



## CONSERVATION ENHANCEMENT ACTIVITY

### E528S

## Soil Health Improvements on Pasture

### Conservation Practice 528: Prescribed Grazing

**APPLICABLE LAND USE:** Pasture

**RESOURCE CONCERN ADDRESSED:** Soil

**ENHANCEMENT LIFE SPAN:** 1 Year

#### Enhancement Description

Use of soil health assessment to evaluate impact of planned grazing in addressing organic matter depletion, soil organism habitat and aggregate instability. Laboratory soil health tests will be completed in year 1 and year 4 of the contract. Planned modifications to the pasture forages and/or management system will be made to the benchmark grazing system to address concerns from the assessments. During sample collection, Pasture Condition Score (PCS) or Determining Indicators of Pasture Health (DIPH) assessment will be completed for the sample area.

#### Criteria

- Utilizing the benchmark PCS or DIPH, the participant will plan improvements to at least one of the indicators. The benchmark PCS or DIPH will be less than one year old.
- A primary assessment will be completed in Year 1 that includes completing the PCS or DIPH and sampling soil that will be analyzed by a soil health testing laboratory. Follow guidance from the selected laboratory for sampling procedure. Record weather factors and most recent grazing event on the PCS or DIPH. Soil sample collection and PCS or DIPH will be completed on the same day and in the same location.
- During Year 4, a follow-up assessment will be completed using the same methods that were utilized in year 1. The assessment will be in the same season, comparable conditions and key area as completed in year 1.

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## Documentation and Implementation Requirements

### **Participant will:**

- Prior to implementation:
  - Provide NRCS with the benchmark grazing information.
  - Develop a prescribed grazing plan.
  - Select the laboratory soil health test and provider based on your soil health objectives.
- During implementation:
  - Complete PCS or DIPH or work with someone qualified to complete the pasture assessment when soil samples are collected.
  - Collect soil samples in years 1 and 4 of the contract and send them to a reputable soil testing lab that completes soil health testing. Year 1 and year 4 soil samples will be tested by the same laboratory.
  - Make changes to the grazing management plan based on results of PCS or DIPH and soil health test to benefit organic matter depletion, soil organism habitat and/or aggregate instability.
- After implementation provide the following items for review by NRCS:
  - PCS or DIPH score sheets with all field notes and locations.
  - Both Soil Health Assessment results to NRCS.
  - Changes made to the grazing management plan for the year.

### **NRCS will:**

- As needed, provide any technical assistance to participant as requested.
- Prior to implementation, provide and explain NRCS Conservation Practice Standard Prescribed Grazing (CPS 528) as it relates to implementing this enhancement.
- Prior to implementation, and as requested from the participant, develop a Prescribed Grazing plan for each year of this enhancement.
- During implementation, assist the producer with locating the key area for the PCS or DIPH and soil samples to be collected.



- During implementation, as requested work with the producer to complete PCS or DIPH and collect the soil samples.
- After implementation, review all PCS or DIPH and all soil health laboratory testing results.
- After implementation, verify implementation of changes made to the grazing management plan to address organic matter depletion, soil organism habitat and/or aggregate instability and other identified indicators from the PCS or DIPH by reviewing grazing herd in and out records or implementation of additional activities.

**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 \_\_\_\_\_

\_\_\_\_\_  
NRCS Technical Adequacy Signature

\_\_\_\_\_  
Date



## CONSERVATION STEWARDSHIP PROGRAM

### SOUTH DAKOTA (SD) SUPPLEMENT TO CONSERVATION ENHANCEMENT ACTIVITY

#### E528S

#### Soil Health Improvements on Pasture

##### Additional Criteria for SD:

In addition to the criteria specified in the national job sheet E528S, the following additional criteria apply in SD:

- Soil Health Test at a minimum will include **organic matter**. Soil health tests may also include testing for:
  - wet aggregate stability
  - microbial activity (respiration or  $\beta$ -glucosidase)
  - readily available carbon
  - bioavailable nitrogen
  - For more information on applicable soil health tests, see National Soil Health Technical Note No. 450-03, Recommended Soil Health Indicators and Associated Laboratory Procedures (<https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=44475.wba>)
  - A list of soil testing labs is below (but producers can choose to use any lab, as long as the soil health test meets the requirements of the enhancement).
- Criteria related to the written grazing management plan:
  - Start of grazing period will be changed by a minimum of two weeks in each pasture/paddock each year during the growing season.
  - Adequate recovery periods must be provided:
    - Minimum of 30 days between grazing events on pasture
    - Longer recovery periods will be needed during slow growth period and during drought.
  - Maximum utilization will not exceed 50 percent (%) by weight of the total current year's growth.

##### Additional Documentation Requirements for SD:

In addition to the documentation requirements specified in the National job sheet E528S, the following additional documentation requirements apply in SD:

- Complete the Pasture Condition Score Sheet (SD-ECS-15)
- Soil Health test results for year 1 and 4 of the contract



## CONSERVATION STEWARDSHIP PROGRAM

- Complete the SD Grazing Tool (SD-CPA-39 Forage/Animal Inventory, Grazing Schedule using the SD-CPA-15 or similar form, and SD-CPA-16 or similar grazing records document).
- Complete a drought contingency plan using the SD Drought Tool or provide the participant with a copy of the example drought contingency plan located within the SD Prescribed Grazing Technical Note 9.

A soil health test at a minimum must include **organic matter**, but may also include wet aggregate stability, microbial activity (respiration or  $\beta$ -glucosidase), readily available carbon, or bioavailable nitrogen. See National Soil Health Technical Note No. 450-03, Recommended Soil Health Indicators and Associated Laboratory Procedures

(<https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=44475.wba>) for more information. Laboratories in and around SD include but are not limited to the following:

AgLab Express  
3600 S. Minnesota Ave; Suite #200  
Sioux Falls, South Dakota 57105  
Phone: 605-271-9237  
Fax: 605-271-9238

Agvise Laboratories, Inc.  
902 13<sup>th</sup> Street N;  
P.O. Box 187  
Benson, Minnesota 56215  
Phone: 320-843-4109  
Fax: 320-843-2074

Agvise Laboratories, Inc.  
604 Hwy 15 West  
P.O. Box 510  
Northwood, North Dakota 58267  
Phone: 701-587-6010  
Fax: 701-587-6013

East Prairie Laboratories  
48598 234<sup>th</sup> St.  
Flandreau, SD 57028  
Phone: 605-221-8000

Midwest Laboratories  
13611 B Street  
Omaha, Nebraska 68144  
Phone: 402-334-7770

Minnesota Valley Testing  
Laboratory (MVTL)  
326 Center Street  
New Ulm, Minnesota 56073  
Phone: 800-782-3557  
Fax: 507-233-7127

Next Level Ag, LLC  
617 Pine Avenue N  
Alpena, South Dakota 57312  
Phone: 605-849-5227  
Fax: 605-849-3463

Ward Laboratories  
4007 Cherry Avenue  
P.O. Box 788  
Kearney, Nebraska 68847  
Telephone: 800-887-7645  
Telephone: 308-234-2418