HORTICULTURE

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.

All static exhibits must have received a purple ribbon at the county fair to advance to the State Fair.

DIVISION 750
AGRONOMY
FIELD CROPS

A. Individuals in the Crop Production and Field Crop projects may exhibit grain or plants or prepare an educational display representing their project.

B. Important: A two-page (maximum) essay must accompany grain and plant exhibits. The essay must include the exhibitor's name and address, county, plant hybrid or variety, plant population, whether crop production was irrigated or dryland and general information including farm cropping history, selection of variety hybrid, soil type and weather effects**. The essay must also include an economic analysis of the project, covering income and expenses on a per-acre basis.** Other topics to discuss are the selection of variety or hybrid, impacts of tillage and conservation practices, inputs (fuel, fertilizer, irrigation, labor, pesticides, etc.) any observations made during the growing season, and what you learned from your crops project. The essay counts as 50% of the total when judged. Essay must be the original work of the individual exhibitor. Attach the essay to the entry in a clear plastic cover such that it can be read without removing it from the cover. In addition to the essay, grain and plant exhibits will be judged on condition, appearance (i.e., disease and insect damage, grain fill), uniformity (size, shape, color, maturity), quality of exhibit. Refer to Score sheet SF264.

C. Grain exhibits must be one gallon per sample. Grain exhibits harvested in the fall (e.g., corn or soybeans) may be from the previous year's project.

D. Plant exhibits: All plant exhibits, with the exception of ears of corn, must be the result of the current year's work.

1. + Corn (yellow, white, pop, waxy or any other type) 10 ears or 3 stalks (cut at ground level with no roots or soil and bound together).
2. + Soybeans (6 stalks cut at ground level and bound together).
3. + Oats (sheaf of heads 2 inches in diameter at top, tied with stems about 24" long).
4. + Wheat (sheaf of heads 2 inches in diameter at top, tied with stems about 24" long).
5.+ Any other crop - includes grain sorghum (4 stalks cut at ground level and bound together), alfalfa, millet, barley, rye, triticale, amaranth, dry beans, sugar beets, mung bean, canola, forage sorghum, safflower, etc. (Sheaf of stems 3 inches in diameter at top, tied with stems cut at ground level of half size small square bale).

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" x 28" on plywood or posterboard. The display should be neatly titled. Make sure to label display with exhibitor's name, address and county on back side. Explain pictures and graphs clearly and concisely. Consider creativity and neatness. (SF259) **Each display must have a one page essay (minimum) explaining why the exhibitor chose the area of display and what they learned from their project**. Include any references used. The essay should be in a clear plastic cover with the exhibitor's name outside.

6. + Crop Production Display – The purpose of this class is to allow original and creative exhibits that contain educational information about crop production aspects, such as crop scouting, alternative crops, etc.
7.+ Crop Technology Display – Display information about aspects of technology used in crop production, such as genetic engineering, crop breeding, GPS, yield mapping, computers, etc.
8. + Crop End Use Display – Display information about the uses for a crop such as food, feed, fuel or other products.
9.+ Water or Soil Display – Display information about water or soils, such as how soils are being used for crop production, range, conservation, wildlife or wetland use or ways to protect or conserve water and soil resources.
10. + Career Interview Display – The purpose of this class is to allow youth to investigate a career in agronomy. Youth should interview one person who works with crops about such topics as what parts of their job do they enjoy or dislike, why did they choose that career, what was their education, etc. Include a picture of the person interviewed.

DIVISION 751
WEED SCIENCE

Premiums: Purple - $1.25, Blue - $1,
Red - $.75, White - $.50

GENERAL INFORMATION:

Any individual in the Conservation, Environment 1, 2, or 3, Range, Reading the Range, or Using Nebraska Range 2 or Crop Production or Field Crops projects may exhibit a weed book or weed display. The book cover and at least 15 specimens must represent this year's work. For assistance identifying plants, participants can use Nebraska Department of Agriculture's Weeds of Nebraska and the Great Plains (1994) or Weeds of the Great Plains (2003).

Exhibits will be judged based on completeness of plant mount, accuracy of identification, label, neatness, and conformity to the exhibit requirements. Refer to score sheet SF261.

Books: Display one plant of the book cover (no label required on cover specimen). Plants must be mounted on sheets that are 14 wide by 14" high. Proper plant mount should include root as well as stem and leaf tissue. Plants should be glued rather than taped and the mounts should be protected with a clear cover. 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 the order that the plants were collected-in your personal collection.
7. Other information, depending on class selected, i.e. noxious, life form.

This information should be typed or printed neatly.

1.+ Weed Identification Book – a collection of a minimum of 15 plant mounts including at least two of the following prohibited noxious weeds (Canada thistle, musk thistle, plumeless thistle, saltcedar,leafy spurge, purple loosestrife, diffuse knapweed, spotted knapweed, Japanese knotweed, bohemian knotweed or phragmites), and at least five weeds that are a problem primarily in lawns.

2. + Life Span Book – a collection of 7 perennial, 1 biennial, and 7 annual weeds

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 x 28" on plywood or posterboard. The display should be neatly titled. Make sure to label display with exhibitor's name, address and county on the back side. Explain pictures and graphs clearly and concisely. **Each display must have a one page essay explaining why the exhibitor chose the area of display and what they learned from their project.** Include any references used. The essay should be in a clear plastic cover with the exhibitor's name outside.

4. + Weed Display – The purpose of this class is to allow original and creative exhibits that contain educational information about weeds, such as interesting information about a weed species, the effects of weed control, herbicide resistant weeds, what makes a weed a weed, or uses for weeds.

DEPARTMENT D
RANGE MANAGEMENT

Premiums: Purple - $1.25, Blue - $1,
Red - $.75, White - $.50

GENERAL INFORMATION:

Individuals in Reading the Range Unit 1 project may exhibit in Classes 1-5 and 8.

Individuals in the Using Nebraska Range Unit 2 project may exhibit in classes 1 – 8.

Each exhibit must be properly identified with Unit and Class.

All plant displays and display covers must be the result of the current year's work.

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 2009, Common Grasses of Nebraska EC170, and Common Forbs and Shrubs of Nebraska EC118.

Books:

A. For books, plants must be mounted on sheets that are no larger than 14" wide by 14" 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.

B. Exhibits will be judged based on completeness of plant mount, accuracy of identification, labeling, neatness and conformation to project requirements. (SF260)

C. Each completed mount must have the following information in the lower right hand 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 the 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.

DIVISION 330
RANGE MANAGEMENT

1. + Value and Importance for Livestock Forage and Wildlife Habitat and Food Book – A collection of 12 different plant mounts, with 4 classified as high value, 4 as medium value, and 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 (EC150, Revised July 2009) on pages 3 through 6. 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.

2. + Life Span Book – A collection of 6 perennial plant mounts and 6 annual plant mounts selected from grasses or forbs.

3. + Growth Season Book – A collection of 6 cool-season grass mounts and 6 warm-season grass mounts.

4. + Origin Book – A collection of plant mounts of 6 native range grasses and 6 introduced grasses. Introduced grasses are not from North American and often used to seed pastures.

5. + Major Types of Range Plants Book – A collection of plant mounts of 3 grasses, 3 forbs, 3 grass-like, and 3 shrubs.

6. + Range Plant Collection Book – 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:
A. 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" by 28" on plywood or poster board. The display should be neatly titles. Make sure to label display with exhibitor's name, address and county on the back side. (SF260)

7. + Parts of a Range Plant Poster- Mount a range plant on a poster board. Label all the plant parts. Include the plant label in the lower right corner. Put your name and 4-H county on the back of the poster.

Boards:
A. Display boards should be no larger than 30" wide by 36" tall, or if hinged in the middle, a maximum of 60" wide by 36" tall. Display boards should be adequately labeled. (SF260)

8. + Range Plant Board – will include 25 range forage species important to a particular county.
9. + Special Study Board– a display of the results of a clipping study, a degree of use study or range site study.

10. + Junior Rancher Board– this exhibit should include a ranch map with a record book or an appropriate educational display on some phase of rangeland or livestock management.