

OJT Training Module Cover Sheet

Title: SRITB (Soil Resource Inventory Toolbox) Edit Tools

Type: Skill Knowledge

Performance Objective:

Trainee will be able to add and configure the Soil Resource Inventory Toolbars by the end of the module. The Trainee will be introduced to the Editing Functions available on the Edit Manager and Edit toolbars.

Trainer Preparation:

Make sure the participants have machines on which they have write permission to the C drive.

Special Requirements:

CCE configuration including the installation of SRITB 1.1.18 and ArcGIS 9.2.

Prerequisite Modules:

A general understanding of ArcGIS is required for this module to be useful to the Trainee.

Procedure:

Trainer will use as a job aid to help prepare for this task.

Trainer can then use this job aid as a training module to accomplish the task.

Notes/Purpose:

The purpose is to give the user a general understanding of the SRITB toolbar. The user should develop an understanding of the advantages of using the SRITB toolbar for editing vs the use of the native ArcGIS toolbars.

Authors:

Whityn Owen and Henry Ferguson

Approved by:

Objective:

- **Add and configure the Soil Resource Inventory Toolbars**
- **Become familiar with the Editing Functions available on the toolbars**

Introduction to the SRITB Extension

The SRITB was designed for tablet PCs but all of the functions will work with desktops and laptops as well

Many of the design features are intended to maximize screen space which is limited on tablet PCs

Commonly used Edit tools and Edit Parameter settings have been consolidated to the SRITB to improve efficiency, especially when in the field

Introduction to the SRITB Extension

Main Features Include:

- **Revolving toolbars – The user scrolls through the toolbars similar to menus on a cell phone. Only one toolbar appears at a time (by default)**
- **Commonly accessed edit settings such as the Snapping Environment and Stream Tolerance are available through icons on the toolbar**
- **Several Common Edit Operation Sequences, e.g. “Cut Polygon”, have been automated to increase efficiency and minimize errors by enforcing best practices**

Step 1. Enable the SRITB Extension

1a. Open ArcMap

Click

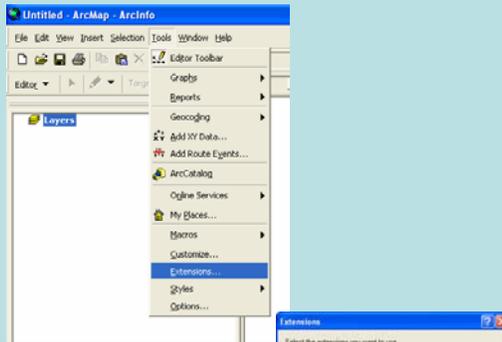
Start >> Programs >> ArcGIS >> ArcMap



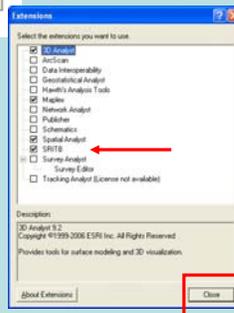
Successful execution of this step:

Creates a C:\home\Toolboxes\GeodbSetup folder that contains several python scripts, a template geodatabase, and a toolbox that contains custom NRCS models.

1b. Click on the Tools Menu from the top Menu Bar, then click Extensions



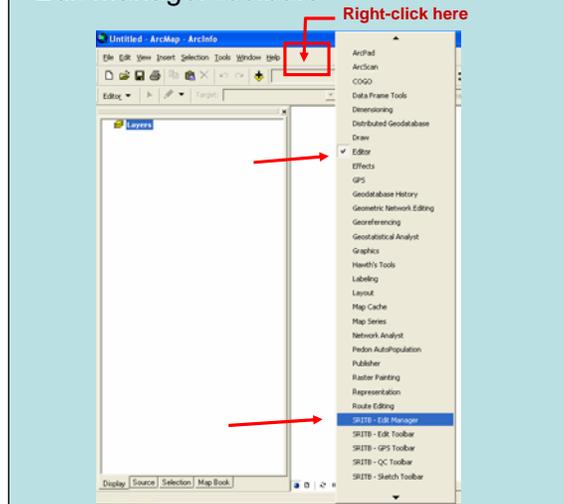
1c. Check the SRITB checkbox and close the window



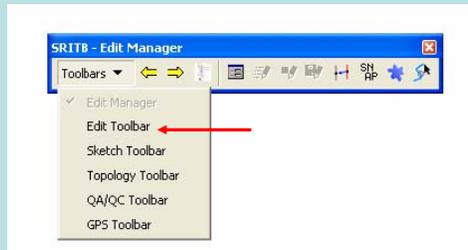
Step 2. Add and Configure the Toolbar

2a. Right-click on the empty space to the right of 'Help' along the top Menu bar. This will bring up a list of Toolbars

Add both the Editor and the SRITB – Edit Manager toolbars



2b. Click on the SRITB Toolbars dropdown menu...



It contains a list of all of the SRITB Toolbars

Select the Edit Toolbar...

Note: If the toolbar appears docked along the left or right edge, left click on the toolbar at the top and drag it into the open area of the data frame

The **Edit Task** function may only appear on one toolbar at a time in ArcMap

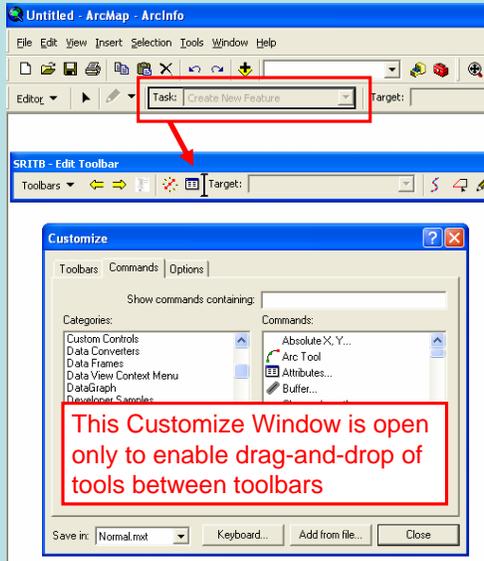
By default it appears on the Editor Toolbar

In the next step we'll drag and drop the Edit Task function from the Editor Toolbar to the SRITB Edit toolbar

2c. With both the Editor and the SRITB Edit Toolbar visible, click Tools >> Customize from the top Menu bar



2c. With the Customize Window open, Click the **Task:** function on the Editor toolbar and drag it next to **Target** on the SRITB Edit Toolbar

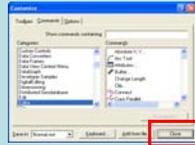


2c. Continued...

After the last step, the SRITB Edit Toolbar should look like this:



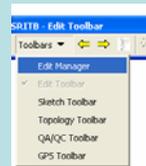
2d. Close the Customize Window



2e. Remove the Editor Toolbar

Right-click next to 'Help' to see the list of toolbars
Uncheck Editor in the toolbar list

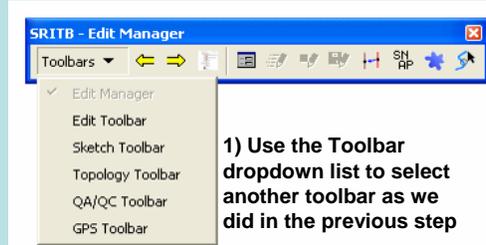
2f. Select the Toolbars dropdown menu on the SRITB Edit Toolbar and switch back to the **Editor Manager** Toolbar



Step 3. Explore the Edit Manager Toolbar

Navigate between Toolbars

Only one SRITB toolbar will display at a time. There are two ways to navigate between the toolbars:



2) The yellow arrows   navigate through this list of toolbars either 'forward' or 'backward' relative to the active toolbar

Example: Edit Manager  Edit Toolbar
Edit Manager  GPS Toolbar

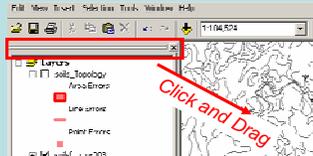


This icon toggles the Table of Contents on/off

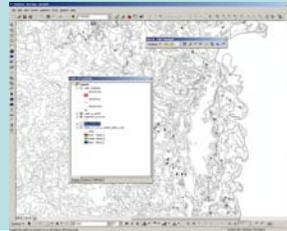
First, add data for editing to your map and select the desired symbols for all of the layers

NOTE: Be sure to add a soil polygon feature class and associated Topology

Second, detach the Table of Contents so that it is "floating" (un-docked) by clicking the double bars along the top edge and dragging it into the map area



Third, test the TOC Toggle button...





SRITB - Edit Manager

Toolbars ▾ ◀ ▶ [Preferences icon] [Other icons]

Set the SRITB preferences

Click the Preferences icon

Choose where the toolbars will dock in the ArcMap application Window
NOTE: These instructions show the toolbars docked on the Right side

Accept all other defaults



SRITB Preferences

Toolbar Preferences

Toolbar Docking Location: Right

Toolbar Loadout: Default Configuration

Editing Tool Preferences

Display attribution window after Cut Polygon

Continue cutting after Create Island Polygon

Pedon Auto Population Preferences

Pedon_PC.mdb location: c:\pedon\pedon_pc.mdb

OK Cancel Apply

The Remaining Icons on the **Edit Manager** toolbar are fairly intuitive and include the Stop\Start\Save Edit functions and commonly accessed Editing Environmental Parameters:

Start Editing
Stop Editing
Save Edits

Opens Snapping Environment
Snap Distance
Sticky Move
Stream Tolerance

- 1) Click the Start Editing button from the Edit Manager Toolbar
- 2) Click the Arrow key or use the Toolbar dropdown list to select the Edit Toolbar

Step 4. Explore the Edit Toolbar

The Toolbar dropdown list, navigation arrows and Table of Contents toggle button are available on all menus

The remaining tools on the Edit Toolbar include commonly used tools and several custom functions developed specifically for editing soil data

Common Tools:

Diagram illustrating the Edit Toolbar tools and their functions:

- Explode Multipart Feature
- Open Attribute Table
- Opens Edit Task
 - Edit Task (Tasks: CUI Polygon Features)
- Opens Edit Target
 - Target Layer (Targets: cr003_a)
- Unselect all Topology Elements
- Fix Topology Tool
- Stream Digitizing Toggle
- Trace Tool
- Sketch Tool
- Validate Topology in Specified Area

This section of the toolbar contains custom tools designed to simplify common editing sequences

These tools will automatically change the Edit Task and then anticipate what tool is needed for each stage of that task

Example:

The Topology > Reshape Edge Tool 

- Changes the edit task to **Reshape Edge**
- Activates the **Topology Edit Tool** to select an edge to reshape
- Activates the **Edit Sketch Tool** after a topology edge is selected
- After finishing Reshaping with the task, the edge remains selected for further editing; click the tool again to select a different edge, or Unselect all Topology Elements  to quit

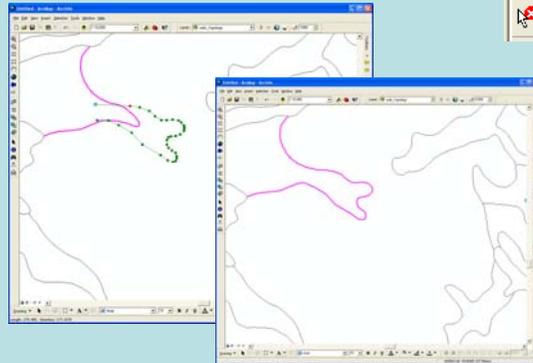


Step 5. The Custom Reshape Edge Tool

A) Verify that the map contains a soil polygon layer with an associated topology (no gaps, no overlaps)

B) Verify that you are in an Edit Session
Check the Edit Manager Toolbar

- Click the Reshape Edge Tool
- Select an Edge
- Draw the new line, double-clicking to end (intersecting the selected line at least twice)



Step 6. The Custom Modify Edge Tool

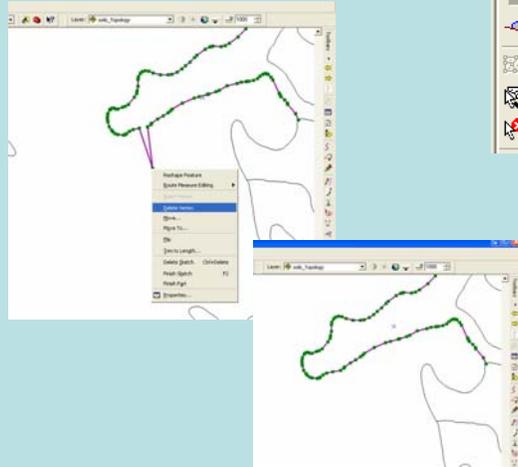
Click the Modify Edge Tool

This changes the Edit Task to Modify Edge and Activates the Topology Edit Tool

Select an Edge and the vertices are shown

Perform desired edit

e.g. hover over a vertex to move or, in this case, right-click and Delete Vertex



Step 7. The Custom Cut Polygon Tool

1) Click on the Custom Cut Polygon Tool

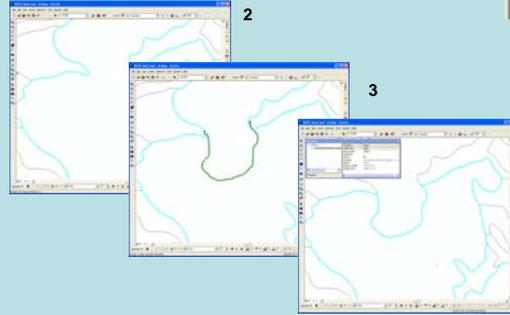
This sets the Edit Task to Cut Polygon and Activates the Select Features tool

2) Select the polygon to split >> this activates the Edit Sketch Tool

3) Draw the line to divide the selected polygon Double-clicking to end (be sure you intersect the selected line at least twice)

The Attribute table will open automatically (default)

NOTE: Change this option from the Edit Manager >> Preferences



Step 8. The Custom Create Island Polygon Tool

1) Click on the Custom Create Island Polygon Tool

This sets the Edit Task to Cut Polygon, the snapping for Edit Sketch Vertices, and Activates the Select Features tool

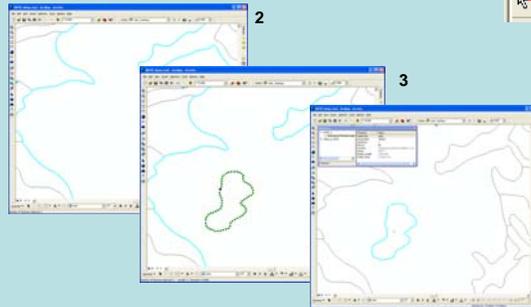
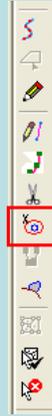
2) Select the polygon surrounding the new island polygon

3) Draw the new island polygon

Note: Allow the line to SNAP to the starting vertex to close the polygon. Then double-click to finish

The Attribute table will open automatically (default)

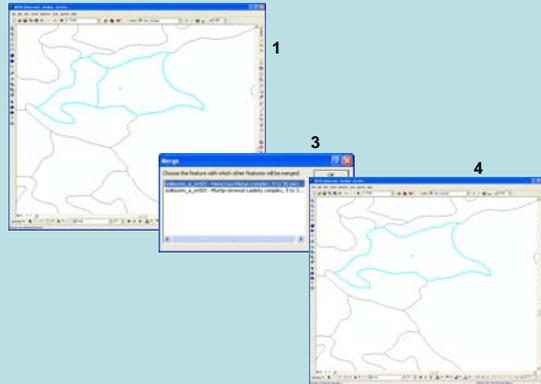
NOTE: Change this option from the Edit Manager >> Preferences



Step 9. The Merge Tool

This tool is the standard Merge function

- 1) Select two or more polygons to combine using the Select Features Tool  (hold down shift to select multiple features)
- 2) Click the Merge tool
- 3) Select the attribute to be retained in the new combined polygon
- 4) The polygons are combined



Step 10. The Custom Auto Complete Tool

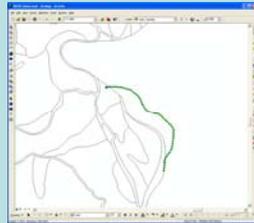
This tool can be used to develop soils in **NO DATA** areas, e.g. along the perimeter of the soil survey area (or in 'holes' in the soil polygon layer)

- 1) Navigate to an area described above
- 2) Click the Auto-complete Polygon Tool
This sets the Edit Task to Auto-Complete Polygon and Activates the Edit Sketch Tool
- 3) Draw the polygon in the NO DATA area intersecting existing polygons at the start and end only; double-click to end
- 4) A new polygon is created with the shared edges of the adjacent polygons; the topology is maintained; the perimeter of the survey area (in this case) has changed



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