

Targeted Grazing –

*Accomplishing Conservation by Breaking
Barriers Between Science and Experience*



Karen Launchbaugh



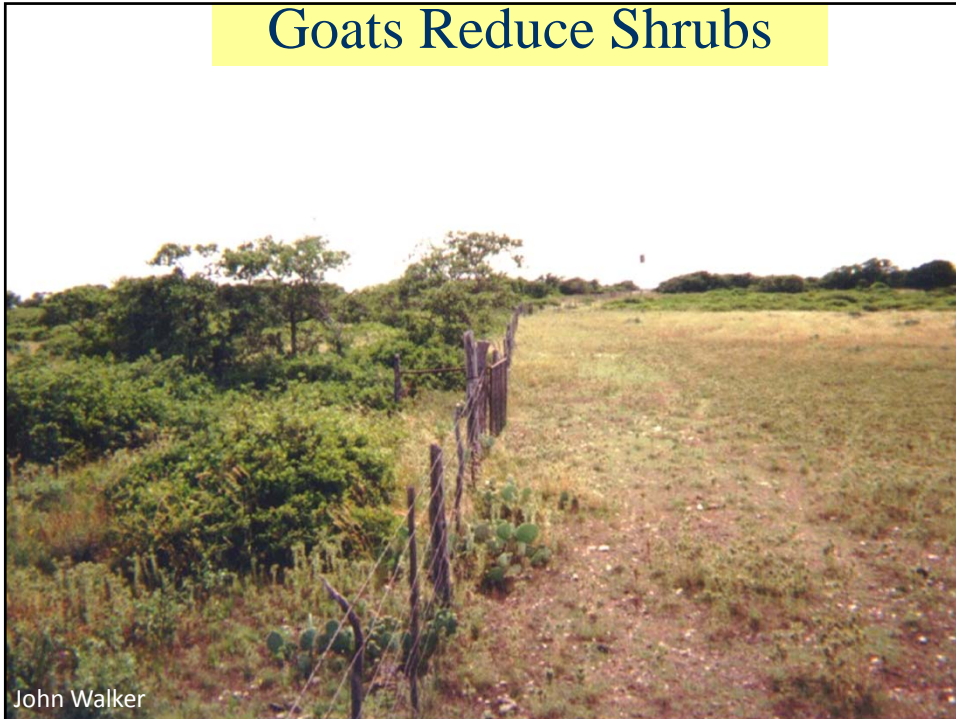
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Rangeland Center

Targeted Grazing

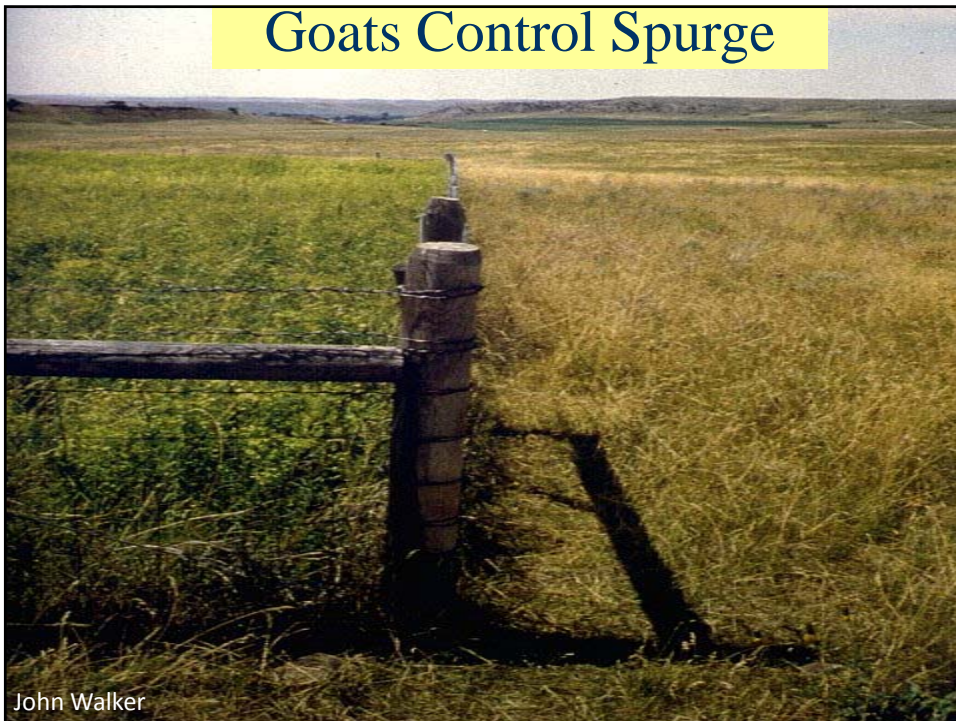
Turning powerful
force of nature
into a tool for
stewardship



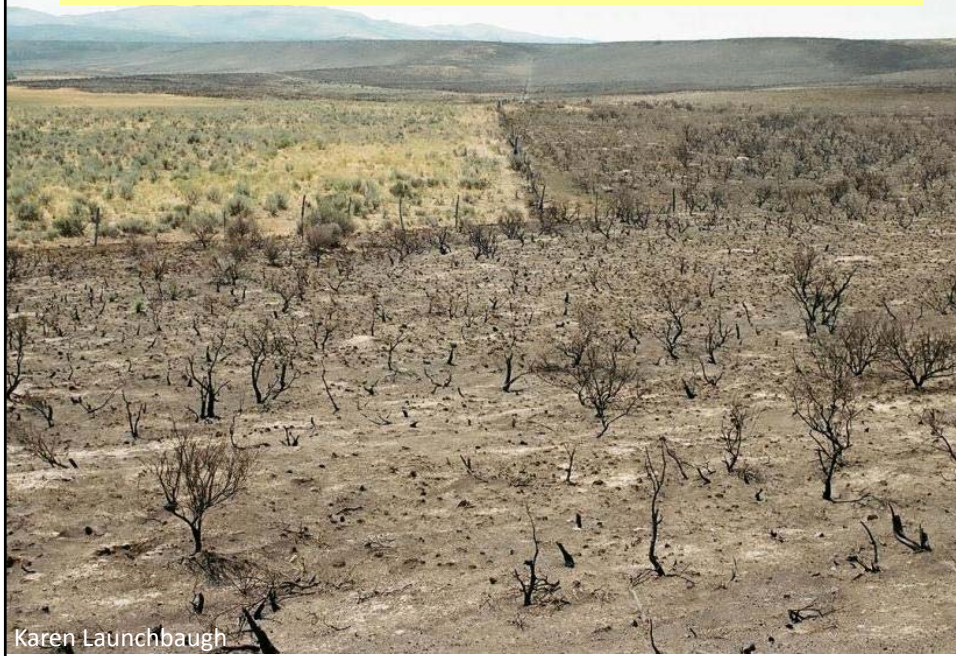
Goats Reduce Shrubs



Goats Control Spurge



Cattle Can Stop Fire



Targeted Grazing

The application of a specific kind of livestock at a determined season, duration, and intensity to accomplish defined vegetation or landscape goals.

Pay attention to:

- Desired Landscape
- Grazing Animal



Targeted Grazing for Weed Management

"Goats enlisted in war on weeds"

"Weed-eating goats provide herbicide alternative"

"Only Ewes can stop wildfire"

"Woolly Weed Eaters"

"Ovines for Vines"



Landscape Goals

- ◆ Reduce weeds on cropland, pastures & wildlands
- ◆ Control herbaceous biomass in tree crops
- ◆ Improve wildlife habitat
- ◆ Reduce fire fuel load
- ◆ Manage watershed characteristics
- ◆ Land restoration



Keys to Targeted Grazing

Accomplished by control of:

Timing

- Appropriate Season

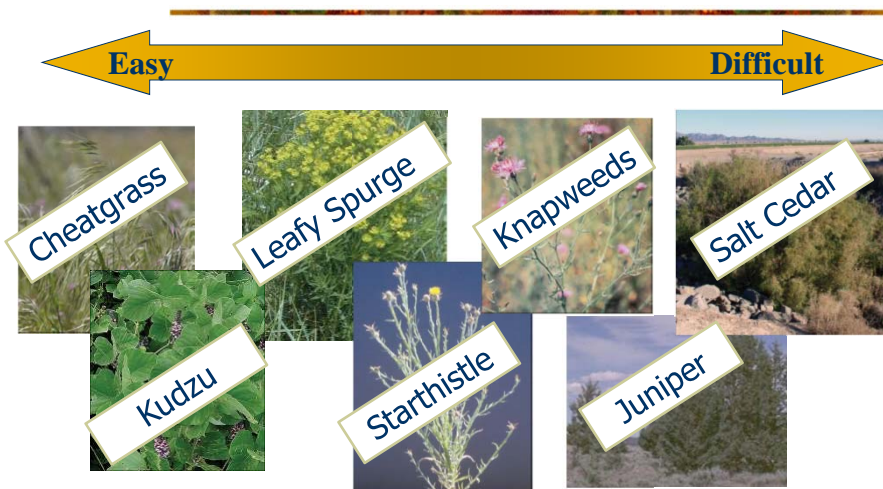
Herbivore

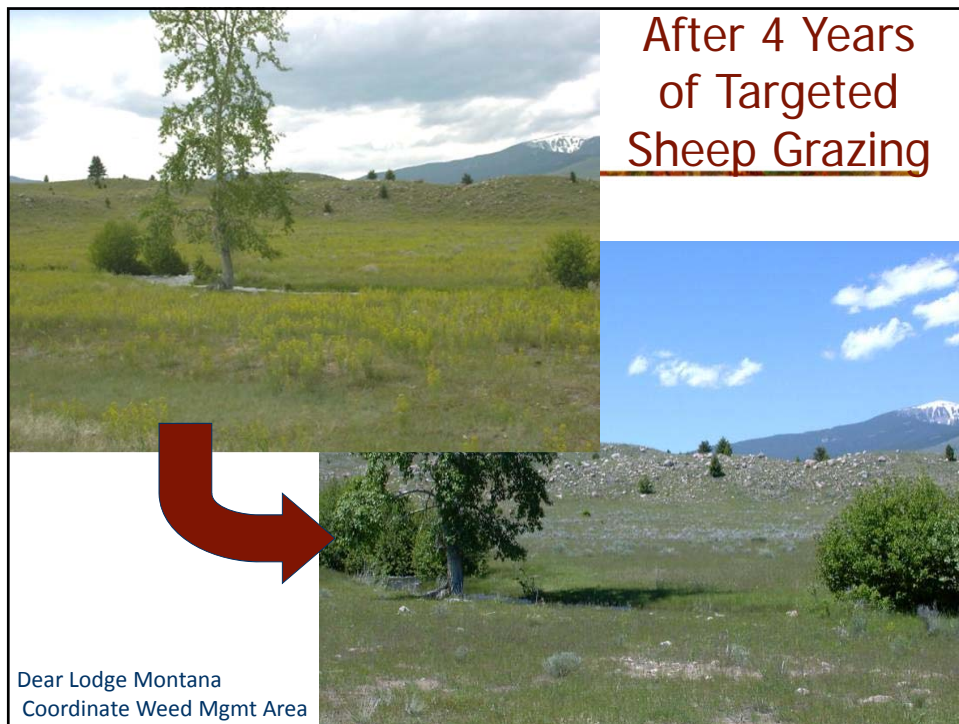
- Species & Breed
- Background
- Condition
- Age

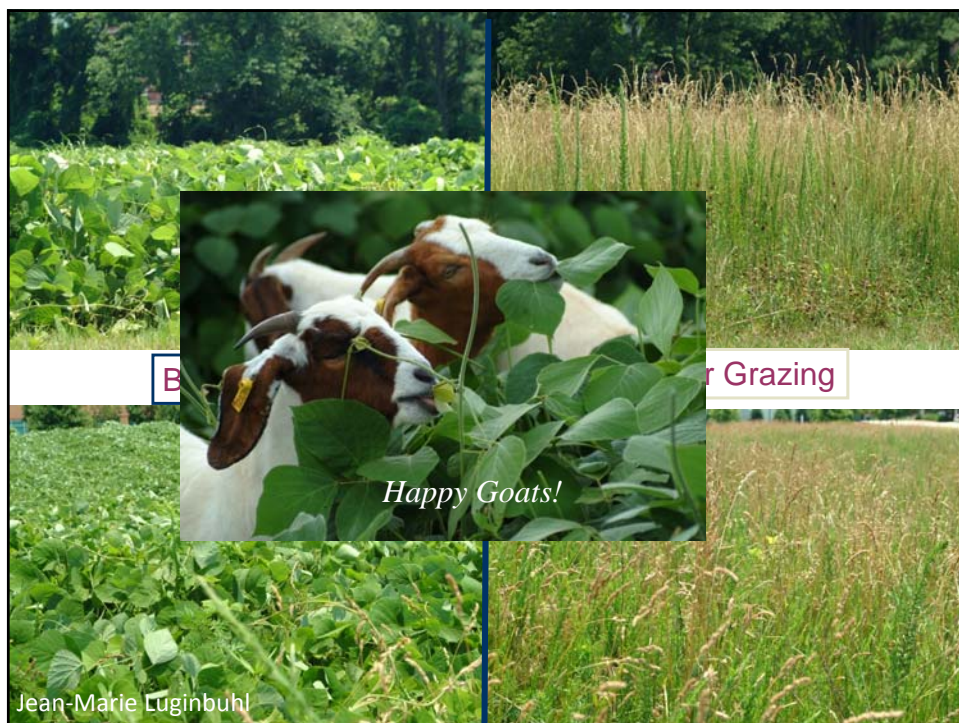
Intensity of defoliation

- Stocking Rate
- Frequency

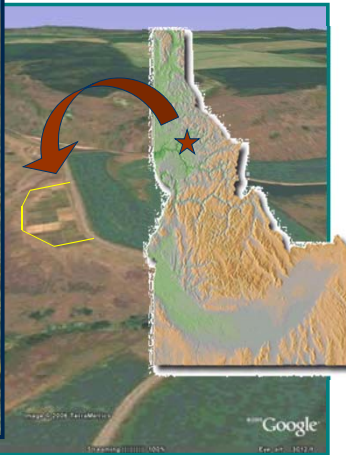
Some Plants are Easier than Others







Yellow Starthistle Grazing



- ♦ Rolling to gently sloped bench
- ♦ Abundance of yellow starthistle
- ♦ Perennial grasses

Yellow Starthistle Grazing

- ♦ Plant Response to Grazing in North Idaho



- ♦ Cattle, Sheep, or None

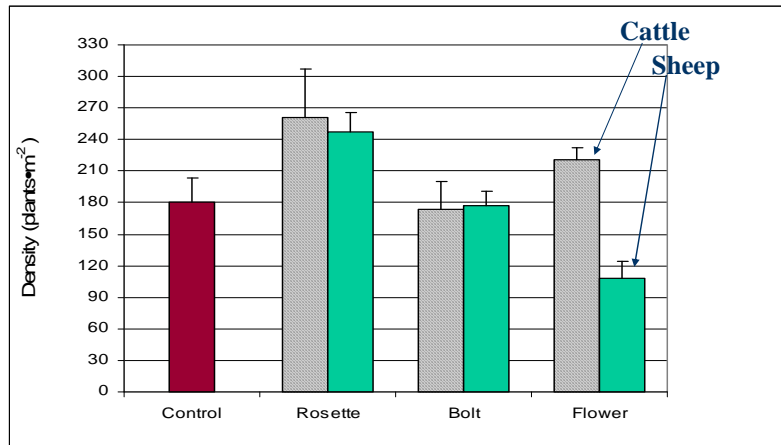
- ♦ Three Phenological Stages
Rosette, Bolting, or Flowering



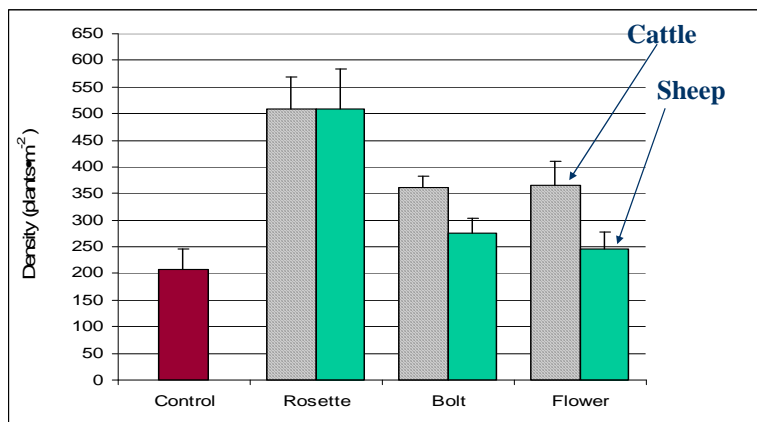
4 Replications
= 27 paddocks (80 x 80 feet)



Fall Yellow Starthistle Density

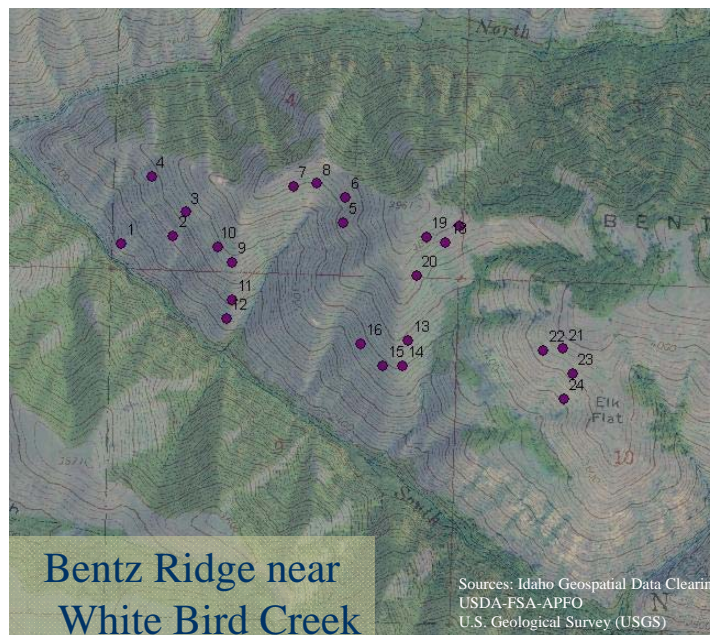


Spring Yellow Starthistle Density



Graze vs No Graze **

Yellow Starthistle Grazing by Goats



Ungrazed vs. Grazed Subplots

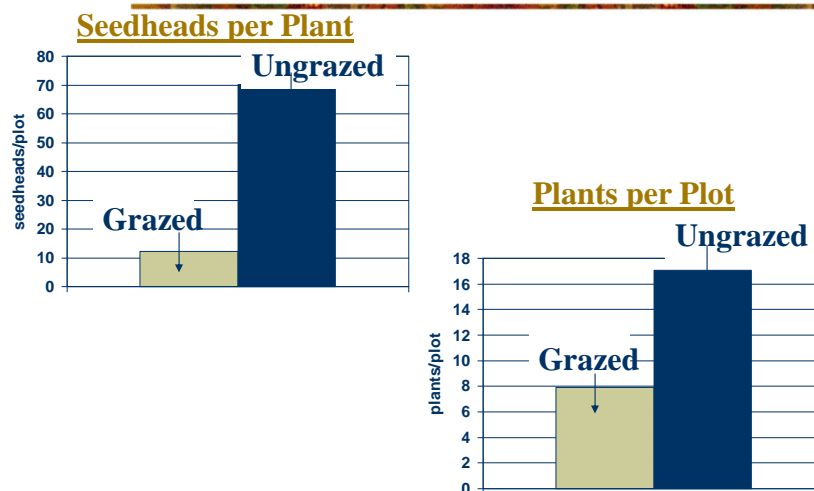


- YST plant density
- Seedhead density

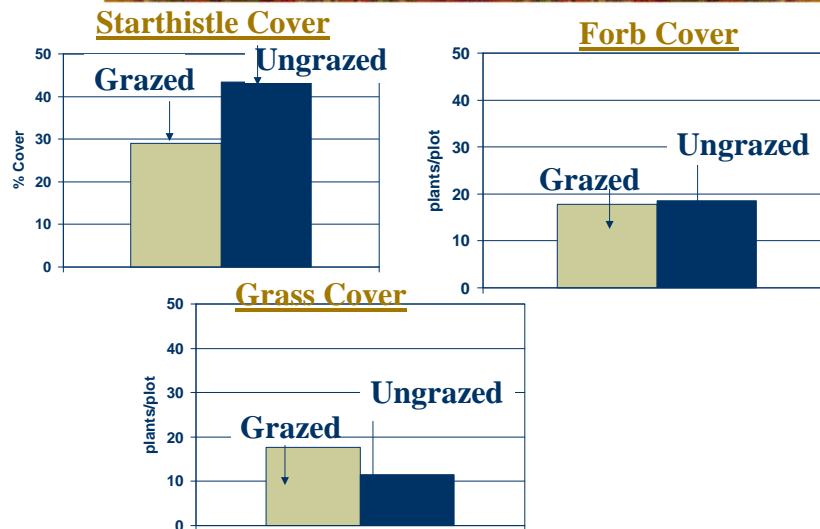


- YST canopy cover

Yellow Starthistle Response



Vegetation Cover Response



Benefits of Targeted Grazing

- ♦ can be highly effective
- ♦ improved pasture quality
- ♦ no pesticide residue... *'environmentally friendly'*
- ♦ lower effect on non-target species
- ♦ convert weeds into a saleable product
- ♦ more sustainable control
- ♦ feasible in rough terrain



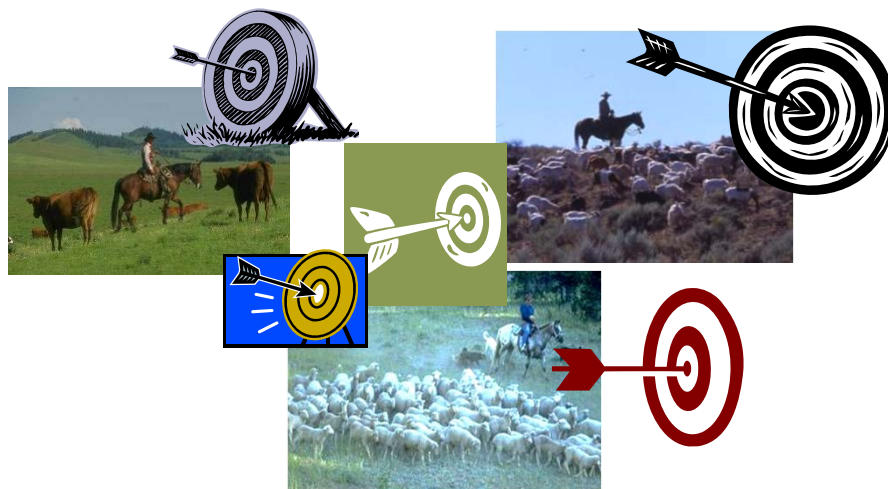
Costs of Targeted Grazing

- ♦ Cost of animals & potential losses
- ♦ Fencing, water, herders, trailers
- ♦ Reduced animal production
- ♦ You can't "*hang them up in the barn*"



Targeted Grazing

Depends on Skill & Knowledge!!



www.cnr.uidaho.edu/rx-grazing/

Targeted Grazing

A natural approach to vegetation management

HOME

- Research
- Plant Prescriptions
- Grazing in Action

HANDBOOKS:

- Targeted Grazing
- Grazing Guidelines

ON-LINE MODULE:

- Interactive Guide

RELATED TOPICS:

- Animal Behavior
- Animal Husbandry

Contact Us

Dr. Karen Launchbaugh
Rangeland Ecologist
University of Idaho

Targeted Grazing is the carefully controlled grazing of livestock to accomplish specific vegetation management objectives. Unlike conventional grazing management, livestock are used as a tool for improving land health by performing weed control, reducing wildland fire, and aiding in restoration projects.

Research & Information

Reports, scientific articles, literature reviews, and extension bulletins.

Grazing Prescriptions for Specific Plants

Detailed guidelines for when to graze specific plants and what species of livestock to use to accomplish vegetation management goals.

Prescribed Grazing in Action

Contract grazers? Who is using the services? Where is it happening? What are they doing?

♦ **Guidelines Handbook Now Available for Download**

Livestock Grazing Guidelines for Control Noxious Weed in the Western United States

Targeted Grazing Committee
Society for Rang Management

University of Idaho
Rangeland Center

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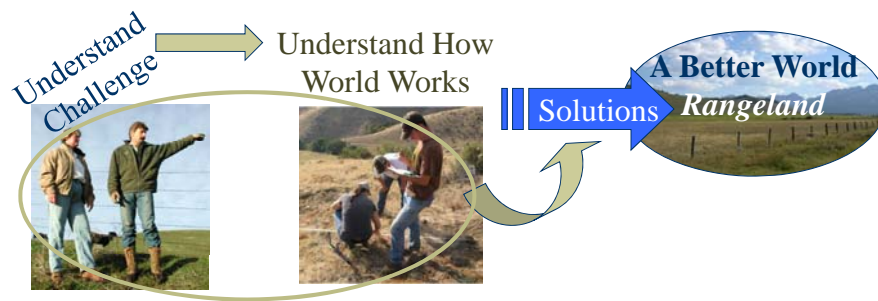
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Barriers ~ Science & Management

- ♦ Science test ideas about physical, biological, and social processes that affect rangelands.
- ♦ Find **Solutions**



Rangeland Center – University of Idaho

Rangeland Program
+
Forest Resources
=
Forest Ecology &
Biogeosciences

Rangeland Center...*is born*

- ♦ A **powerful collaboration** from across campus and across Idaho focusing on rangelands.
 - ♦ Researchers and educators from:
 - 7 Departments
 - 3 Colleges
 - Cooperative Extension
- College of **Natural Resources**
University of Idaho
Extension
College of **Agricultural and Life Sciences**
- ♦ Partners and practitioners:
 - Land managers, land owners, and conservationists
- ... *Science and Solutions for the Range***

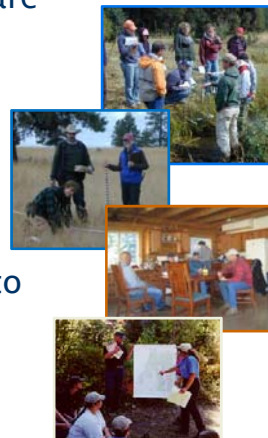
A Rangeland Vision

The forces that threaten rangelands are complex and dynamic:

- Unsustainable grazing practices
- Damaging fire regimes
- Invasive and endangered species
- Climate change
- Human development

Need broad thinking and bold ideas to address these challenges:

- Multidisciplinary & interdisciplinary
- No single science will do
- Science alone is not enough



Rangeland Center

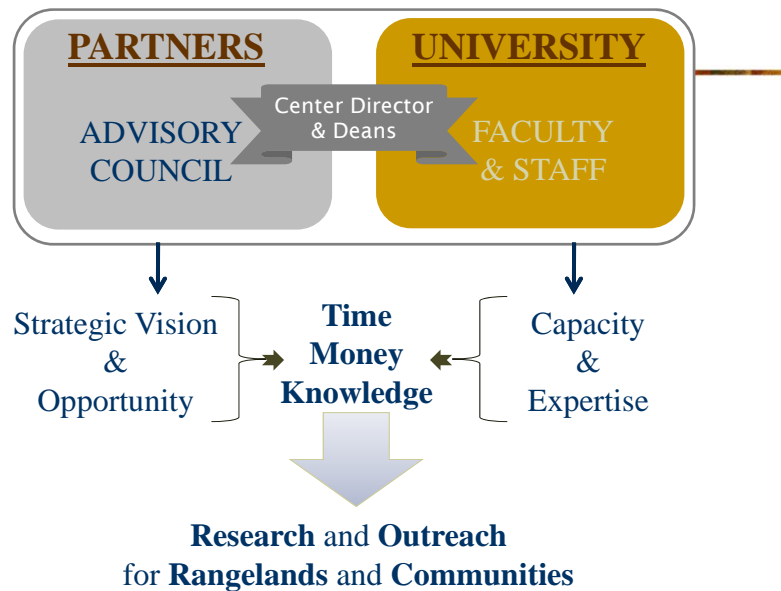
...is born at the University of Idaho

This Center is **not a building**.

This Center is **network of people** who want to advance the understanding of rangelands.



University of Idaho Rangeland Center




A Rangeland Mission...

- ♦ Create insight and foster understanding for the stewardship of rangelands.
- ♦ Promote active partnerships with individuals, organizations and communities who work and live on these vast landscapes.
- ♦ Focus research and education to produce solutions that are responsive and relevant to contemporary rangeland issues.

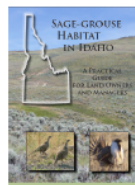
Products thus far...

1 The Range Science Information System

 brings the most significant and reliable published research to those making decisions for the management and conservation of rangelands. This searchable database has over 1,400 peer-reviewed bibliographic citations accessible at: www.rangescience.info.

2 Sage-Grouse Habitat in Idaho—A Practical

Guide for Land Owners and Managers. An easy to read, full-color guide to recognize and understand sage-grouse habitat. Download this guide from our web page: www.rangelandcenter.org. Or, request a copy by e-mailing us at: 4range@uidaho.edu.



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3 Backpack Guide to Idaho

Rangeland Plants A full-color handbook of major wildland plants essential for those who manage and appreciate rangelands. (See other side of this flyer for details).

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Formal designation as a University Center -
August 2011.... Stay Tuned



Grazing , Wildfire and Sage-Grouse Conservation

- Candidate species for listing under the ESA
- Potential to preclude listing if land management plans can adequately address threats.

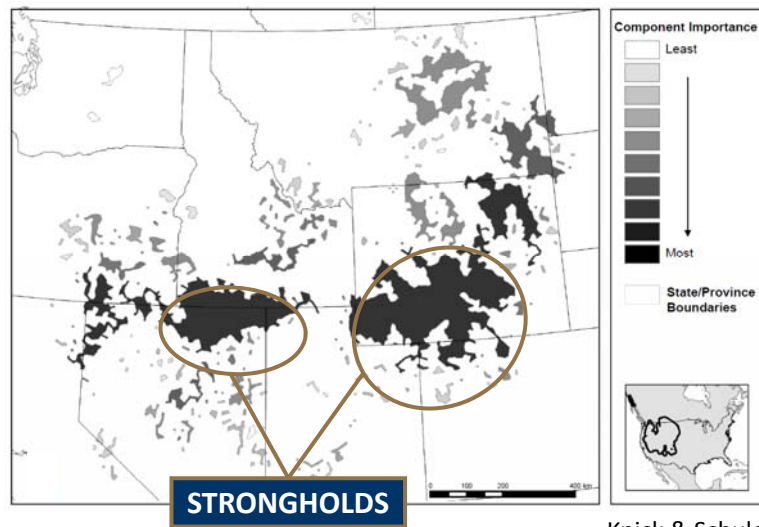
Primary threat in Idaho:

- Wildfire
- Invasive species
- Infrastructure and fragmentation

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Sage-Grouse Habitat



Grazing-Fire-Grouse



Grouse and Grazing

Effects of spring cattle grazing on:

- 1) Demographic traits of greater sage-grouse
- 2) Sage-grouse habitat characteristics
- 3) Fuel loads and behavior



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Idaho Rangeland Resource Commission

- Established in 1994
- Annual Refundable Assessment
 - Fee on AUM's for public and private lands.



IRRC Goals

<http://idrange.org>

- ♦ To provide programs that result in an informed public that understands and supports balanced responsible management of Idaho's economically vital private and public rangelands.



IRRC Programs



- Signs
- Public Service Announcements
- Education

IRRC Programs

www.lifeontherange.org



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