# MANAGEMENT TOOLS AND TECHNIQUES COMMON TO ALL GRAZING STRATEGIES



The challenge on rangelands is to find the balance between total protection, proper use, and overuse.

When problems occur it is not generally stocking rates but rather lack of appropriate management for that site.

#### Livestock Grazing is a Tool

 Tools & Techniques to Assist Grazing Management Objectives and Strategies

Grazing Management Strategies

Targeted Grazing Management

#### Boot Before Grazing







Post-grazing



# The effects of grazing on plants depend on:

- Timing relative to stages of plant development
- > Severity, and
- > Frequency of recurrence

(as with most disturbances)

#### **Tools and Practices**

- > Capitalize on or modify existing animal behavior.
- ➤ Economically feasible and practical for the operator/manager.
- > Chosen and implemented for each individual case.

"NO COOKBOOK APPROACH!"

### Techniques That Attract Livestock Away From Riparian Areas

- > Off site stockwater developments
- > Alternative forage sources such as seedings
- ➤ Fertilization to improve palatability of off-site forage
- Prescribed fire to improve both forage availability and palatability
- > Feed supplements









#### **Pasture Nose Pump**



# Herd Management & Animal Husbandry

**Kind of Livestock** 



Herding/Supplements

### Alternative Livestock Species







### Livestock Grazing

Why?

Control of re-sprouts/new seedlings/older vegetation

> Preferred plant species/communities

Maintain or improve native plant species

Manage fire risk by reduction of fine fuels

Decrease herbaceous vegetation competition for tree growth (upland)

#### Livestock Grazing

- Goats and sheep eat a variety of non-native invasive species.
- Cattle controlling weed species are learned tastes and can be trained to eat a variety of weed species.
- Targeted Grazing
- Kathy Voth, Livestock for Landscapes provides method of training cattle.

#### Selection of Feeding and Resting Sites



Management can change where animals graze and possibly where they rest.







- Strategic supplement placement can modify cattle grazing patterns.
- Strategic supplement placement appears to be more effective when forage quality is lower and feed alternatives are minimal.

#### Considerations

- Cost of installation
- Cost of product
- Cost of increased management
- Extension of grazing period within a pasture
- Increase in grazable AUM's (riparian/upland)
- Increase in animal weight
- May change wildlife distribution and use

## Herding & Animal Husbandry Practices

- Culling practices
- >Low stress handling





Low-Stress Livestock Handling



#### Consider

- Are there physical restraints to plant recovery?
- Integrated Weed Management Plan
- Use the principles of range management
- Allow for plant recovery
- Long-term Management/Monitoring
- No "Silver Bullet"

#### Restriction of Livestock Away From Riparian Areas

>Hardened crossings or water access points

- > Fencing
- **Barriers**



#### Techniques That Restrict Livestock From Riparian Areas

- Fencing sometimes exclusion is the most practical approach, especially in the short term or to use larger pasture while resting riparian area or other sensitive sites
- **Barriers** e.g., brush windrows, down trees, and natural barriers such as rock formations
- ➤ <u>Hardened crossings or water access points</u> (livestock will often avoid steep banks in preference of gentle slopes and sure footing)



**Streambank Damage by Livestock** 

### LONG TERM EXCLUSION IS NOT PRACTICAL IN MANY CASES BECAUSE:

- **▶** Cost of materials/installation
- >Floodplain fence maintenance
- >Weed encroachment
- Montana studies indicate healthy riparian areas with well-managed grazing systems
- > Detrimental to wildlife movement
- > Discourages recreation access



Livestock Access Point Allows Debris Flow and Limits Livestock Access to Stream Channel

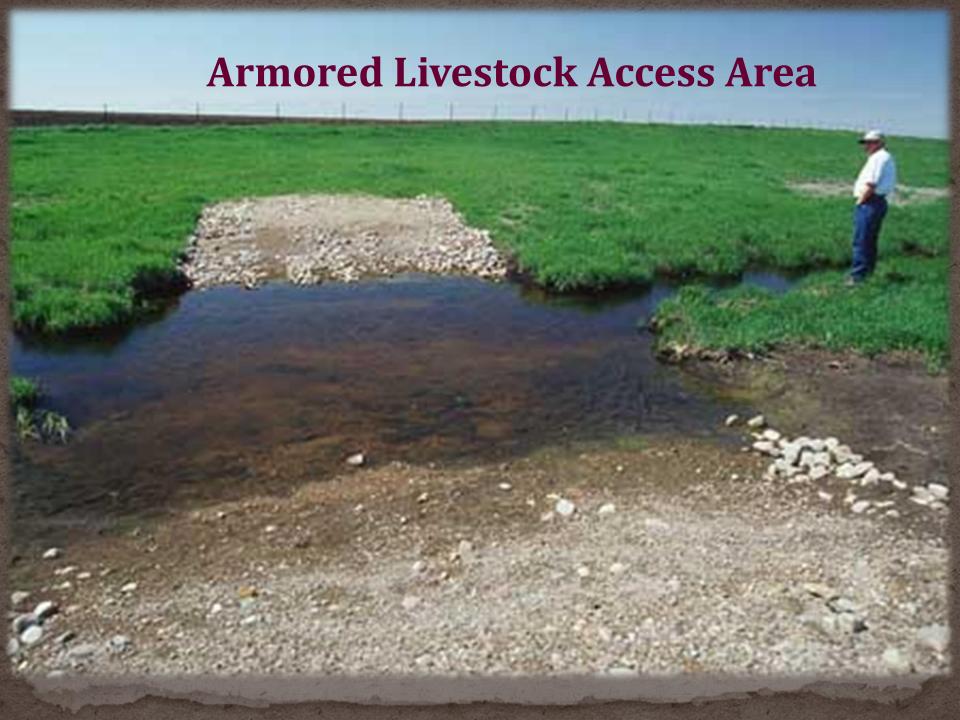
#### Fencing

Direct method of regulating grazing, but it is usually expensive and time-consuming to maintain.





fence used to hold in the right location.





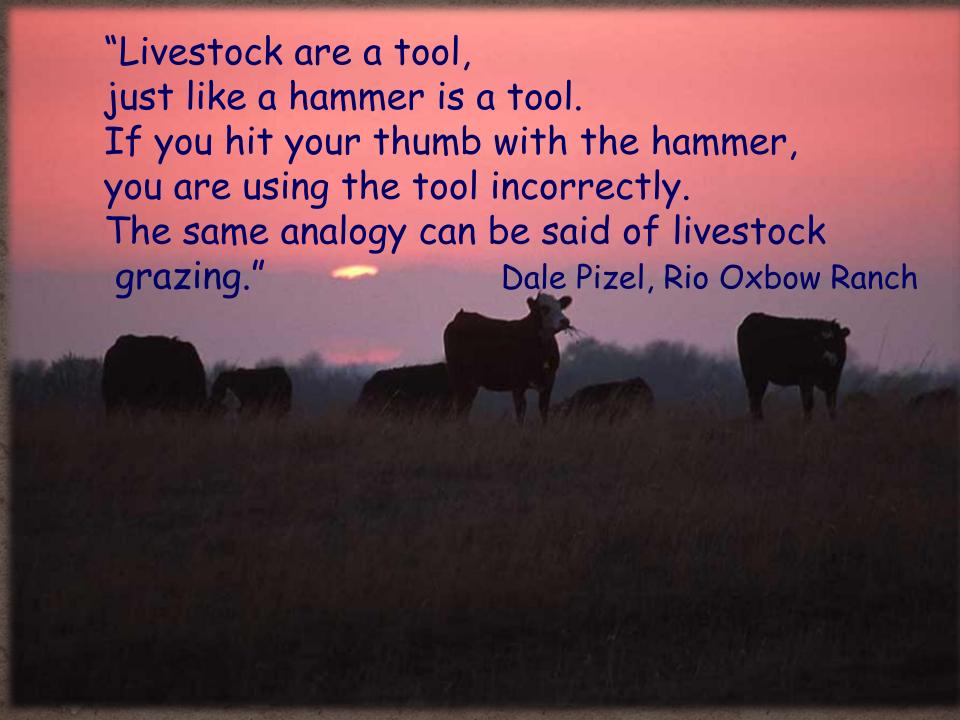












#### Points to Ponder

- Was past management responsible for current condition?
- > Planned changes in management?
- Return of water table

needed to restore desired plant community and hydrology?



#### **Project Planning**

No one time fix –
incorporate ongoing management
and maintenance
Economically and Ecologically
Feasible

#### "Don't get stuck on one method!"



#### Maggie Creek



1999 rest for 3 years & then grazed early spring

1980



#### Lynn Creek



1991

1998 with rest every 3<sup>rd</sup> year.



# Rest rotation (grazed every other year) late spring. Camas Creek - 1981 Camas Creek - 2009





## Annual grazing with occasional rest as needed; generally grazed late summer; AUM's reduced

Deep Creek - 1994

Deep Creek - 2009





### Include Adaptive Management (in case there is a need for it)





- Streams change
- The environment changes
- The interaction of the two is dynamic























#### Costs Vary Due To:

- Local cost of materials
- Distance to site/Access
- Availability of materials
- Installation cost (Contractor or manager's time)
- Design & Specifications
- May take up to 3 years before see positive results.





