

Grazing Management for Riparian-Wetland Areas



NRCS Natural Resources Conservation Service



Introduction

THE NATIONAL RIPARIAN SERVICE TEAM, in partnership with **University Extension, USDA Forest Service, USDI Bureau of Land Management, and USDA Natural Resources Conservation Service**, has been working with private and public land managers since 1998 to raise awareness about different grazing management strategies and practices that can improve riparian-wetland areas. This training course is one of the many ways the team provides assistance in both the technical and social dimensions of managing this important resource.

THE TRAINING COURSE will provide participants with an understanding of the tools, concepts, and thought processes necessary to collaborate with other individuals, groups, and agencies to develop and implement their own successful grazing management strategies in the future.

WORKING IN A COLLABORATIVE SETTING is key to achieving successful results. This training course provides an opportunity for livestock managers, private and Federal land management agencies, and special interest groups and individuals to study different grazing management methods and learn how to work in a collaborative manner to “Accelerate Cooperative Riparian Restoration and Management.” Participants will work with an actual livestock operation and provide grazing management alternatives to achieve riparian-wetland objectives.



Training takes place in the classroom and the field.

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For more information about hosting a training course in your area, contact Susan Holtzman at (503) 808-2987 or skholtzman@fs.fed.us

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Resource Training in a Collaborative Setting

Identifying Key Plant Species

Shallow rooted colonizing and deep rooted stabilizing key plant species are reviewed.



Nebraska sedge/Beaked sedge (stabilizers)

Nebraska sedge/Water cress (stabilizer/colonizer)



Examining Livestock Behavior and Forage Selectivity

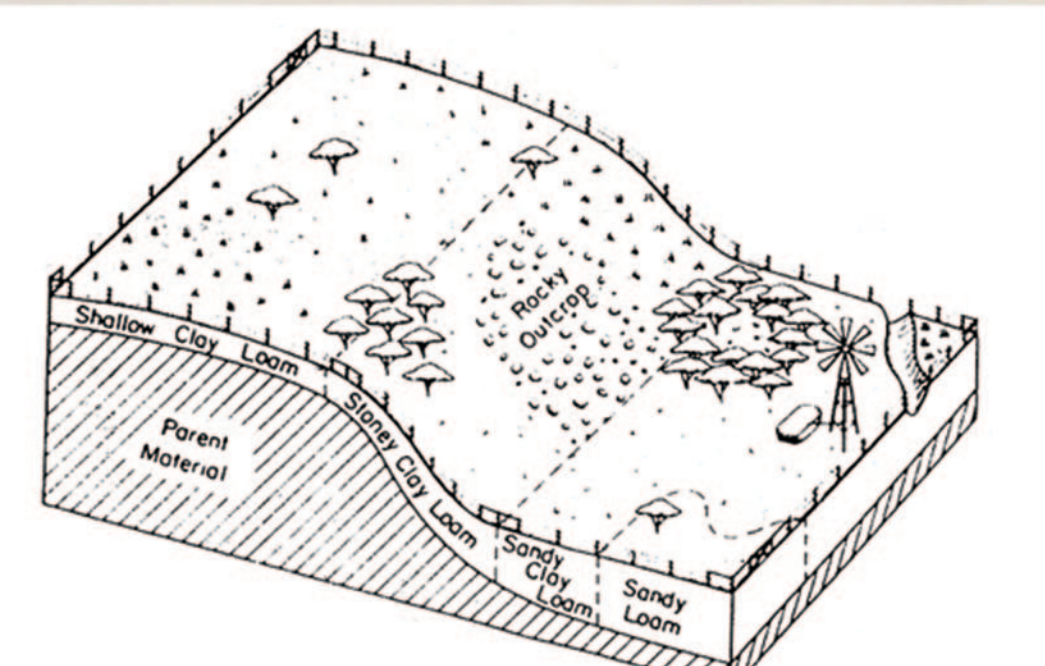


Figure 3.2. Landscape configuration reflecting the unique set of forage resources, water locations, and terrain constraints which effect use patterns by grazing animals.

Livestock movement is affected by topographic features such as percent slope, length of slope, and water location. Figure adapted from *Grazing Management: An Ecological Perspective*; edited by Rodney K. Heitschmidt and Jerry W. Stuth, 1991.

Animal behavior and forage selectivity are the driving grazing management forces affecting resource interactions.



Cattle often have to work to get a drink from a stream/creek/river. If they have an easier access alternative with equal or better water, they will tend to use the alternative.

Reviewing Key Management Strategies

It is necessary to get past the idea that riparian-wetland area degradation is a livestock problem. Management of the livestock is the problem.



It isn't a matter of grazing versus non-grazing, but rather poor grazing practices versus good grazing management.

“There are no cook book or ‘one size fits all’ prescriptions for livestock grazing in riparian areas.”

—Wayne Elmore, Riparian Specialist

Course Topics Include:

- **Issues concerning common functions of riparian areas, proper functioning condition, long-term sustainability, and key plant species**
- **Grazing management principles and concepts, including livestock behavior and forage selectivity**
- **Grazing management strategies, including key management strategies, grazing treatments, and additional management techniques**
- **Monitoring riparian-wetland vegetation in the short and long term**
- **Cardinal rules for planning and managing riparian-wetland areas**

Reviewing Grazing Treatments

Examples of some grazing treatments for riparian-wetland areas include:

Spring Grazing

Uses the pasture during the early growing period.

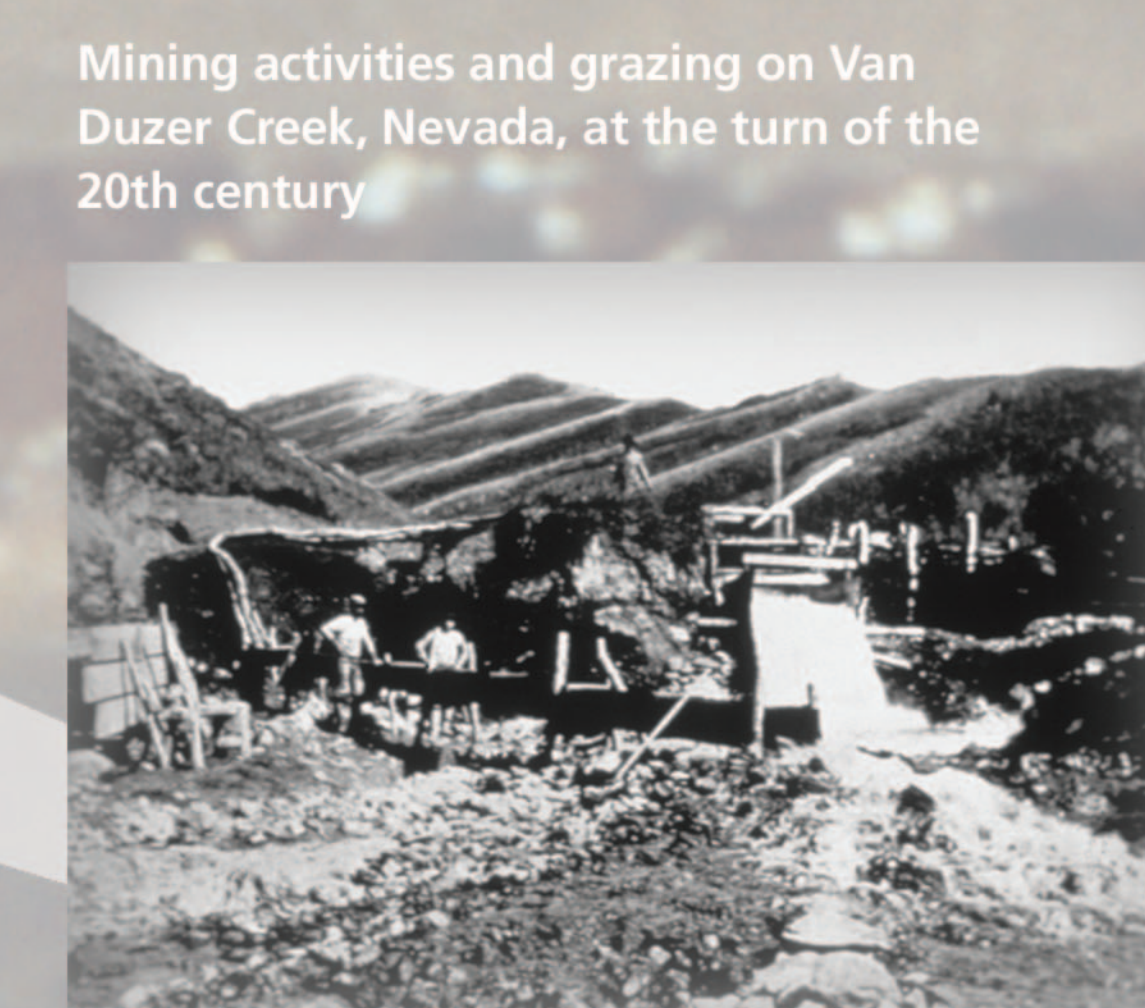


Season long grazing on South Fork Crooked River, Oregon, 1979

Spring grazing system after exclusion on South Fork Crooked River, Oregon, 1986

Deferred Rotation Grazing

Provides critical growing season rest for each pasture every year, but each pasture is also grazed.



Mining activities and grazing on Van Duzer Creek, Nevada, at the turn of the 20th century



Van Duzer Creek recovered remarkably by 1982 as a result of better management practices.



Five-pasture deferred rotation allowed even better recovery by 1991.

Rest Rotation Grazing

One or more pastures rested the entire year with the remainder of the pastures grazed for a portion of the year.



Season long grazing system



After changing to the rest rotation grazing system

“The single common denominator among all riparian areas inventoried...as functioning properly or at least being on an improving trend, was continual involvement on the part of the operator or manager.”

—Bob Ehrhart, Associate Professor of Rangeland Resources, COCC, Oregon.



Monitoring the Riparian-Wetland Area

Short-term monitoring looks at what is happening this year. Long-term monitoring looks at what is happening over several years.



Nebraska sedge grazed to a 6-inch stubble height. Stubble height is one trigger used to determine when to move livestock.



The course briefly describes Winward's Monitoring Riparian Vegetation Methodology, which includes greenline, cross-sections of the valley bottom, and woody species regeneration.



Wildlife impacts should be evaluated when developing a monitoring strategy.

Considering Additional Management Techniques

Practices used to implement livestock grazing management strategies.

Low-moisture supplements provide an opportunity to use low-use areas of pastures and decrease use of riparian areas.



Alternative livestock may enhance riparian conditions by controlling weed species, changing the amount of use of desired species, and redistributing grazing.



Low-stress livestock handling has many benefits, including higher conception rates, decreased disease and fly problems, improved riparian areas, and more.



Streambank damage caused by livestock.



Hardened livestock watering access point that limits stream