

More than half of Idaho is the vast, wide-open grasslands and shrublands known as rangelands. The conservation and management of rangelands is central to Idaho's economic and ecological vitality. The University of Idaho Rangeland Center advances long-term management solutions for rangelands through cross-cutting, interdisciplinary studies and workshops on key rangeland issues. With 34 researchers and educators across the state, the Center explores integrated land management approaches to support livestock, wildlife, and watersheds throughout Idaho.

RANGELANDS RESEARCH

The Rangeland Center focused on current issues impacting rangelands statewide in 2022 and engaged in more than 40 research projects. Focus areas included issues such as wildfire and fuels, wildlife management, watershed function, rangeland uses, and invasive plants.

Virtual fencing designed for rugged, remote terrain

Center members secured \$1 million in funding from USDA to design a low-cost, rugged virtual fence prototype designed for range conditions. An interdisciplinary team of faculty and students from U of I and Washington State University are working together to develop the prototype.

Assessing fuel-break performance and methods of wildfire management

Center members completed data collection in 2022, and preliminary results and analysis were presented at the Association for Fire Ecology conference. Data has been delivered to federal agencies, and publication is anticipated in 2023.

Managing and measuring rangeland recreation as a land use

Two recreation-focused studies were developed this year to bring data to the ongoing challenge of recreation on rangelands. A project began in 2022 to measure recreation activity at Rinker Rock Creek Ranch, as well as how recreation is effecting cattle. A second study is being developed to compare the intensity, type, and timing of recreation on rangelands in different communities.

Effects of grazing duration on sage-grouse brood rearing habitat in wet meadows This project was completed and published in 2022. It identified whether short-duration or season-long grazing had an influence on the health of greater sage-grouse habitat in mesic meadows.

Low-tech, processed based restoration techniques for rangeland streams Sixty structures were installed into a tributary at Rinker Rock Creek Ranch in 2021. This year, researchers assessed their effect on groundwater levels, water quantity, and vegetation. Additional data will be gathered in 2023.

For additional research highlights, visit www.uidaho.edu/cnr/rangeland-center/projects



U of I Rangeland Center creates knowledge and fosters understanding for the stewardship and management of rangelands.





RANGELAND CENTER

HIGHLIGHTS 2022

STAKEHOLDER OUTREACH

The Rangeland Center conducted several outreach events in 2022 providing information and resources to local, statewide, national, and international audiences. Outreach projects ranged from workshops and forums, to publications, online databases, and digital resources.

Rangeland Fall Forum: Conservation that Works for Rangelands

Hosted in partnership with the Sagebrush Steppe Land Trust and the McClure Center for Public Policy Research, this forum focuses on providing producers and land managers with research on contemporary concerns. This year's forum delved into the leveraging partnership and conservation opportunities for rangeland management, restoration, and livestock production.

Idaho Range Livestock Symposium 2022: Managing Livestock During Drought This annual symposium, co-hosted with UI Extension, provided valuable information and research

to livestock producers throughout Idaho. Over 180 attendees joined the symposium, which focused on methods for managing livestock through Idaho's ongoing drought.

Outreach at Rinker Rock Creek Ranch

Located in central Idaho, the ranch serves as a hub for research, rangeland monitoring, and outreach for the Rangeland Center. In addition to studies that incorporate stakeholder partnerships, activities on the ranch include community events and workshops, such as Sagebrush Saturday.

RangeDocs: National Grazingland Information System

Rangeland Center faculty helped develop and launched a free, searchable digital library for technical documents and research relating to rangelands. This tool is accessible to rangeland users and managers across the globe. (www.docs.rangelandsgateway.org)

Idaho At A Glance: Idaho Rangelands

Rangeland Center staff and members worked with the U of I McClure Center for Public Policy Research to provide a snapshot overview of the role rangelands play in Idaho's economy, resources, history, and communities. More than 400 copies have been shared with partners and stakeholders since it was published in October 2022.

Visit https://www.uidaho.edu/cnr/rangeland-center/events for further information on Rangeland Center events.



PREPARING THE NEXT GENERATION OF RANGELAND MANAGERS

Providing Hands-On Experience for University Students

Students seeking degrees in agriculture and natural resources are an integral part of the Center's work. The Rangeland Center hires and supervises undergraduate interns each year, engaging them in research through data collection, monitoring, and working with Center faculty.

Engaging Youth in Rangelands Career Development and Science

Rangeland Center faculty presented Future Farmers of America (FFA) and 4H programs to engage students in career development and opportunities to learn about rangelands. The Rangeland Center also hosted science education days in Idaho schools, engaging hundreds of students in rangeland, environmental, and natural resources science experiences.

STUDENT Project Highlight

The Rangeland Center has worked with university students for several years to conduct the Natural Resource Inventory (NRI) project in Idaho with the USDA Natural Resource Conservation Service (NRCS). This project provides information to assess the status, condition, and trend of rangeland across the US.

uidaho.edu/rangeland-center

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and joint efforts, the Rangeland Center is cutting across challenges and topics to accomplish our mission.

Through partnerships



