ISSUE 07



United States Department of Agriculture Southern Plains Climate Hub

CLIMATE CONNECTION

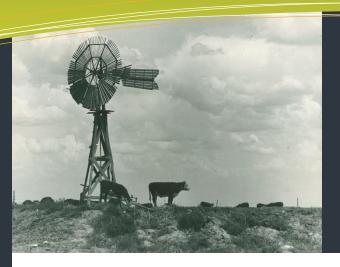
Meet the Southern Plains Climate Hub's new Fellow Maria DeBernardi in this month's Staff Corner

Over the course of the next few issues of the newsletter we want to introduce all of you to our hub team. As part of this effort, this month we want to highlight Maria DeBernardi, our new Fellow.

A young researcher from Argentina, Maria DeBernardi will be joining Kansas State University and the USDA Southern Plains Climate Hub as the newest Climate Hub Fellow in August.

María has had an interest in studying the environment since her childhood. After receiving a Bachelor's degree in Environmental Technology, she received her Ph.D. in Applied Environment and Health Sciences at the

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- Hub hosts two-day education event
- USDA and others partner on Tribal Plant workshop

Scientists met to discuss climate adaptation strategies for the beef industry

Coping with extreme weather is nothing new to cattle producers. From cow-calf ranchers to feedlot operators, the challenges created by droughts, wildfires, blizzards and floods are considered part of the cost of doing business. As extreme weather becomes more frequent thanks to our changing climate novel strategies may be needed to help the industry adapt to these events.

To help spur the conversation on possible strategies to deal with these challenges, the USDA Southern Plains and Southwest Climate Hubs in partnership with <u>the Sustainable Southwest Beef Coordinated Agriculture Project</u> and the Western Section of the American Society of Animal Science convened a meeting of researchers from the USDA Agricultural Research Service as well as several Plains and Western Land Grant Universities to discuss tools currently available in the region to cope with current and anticipated changes in weather patterns associated with climate change. The symposium was held on July 16 at the Albuquerque Convention Center in New Mexico as part of this year's annual conference of the American and Canadian Animal Science Societies (more details here).

Topics discussed at the meeting included the overall contribution of the beef industry to the economy of the Great Plains and Western United States; the impacts of future climate change scenarios on the beef industry; a discussion of adaptive strategies by United States grazing land managers in a changing climate; what role could old/heritage genetics play in climate adaptation; and what existing livestock farming tools are available for climatesmart ranching and climate smart feedlot decision making. A full report of the symposium presentations will be made available through the USDA Climate Hubs website.

For more information on the symposium, please contact Andres Cibils (andres.cibils@usda.gov) at the Southern Plains Climate Hub.

Staff Corner Continued-

Universidad Nacional del Centro de la Provincia de Buenos Aires, in Argentina.

Maria's Ph.D. and subsequent research focused on studying soil greenhouse gas (GHG) fluxes and gas diffusivity under different land uses such as grazing, cropping, afforestation, and the effect of land use changes on GHG fluxes.

María is actively involved in teaching and service at her university. Besides her responsibilities as an instructor, Maria serves as research advisor to BS students completing their undergraduate thesis work in the area of soil GHG fluxes. Maria is looking forward to joining the Southern Plains Climate Hub team to work on a grazing and climate mitigation project in the southern Great Plains.



Climate Hub, BIA and others partner on tribal plant workshop.

On July 7, 2023 the USDA Southern Plains Climate Hub (Hub) and the Bureau of Indian Affairs Tribal Climate Resilience (BIA/TCR) partnered with the East Texas Plant Materials Center (ETPMC), the Chief Kina Health Clinic, and the Alabama-Coushatta Wildland Fire Department to host the Medicinal and Riparian Plant Workshop for Tribal Members. A first of its kind event in Texas, the meeting focused on the medicinal and cultural significance of native plant species. According to Kristy Oates, NRCS Texas State Conservationist, the meeting was a great way to strengthen the partnership between USDA and the Alabama-Coushatta Tribe of Texas.

"Native American history is Texas History," Oates said. "Tribes have always played a significant role in agriculture and conservation and that commitment continues today,"

The event began with a history of medicinal plant use presentation by Ricky Linex, retired NRCS Biologist and author of the book Range Plants of North Central Texas. After the medicinal plant discussion, Dawn Stover, Study Leader and Agronomist with the East Texas Plant Materials Center gave an overview of the Nacogdoches Pollinator Right of Way Project, a partnership initiative designed to expand pollinator friendly plants along roadways as well as discussing way in which to propagate river cane species on tribal land.

Alan Shadow, Manager of the East Texas Plants Material Center gave an overview of Center's work and how they are encouraging landowners to let the ground revegetate after a ground disturbance practice such as clear cutting.

Ricky Linex again took the stage for a presentation on what healthy riparian systems look like and what plants are commonly found in these areas. The presentation was followed by an outside riparian walk on Alabama-Coushatta land to discuss riparian health, vegetation, and stream function.

"This event has been extremely informational," said Kelli Scroggins, LVN/CRT Diabetes Education Coordinator for the Alabama-Coushatta Tribe of Texas. "Our members have truly enjoyed learning about medicinal plant uses and healthy riparian functions,"

Gesse Bullock, Fire Management Specialist with the Alabama-Coushatta Tribe of Texas wanted to thank the USDA Southern Plains Climate Hub, the Bureau of Indian Affairs Tribal Climate Resilience and the East Texas Plant Materials Center for partnering to host another informative workshop.

"Events such as these are great for our Tribal Members and the Tribe in general to partner with agencies to deliver great educational information," Bullock said.

Former NRCS biologist Linex agreed.



"I have given over 1,000 presentations in my career," Linex said, "But this one has been the most meaningful,"

USDA Accepts Nearly 2.7 Million Acres in Grassland CRP Signup, Successfully Closing the Gap and bringing CRP Near to Acreage Cap

WASHINGTON, July 19, 2023 – The U.S. Department of Agriculture (USDA) is accepting offers for nearly 2.7 million acres from agricultural producers and private landowners through this year's Grassland Conservation Reserve Program (CRP) signup, which received a record setting sign-up of 4.6 million acres in offers. This working lands program allows producers and landowners to continue grazing and haying practices while protecting grasslands and further the CRP's impacts. Grassland CRP is part of the Biden-Harris administration's broader effort to address climate change and conserve natural resources.

"This year's Grassland CRP signup demonstrates the continued popularity, success and value of investments in voluntary, producerled, working lands conservation programs," said Zach Ducheneaux, administrator of USDA's Farm Service Agency (FSA). "Grassland CRP clearly demonstrates that conservation priorities and agricultural productivity not only have the capacity to coexist but also complement and enhance one another. Through all our working land conservation programs, farmers and ranchers play a critical role in helping secure the future of both our food production and our natural resources."

Grassland CRP leverages working lands practices to improve biodiversity and conserve environmentally sensitive land. To target conservation in key geographies, USDA prioritizes land within two National Priority Zones: the Greater Yellowstone Ecosystem and the Dust Bowl area. Building upon the nearly 2.4 million acres already in the Priority Zones, this year's more than 900,000 acres continues to robustly demonstrate that producers in these areas recognize the keen conservation value of Grassland CRP. Land enrolled in these zones will contribute to broader USDA conservation efforts through Working Lands for Wildlife by conserving working grasslands and other lands that underpin iconic big game migrations.

Grasslands enrolled in CRP help sequester carbon in vegetation and soil, while enhancing resilience to drought and wildfire. Meanwhile, producers can still conduct common grazing practices, such as haying, mowing or harvesting seed from the enrolled land, which supports agricultural production.

In addition to the Grassland signup, FSA also has accepted more than 1 million acres through the General signup, and more than 465,800 acres have been submitted through the Continuous CRP signup so far this year, on pace to be similar to last year's nearly 900,000-acre enrollment.

For more information contact your local USDA Service Center.

Cows, climate and education--Hub, Asombro Institute and the BlueSTEM AgriLearning Center host two-day event for teachers.

Can technology and heritage breed cattle make ranching more sustainable? What does the current research on climate change tell us and what role does agriculture play? The answers to these questions were the focus of a two-day educational workshop in El Reno, Oklahoma hosted by the USDA Southern Plains Climate Hub, the BlueSTEM AgriLearning Center and the Asombro Institue for Science and Education.

Open to middle and elementary school teachers in Oklahoma, the workshops focused on current research on climate change and the lessons learned by the Sustainable Southwest Beef Project, a five-year initiative funded by the USDA National Institute of Food and Agriculture that focused on novel technologies for sustainable ranching in the southwest.

On the first day, fourth, fifth and sixth grade teachers learned about regional ranching research investigating if technology and heritage breed cattle could make ranching more sustainable. On the second day, middle and high school teachers learned about current research on climate change and agriculture.

On both days, the educators in attendance received access to standards-aligned lessons that break down this global issue into bite-sized pieces for their students.

All the lesson plans were designed to prepare students to be informed decision-makers of the future with a focus on water, wildfire, agriculture, and the carbon cycle

Anyone interested in obtaining the lesson plans provided at the workshop should contact Susan Eisenhour at <u>susan.eisenhour@udsa.gov</u> or visit the USDA Southern Plains Climate Hub web site at:

https://www.climatehubs.usda.gov/hubs/south ern-plains

Texas NRCS Quarterly Watershed Program Update

Aug. 24, 2023

Nov. 10, 2023

Virtual—2 pm start time

The USDA Natural Resources Conservation Service (NRCS) Texas Watershed Program has scheduled quarterly conference calls throughout 2023 to keep watershed sponsors and others interested in Texas's watershed program up to date on current and upcoming program activity.

The NRCS Landscape and Planning staff in Temple, Texas, will provide information on program opportunities and requirements related to Watershed Operations, Watershed Rehabilitation and Emergency Watershed Protection programs.

These quarterly meetings will be presented via Microsoft Teams.

To receive an email notification about these meetings, send an email request to Watershed Program Staff at RC.TX-NRCS-WSPGMS@usda.gov. The invitation will include an audio line for calling into the meeting for participants unable to connect through MS Teams.

Oklahoma Women in Agriculture and Small Business Conference

THURSDAY, AUGUST 3, 2023, 8 A.M. – 4:45 P.M.

The Oklahoma Women in Ag and Small Business conference provides risk management education in the areas of production, marketing, financial, legal and human risks inherent to women owned operations. Five general sessions and 20 concurrent workshops focusing on educational information and resources to mitigate and manage risks through implementation of new methods and tools. Topics this year include wheat and canola, chickens, goats and sheep, animal health, wills and trusts, hoop house production, pecans, composting and more!

Location: Hilton Garden Inn & Conference Center

2833 Conference Dr.

Edmond, OK. 73034

Cost: \$65

For more information contact Lauren Minyard- (580) 276-3385

Email: lauren.young11@okstate.edu

Oklahoma Panhandle Crops Field Day

THURSDAY, AUGUST 31, 2023, 8:30 A.M. – 12 P.M.

McCaull Research and Demonstration Farm

Rural Route 1

Goodwell, Oklahoma 73939

OSU Agriculture Field Days are educational event showcasing current agricultural research and relevant best practices through presentations, tours, hands-on workshops and discussion at little or no cost.

Register for the event by Aug. 24 at <u>okstatecasnr.az1.qualtrics.com...</u> to be entered into a prize drawing!

For more information contact Cameron Murley

(508) 349-5440 or email <u>cameron.murley@okstate.edu</u>

Virtual Fencing: A tool for resilient rangeland beef systems

Tuesday, September 26, 2023

Windsong Ranch NM; Donna Knudson & Glenn Duff

Sedan, New Mexico

The use of virtual fencing (VF) to manage cattle grazing after a wildfire, during a drought, near waterways, or upon converting irrigated cropland to permanent pasture is rapidly increasing across the Great Plains and the West. A hands-on workshop to demonstrate commercially available VF systems currently used in Oklahoma, New Mexico, and elsewhere will be held at Windsong Ranch NM this fall. Ranchers, researchers, USDA NRCS staff and VF company reps from Vence TM and No-Fence TM, will be on site to conduct demonstrations and answer questions about operation, cost, and use of this precision technology in conservation plans. Brief presentations by a panel of experts will be followed by hands-on demonstrations; from App configuration, to collar deployment, to data display and livestock management.

A detailed agenda for this event will be sent out this summer.

For further information or to express interest in attending, please contact Susan Eisenhour <u>susan.eisenhour@usda.gov</u> or (405)205-0152



Learn more about rangeland management in a friendly setting with other ranchers, land managers, range management students and natural resource professionals.

During the Mixed Grass Academy you will receive the opportunity to listen to others share their experiences, expertise, best practices, as well as gain hands on experience!

Besides learning plant identification, figuring stocking rates, monitoring

vegetation response, estimating forage allocation and the rest of basics needed to manage your rangeland, there will be ranchers and natural resource professionals from NRCS and other organizations talking with you about how to plan long term for whatever nature or market forces bring to your ranching enterprise and how to respond to keep your rangeland health high and your livestock productive.

The cost is \$350 per student and covers room & board, meals and tuition for the 2 ½ day academies. Scholarships of \$175 are available for landowners, ranchers and operators. Contact your local conservation district for a scholarship.

Join us for all the 2023 Range Academies! The theme for all three schools this year is "Being Intentional Managers in a Changing Landscape."

The Mixed Grass Academy is scheduled for August 8-10 at Camp Mennoscah in Murdock, Kansas.

The Tallgrass Academy is scheduled for August 29-31 at Camp Wood YMCA near Elmdale, KS.

The Shortgrass Academy is set for September 5-7 at Camp Christy at Scott Lake.

For more information contact David Kraft at david.kraft@kglc.org

2023 Nitrogen use Efficiency Workshop

August 7th at 5 pm - August 9th at 12 pm

Oklahoma State University ConocoPhillips OSU Alumni Center

201 ConocoPhillips OSU Alumni Center

Stillwater, OK 74078

Registration is limited to first 160!

To register go to <u>https://extension.okstate.edu/events/2023-</u> nitrogen-use-efficiency-workshop/index.html

In 2003

Dr. Bill Raun and Dr. Jim Schepers arranged the first NUE. conference in Stillwater OK.

The focus of the meeting was a discussion of current management strategies and presentations on potential methods to improve NUE. The meeting had 24 researchers and industry specialist from Oklahoma, Nebraska, Colorado, Kansas, Virginia, Iowa, Maryland, and Brazil. Last year UNL hosted the meeting which included 170 attendees with 37% were graduate students. To this date the conference organizers have been able to work with industry to provide this event at no cost to all who attend. For years this meeting was known for the lively discussion that spurred enthusiastic research and discovery.



Patch Burn Grazing Working Group Meeting 2023

Details of the schedule will be updated as events and speakers are secured. Meeting will consist of presentations related to patch burn grazing research

September 6 and 7

Auburn Community Center

121 W 11th St Auburn, KS 66402

The meeting will consist of presentations related to research and practice of using patch burn grazing, producer panels, and tours. We are happy to say that our main tour will be Tallgrass Bison (picture above is of thief bison on a newly burned pasture)

There is a block of rooms at the Holiday Inn Express (901 SW Robinson Avenue, Topeka, KS) Please mention "Patch Burn Grazing" when registering to receive the room block rate of \$98. Block expires Aug 23

Ticket Sales will be available online until Aug 23 at noon. Registration after Aug 23 will be atthe-door and \$50 (cash only) If ordering tickets for a group, please be sure to list the name of all of those attending, to insure accurate name tags.

To register or for more information go to:

https://www.eventbrite.com/e/patch-burn-grazing-working-group-meeting-2023-tickets-664893613697

or call Lori Bammerlin at (785) 477-3695

INDIAN NATIONS CONSERVATION ALLIANCE and Partners Presents:

Prescribed Burn Workshop: Conserving Tribal Lands with Fire

August 21-23, 2023 @ the Caddo Kiowa Technology Center Ft. Cobb, OK

To register go to: https://rb.gy/05abd For more information contact: 918-699-9850

Join us to learn about: : -Prescribed burning -Find assistance for tribal burning -Explore Career Opportunities -Strengthen tribal land conservation









United States Department of Agriculture Southern Plains Climate Hub

Wildlife Habitat and Soil Health Management Field Day

Using the principles of soil health to build relationships between wildlife habitat and production agriculture.

Hosted By Darin Williams

D&N Ag Farms and Winner of the 2022/2023 Buckmaster Deer of the Year



8:30-9:00 - Check in at D&N Ag Farms 2293 26th Road, Waverly, KS 66871

9:00-10:30 - Rainfall Simulator, Field Tour, and Soil Pit Led by Darin Williams, Doug Peterson, and Candy Thomas, NRCS Regional Soil Health Specialist

10:30-10:45 - Travel to Waverly Community Center 210 Pearson Ave, Waverly, KS 66871

11:00-12:00 - Doug Peterson

12:00-1:00 - Lunch

1:00-2:00 - Darin Williams

2:00-2:30 - Q&A

No.till

- On The Plains

COUNTRYCROCK

Tuesday, August 15 8:30AM-2:30PM

RSVP for this <u>FREE</u> event is appreciated by August 7 for meal headcount. Registration Options: Scan QR code, Visit www.KSsoilhealth.org, www.notill.org, or Call 785-210-4549

Soil Health