

# RANGE MANAGEMENT

The purpose of this category is to help 4-H'ers identify and collect range plants. In addition, participants will learn the basics of range management, and Nebraska's range. Through the creation of range boards 4-H'ers will become more proficient in knowledge of Nebraska's range.

## RULES

- A. Each exhibit must be properly identified with Unit and Class.
- B. All plant displays and display covers must be the result of the current year's work.
- C. Plant identification and lists of appropriate plants in each category (grasses, forbs, shrubs, and grass-like plants) can be found in the Range Judging Handbook and Contest Guide (EC150, Revised July 2016), Common Grasses of Nebraska (EC170), and Common Forbs and Shrubs of Nebraska (EC118).
- D. The purpose of these exhibits is to demonstrate to the public the benefits from the study and application of crop, weed, range and soil sciences to solving problems in management, conservation, sustainability, and environmental protection. For guidelines on specific projects, refer to appropriate project manuals.

## BOOKS

For books, plants must be mounted on sheets that are no larger than 14 inches wide by 14 inches high. Plants should be glued rather than taped and the mounts should be protected with a clear cover. Proper plant mount should include root as well as stem and leaf tissue.

Exhibits will be judged based on completeness of plant mount, accuracy of identification, labeling, neatness, and conformation to project requirements.

Each completed mount must have the following information (see example below) in the lower right corner of the mounting sheet:

1. Scientific name (in italic or underlined), with authority
2. Common name
3. County of collection
4. Collection date
5. Collector's name
6. Personal collection number, indicating order that plants were collected in your personal collection
7. Other information, depending on class selected, i.e., value and importance, life span, growth season, origin, major types of range plants.

This information should be typed or printed neatly.

- \*D330001**      **Value & Importance for Livestock Forage & Wildlife Habitat & Food Book** - (SF260) - A collection of 12 different plant mounts, with 4 classified as high value, 4 as medium value, & 4 as low value for livestock forage, wildlife habitat, or wildlife food. Value and importance classifications can be found in the Range Judging Handbook and Contest Guide (EC 150, Revised July 2016) starting on page 42. Plants can consist of any combination of grasses, grass-like plants, forbs, or shrubs. Assemble plant mounts in order of high, medium, and low value and importance. Label each plant mount with its value and importance classifications for each of the three areas: Livestock Forage, Wildlife Habitat, Wildlife Food.
- \*D330002**      **Life Span Book** – (SF260) - A collection of 6 perennial plant mounts and 6 annual plant mounts selected from grasses or forbs.
- \*D330003**      **Growth Season Book** - (SF260) - A collection of 6 cool-season grass mounts and 6 warm-season grass mounts.
- \*D330004**      **Origin Book** – (SF260) - A collection of plant mounts of 6 native range grasses and 6 introduced grasses. Introduced grasses are not from North America and often used to seed pastures.
- \*D330005**      **Major Types of Range Plants Book** – (SF260) - A collection of plant mounts of 3 grasses, 3 forbs, 3 grass-like, and 3 shrubs.
- \*D330006**      **Range Plant Collection Book** – (SF260) - A collection of 12 range plant mounts with something in common (i.e. poisonous to cattle, or historically used as food by Native Americans, or dye plants, or favorite antelope forage, etc.). Include a short paragraph in the front of the book which describes what the plants have in common and why you have chosen to collect them.

## DISPLAYS

The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (pictures, charts, graphs) no larger than 28 inches by 28 inches on plywood or poster board. The display should be neatly titled. Make sure to label display with exhibitor's name, address, and county on back side.

**\*D330007**      **Parts of a Range Plant Poster** – (SF259) - Mount a range plant on a poster board. Label all the plant parts. Include the plant label in the lower right corner, including the scientific and common name of the plant. Put your name and 4-H county on the back of the poster.

## BOARDS

Boards should be no larger than 30 inches wide by 36 inches tall. Boards should be adequately labeled.

**\*D330008**      **Special Study Board** – (SF260) - A display of the results of a clipping study, a degree of use study, range site study, etc. A short essay must accompany the display to explain the reason for the study, what was learned, and study results. This should be placed in a sheet cover attached to the board.

**\*D330010**      **Junior Rancher Board** – (SF260) - This exhibit should include a ranch map with a record book or an appropriate educational display on some phase of rangeland or livestock management. A short essay must accompany the display to explain the purpose of the rancher board, what was learned, etc.

Resources:

- Reading the Range – Learn the names of range plants; Identify and collect range plants; Explore the basics of range management
- Using Nebraska Range – Study Nebraska grassland heritage; Understand plant vigor and the effects of grazing; Identify range sites; Calculate range conditions; Understand stocking rates
- Weed Science – Learn the names of range plants; Identify and collect range plants; Explore the basics of range management