1.00-1.30	0.6-2.0	0.15-0.25	3.6-6.0	Low----------	0.15	3	---
Brayton	9-22	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low----------	0.32		
	22-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low----------	0.24		
BSB*:										
Brayton---------	0-9	4-10	1.00-1.30	0.6-2.0	0.18-0.28	3.6-6.0	Low----------	0.20	3	---
	9-22	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low----------	0.32		
	22-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low----------	0.24		
Colonel---------	0-3	3-10	0.90-1.20	0.6-2.0	0.15-0.25	3.6-6.5	Low----------	0.17	3	---
	3-20	3-10	1.00-1.60	0.6-2.0	0.15-0.25	3.6-6.5	Low----------	0.24		
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	4.5-6.5	Low----------	0.20		
BTB*:										
Brayton---------	0-9	4-10	1.00-1.30	0.6-2.0	0.15-0.25	3.6-6.0	Low----------	0.15	3	---
	9-22	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low----------	0.32		
	22-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low----------	0.24		
Colonel---------	0-3	3-10	0.90-1.20	0.6-2.0	0.12-0.22	3.6-6.5	Low----------	0.15	3	---
	3-20	3-10	1.00-1.60	0.6-2.0	0.15-0.25	3.6-6.5	Low----------	0.24		
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	4.5-6.5	Low----------	0.20		
BwC----------	0-8	15-30	0.90-1.20	0.2-2.0	0.25-0.30	4.5-6.5	Low----------	0.32	3	---
Buxton	8-16	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate-----	0.49		
	16-35	20-45	1.40-1.80	<0.2	0.06-0.16	5.1-7.3	Moderate-----	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate-----	0.49		
BwD----------	0-4	15-30	0.90-1.20	0.2-2.0	0.25-0.30	4.5-6.5	Low----------	0.32	3	3-8
Buxton	4-12	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate-----	0.49		
	12-31	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate-----	0.49		
	31-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate-----	0.49		
Ch----------	0-6	2-18	0.90-1.35	0.6-2.0	0.20-0.40	3.6-6.5	Low----------	0.32	5	5-10
Charles	6-65	2-18	1.00-1.50	0.6-2.0	0.20-0.40	3.6-6.5	Low----------	0.49		
CoB, CoC, CoE----	0-4	1-7	1.10-1.40	>6.0	0.09-0.12	3.6-6.0	Low----------	0.20	3	3-8
Colton	4-8	0-7	1.15-1.45	>6.0	0.05-0.12	3.6-6.0	Low----------	0.17		
	8-20	0-5	1.25-1.55	>6.0	0.02-0.05	3.6-6.0	Low----------	0.17		
	20-65	0-3	1.45-1.65	>20	0.01-0.02	4.5-6.5	Low----------	0.17		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
CRE*:										
Colton	0-4	1-7	1.10-1.40	>6.0	0.09-0.12	3.6-6.0	Low	0.20	3	3-8
	4-8	0-7	1.15-1.45	>6.0	0.05-0.12	3.6-6.0	Low	0.17		
	8-20	0-5	1.25-1.55	>6.0	0.02-0.05	3.6-6.0	Low	0.17		
	20-65	0-3	1.45-1.65	>20	0.01-0.02	4.5-6.5	Low	0.17		
Adams	0-3	0-5	1.00-1.30	6.0-20	0.06-0.12	3.6-6.0	Low	0.17	5	2-5
	3-24	0-5	1.10-1.45	6.0-20	0.03-0.10	4.5-6.0	Low	0.17		
	24-65	0-5	1.20-1.50	>20	0.03-0.04	4.5-6.5	Low	0.17		
CSC*:										
Colton	0-4	1-7	1.10-1.40	>6.0	0.09-0.12	3.6-6.0	Low	0.20	3	3-8
	4-8	0-7	1.15-1.45	>6.0	0.05-0.12	3.6-6.0	Low	0.17		
	8-20	0-5	1.25-1.55	>6.0	0.02-0.05	3.6-6.0	Low	0.17		
	20-65	0-3	1.45-1.65	>20	0.01-0.02	4.5-6.5	Low	0.17		
Adams	0-3	0-5	1.00-1.30	6.0-20	0.06-0.12	3.6-6.0	Low	0.17	5	2-5
	3-24	0-5	1.10-1.45	6.0-20	0.03-0.10	4.5-6.0	Low	0.17		
	24-65	0-5	1.20-1.50	>20	0.03-0.04	4.5-6.5	Low	0.17		
Sheepscot	0-7	3-5	1.00-1.30	0.6-6.0	0.11-0.21	3.6-6.5	Low	0.17	3	2-6
	7-18	1-5	1.20-1.50	0.6-6.0	0.06-0.15	3.6-6.5	Low	0.10		
	18-24	0-3	1.45-1.70	>6.0	0.02-0.09	3.6-6.5	Low	0.10		
	24-65	0-3	1.45-1.70	>6.0	0.01-0.06	4.5-6.5	Low	0.05		
DaB, DaC	0-6	3-10	0.90-1.20	0.6-2.0	0.20-0.30	3.6-6.5	Low	0.20	3	4-8
Dixfield	6-26	3-10	1.30-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	26-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
DbC	0-6	3-10	0.90-1.20	0.6-2.0	0.18-0.28	3.6-6.5	Low	0.17	3	---
Dixfield	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
DsB*:										
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.20-0.30	3.6-6.5	Low	0.20	3	4-8
	6-26	3-10	1.30-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	26-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
Colonel	0-6	3-10	0.90-1.20	0.6-2.0	0.20-0.30	3.6-6.5	Low	0.20	3	4-8
	6-18	3-10	1.00-1.60	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.24		
	18-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	4.5-6.5	Low	0.20		
DtB*:										
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.18-0.28	3.6-6.5	Low	0.17	3	---
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
Colonel	0-3	3-10	0.90-1.20	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.17	3	---
	3-20	3-10	1.00-1.60	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.24		
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	4.5-6.5	Low	0.20		
DWB*:										
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.18-0.28	3.6-6.5	Low	0.17	3	---
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
Colonel	0-3	3-10	0.90-1.20	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.17	3	---
	3-20	3-10	1.00-1.60	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.24		
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	4.5-6.5	Low	0.20		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
DWB*:										
Tunbridge-------	0-6	5-9	0.80-1.20	0.6-6.0	0.11-0.21	3.6-6.0	Low----------	0.20	2	---
	6-19	3-9	1.20-1.40	0.6-6.0	0.10-0.21	3.6-6.0	Low----------	0.20		
	19-33	3-7	1.20-1.50	0.6-6.0	0.09-0.15	5.1-6.5	Low----------	0.20		
	33-37	---	---	0.01-20	---	---	----------	----		
Go---------------	0-5	18-35	1.20-1.50	0.2-2.0	0.12-0.24	5.1-6.5	Low----------	0.32	5	5-20
Gouldsboro	5-65	18-35	1.30-1.60	<0.2	0.12-0.24	5.6-8.4	Moderate-----	0.37		
Gt*:										
Gouldsboro------	0-5	18-35	1.20-1.50	0.2-2.0	0.12-0.24	5.1-6.5	Low----------	0.32	5	5-20
	5-65	18-35	1.30-1.60	<0.2	0.12-0.24	5.6-8.4	Moderate-----	0.37		
Beaches---------	0-6	0-1	---	>6.0	0.01-0.03	---	Low----------	0.02	5	<.1
	6-60	0-1	---	>6.0	0.01-0.03	---	Low----------	0.02		
HcC*:										
Hermon----------	0-3	2-6	0.85-1.20	2.0-20	0.07-0.15	3.6-5.5	Low----------	0.10	3	---
	3-12	2-6	0.85-1.20	2.0-20	0.07-0.20	3.6-5.5	Low----------	0.10		
	12-65	2-7	0.85-1.30	2.0-20	0.05-0.10	3.6-6.0	Low----------	0.10		
Colton----------	0-4	1-7	1.10-1.40	>6.0	0.09-0.12	3.6-6.0	Low----------	0.20	3	---
	4-8	0-7	1.15-1.45	>6.0	0.05-0.12	3.6-6.0	Low----------	0.17		
	8-20	0-5	1.25-1.55	>6.0	0.02-0.05	3.6-6.0	Low----------	0.17		
	20-65	0-3	1.45-1.65	>20	0.01-0.02	4.5-6.5	Low----------	0.17		
Rock outcrop----	0-60	---	---	---	---	---	----------	----	---	---
HmB*, HmC*:										
Hermon----------	0-6	2-6	0.85-1.20	2.0-20	0.09-0.20	3.6-5.5	Low----------	0.17	3	3-7
	6-65	2-7	0.85-1.30	2.0-20	0.05-0.10	3.6-6.0	Low----------	0.10		
Monadnock-------	0-8	1-8	0.80-1.20	0.6-2.0	0.15-0.21	3.6-6.0	Low----------	0.28	3	3-8
	8-18	1-8	0.80-1.30	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	18-65	1-5	1.30-1.60	2.0-6.0	0.04-0.08	3.6-6.0	Low----------	0.17		
HtB*, HtC*, HtE*:										
Hermon----------	0-3	2-6	0.85-1.20	2.0-20	0.07-0.15	3.6-5.5	Low----------	0.10	3	---
	3-12	2-6	0.85-1.20	2.0-20	0.07-0.20	3.6-5.5	Low----------	0.10		
	12-65	2-7	0.85-1.30	2.0-20	0.05-0.10	3.6-6.0	Low----------	0.10		
Monadnock-------	0-8	1-8	0.80-1.20	0.6-2.0	0.10-0.20	3.6-6.0	Low----------	0.24	3	---
	8-20	1-8	0.80-1.30	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	20-65	1-5	1.30-1.60	2.0-6.0	0.04-0.08	3.6-6.0	Low----------	0.17		
HVC*, HVE*:										
Hermon----------	0-3	2-6	0.85-1.20	2.0-20	0.07-0.15	3.6-5.5	Low----------	0.10	3	---
	3-12	2-6	0.85-1.20	2.0-20	0.07-0.20	3.6-5.5	Low----------	0.10		
	12-65	2-7	0.85-1.30	2.0-20	0.05-0.10	3.6-6.0	Low----------	0.10		
Monadnock-------	0-8	1-8	0.80-1.20	0.6-2.0	0.10-0.20	3.6-6.0	Low----------	0.24	3	---
	8-20	1-8	0.80-1.30	0.6-2.0	0.09-0.17	3.6-6.0	Low----------	0.28		
	20-65	1-5	1.30-1.60	2.0-6.0	0.04-0.08	3.6-6.0	Low----------	0.17		
Dixfield--------	0-6	3-10	0.90-1.20	0.6-2.0	0.18-0.28	3.6-6.5	Low----------	0.17	3	---
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low----------	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low----------	0.20		
Kn---------------	0-7	1-5	1.10-1.50	6.0-20	0.05-0.09	3.6-6.0	Low----------	0.17	5	3-15
Kinsman	7-37	1-5	1.20-1.50	6.0-20	0.05-0.08	3.6-6.0	Low----------	0.17		
	37-65	1-5	1.45-1.65	6.0-20	0.04-0.06	4.5-6.0	Low----------	0.17		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
KW*:										
Kinsman	0-7	1-5	1.10-1.50	6.0-20	0.05-0.09	3.6-6.0	Low	0.17	5	3-15
	7-37	1-5	1.20-1.50	6.0-20	0.05-0.08	3.6-6.0	Low	0.17		
	37-65	1-5	1.45-1.65	6.0-20	0.04-0.06	4.5-6.0	Low	0.17		
Wonsqueak	0-8	---	0.10-0.30	0.2-6.0	0.20-0.40	3.6-6.5	---	---	1	80-99
	8-32	---	0.10-0.30	0.2-6.0	0.20-0.40	4.5-6.5	---	---		
	32-65	5-30	1.50-1.70	0.2-2.0	0.06-0.16	5.1-7.3	Low	0.49		
LaB	0-7	15-30	0.90-1.20	0.2-2.0	0.25-0.30	4.5-6.5	Low	0.32	3	3-8
Lamoine	7-17	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate	0.49		
	17-21	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate	0.49		
	21-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
LbB*:										
Lamoine	0-7	15-30	0.90-1.20	0.2-2.0	0.25-0.30	4.5-6.5	Low	0.32	3	3-8
	7-17	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate	0.49		
	17-21	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate	0.49		
	21-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Scantic	0-15	15-40	1.05-1.22	0.2-2.0	0.24-0.34	4.5-6.5	Low	0.32	3	3-9
	15-35	20-55	1.15-1.75	<0.2	0.13-0.28	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
LCB*:										
Lamoine	0-7	15-30	0.90-1.20	0.2-2.0	0.25-0.30	4.5-6.5	Low	0.32	3	3-8
	7-17	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate	0.49		
	17-21	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate	0.49		
	21-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Scantic	0-15	15-40	1.05-1.22	0.2-2.0	0.24-0.34	4.5-6.5	Low	0.32	3	3-9
	15-35	20-55	1.15-1.75	<0.2	0.13-0.28	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Buxton	0-8	15-30	0.90-1.20	0.2-2.0	0.25-0.30	4.5-6.5	Low	0.32	3	3-8
	8-16	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate	0.49		
	16-35	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
LgB*:										
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
Brayton	0-9	4-10	1.00-1.30	0.6-2.0	0.18-0.28	3.6-6.0	Low	0.20	3	---
	9-22	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low	0.32		
	22-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low	0.24		
LHC*:										
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
Brayton	0-9	4-10	1.00-1.30	0.6-2.0	0.18-0.28	3.6-6.0	Low	0.20	3	---
	9-22	4-10	1.40-1.65	0.6-2.0	0.12-0.28	5.1-6.5	Low	0.32		
	22-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	5.6-7.3	Low	0.24		
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors K	Erosion factors T	Organic matter
	In	Pct	G/cc	In/hr	In/in	pH				Pct
LsE*:										
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
LTE*:										
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
Rock outcrop	0-60	---	---	---	---	---	---	---	---	---
LuC*:										
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
Tunbridge	0-6	5-9	0.80-1.20	0.6-6.0	0.11-0.21	3.6-6.0	Low	0.20	2	---
	6-19	3-9	1.20-1.40	0.6-6.0	0.10-0.21	3.6-6.0	Low	0.20		
	19-33	3-7	1.20-1.50	0.6-6.0	0.09-0.15	5.1-6.5	Low	0.20		
	33-37	---	---	0.01-20	---	---	---	---		
LWC*:										
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
Tunbridge	0-6	5-9	0.80-1.20	0.6-6.0	0.11-0.21	3.6-6.0	Low	0.20	2	---
	6-19	3-9	1.20-1.40	0.6-6.0	0.10-0.21	3.6-6.0	Low	0.20		
	19-33	3-7	1.20-1.50	0.6-6.0	0.09-0.15	5.1-6.5	Low	0.20		
	33-37	---	---	0.01-20	---	---	---	---		
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
MaC, MaD	0-8	3-10	1.00-1.30	0.6-2.0	0.10-0.23	3.6-6.0	Low	0.24	3	2-6
Marlow	8-21	3-10	1.30-1.60	0.6-2.0	0.06-0.20	3.6-6.0	Low	0.32		
	21-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	3.6-6.0	Low	0.20		
MbC, MbE	0-2	3-10	1.00-1.30	0.6-2.0	0.10-0.23	3.6-6.0	Low	0.20	3	---
Marlow	2-21	3-10	1.30-1.60	0.6-2.0	0.06-0.20	3.6-6.0	Low	0.32		
	21-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	3.6-6.0	Low	0.20		
McC, McE	0-2	3-10	1.00-1.30	0.6-2.0	0.08-0.15	3.6-6.0	Low	0.20	3	---
Marlow	2-21	3-10	1.30-1.60	0.6-2.0	0.06-0.20	3.6-6.0	Low	0.32		
	21-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	3.6-6.0	Low	0.20		
MDC*, MDE*:										
Marlow	0-2	3-10	1.00-1.30	0.6-2.0	0.10-0.23	3.6-6.0	Low	0.20	3	---
	2-21	3-10	1.30-1.60	0.6-2.0	0.06-0.20	3.6-6.0	Low	0.32		
	21-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	3.6-6.0	Low	0.20		
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.18-0.28	3.6-6.5	Low	0.17	3	---
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
MGC*, MGE*:										
Marlow	0-2	3-10	1.00-1.30	0.6-2.0	0.08-0.15	3.6-6.0	Low	0.20	3	---
	2-21	3-10	1.30-1.60	0.6-2.0	0.06-0.20	3.6-6.0	Low	0.32		
	21-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	3.6-6.0	Low	0.20		
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.15	3	---
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
MhC*, MhE*:										
Monadnock	0-8	1-8	0.80-1.20	0.6-2.0	0.07-0.17	3.6-6.0	Low	0.17	3	---
	8-20	1-8	0.80-1.30	0.6-2.0	0.09-0.17	3.6-6.0	Low	0.28		
	20-65	1-5	1.30-1.60	2.0-6.0	0.04-0.08	3.6-6.0	Low	0.17		
Hermon	0-3	2-6	0.85-1.20	2.0-20	0.05-0.13	3.6-5.5	Low	0.10	3	---
	3-12	2-6	0.85-1.20	2.0-20	0.06-0.14	3.6-5.5	Low	0.10		
	12-65	2-7	0.85-1.30	2.0-20	0.05-0.10	3.6-6.0	Low	0.10		
MXC*, MXE*:										
Monadnock	0-8	1-8	0.80-1.20	0.6-2.0	0.07-0.17	3.6-6.0	Low	0.17	3	---
	8-20	1-8	0.80-1.30	0.6-2.0	0.09-0.17	3.6-6.0	Low	0.28		
	20-65	1-5	1.30-1.60	2.0-6.0	0.04-0.08	3.6-6.0	Low	0.17		
Hermon	0-3	2-6	0.85-1.20	2.0-20	0.05-0.13	3.6-5.5	Low	0.10	3	---
	3-12	2-6	0.85-1.20	2.0-20	0.06-0.14	3.6-5.5	Low	0.10		
	12-65	2-7	0.85-1.30	2.0-20	0.05-0.10	3.6-6.0	Low	0.10		
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.15-0.25	3.6-6.5	Low	0.15	3	---
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
NaB*:										
Naskeag	0-16	2-6	0.95-1.20	6.0-20	0.07-0.15	3.6-5.5	Low	0.10	3	---
	16-38	1-5	1.00-1.30	6.0-20	0.05-0.11	4.5-5.5	Low	0.10		
	38-42	---	---	0.01-20	---	---	---	---		
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
NEB*:										
Naskeag	0-16	2-6	0.95-1.20	6.0-20	0.07-0.15	3.6-5.5	Low	0.10	3	---
	16-38	1-5	1.00-1.30	6.0-20	0.05-0.11	4.5-5.5	Low	0.10		
	38-42	---	---	0.01-20	---	---	---	---		
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
NcB, NcC	0-2	2-18	1.20-1.50	0.6-2.0	0.16-0.22	3.6-6.0	Low	0.49	3	2-6
Nicholville	2-20	2-18	1.20-1.50	0.6-2.0	0.15-0.20	4.5-6.0	Low	0.64		
	20-65	2-18	1.45-1.65	0.6-2.0	0.10-0.20	4.5-6.5	Low	0.64		
Ps*	0-6	0-1	---	>6.0	0.01-0.02	---	Low	0.02	---	<.1
Pits	6-60	0-1	---	>6.0	0.01-0.02	---	Low	0.02		
Sa	0-15	15-40	1.05-1.22	0.2-2.0	0.24-0.34	4.5-6.5	Low	0.32	3	3-9
Scantic	15-35	20-55	1.15-1.75	<0.2	0.13-0.28	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
SB*:										
Scantic	0-15	15-40	1.05-1.22	0.2-2.0	0.24-0.34	4.5-6.5	Low	0.32	3	3-9
	15-35	20-55	1.15-1.75	<0.2	0.13-0.28	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Biddeford	0-9	---	0.10-0.30	0.2-6.0	0.20-0.45	4.5-6.5	---	---	1	30-99
	9-19	20-50	0.90-1.20	0.2-2.0	0.24-0.34	5.1-7.3	Low	0.32		
	19-49	35-55	1.30-1.70	<0.2	0.13-0.23	5.1-7.8	Moderate	0.49		
	49-65	35-55	1.40-1.80	<0.2	0.06-0.16	6.1-7.8	Moderate	0.49		
SdB*:										
Scantic	0-15	15-40	1.05-1.22	0.2-2.0	0.21-0.32	4.5-6.5	Low	0.32	3	---
	15-35	20-55	1.15-1.75	<0.2	0.13-0.28	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Lamoine	0-7	15-30	0.90-1.20	0.2-2.0	0.20-0.28	4.5-6.5	Low	0.28	3	---
	7-17	20-45	1.10-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate	0.49		
	17-21	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate	0.49		
	21-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
SEB*:										
Scantic	0-15	15-40	1.05-1.22	0.2-2.0	0.21-0.32	4.5-6.5	Low	0.32	3	---
	15-35	20-55	1.15-1.75	<0.2	0.13-0.28	5.1-7.3	Moderate	0.49		
	35-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Lamoine	0-7	15-30	0.90-1.20	0.2-2.0	0.20-0.28	4.5-6.5	Low	0.28	3	---
	7-17	20-45	1.20-1.55	0.06-0.6	0.13-0.28	5.1-7.3	Moderate	0.49		
	17-21	20-45	1.40-1.80	<0.2	0.10-0.16	5.1-7.3	Moderate	0.49		
	21-65	35-55	1.40-1.80	<0.2	0.06-0.16	5.6-7.3	Moderate	0.49		
Dixfield	0-6	3-10	0.90-1.20	0.6-2.0	0.18-0.28	3.6-6.5	Low	0.17	3	0-2
	6-28	3-10	1.00-1.60	0.6-2.0	0.20-0.30	4.5-6.5	Low	0.24		
	28-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	4.5-6.5	Low	0.20		
SfC*, SfE*:										
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
Rock outcrop	0-60	---	---	---	---	---	---	---	---	---
SGE*:										
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
Rock outcrop	0-60	---	---	---	---	---	---	---	---	---
Lyman	0-3	2-10	0.75-1.20	2.0-6.0	0.13-0.24	3.6-6.0	Low	0.20	2	---
	3-19	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low	0.32		
	19-23	---	---	0.01-20	---	---	---	---		
SKC*:										
Schoodic	0-9	1-6	0.90-1.20	6.0-20	0.06-0.10	3.6-5.5	Low	0.17	1	---
	9-13	---	---	0.01-20	---	---	---	---		
Rock outcrop	0-60	---	---	---	---	---	---	---	---	---
Naskeag	0-16	2-6	0.95-1.20	6.0-20	0.07-0.15	3.6-5.5	Low	0.10	3	0-8
	16-38	1-5	1.00-1.30	6.0-20	0.05-0.11	4.5-5.5	Low	0.10		
	38-42	---	---	0.01-20	---	---	---	---		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
SmB----------	0-7	3-5	1.00-1.30	0.6-6.0	0.11-0.21	3.6-6.5	Low----------	0.17	3	2-6
Sheepscot	7-18	1-5	1.20-1.50	0.6-6.0	0.06-0.15	3.6-6.5	Low----------	0.10		
	18-24	0-3	1.45-1.70	>6.0	0.02-0.09	3.6-6.5	Low----------	0.10		
	24-65	0-3	1.45-1.70	>6.0	0.01-0.06	4.5-6.5	Low----------	0.05		
SoB, SoC----------	0-7	3-5	1.00-1.30	0.6-6.0	0.09-0.15	3.6-6.5	Low----------	0.17	3	---
Sheepscot	7-18	1-5	1.20-1.50	0.6-6.0	0.06-0.15	3.6-6.5	Low----------	0.10		
	18-24	0-3	1.45-1.70	>6.0	0.02-0.09	3.6-6.5	Low----------	0.10		
	24-65	0-3	1.45-1.70	>6.0	0.01-0.06	4.5-6.5	Low----------	0.05		
SrB*:										
Sheepscot-------	0-7	3-5	1.00-1.30	0.6-6.0	0.11-0.21	3.6-6.5	Low----------	0.17	3	2-6
	7-18	1-5	1.20-1.50	0.6-6.0	0.06-0.15	3.6-6.5	Low----------	0.10		
	18-24	0-3	1.45-1.70	>6.0	0.02-0.09	3.6-6.5	Low----------	0.10		
	24-65	0-3	1.45-1.70	>6.0	0.01-0.06	4.5-6.5	Low----------	0.05		
Rock outcrop----	0-60	---	---	---	---	---	----------	----	---	---
ThC*:										
Thorndike-------	0-3	5-10	0.90-1.20	0.6-2.0	0.12-0.22	3.6-6.0	Low----------	0.17	2	---
	3-18	5-10	1.00-1.30	0.6-2.0	0.09-0.22	3.6-6.0	Low----------	0.17		
	18-22	---	---	0.01-20	---	---	----------	----		
Winnecook-------	0-4	3-10	0.90-1.20	0.6-2.0	0.12-0.22	3.6-6.0	Low----------	0.24	3	---
	4-32	3-10	1.10-1.40	0.6-2.0	0.09-0.22	3.6-6.0	Low----------	0.28		
	32-36	---	---	0.01-20	---	---	----------	----		
TuB*, TuC*:										
Tunbridge-------	0-6	5-9	0.80-1.20	0.6-6.0	0.14-0.23	3.6-6.0	Low----------	0.24	2	2-8
	6-15	3-9	1.20-1.40	0.6-6.0	0.10-0.21	3.6-6.0	Low----------	0.20		
	15-29	3-7	1.20-1.50	0.6-6.0	0.09-0.15	5.1-6.5	Low----------	0.20		
	29-33	---	---	0.01-20	---	---	----------	----		
Lyman-----------	0-5	2-10	0.75-1.20	2.0-6.0	0.08-0.25	3.6-6.0	Low----------	0.28	2	1-4
	5-17	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low----------	0.32		
	17-21	---	---	0.01-20	---	---	----------	----		
TWC*:										
Tunbridge-------	0-6	5-9	0.80-1.20	0.6-6.0	0.14-0.23	3.6-6.0	Low----------	0.24	2	2-8
	6-15	3-9	1.20-1.40	0.6-6.0	0.10-0.21	3.6-6.0	Low----------	0.20		
	15-29	3-7	1.20-1.50	0.6-6.0	0.09-0.15	5.1-6.5	Low----------	0.20		
	29-33	---	---	0.01-20	---	---	----------	----		
Lyman-----------	0-5	2-10	0.75-1.20	2.0-6.0	0.08-0.25	3.6-6.0	Low----------	0.28	2	1-4
	5-17	2-10	0.90-1.40	2.0-6.0	0.08-0.28	3.6-6.0	Low----------	0.32		
	17-21	---	---	0.01-20	---	---	----------	----		
Marlow----------	0-8	3-10	1.00-1.30	0.6-2.0	0.10-0.23	3.6-6.0	Low----------	0.24	3	2-6
	8-21	3-10	1.30-1.60	0.6-2.0	0.06-0.20	3.6-6.0	Low----------	0.32		
	21-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	3.6-6.0	Low----------	0.20		
Ud*:										
Udorthents------	0-65	1-15	1.00-2.00	0.06-20.0	0.01-0.20	4.5-7.8	Low----------	----	---	---
Urban land------	0-6	---	---	---	---	---	----------	----	---	---
WA*:										
Waskish---------	0-65	---	0.02-0.10	>6.0	0.55-0.65	<4.5	----------	----	5	>90
Sebago----------	0-34	---	0.10-0.30	2.0-6.0	0.20-0.40	3.6-4.4	----------	----	1	80-99
	34-65	---	0.10-0.30	2.0-6.0	0.20-0.40	3.6-4.4	----------	----		

See footnote at end of table.

TABLE 15.--Physical and Chemical Properties of the Soils--Continued

Soil name and map symbol	Depth	Clay	Moist bulk density	Permeability	Available water capacity	Soil reaction	Shrink-swell potential	Erosion factors		Organic matter
								K	T	
	In	Pct	G/cc	In/hr	In/in	pH				Pct
WkC*:										
Winnecook	0-12	5-10	0.90-1.20	0.6-2.0	0.15-0.25	3.6-6.0	Low	0.28	3	2-8
	12-30	3-10	1.10-1.40	0.6-2.0	0.09-0.22	3.6-6.0	Low	0.28		
	30-34	---	---	0.01-20	---	---	---	---		
Thorndike	0-7	5-10	1.00-1.30	0.6-2.0	0.12-0.24	3.6-6.0	Low	0.20	2	2-8
	7-16	5-10	1.00-1.30	0.6-2.0	0.09-0.22	3.6-6.0	Low	0.17		
	16-20	---	---	0.01-20	---	---	---	---		
Wo	0-8	---	0.10-0.30	0.2-6.0	0.20-0.40	3.6-6.5	---	---	1	80-99
Wonsqueak	8-32	---	0.10-0.30	0.2-6.0	0.20-0.40	4.5-6.5	---	---		
	32-65	5-30	1.50-1.70	0.2-2.0	0.06-0.16	5.1-7.3	Low	0.49		
Ws*:										
Wonsqueak	0-8	---	0.10-0.30	0.2-6.0	0.20-0.40	3.6-6.5	---	---	1	80-99
	8-32	---	0.10-0.30	0.2-6.0	0.20-0.40	4.5-6.5	---	---		
	32-65	5-30	1.50-1.70	0.2-2.0	0.06-0.16	5.1-7.3	Low	0.49		
Bucksport	0-12	---	0.10-0.30	0.2-6.0	0.20-0.50	3.6-5.5	---	---	1	80-99
	12-25	---	0.10-0.30	0.2-6.0	0.20-0.50	3.6-6.0	---	---		
	25-65	---	0.10-0.30	0.2-6.0	0.20-0.50	4.5-6.5	---	---		
WT*:										
Wonsqueak	0-8	---	0.10-0.30	0.2-6.0	0.20-0.40	3.6-6.5	---	---	1	80-99
	8-32	---	0.10-0.30	0.2-6.0	0.20-0.40	4.5-6.5	---	---		
	32-65	5-30	1.50-1.70	0.2-2.0	0.06-0.16	5.1-7.3	Low	0.49		
Bucksport	0-12	---	0.10-0.30	0.2-6.0	0.20-0.50	3.6-5.5	---	---	1	80-99
	12-25	---	0.10-0.30	0.2-6.0	0.20-0.50	3.6-6.0	---	---		
	25-65	---	0.10-0.30	0.2-6.0	0.20-0.50	4.5-6.5	---	---		
Sebago	0-34	---	0.10-0.30	2.0-6.0	0.20-0.40	3.6-4.4	---	---	1	80-99
	34-65	---	0.10-0.30	2.0-6.0	0.20-0.40	3.6-4.4	---	---		

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 16.--Soil and Water Features

("Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in the text. The symbol < means less than; > means more than. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Total subsidence	Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness			Uncoated steel	Concrete
					Ft			In		In			
AdB, AdC--- Adams	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Bd--- Biddeford	D	None	---	---	+1-0.5	Apparent	Oct-Jul	>60	---	---	High	High	Moderate.
BfB, BgB, BhB--- Brayton	C	None	---	---	0-1.0	Perched	Nov-Jun	>60	---	---	High	High	Moderate.
BSB*, BTB*:													
Brayton	C	None	---	---	0-1.0	Perched	Nov-Jun	>60	---	---	High	High	Moderate.
Colonel	C	None	---	---	1.0-2.0	Perched	Oct-May	>60	---	---	High	Moderate	Moderate.
BwC, BwD--- Buxton	C	None	---	---	1.5-3.0	Perched	Nov-May	>60	---	---	High	High	Moderate.
Ch--- Charles	C	Occasional	Brief	Mar-Oct	0-1.0	Apparent	Nov-Jun	>60	---	---	High	High	Moderate.
CoB, CoC, CoE--- Colton	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
CRE*:													
Colton	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Adams	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
CSC*:													
Colton	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Adams	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Sheepscot	B	None	---	---	1.5-2.5	Apparent	Nov-May	>60	---	---	Low	Low	High.
DaB, DaC, DbC--- Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
DsB*, DtB*:													
Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
Colonel	C	None	---	---	1.0-2.0	Perched	Oct-May	>60	---	---	High	Moderate	Moderate.
DWB*:													
Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
Colonel	C	None	---	---	1.0-2.0	Perched	Oct-May	>60	---	---	High	Moderate	Moderate.
Tunbridge	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	High	High.

See footnote at end of table.

TABLE 16.--Soil and Water Features--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Total subsidence	Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness			Uncoated steel	Concrete
					Ft			In		In			
Go---------- Gouldsboro	D	Frequent----	Very brief	Jan-Dec	+1-0.5	Apparent	Jan-Dec	>60	---	---	High-----	High-----	High.
Gt*: Gouldsboro-----	D	Frequent----	Very brief	Jan-Dec	+1-0.5	Apparent	Jan-Dec	>60	---	---	High-----	High-----	High.
Beaches--------	D	Frequent----	Very brief to long.	Jan-Dec	0-6.0	Apparent	Jan-Dec	>60	---	---	---	---	---
HcC*: Hermon---------	A	None--------	---	---	>6.0	---	---	>60	---	---	Low------	Low------	High.
Colton---------	A	None--------	---	---	>6.0	---	---	>60	---	---	Low------	Low------	High.
Rock outcrop---	D	None--------	---	---	>6.0	---	---	0	Hard	---	---	---	---
HmB*, HmC*, HtB*, HtC*, HtE*: Hermon--------	A	None--------	---	---	>6.0	---	---	>60	---	---	Low------	Low------	High.
Monadnock-----	B	None--------	---	---	>6.0	---	---	>60	---	---	Low------	Low------	High.
HVC*, HVE*: Hermon---------	A	None--------	---	---	>6.0	---	---	>60	---	---	Low------	Low------	High.
Monadnock------	B	None--------	---	---	>6.0	---	---	>60	---	---	Low------	Low------	High.
Dixfield-------	C	None--------	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High-----	Moderate	Moderate.
Kn---------- Kinsman	C	None--------	---	---	0-1.0	Apparent	Nov-May	>60	---	---	Moderate	High-----	High.
KW*: Kinsman--------	C	None--------	---	---	0-1.0	Apparent	Nov-May	>60	---	---	Moderate	High-----	High.
Wonsqueak------	D	None--------	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High-----	Moderate	Moderate.
LaB---------- Lamoine	D	None--------	---	---	0.5-1.5	Perched	Nov-Jun	>60	---	---	High-----	High-----	Moderate.
LbB*: Lamoine--------	D	None--------	---	---	0.5-1.5	Perched	Nov-Jun	>60	---	---	High-----	High-----	Moderate.
Scantic--------	D	None--------	---	---	0-1.0	Perched	Oct-Jun	>60	---	---	High-----	High-----	Moderate.
LCB*: Lamoine--------	D	None--------	---	---	0.5-1.5	Perched	Nov-Jun	>60	---	---	High-----	High-----	Moderate.
Scantic--------	D	None--------	---	---	0-1.0	Perched	Oct-Jun	>60	---	---	High-----	High-----	Moderate.
Buxton---------	C	None--------	---	---	1.5-3.0	Perched	Nov-May	>60	---	---	High-----	High-----	Moderate
LgB*: Lyman----------	C/D	None--------	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low------	High.
Brayton--------	C	None--------	---	---	0-1.0	Perched	Nov-Jun	>60	---	---	High-----	High-----	Moderate.

See footnote at end of table.

TABLE 16.--Soil and Water Features--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Total subsidence	Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness			Uncoated steel	Concrete
					Ft			In		In			
LHC*:													
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
Brayton	C	None	---	---	0-1.0	Perched	Nov-Jun	>60	---	---	High	High	Moderate.
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
LsE*:													
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
LtE*:													
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
Rock outcrop	D	None	---	---	>6.0	---	---	0	Hard	---	---	---	---
LuC*:													
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
Tunbridge	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	High	High.
LWC*:													
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
Tunbridge	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	High	High.
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
MaC, MaD, MbC, MbE, Marlow	C	None	---	---	2.0-3.5	Perched	Mar-Apr	>60	---	---	Moderate	Low	Moderate.
McC, McE, Marlow	C	None	---	---	2.0-3.5	Perched	Mar-Apr	>60	---	---	Moderate	Low	Moderate.
MDC*, MDE*:													
Marlow	C	None	---	---	2.0-3.5	Perched	Mar-Apr	>60	---	---	Moderate	Low	Moderate.
Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
MGC*, MGE*:													
Marlow	C	None	---	---	2.0-3.5	Perched	Mar-Apr	>60	---	---	Moderate	Low	Moderate.
Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
MhC*, MhE*:													
Monadnock	B	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Hermon	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.

See footnote at end of table.

TABLE 16.--Soil and Water Features--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Total subsidence	Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness			Uncoated steel	Concrete
					Ft			In		In			
MXC*, MXE*:													
Monadnock	B	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Hermon	A	None	---	---	>6.0	---	---	>60	---	---	Low	Low	High.
Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
NaB*:													
Naskeag	C	None	---	---	0-1.5	Apparent	Nov-May	20-40	Hard	---	Moderate	Low	High.
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
NRB*:													
Naskeag	C	None	---	---	0-1.5	Apparent	Nov-May	20-40	Hard	---	Moderate	Low	High.
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
NcB, NcC Nicholville	C	None	---	---	1.5-2.0	Perched	Nov-May	>60	---	---	High	Low	Moderate.
Ps* Pits	A	None	---	---	>6.0	---	---	>60	---	---	---	---	---
Sa Scantic	D	None	---	---	0-1.0	Perched	Oct-Jun	>60	---	---	High	High	Moderate.
SB*:													
Scantic	D	None	---	---	0-1.0	Perched	Oct-Jun	>60	---	---	High	High	Moderate.
Biddeford	D	None	---	---	+1-0.5	Apparent	Oct-Jul	>60	---	---	High	High	Moderate.
SdB*:													
Scantic	D	None	---	---	0-1.0	Perched	Oct-Jun	>60	---	---	High	High	Moderate.
Lamoine	D	None	---	---	0.5-1.5	Perched	Nov-Jun	>60	---	---	High	High	Moderate.
SEB*:													
Scantic	D	None	---	---	0-1.0	Perched	Oct-Jun	>60	---	---	High	High	Moderate.
Lamoine	D	None	---	---	0.5-1.5	Perched	Nov-Jun	>60	---	---	High	High	Moderate.
Dixfield	C	None	---	---	1.5-2.5	Perched	Nov-Apr	>60	---	---	High	Moderate	Moderate.
SfC*, SfE*:													
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
Rock outcrop	D	None	---	---	>6.0	---	---	0	Hard	---	---	---	---
SGE*:													
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
Rock outcrop	D	None	---	---	>6.0	---	---	0	Hard	---	---	---	---
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.

See footnote at end of table.

TABLE 16.--Soil and Water Features--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Total subsidence	Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness			Uncoated steel	Concrete
					Ft			In		In			
SKC*:													
Schoodic	D	None	---	---	>6.0	---	---	1-10	Hard	---	Low	Low	High.
Rock outcrop	D	None	---	---	>6.0	---	---	0	Hard	---	---	---	---
Naskeag	C	None	---	---	0-1.5	Apparent	Nov-May	20-40	Hard	---	Moderate	Low	High.
SmB, SoB, SoC---Sheepscot	B	None	---	---	1.5-2.5	Apparent	Nov-May	>60	---	---	Low	Low	High.
SrB*:													
Sheepscot	B	None	---	---	1.5-2.5	Apparent	Nov-May	>60	---	---	Low	Low	High.
Rock outcrop	D	None	---	---	>6.0	---	---	0	Hard	---	---	---	---
ThC*:													
Thorndike	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Moderate	High.
Winnecook	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	Moderate	High.
TuB*, TuC*:													
Tunbridge	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	High	High.
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
TWC*:													
Tunbridge	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	High	High.
Lyman	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Low	High.
Marlow	C	None	---	---	2.0-3.5	Perched	Mar-Apr	>60	---	---	Moderate	Low	Moderate.
Ud*:													
Udorthents	-	None	---	---	>2.0	---	---	>60	---	---	---	---	---
Urban land	-	None	---	---	>2.0	---	---	>10	---	---	---	---	---
WA*:													
Waskish	D	None	---	---	0-2.0	Apparent	Nov-Jul	>60	---	---	High	High	High.
Sebago	D	None	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	High	High.
WkC*:													
Winnecook	C	None	---	---	>6.0	---	---	20-40	Hard	---	Moderate	Moderate	High.
Thorndike	C/D	None	---	---	>6.0	---	---	10-20	Hard	---	Moderate	Moderate	High.
Wo---Wonsqueak	D	Frequent	Long	Mar-Oct	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	Moderate	Moderate.
Ws*:													
Wonsqueak	D	None	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	Moderate	Moderate.
Bucksport	D	None	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	Moderate	High.

See footnote at end of table.

TABLE 16.--Soil and Water Features--Continued

Soil name and map symbol	Hydrologic group	Flooding			High water table			Bedrock		Total subsidence	Potential frost action	Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness			Uncoated steel	Concrete
					Ft			In		In			
WT*:													
Wonsqueak	D	None	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	Moderate	Moderate.
Bucksport	D	None	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	Moderate	High.
Sebago	D	None	---	---	+1-0.5	Apparent	Sep-Jul	>60	---	---	High	High	High.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 17.--Classification of the Soils

Soil name	Family or higher taxonomic class
Adams	Sandy, mixed, frigid Typic Haplorthods
Biddeford	Fine, illitic, nonacid, frigid Histic Humaquepts
Brayton	Coarse-loamy, mixed, nonacid, frigid Aeric Haplaquepts
Bucksport	Euic Typic Borosaprists
Buxton	Fine, illitic, frigid Aquic Dystric Eutrochrepts
Charles	Coarse-silty, mixed, nonacid, frigid Aeric Fluvaquents
Colonel	Coarse-loamy, mixed, frigid Aquic Haplorthods
Colton	Sandy-skeletal, mixed, frigid Typic Haplorthods
Dixfield	Coarse-loamy, mixed, frigid Typic Haplorthods
Gouldsboro	Fine-silty, mixed, nonacid, frigid Typic Sulfaquents
Hermon	Sandy-skeletal, mixed, frigid Typic Haplorthods
Kinsman	Sandy, mixed, frigid Aeric Haplaquods
Lamoine	Fine, illitic, nonacid, frigid Aeric Haplaquepts
Lyman	Loamy, mixed, frigid Lithic Haplorthods
Marlow	Coarse-loamy, mixed, frigid Typic Haplorthods
Monadnock	Coarse-loamy over sandy or sandy-skeletal, mixed, frigid Typic Haplorthods
Naskeag	Sandy, mixed, frigid Aeric Haplaquods
Nicholville	Coarse-silty, mixed, frigid Aquic Haplorthods
Scantic	Fine, illitic, nonacid, frigid Typic Haplaquepts
Schoodic	Loamy-skeletal, mixed, acid, frigid Lithic Udorthents
Sebago	Dysic Fibric Borohemists
Sheepscot	Sandy-skeletal, mixed, frigid Typic Haplorthods
Thorndike	Loamy-skeletal, mixed, frigid Lithic Haplorthods
Tunbridge	Coarse-loamy, mixed, frigid Typic Haplorthods
Udorthents	Udorthents
Waskish	Dysic, frigid Typic Sphagnofibrists
Winnecook	Loamy-skeletal, mixed, frigid Typic Haplorthods
Wonsqueak	Loamy, mixed, euic Terric Borosaprists

TABLE 18--Relationships Between Soil Series and Parent Material, Landscape Position, and Drainage

Parent material	Excessively drained	Somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
	SOILS THAT FORMED IN GLACIAL TILL ON UPLANDS						
Very shallow, moderately coarse textured glacial till derived mainly from mica schist and phyllite and some granite and gneiss	Schoodic						
Shallow, moderately coarse textured glacial till derived mainly from mica schist		Lyman					
Moderately deep, medium textured and moderately coarse textured glacial till derived mainly from mica schist, gneiss, and phylite			Tunbridge				
Shallow, medium textured glacial till derived mainly from slate, phyllite, or shale		Thorndike					
Moderately deep, medium textured glacial till derived mainly from slate, phyllite, or shale			Winnecook				
Moderately deep, coarse textured glacial till derived mainly from granite, gneiss, and schist					Naskeag	Naskeag	
Very deep, moderately coarse textured and coarse textured till derived mainly from gneiss, granite, and schist		Hermon	Monadnock				
Very deep, moderately coarse textured, compact glacial till derived mainly from schist and some gneiss, phyllite, or granite			Marlow	Dixfield	Colonel Morris	Brayton	

TABLE 18.--Relationships Between Soil Series and Parent Material, Landscape Position, and Drainage--Continued

Parent material	Excessively drained	Somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
SOILS ON OUTWASH PLAINS, TERRACES, OR ESKERS							
Very deep, moderately coarse over gravelly coarse textured material		Colton		Sheepscot			
Very deep, coarse textured material		Adams				Kinsman	
SOILS ON MARINE OR LACUSTRINE PLAINS							
Very deep, medium textured material				Nicholville			
Very deep, medium textured over moderately fine textured and fine textured material				Buxton	Lamoine	Scantic	Biddeford
SOILS ON FLOOD PLAINS							
Very deep, medium textured material						Charles	
SOILS IN SWAMPS, BOGS, AND MARSHES							
Moderately deep, well decomposed, herbaceous, mossy or woody fiber							Wonsqueak
Very deep, well decomposed, herbaceous, mossy or woody fiber							Bucksport
Very deep, moderately decomposed, herbaceous, mossy or woody fiber							Sebago
Very deep, slightly decomposed, sphagnum moss and some herbaceous and woody fiber							Waskish
Very deep, well decomposed saltwater marshgrasses over medium textured material							Gouldsboro

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