



# THE GRAMA PHONE

A Regional Newsletter from USDA NRCS Southwestern Plant Materials Centers ☀ Spring 2016

## Greetings

The staff of the four Southwest Plant Materials Centers (PMC) happily present the second edition of our consolidated newsletter describing work and events occurring at our PMCs. It has been a busy few months for all of us, incorporating changes into our operations to address assigned focus areas and specific local resource concerns. Our goal is to target PMC activities to work that produces the greatest contribution to NRCS goals. Our PMC’s focus and targeted resource concerns are listed below:

Location	Focus	Resource Concerns
Tucson Plant Materials Center, AZ	Climate Change	Grazing areas, riparian zones
Lockeford Plant Materials Center, CA	Soil Health & Water Quality	Cropland, grazing land
Great Basin Plant Materials Center, NV	Grazing Land Health	Rangeland with sage grouse emphasis
Los Lunas Plant Materials Center, NM	Water Quality & Climate Change	Riparian zones, rangeland

PMCs work to develop products targeted to specific field office needs. Annually, through a needs assessment, each state provides the Plant Materials Regional State Conservationist’s Advisory Committee with a list of their needs. The State Conservationist’s Advisory Committee reviews the needs of each state and determines what the priority issues are for the region. Field staff throughout the Southwest may call any PMC for direct assistance. Coordination among PMCs allows us to address your concerns no matter where your home office is. Contact information for each PMC can be found on the last page of the newsletter. Please, read about some of our ongoing projects and give us a call. We look forward to assisting you!

*Sincerely, The Southwestern PMC Staff*

## Ongoing Project National Adaptation Cover Crop Trials at the PMCs

National Adaptation Cover Crop Trials were established at PMCs around the country to evaluate growth characteristics and production attributes of commercially available varieties/cultivars and local sources of selected cover crops. The cultivars were selected by NRCS state agronomists/soil health contacts and PMC staff. The cultivar seeds were purchased by various PMC staff and distributed to all locations involved in the testing. Nationwide testing of different cultivars provides cover crop adaptation and growth data for different geographical regions of the U.S. The data will provide local recommendations for suitable cover crops cultivars. Information from these trials will allow for the development of regional cover crop mixtures based upon the cultivars maturation times. The information will be invaluable as we progress with future soil health studies and develop regional technical notes for field staff. The complexity of the trials varies among PMCs, with the Lockeford PMC and Great Basin PMC undertaking replicated trials while Tucson and Los Lunas PMCs have established replicated rows to assess adaptation.

## Growth stages of National Adaptation Cover Crop Trials at participating PMCs, February 2016



*Figure 1: Tucson, AZ February 10, 2016. Note that cereals are close to maturity.*



*Figure 3: Lockeford, CA February 3, 2016. Plots are exhibiting good cover.*



*Figure 2: Fallon, NV February 4, 2016. Variable growth visible in the plots.*



*Figure 4: Los Lunas, NM February 12, 2016. Daikon radish winter killed with low temperatures.*

## New Staff for the Plant Materials Program

New hires at the Great Basin, Lockeford, and Tucson PMCs increase our ability to serve the needs of the Southwest Region.

The Tucson PMC welcomes Mary Wolf, soil conservationist, to our team. Mary comes to us from Caldwell, Idaho where she worked as a soil conservationist for the past eleven years. She previously worked for the ARS Land Management and Water Conservation Research Unit in Pullman, WA. She has a M.S. degree in Soil Science from Washington State University. Mary enjoys sunshine, the desert, rockhounding, and gardening for pollinators.



*Figure 5: Mary Wolf, recently hired soil conservationist at the Tucson PMC.*

The Tucson PMC also welcomes new Earth Team volunteers Kayti Staley-Lewis and Aaron Wilson. Kayti is working with us through the Portable Practical Educational Preparation, Inc. Youth Build Program. Aaron is a University of Arizona student studying Public Management and Policy with a minor in Sustainable Horticulture.



*Figure 6: Kayti Staley-Lewis, Earth Team volunteer at Tucson PMC.*



*Figure 7: Aaron Wilson, Earth Team volunteer at Tucson PMC.*

The Great Basin Plant Materials Center is pleased to welcome Christopher Bernau as a rangeland management specialist. Chris earned his Bachelor of Science degree in Biology, with a minor in Chemistry, from the University of Utah, and his Master of Science degree in Rangeland Ecology and Management from the University of Idaho.

His specialty is rangeland ecology with particular emphasis on the effects of fire in arid ecosystems. His experience includes work in education, research, and land management at the University of Arizona's V bar V Ranch Experiment Station. Before that, he worked in the Intermountain West on fuel loads in the Sagebrush Steppe, including work on post-fire vegetation responses in western states. Chris is also active in the Society for Range Management.



*Figure 8: Christopher Bernau, rangeland management specialist at the Great Basin PMC.*

The Lockeford PMC welcomes three new staff members. Valerie Bullard, agronomist, previously worked for NRCS in Soil Survey in California, before she obtained a Masters from UC Davis in Soils and Biogeochemistry. She then worked for a wine grape grower conducting research trials on over 40,000 acres of vineyards throughout California and most recently worked for Marrone Bio Innovations as a product development specialist conducting trials on biological pest control and plant health products in turf and wine grapes.



*Figure 9: L-R, Larry Sell, Benjamin Hudson and Valerie Bullard recently started working at the Lockeford PMC.*

Benjamin Hudson, farm foreman, has worked for NRCS since 2011 and was most recently a soil conservationist in Florida. He is originally from Utah, with a degree in ornamental horticulture from Utah State and has worked for the USDA-ARS in Logan, Utah and the Missouri Botanical Gardens in Saint Louis, Missouri.

Larry Sell is a veteran of the US Navy where he was as an explosive ordnance disposal technician. He has worked at the Lockeford PMC on a temporary contract basis for the past 5 years, but has now been hired as a biological science technician.

We also have two Earth Team volunteers, Matthew Bronson and Stephen Cooper Jr. Additionally, Connor McGee of the Tribe of Pala Reservation Indians has an internship at the PMC through the Intertribal Agriculture Council and is working with documenting indigenous stewardship methods for plants of cultural significance.

## Ongoing Collaborations

In the 2014 Southwest Region Needs Assessment, critical area stabilization studies to mitigate air quality impacts from blowing dust were a high priority need. To that end, Arizona NRCS and the University of Arizona College of Agriculture and Life Sciences Cooperative Extension jointly held a Dust Assessment, Management and Mitigation Conference. The conference was a first step to develop partnerships to enable installation of studies. Topics included health and safety concerns of dust, factors impacting dust generation and transport, monitoring systems and mitigation strategies. The presentations given can be accessed at: <https://extension.arizona.edu/2016-dust-assessment-management-mitigation-presentations>

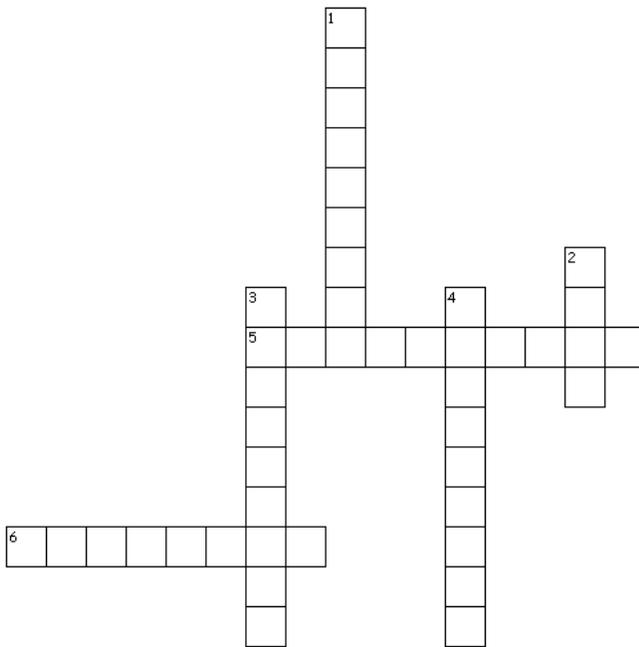
Similarly, the Los Lunas PMC attended the Dust Storm Stakeholder Meeting in partnership with the New Mexico Department of Transportation, Bureau of Land Management (BLM), New Mexico State Police, and National Weather Service to discuss highway safety improvement projects that will mitigate dust storm hazards and fatalities. The PMC is a partner within the vegetation task force.

## Upcoming Events

On March 30<sup>th</sup> the Lockeford Plant Materials Center will be hosting an Open House, this will include sessions on Soil Health Cover Crops and forage for dairies. The event is sponsored by Sustainable Conservation and is also a meeting of the Soil Health Network for California.

On April 25<sup>th</sup>, the Los Lunas Plant Materials Center will be hosting the Southwest Native Seed Partnership Steering Committee Meeting with partners from the BLM, Forest Service, Fish and Wildlife Service, National Park Service and the Institute of Applied Ecology to discuss improving the diversity and supply of ecologically appropriate native propagules. Please contact either Lockeford or Los Lunas PMCs to learn more about these events.

## Southwestern Plant Materials Centers Puzzle



### Across

5. Studies soil management and crop production

6. Cover Crop Variety

### Down

1. Earth Team \_\_\_\_\_

2. Major cause of Air Quality problems

3. \_\_\_\_\_ Management Specialist studies grazing lands

4. Location of PMC for Mediterranean Area of California

## Contact information

Tucson Plant Materials Center  
3241 North Romero Rd.  
Tucson, AZ 85705-9223  
Telephone: 520-292-2999  
Manager: Heather Dial

Lockeford Plant Materials Center  
21001 N. Elliott Rd  
PO Box 68  
Lockeford, CA 95237-0068  
Telephone: 209-727-5319  
Manager: Margaret Smither-Kopperl

Los Lunas Plant Materials Center  
1036 Miller St., SW  
Los Lunas, NM 87031  
Telephone: 505-865-4684  
Manager: Bernadette Cooney

Great Basin Plant Materials Center  
2055 Schurz Highway  
Fallon, NV 89406  
Telephone: 775-423-7957  
Manager: Eric Eldredge