

A Guide to South Dakota's Rangeland and Soils Days



Kaylee Wheeler, SDSU Extension Range Field Specialist
Krista Ehlert, Assistant Professor & SDSU Extension Range Specialist
Emily Rohrer, State Rangeland Management Specialist, USDA-NRCS South Dakota
Lance Howe, MLRA Soil Survey Office Leader, USDA-NRCS South Dakota
Landon Wolter, Rangeland Management Specialist, USDA-NRCS South Dakota

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The purpose of this Fact Sheet is to provide an overview of the South Dakota (SD) Rangeland and Soils Days program. Rangeland and Soils Days is hosted by a local conservation district (CD), with support from the South Dakota Society for Range Management (SD SRM), SDSU Extension, and the Natural Resources Conservation Service (NRCS). The purpose of Rangeland Days, started in 1984, is to promote education on South Dakota's most-threatened natural resource – grasslands. This event provides an understanding of rangeland resources and a sense of stewardship in natural resource management. Similarly, the purpose of Soils Days, started in 2005, is to promote education of South Dakota's most-important resource – soil.

The current format is that both Rangeland and Soils Days are held at the same time of the year, typically in June. The event is held at the same location 2 years in a row before moving to a new location. The event location and time (typically the second full week in June) is determined by a Planning Committee that includes event organizers, local personnel, and event hosts. The date will be made available to the public via the SDSU Extension and SD SRM websites.

Rangeland Days - Overview

Age Divisions (age determined as of January 1 of that year)

1. New Ranger (8-10 years old)

2. Wrangler (11-13 years old)
3. Scout (14-18 years old)
 - a. Intended for incoming high school freshmen OR high school students who have NOT attended a range camp or a previous range judging event.
 - b. A student can only participate in the Scout division for 1 year.
4. Go-Getter (14-18 years old)
5. The competition is individual for all age groups, with a team option to attend Nationals only available for Go-Getters. Wranglers and Scouts can form teams, but they are ineligible for the National contest.
 - a. Coaches must declare team members the morning of the contest via a form that will be provided the day of.

Rangeland Days - Learning Objectives

1. New Ranger
 - a. Learn plant identification and other range facts out in the field – such as soils, why rangelands are important, the importance of “solar panels”, etc.
 - b. Learn to create plant presses with the range plants they collect.
 - c. Plant presses will be given out on Practice Day.
 - i. Returning New Rangers are highly encouraged to bring their plant presses back for subsequent years.

2. Wrangler
 - a. Learn plant identification, plant lifespan, plant seasonality and origin.
 - b. Learn to determine ecological site.
 - c. Learn to calculate similarity index (SI).
3. Scout and Go-Getter
 - a. Learn plant identification along with plant characteristics and habitat values.
 - b. Determine ecological site.
 - c. Calculate SI.
 - d. Determine beef carrying capacity.
 - e. Evaluate beef cattle and prairie grouse habitat.
 - f. Recommend management practices for improving evaluation site to meet manager's goals.

Rangeland Days - Contest Categories

Each age division can compete in the following categories:

1. Student Displays
 - a. A table-top display on any range-related topic.
 - i. See the Student Display Scorecard below for scoring.
 - b. Plant collections are judged as a separate category and will be eligible for special awards. See the Rangeland Plant Collection scorecard.
 - i. Plant collections do not count towards the Top Hand Award.
2. Student Talks
 - a. Topics should cover any aspect of range management or range resources.
 - b. Visual aids are required.
 - c. PowerPoints are preferred. ****Note: the PowerPoint can serve as the visual aid.****
 - d. Scout and Go-Getter presentations should contain more scientific information than a revised 4-H demonstration. Sources should be cited. There is no preference to citation format.
 - e. Time limits:
 - i. New Ranger: 2-8 minutes
 - ii. Wrangler: 3-8 minutes
 - iii. Scout: 5-8 minutes
 - iv. Go-Getter: 5-8 minutes
 - f. The top Scout OR Go-Getter from South Dakota may be given the opportunity to present their talk as the SD Delegate at the International Society for Range Management (SRM) Meeting (held January/February of the next year).
 - i. This privilege is determined solely on

performance in the Talk division. i.e. If a student wins the Go-Getter Top Hand award, they may not be chosen as the SD Delegate to SRM, as they may not have had the highest talk score.

- g. See Student Talk Scorecard below.

3. Judging Contest
 - a. Individual scores will count towards the Top Hand award.
 - b. See the scoring information below.

Rangeland Days - The Contest

1. New Rangers will be able to complete their contest plant line at their convenience, with no time limit.
2. Wranglers, Scouts and Go-Getters will rotate between stations.
 - a. The contest consists of 3 stations: 2 ecological site evaluation stations and 1 rangeland plant identification station.
 - b. There are 30 minutes allowed for participants to complete/judge each station.
3. For Go-Getters:
 - a. FFA or 4-H teams will consist of 3 or 4 members. The combined top 3 individual scores will count towards the team score.
 - i. Coaches must declare team members the morning of the contest via a form that will be provided the day of.

Rangeland Days - General Contest Rules

1. Team members shall be bona fide enrollees in a secondary AFNR program and FFA members in good standing.
2. Students in the New Ranger, Wranglers, and/or Scouts divisions do not have to be associated with a 4-H or FFA team in order to compete.
3. 4-H team and team members that have previously won in the 4-H division at Rangeland Days are ineligible to compete as a 4-H team again.
4. Any communication, verbal or non-verbal between participants during the event will be sufficient cause to eliminate the team member(s) involved from the contest.
5. Contestants can NOT have any writing on their scorecards (such as plant characteristics, etc.).
6. Contestants can have math calculations or givens for the site written on their scorecards.
7. Contestants can NOT have the following items listed below. If any are found, the participant will be disqualified:

- a. Electronic devices (cell phones, smart phones, etc.)
- b. Calculators
- c. Slope measuring devices
- 8. Contestants may only have the following pieces of equipment:
 - a. Pencils
 - b. Score cards
 - c. Clipboard
- 9. The publication "Judging South Dakota Rangeland for Livestock and Wildlife Values" will be used to resolve contest differences and should be used in setting up and conducting all contests.
- 10. Individuals are able to win the Top Hand Award more than once.
- 11. The Scout or Go-Getter that has the winning talk is eligible to win more than once, and will consequently have the privilege of attending the Society for Range Management (SRM) High School Youth Forum (HSYF) as the SD Delegate.
- 12. Decisions of the judges will be final.

Rangeland Days - Contest Scoring

- 1. Scoring is final when done correcting the day of the contest.
- 2. For Rangeland Days scoring is as follows:
 - a. New Rangers:
 - i. 20 questions are given with 10 points per question, for a total of 200 possible points.
 - ii. 1 bonus question is provided, worth 10 points.
 - iii. Example questions are: What is the name of this plant? Is this a cool or warm season plant? What insects like this plant? (e.g., butterflies)
 - b. Wranglers:
 - i. Station 1 and Station 2 scorecards will be graded on the following:
 - 1. Ecological site
 - 2. Similarity Index (SI)
 - 3. The total possible score for each ecological evaluation site (Stations 1 and 2) is 25 points (50 points combined) for the Wrangler age division.
 - ii. Plant Identification Scorecards are graded on the following:
 - 1. Plant Name
 - 2. Lifespan
 - 3. Growth Season
 - 4. Origin
 - 5. The total possible score for the plant identification is 14 points per plant (280 points total).
 - a. 8 points for the correct plant name
 - b. 2 points for correct lifespan
 - c. 2 points for correct growth season
 - d. 2 points for correct origin
 - e. If the plant is incorrectly identified, no points will be awarded for the marked characteristics.
 - iii. Total points possible for the Wrangler age division is 330.
 - iv. Wranglers may be placed into teams at the discretion of the group leader.
 - 1. Teams will be in groups of three or four. (This is dependent on how many students are registered).
 - 2. All individual scores count towards the team score – this serves as a fun 'team' activity to do to build comradery.
- c. Scouts and Go-Getters:
 - i. Must complete all of Station 1 and Station 2 Scorecards and all of Plant Identification Scorecard.
 - ii. The total possible score for each ecological evaluation site (Stations 1 and 2) is 118 points (236 points combined).
 - 1. For sections on the card that have "each" in the points area, each box in that section is worth 3 points. If the boxes are correctly left blank or checked, then the points are awarded.
 - iii. The total possible score for the plant identification portion of the contest is 400 points (20 points per plant).
 - 1. 8 points for the correct plant name
 - 2. 2 points for the correct lifespan
 - 3. 2 points for the correct growth season
 - 4. 2 points for correct origin
 - 5. 2 points for prairie grouse food
 - 6. 2 points for prairie grouse cover
 - 7. 2 points for cattle food
 - 8. If the plant is incorrectly identified, no points will be awarded for the marked characteristics.
 - iv. Total points possible for the Scout and Go-

Getter age divisions is 636 per individual.

- d. Go-getter Team Score:
 - i. 4-H Team score is the combined top 3 individual scores.
 - ii. FFA Team score is the combined top 3 individual scores.
- 3. Tiebreakers
 - a. In the case of a team tie, the order to break the tie will be:
 - i. The top three team member plant identification scores.
 - b. In the case of an individual tie, the order to break the tie will be:
 - i. The plant identification score.

Rangeland Days - Awards

- 1. Top Hand Award
 - a. Top Hand Awards are available in each age division. Students must participate in all three categories (Judging Contest, Student Talk, and Student Display) to be eligible for the Top Hand Award, which is given a belt buckle. Scoring for the Top Hand Award is weighted as follows:
 - i. Judging Contest - 40%
 - ii. Student Talks - 35%
 - iii. Student Displays - 25%
 - b. It is important to note that a student may excel in the student talk and display, but perform less favorably in the Talk division, lowering their score and the likelihood of receiving the Top Hand award.
 - c. The Go-Getter Top Hand award also receives a traveling trophy. The school or individual who receives the award must have their name engraved on the plaque prior to the next year's contest.
- 2. Student Displays
 - a. For each age division, the top 5 displays are awarded. First place receives a plaque; medals are awarded for the other places.
 - b. The top scoring individual from each age division will receive a plaque.
 - c. Plant collections will be given a separate award, and are given to the top 5 collections. Medals are given for plant collections.
- 3. Student Talks
 - a. For each age division, the top 5 talks are awarded. First place receives a plaque; medals are awarded for the other places.

- b. Top scoring individuals from each age division will receive a plaque.
- 4. Individual Judging
 - a. Individuals in each age division with the highest judging score will be awarded a plaque and/or medal.
 - b. Go-getter individuals will be split out by affiliation (top 4-H individuals, top FFA individuals).
 - i. Separate medals will be given to each affiliation.
 - c. Individual placings are shared via the following, and each of these students is given a medal:
 - i. New Rangers - top 10 individuals are announced.
 - ii. Wranglers - top 5 individuals are announced.
 - iii. Scouts - top 5 individuals are announced.
 - iv. Go-Getters - top 5 individuals are announced.
- 5. Top Scoring 4-H Team
 - a. 4-H Teams will consist of 3 to 4 members of bona fide 4-H members.
 - i. Coaches must declare team members the morning of the contest via a form that will be provided the day of.
 - b. The top scoring team will qualify for the National Land and Range Contest in Oklahoma the following spring (typically early May).
 - c. The team will receive a plaque.
- 6. Top Scoring FFA Team
 - a. FFA teams will consist of 4 or more members of bona fide FFA members. The top 3 individual scores will make up the team score.
 - i. Coaches must declare team members the morning of the contest via a form that will be provided the day of.
 - b. The team will receive a plaque.
 - c. The top scoring team will NOT qualify for the National Land and Range Contest in Oklahoma the following spring, as the FFA Association hosts their Regional Contests to attend in the fall.

Rangeland Days - Resources

- 1. Judging South Dakota Rangeland for Livestock and Wildlife Values, Revised March 2023.
- 2. Grassland Plants of South Dakota and the Northern Great Plains, by James R Johnson and Gary E.

Larson. (available through the SDSU Ag Heritage Museum: agmuseumstore.com/grassland-plants-of-south-dakota.html)

Soils Days - Overview

Age Divisions

1. Soils Days is for youth 14 to 18 years.
 - a. All contestants must be 14 years old on the date of the contest and must not have graduated from high school prior to the current year.
2. Soils Days participants sign up to compete as either a 4-H or FFA team.

Soils Days - Learning Objectives

1. Students learn to determine soil texture, depth, erosion, slope, and stoniness.
2. Learn to interpret permeability, surface run off and limiting factors.
3. Determine the land capability class to make recommendations for vegetation and mechanical erosion control, as well as fertilization recommendations.
4. Students will learn about homesite evaluation.
 - a. Emphasize the importance of soils and their limitations for homesites.
 - b. Predict potential problems associated with planned or existing homesites.

Soils Days - Contest Categories

1. Soils Days participants complete the land judging and homesite evaluation contests concurrently.

Soils Days - The Contest

1. FFA and 4-H Team member roster must be declared prior to the contest.
2. The contest consists of 4 sites, with students completing both land and homesite evaluations on each site.
3. There will be 25 minutes allowed for participants to complete/judge each site.

Soils Days - General Contest Rules

1. Team members shall be bona fide enrollees in a secondary AFNR program and FFA members in good standing.
 - a. FFA teams must be comprised of members from the same chapter.
2. 4-H team members that have previously won in the 4-H division at Soils Days are ineligible to compete as a 4-H team again.

3. Any communication, verbal or non-verbal between participants during the event will be sufficient cause to eliminate the team member(s) involved from the contest.
4. Contestants can NOT have any writing on their scorecards (such as land capability class, or notes).
5. Contestants can have math calculations or givens for the site written on their scorecards.
6. Contestants can NOT have the following items listed below. If any are found, the participant will be disqualified:
 - a. Electronic devices (cell phones, smart phones, etc.)
 - b. Calculators
 - c. Slope measuring devices
7. Contestants may only have the following pieces of equipment:
 - a. Pencils
 - b. Knife
 - c. Towel or rags
 - d. Contest score cards
 - e. Clear clipboard with no writing or measurements on it
8. For Soils Days, the Land Judging in South Dakota Handbook and Homesite Judging in South Dakota Guidebook shall be used to resolve contest differences and should be used in setting up and conducting all contests.
9. Decisions of the judges will be final.

Soils Days - Contest Scoring

1. Scoring is final when done correcting the day of the contest.
2. Scoring is as follows:
 - a. 75 Possible points for each Land Site (300 total)
 - b. 51 possible points for each homesite evaluation (204 total)
 - c. Total possible individual score is 504 points
 - d. Total team score is 1,512 points using the combined top 3 individual scores for 4-H and FFA in Soils Days.
3. Tiebreakers
 - a. In case of a team tie, the order to break the tie will be:
 - i. Use scores from Land Site 1, then Land Site 2, Land Site 3, and Land Site 4 and the team with the first largest score can be declared the winner. If this does not break

- the tie the scores from Homesite Site 1, Site 2, Site 3, and Site 4 can be used.
- b. In the case of individual tie, the order to break the tie will be:
 - i. Use scores from Land Site 1, then Land Site 2, Land Site 3, and Land Site 4 and the individual with the first largest score can be declared the winner. If this does not break the tie the scores from Homesite Site 1, Site 2, Site 3, and Site 4 can be used.

Soils Days - Awards

1. 4-H Division
 - a. Top Individual awarded a belt buckle.
 - b. Top Team is awarded a plaque and gold medals.
 - i. Coaches must declare team members the morning of the contest via a form that will be provided the day of.
 - c. Medals will be awarded according to the top 10% - gold, next 15% - silver, next 15% - bronze.
 - d. The top scoring team will qualify for the National Land and Range Contest in Oklahoma the following spring (typically early May).
2. FFA Division
 - a. Top Individual is awarded a plaque and gold medal.
 - b. Top Team is awarded medals.
 - i. Coaches must declare team members the morning of the contest via a form that will be provided the day of.
 - c. The top scoring team will NOT qualify for the National Land and Range Contest in Oklahoma the following spring, as the FFA Association hosts their Regional Contests to attend in the fall.

Soils Days - Resources

1. Land Judging in South Dakota, ABS 8-01, revised August 2012 with a revised Land Judging Scorecard 6/2010.
2. Homesite Judging in South Dakota, June 2008, with a revised Homesite Judging Scorecard 6/2010.



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South Dakota Rangeland Days Student Talk

New Rangers (3-4 minutes)
Wranglers (4-6 minutes)
Scouts and Go-Getters (7-8 minutes)

Name: _____ Points: _____

Title: _____

New Ranger _____ Wrangler _____ Scouts _____ Go-Getter _____

Criteria	Points Awarded	Comments
Introduction Prepares audience; states purpose	10	
Body Clearly presents ideas; fulfills purpose	20	
Subject Matter Range oriented; interesting and engaging	15	
Visual Aids Visible at 50 feet; high quality; helpful; flows with presentation Visual aids may be the student's display or a prepared PowerPoint presentation.	15	
Conclusion Concise summary; effective conclusion	10	
Knowledge of Subject Speaker credibility; self-confidence	15	
Delivery and Language Use of words, voice, gestures, appearance	15	
Total Points	100	
NOTE: The Scout and Go-Getter talks should consist of a more scientific approach to the topic, and this should be considered during scoring.		

Suggestions (Use back if needed):

Judge's Signature _____

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South Dakota Rangeland Days

Range Plant Collection

Name: _____ Points: _____

New Ranger _____ Wrangler _____ Scouts _____ Go-Getter _____

Criteria	Points Awarded	Comments
Identification All plants must be properly identified to qualify for a purple ribbon at state level.	25	
Speciman Quality Plants collected at the proper stage of development to show good plant color, mature seed heads or flowers, and roots.	30	
Plant Label Attached, complete, and neat.	10	
Pressing/Mounting Plants flattened as completely as possible, folded as necessary following recommendation of "V" or "W" folds, positioned on page in a balanced manner, and securely but not excessively glued.	25	
Collection Complete Follows guide as per lot requirements.	10	
Total Points	100	

Suggestions (Use back if needed):

Judge's Signature _____

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South Dakota Rangeland Days

Student Display

Name: _____ Points: _____

New Ranger _____ Wrangler _____ Scouts _____ Go-Getter _____

Criteria	Points Awarded	Comments
Attracts Attention Arouses favorable interest and encourages reading of details. Attractive use of size, shape, texture, color, motion, and light. The message is part of the design. May encourage additional study.	20	
Conveys Message Relates to rangeland study, use, promotion, or management. Conveys message and information that is true, complete, and useful. Presents one basic idea which impresses the viewer. The display educates the viewer.	40	
Design Arrangement of elements creates a sense of unity and balance. High-quality planning and construction shown. Design illustrates or symbolizes the message.	20	
Originality Evidence of creative and independent thought, skills, and work, appropriate to age.	10	
Workmanship Neat and organized	10	
Total Points	100	

Suggestions (Use back if needed):

Judge's Signature _____

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