Agricultural Research Service
Great Basin Rangelands Research Unit

GBRRU NEWS

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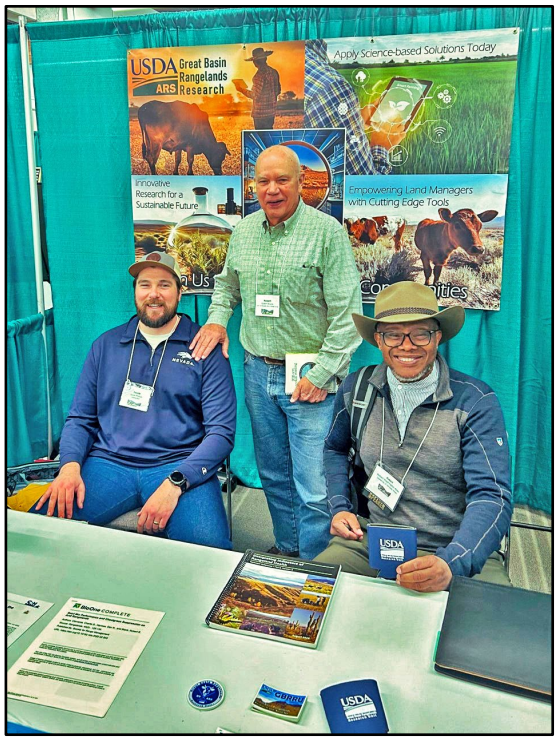
Spring is here!

After a dry winter and one big late February snowstorm, spring arrived early in northern Nevada. March experienced 7 days over 80F in the Reno area, breaking a new record. Plants were in bloom and people were enjoying the sunshine. This was of course followed by a week with freezing lows and highs in the 40F's to start April. Nothing new for locals, as they say in Reno "If you don't like the weather just wait five minutes".

GBRRU at SRM

This year's Society for Range Management meeting was held in Monterey CA the first week of February. The meeting hosted more than 1,300 attendees. The theme was "Herd Round The World" and focused on global awareness of the critical importance of healthy rangeland ecosystems and their contributions to economic prosperity, sustainable livelihoods, and food security worldwide. The 2026 International Year of Rangelands and Pastoralists (IYRP 2026) was also highlighted.

The warm weather and oceanside landscapes were quite the change of scenery for the members of GBRRU who attended. The GBRRU team had 7 presentations and numerous research posters and participated in many workshops throughout the week.



Jacob Phillips (GBRRU), Bob Alverts (UNR) and Dr. Robert Washington-Allen (UNR) visited with attendees at the SRM meeting tradeshow.

Employee Highlights

University Nevada Reno (UNR) undergraduate student and GBRRU employee Ashley Santiago presented at the SRM meeting. Her presentation was titled "Understanding the effects of livestock grazing and fuel treatments on woodland encroachment in sagebrush-steppe habitat."

GBRRU Analytical Soil and Plant Laboratory

The GBRRU is proud to have a robust in-house analytical chemistry lab tailored towards processing soil, water, and plant materials.

The lab has full analytical capabilities including elemental, nutritional, and physical sample analysis on an array of instrumentation and equipment for incorporating chemical analysis in the diverse array of research projects at the unit. Knowledge of the soil and plant chemistry is critical for any rangeland management actions, such as herbicide weed control or restoration seedings.

Continuing the legacy of the late Dr. Robert (Bob) Blank, collaboration with the University of Nevada, Reno Core Analytical Lab (CAL) and UNR researchers make the lab extremely productive, processing thousands of samples annually. The in-depth understanding from soil and plant analyses provides insight for effective land management actions that can be passed onto stakeholders.

The data from the lab can analytically quantify improvements to soil health and plant productivity using management tools developed from research at the unit. The lab is always happy to assist scientists, collaborators, and stakeholders of the GBRRU. (Photo: Jacob Phillips, A research technician at the lab)

University Nevada Reno Ag. Experiment Station
Photo: Washoe Co. Basin Wildrye local ecotype

Research: Does Local Matter?

Seeds of Success (SOS) is a national native seed collection program led by the BLM that develops plant materials based on geographic seed origin zones. Beginning in 2025 GBRRU began field seeding trials at 3 Nevada locations and a common garden evaluation (UNR Ag. Experiment Station) using 9 BLM seed source collections (4 bluebunch wheatgrass, 2 bottlebrush squirreltail, 2 Sandberg bluegrass and 1 basin wildrye). While local adaptation and improved establishment performance has been assumed by SOS programs, very few field seeding trials have compared the SOS selections to the current best performing cultivars. Over the next few years GBRRU will make annual establishment evaluations after seeding trials of "local" vs. developed cultivars at multiple sites in northern Nevada.

Meet Fay Allen

Fay Allen's research technician career with the Reno USDA-ARS unit started in 1984. Before completing her Range Management degree program at the University of Nevada, Reno (B.S.1981, M.S. 1990), Fay took a summer job 40 miles north of Elko on the Saval Ranch Research and Evaluation Project where one of the principal investigators was Dr. Richard E. Eckert, Jr., a scientist at the Reno ARS unit.

A few years later, Dr. Eckert informed Fay of a job opening for the Reno ARS unit as a research technician. After Dr. Eckert's retirement in 1987, Fay began her long and dedicated career in the GBRRU soil's laboratory, mentored by Dr. Robert (Bob) Blank.

What started out as a summer job turned into 40+ years of exceptional research on rangeland soils analysis, restoration, invasive weed control, and seed ecology. Equally important, though, have been the friendships that will last long after the research projects are done. Mentored by scientists such as Dr. Robert R. Blank and Dr. James A. Young, Fay acknowledges that she has been fortunate being part of an amazing team.

Learn more about the Saval Ranch Project (Link) (Link) (Link)