United States Department of Agriculture

CONSERVATION ENHANCEMENT ACTIVITY

E528R

CONSERVATION STEWARDSHIP PROGRAM

# Management Intensive Rotational Grazing

## Conservation Practice 528: Prescribed Grazing

**APPLICABLE LAND USE: Pasture, Range**

**RESOURCE CONCERN ADDRESSED: PLANTS**

**ENHANCEMENT LIFE SPAN: 1 Year**

### Enhancement Description

Management intensive, multi-paddock grazing system where livestock are regularly and systematically moved to fresh forage to optimize quantity and quality of forage growth, improve manure distribution, improve wildlife cover, and improve soil health.

### Criteria

- Management-intensive rotational grazing increases harvest efficiency of vegetation with grazing and/or browsing animals through smaller paddock sizes, higher stock density while maintaining plant residue with enough energy reserves to recover quickly when adequate soil moisture is available for regrowth.
- Must develop and implement a written grazing plan that:
  - increases stock density
  - shortens grazing periods
  - enhances plant recovery
  - matches the forage quantity and quality produced with the grazing and / or browsing animal, and

  - increases harvest efficiency and manure distribution by significantly increasing the existing stock density per herd.

- Removal of forage will be in accordance with site production limitations, rate of plant growth, the physiological needs of forage plants and the nutritional needs of the livestock.

- Deferment (non-grazing period less than one year) and / or rest (non-grazing period equal to or greater than one year) will be planned for critical periods of plant needs.

- Manage livestock rotation based on rate of plant growth, available forage, and allowable utilization target.

- Manage livestock rotation to provide adequate ground cover and plant density to decrease soil erosion, reduce runoff and improve infiltration and water holding capacity.

- Minimize concentrated livestock areas to enhance nutrient distribution and improve or maintain ground cover.

- Utilize higher stock density and shorter grazing periods in riparian areas to minimize impact to stream bank or shoreline stability and ensure other sensitive areas such as wetlands, habitats of concern, karst areas do not become degraded.

- Implement and maintain a rotational grazing system using a combination of permanent or temporary division fences and water facilities to serve the management needs of operation.

- Develop and follow contingency plans to deal with drought or flooding or other episodic disturbance events.

Develop and implement a monitoring plan that at a minimum evaluates livestock performance, plant community composition and density, and soil function components such as ground cover, infiltration and aggregate stability.

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**Documentation and Implementation Requirements**

**Participant will:**

- ☐ Prior to implementing, obtain a grazing plan map delineating the existing paddock system, along with a livestock inventory (type, class, average weight, and number) to document the current stocking density and current stocking rate.
- ☐ Prior to implementation, acquire a prescribed grazing plan, with a plan narrative delineating the following:
  - The goals and objectives of the plan
  - Map showing the number of paddock subdivisions with water sources, proposed stock densities per paddock associated with different herds in the system.
  - Forage Inventory
  - Forage / Animal Balance
  - A grazing plan narrative describing the basis for when livestock movement or rotation will occur
  - A contingency plan
  - A monitoring plan
- ☐ During implementation, keep pasture/ herd in/out records, stock density records and photos of paddock condition and photos of high stock density grazing implementation.
- ☐ After implementation, provide the following items for review by NRCS:
  - Written grazing plan with maps showing fencing and water layout and managed stock densities for each herd.
  - Paddock / herd in / out records with actual stock densities documentation.
  - Photos of paddock(s) condition and improved forage utilization and photos of high stock density grazing.
  - Changes made to the grazing management plan.

**NRCS will:**

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- ☐ As needed, provide technical assistance to participant as requested.
- ☐ Prior to implementation, provide and explain NRCS Conservation Practice Standard Prescribed Grazing (Code 528) and supporting documents that are needed to implement this enhancement, such as forage-animal balance forms.
- ☐ Prior to implementation, review the existing grazing plan, maps and livestock inventory provided by the participant.
- ☐ Review the newly proposed grazing plan fencing and watering layout, associated maps and stock density numbers for each herd.
- ☐ After implementation, review the following:
  - Written grazing plan with maps showing fencing and water layout and managed stock densities for each herd.
  - Paddock / herd in / out records with actual stock densities documentation.
  - Photos of paddock(s) condition and improved forage utilization and photos of high stock density grazing.
  - Changes made to the grazing management plan

**NRCS Documentation Review:**

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

X _____

NRCS Technical Adequacy Signature Date

*Sign and certify in the Oregon-Acknowledgment & Certification supplement below.

USDA United States Department of Agriculture

# OREGON SUPPLEMENT TO CONSERVATION ENHANCEMENT ACTIVITY E528R

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## Additional Documentation for Oregon

In addition to the documentation requirements specified in the National job sheet E528R the following additional documentation requirements apply in Oregon.

- Planner or Non-Affiliated Consultant must complete an Oregon Prescribed Grazing Implementation Requirement (528 IR) to accompany this enhancement.
  - Non-Affiliated Consultant Form – Available on the OR SharePoint CSP Site
- Monitoring will include actual use records, paddock photo points, livestock performance records that will be provided to NRCS annually. Livestock performance records may be fulfilled through Body Condition Scoring livestock.
- Document adjustments to grazing plan as result of monitoring and assessment data.

## Additional References for Oregon

**High Intensity Low Frequency Grazing:** High intensity - low frequency (HILF) systems are multi pasture - single herd systems. Stock density is high to extremely high. The length of the grazing period is moderate to short, with a long rest period. Dates for moving livestock are set by the utilization of the forage. Grazing units are not grazed the same time of year each year. Figure F-14 in the National Range and Pasture Handbook is a conceptual model of a HILF grazing system. In HILF the number of grazing units and grazing of each unit determine how often if ever the same grazing unit is grazed during the same period of the year.

**Short Duration Grazing:** Short duration grazing is similar to high intensity-low frequency grazing systems except that the length of the grazing and rest periods are both shorter for the short duration. Utilization, therefore, is less during any given grazing period. Stock densities are high. See Figure F-15 in the National Range and Pasture Handbook for an example conceptual model of a short duration grazing system. In some areas of the state, livestock cannot graze the entire year. Where snow or other related conditions prevent yearlong grazing, the concepts of the grazing system still apply.

**Body Condition Scoring Information:**

Basics of Body Condition Scoring (BCS)

Influence of Body Condition on Reproductive Performance of Beef Cows Oregon State

Oregon State University Body Condition Scoring Sheep

Purdue University Body Condition Scoring in Farm Animal

**Information and forms on Key Species Forage Utilization and Photo-Point monitoring can be found in the following links:**

Key Species Utilization

Photo Plot Monitoring Guide

Pasture and Grazing Management in the Pacific Northwest PNW 614

**Design Approvals & Acknowledgements:**

| Design Approval | Date | Job Approval Authority |
|---|---|---|
| Designed by: | | |
| Approved by: | | |

**Client's Acknowledgement Statement:**

The client acknowledges:

- I have received a copy of the specification and understand the contents and requirements.
- It is my responsibility to obtain all necessary permits and/or rights and to comply with all ordinances and laws pertaining to the application of this practice.
- I will not begin installation of this practice until I have received appropriate approval to do so. I understand NRCS also has Federal and state laws to comply with that may take some time to address (e.g. cultural resources).

| Client's Signature | Date |
|---|---|
| | |

**Certification Documentation:**

| | |
|---|---|
| ☐ | Field Evaluation: Post-treatment inventory, measurements, notes, as-built, and supporting documentation (document completion in conservation plan), as required. |
| ☐ | Map(s): Including field numbers, fields treated, and units treated (may document on conservation plan map), as required. |
| ☐ | Photos or other supporting documentation (e.g., seed tags, soil tests, receipts, invoices, spray records, fertilizer records, etc.) |
| Brief Description of Work Accomplished (types of equipment used, date of application, extents and quantities installed, etc.) | |

**Certification Statement:**

The employee certifies the implementation of this conservation practice:

- Meets the purpose, general criteria, and any required additional criteria as documented in the conservation practice standard and/or enhancement sheet.
- Meets the specifications contained herein and is complete.
- Conforms to my existing Job Approval Authority controlling factors and levels.

| Name | Date | Job Approval Authority |
|---|---|---|
| | | |

| **Field Level Certification** – For multiple applications of this design. | | | | |
|---|---|---|---|---|
| Land Unit/ Contract Item Number | Date | Unit(s) | Amount Installed | Certifier |
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