DEPARTMENT G – PLANTS & ANIMALS
AGRONOMY

4-H Staff Person Responsible – John Kilpatrick

DEPARTMENT G-CROP PRODUCTION

GENERAL INFORMATION:

A. Individuals with field crop production 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 exhibitors name and address, county, plant hybrid or variety, plant population, whether crop production was irrigated or dryland, and general information including farm cropping history, soil type and weather effects. **The essay also must include an economic analysis of the project, covering income and expenses per acre.** 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), and quality of exhibit.

C. Grain exhibits must be one gallon per sample. Fall harvested crops (e.g., corn or soybeans) may be from the previous year's project. Display containers will be furnished. Plant exhibits: Corn 10 ears or 3 stalks (cut at ground level with no soil and bound together); Grain Sorghum - 4 stalks (cut at ground level and bound together); Soybeans - 6 stalks (cut at ground level and bound together); Small grains (oats, barley, wheat, triticale) - sheaf of heads 2 inches in diameter at top tie with stems about 24" long. Other crops (alfalfa, millet, etc.) –Sheaf of stems 3 inches in diameter at top tied with stems cut at ground level or half size small square bale. All plant exhibits, with the exception of ears of corn, must be the result of the current year's project.

Department G – Plants & Animals
Division 750 - Agronomy

CLASS 1 **CORN**
(includes yellow, white, pop, waxy, or any other type)

CLASS 2 **SOYBEANS**

CLASS 3 **OATS**

CLASS 4 **WHEAT**

CLASS 5 ANY OTHER CROP

(includes grain sorghum, alfalfa, millets, barley, rye, triticale, amaranth, dry beans, sugar beet, mung bean, canola, forage sorghum, safflower, etc)

Guidelines for all 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) as a poster on 24" by 24" ¼" 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. 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.

CLASS 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, bioenergy, etc,

CLASS 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,

CLASS 8 CROP END USE DISPLAY

Display information about the uses for a crop including examples of products.

CLASS 9 WATER OR SOIL CONSERVATION DISPLAY

Display information about ways to protect or conserve water and soil resources

CLASS 10 SOILS DISPLAY

The purpose of this class is to allow original and creative exhibits that contain educational information about soils, such as how soils are being used for crop production, range, conservation, wildlife, or wetland use.

Department G – Plants & Animals
Division 751 – Weed Management

GENERAL INFORMATION: WEED MANAGEMENT

A. Any individual with a range or conservation project may exhibit a weed book or weed display. The book cover and majority of 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).

B. Exhibits will be judged based on completeness of plant mount, accuracy of identification, label, neatness, and conformity to exhibit requirements.

C. Display one plant on the book cover (no label required on cover specimen). Plants must be mounted on sheets that are 11" wide x 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 clover.

D. Each completed mount must have a 3" x 5" cardstock label glued flush in the lower right corner of the mounting sheet. The label (see example below) should include

the following information: 1. Scientific name (in italic or underlined), with authority, 2. Common name, 3. County of collection, 4. Collection date, 5. Collector's name, 6. Collection number, 7. Other information depending on class selected, i.e., noxious, life form. This information should be typed or printed neatly.

Scientific name: *Abutilon theophrasti* Medic.
Common name: velvetleaf
County of collection: Douglas County
Collection date: 6 September 2002
Collector's name: Dan D. Lion
Collection number: 3
Life cycle: annual

Department G – Plants & Animals
Division 751 – Weed Management

CLASS 1 **WEED IDENTIFICATION BOOK**

Each book shall contain a minimum of 15 plant mounts and must include at least two of the following prohibited noxious weeds (Canada thistle, musk thistle, plumeless thistle, salt cedar, leafy spurge, purple loosestrife, diffuse knapweed, or spotted knapweed), and at least five weeds that are a problem primarily in lawns.

CLASS 2 **LONGEVITY**

A collection of 6 perennial, 1 biennial, and 6 annual weeds selected from grasses, sedges, or forbs.

CLASS 3 **WEED IDENTIFICATION BOARD**

This exhibit should display a collection of 20 weed species important to a particular county. The display board should be hinged in the middle with the total open width of 60" and height of 36". This display should be adequately labeled.

Guidelines for 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) as a poster on 24" by 24" ¼" 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. 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.

CLASS 4 **WEEDS DISPLAY**

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