

Using Livestock to Improve Public Lands

A photograph of a herd of cattle grazing in a field. The cattle are primarily brown and white, with some darker brown individuals. They are scattered across a dry, grassy field under a bright sky. The text is overlaid on the image.

Montana Association of State Grazing Districts

Southeast Association of Grazing Districts

September 2008

Terry, Montana

Clayton B. Marlow, Animal and Range Sciences Department
Montana State University - Bozeman

Diversifying Opportunities

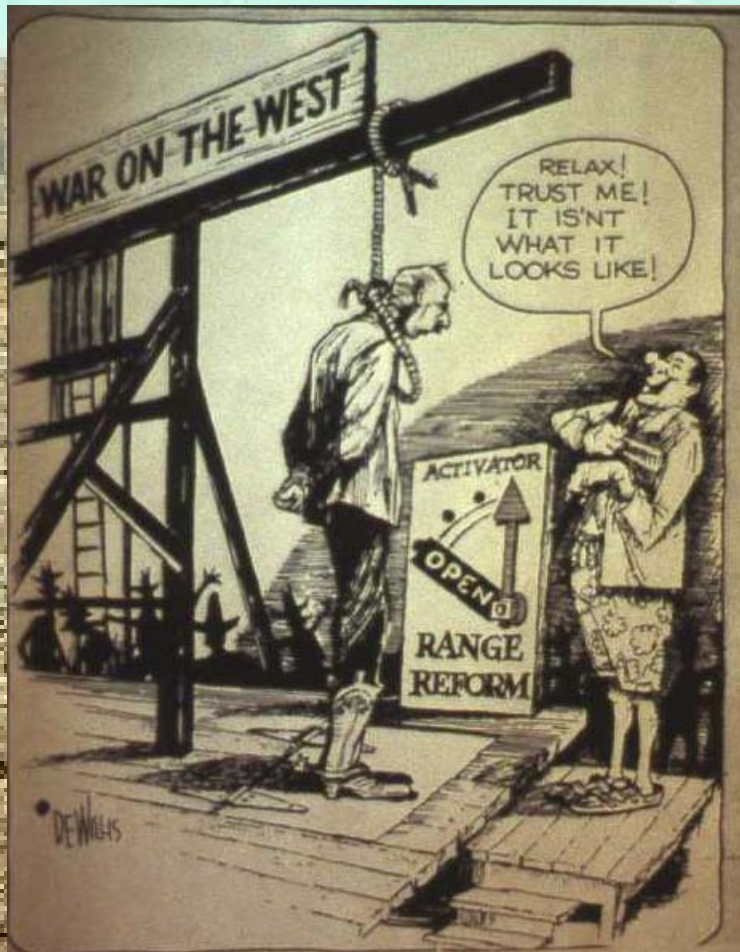


- Direct Market Product
 - Cow is direct product
 - Requires adaptation to changing market conditions
- Service
 - Cow is mechanical treatment not product
 - Performance may not be optimal but low forage cost

Tremendous opportunities outside the box



Socio-political Barriers



- Constant tension between grazers and recreational public
- World organizations already reporting that livestock are limiting water resources
- Higher personal and ranch costs

Changing Public Attitudes

- Demonstrate that grazing can be a positive force for:
 - Maintaining wildlife habitat
 - “fire-proofing” communities and homes



Global Climate Change



- Regional changes in precipitation pattern
 - Rain rather than snow
 - Faster runoff
- Shifts in vegetation type and dominance
 - Most woody species better adapted

Landscape processes will change



- Vegetation changes coupled with shifts in precipitation
 - Less stream flow during fall and winter
 - More catastrophic wildfires
 - Drier late summer and falls + annual grasses = **higher fire incidence**

Cattle grazing compliments efforts



- State encourages home owners to thin timber stands
 - Grass production ↑
 - Grass fires most dangerous
- New owners want to improve wildlife habitat
 - Low species richness in dryland crop and hay ground

Reducing Fire Severity



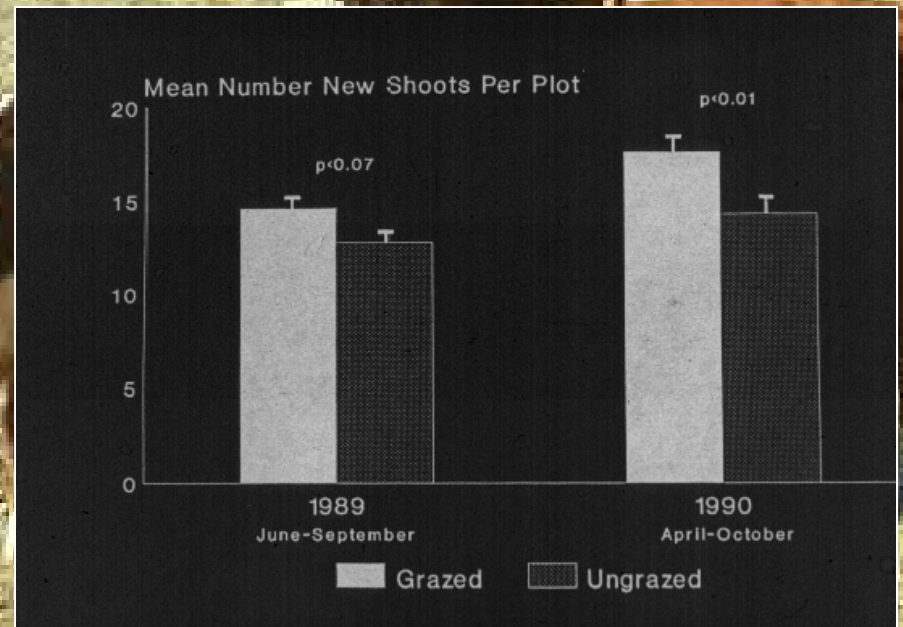
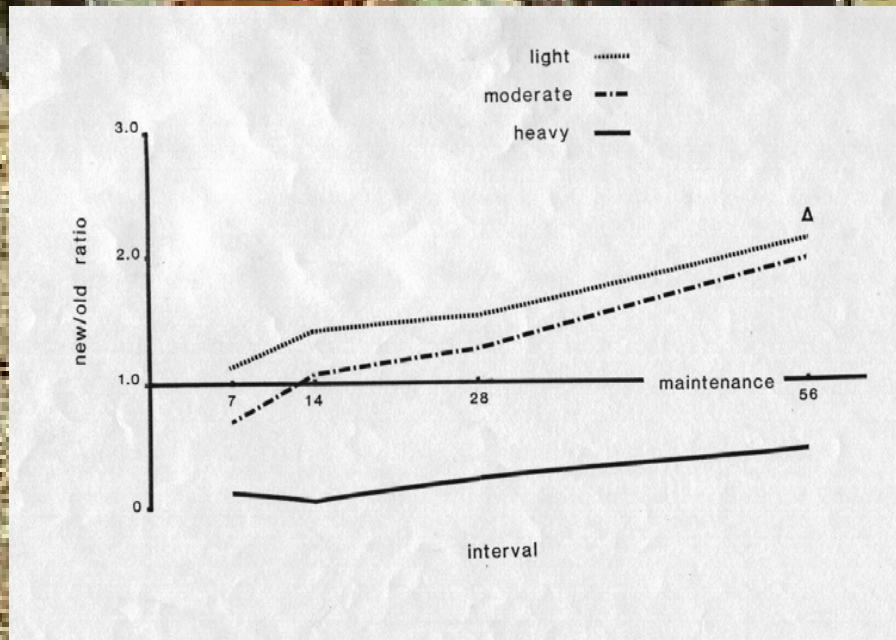
Lease cattle to remove grass cover



If grazing destroys it can also revitalize

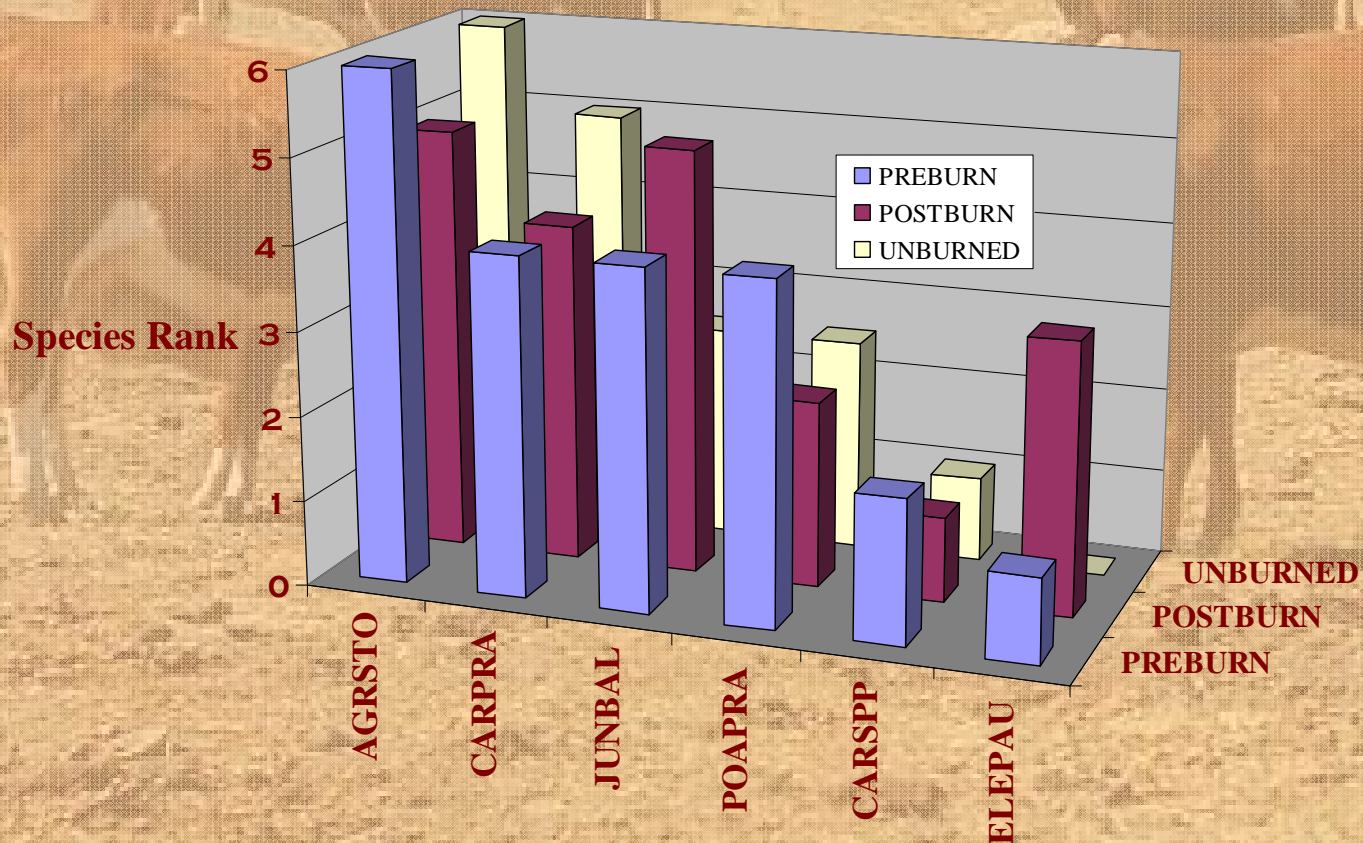
- Conventional grazing management designed to achieve a balance between needs of cattle and plant community
 - Utilization levels dictate length of rest
 - Season of use to promote completion of life cycle
- Using cattle to change structure of vegetation community
 - Light use punctuated by infrequent heavy use
 - Target species grazed during most vulnerable period

Manipulating Vegetation



Prescribed Fire + Grazing

Units 3,4 & 6



Threatened Prairie Bird Recovery



© Greg W.Lasley / CLO

- Prairie birds declining throughout N. America
- Decline due to:
 - loss of short to medium height bunchgrasses interspersed with bare ground
 - Tree and shrub encroachment
- Season long grazing with low cattle numbers

Early use to promote shrub recovery



Questions or Comments?

