

## DIVISION 261 - PORTFOLIO PATHWAYS

- Use techniques from manual or comparable techniques. **Attach information to explain steps taken.** Information must also include element or principle of design used. (SF200) Classes 1-7.

PREMIUMS: Purple-\$3.00; Blue-\$2.00; Red-\$1.50; White-\$1.00

- C261001\* **ORIGINAL ACRYLIC PAINTING** - based on techniques learned in Unit 1 of Portfolio Pathways, framed and ready to hang; (p. 10-13).
- C261002\* **ORIGINAL OIL PAINTING** - based on techniques learned in Unit 1 of Portfolio Pathways, framed and ready to hang; (p. 26-33).
- C261003\* **ORIGINAL WATERCOLOR** - based on techniques learned in Unit 1 of Portfolio Pathways, framed and ready to hang; (p. 14-17).
- C261004\* **ORIGINAL SAND PAINTING** - based on techniques learned in Unit 1 of Portfolio Pathways, framed and ready to hang; (p. 20-21).
- C261005\* **ORIGINAL ENCAUSTIC PAINTING** - based on techniques learned in Unit 1 of Portfolio Pathways, framed and ready to hang; (p. 34-35).
- C261006\* **HOME ACCESSORY MADE WITH ANY PRINTING TECHNIQUE IN PATHWAYS UNIT II** - (p.36-56).
- C261007\* **ORIGINAL MIXED MEDIA ACCESSORY** - An art exhibit using a combination of two or more different media or materials. One media must be included in another Portfolio Pathways class. (ex. Watercolor and graphite).
- C261008\* **NEBRASKA LIFE EXHIBIT** - An art exhibit using one of the techniques in the above classes to show how art can define a sense of place or life in Nebraska. For example - solar printing; making prints using shed snakeskin or plant; an acrylic, oil; watercolor painting of scenes of your community or the surrounding area; or using objects from nature to make the painting. Include the required information listed above and how this project represents Nebraska life.

## ENVIRONMENTAL EDUCATION/EARTH SCIENCE

### DIVISION - CONSERVATION & WILDLIFE

Conservation, Wildlife and shooting sports give 4-H members an opportunity to share their knowledge and field experience about conservation, wildlife, and shooting sports. When creating an exhibit make sure to take close account of the rules while taking into account the different laws that surround those area.

- **Show What You Did and Learned** - All exhibitors will show evidence of their personal field experiences, research, or observations that relate to their exhibit. This helps judges understand what the 4-Her did and learned in the process that led to the exhibit.
- **Proper Credit** - Show proper credit by listing the sources of plans or other supporting information used in exhibits.
- **Whose Exhibit?** - The exhibitor's name, address, and parent's or guardian's name must be on the back or bottom of all displays.
- **Wildlife and Wildlife Laws** - "Animal" or "wildlife" in the following classes include wild fish, amphibians, reptiles, birds, or mammals. Please make sure you are following all appropriate wildlife laws.
- **Project Materials** - Related project booklets include Exploring Your Environment Series, 4-H Shooting Sports, Amphibians, Bird Behavior (EC 59381), Fishing for Adventure Project Manuals, Wildlife Conservation (4-H 125), Geology, and Outdoor Adventure. Other resources include: Outdoor Skills: Learning Science in the Outdoors Series (Science Signature Outcome Program) [outdoornebraska.gov/afterschool/](http://outdoornebraska.gov/afterschool/) and [www.whep.org](http://www.whep.org).
- **Board and Poster Exhibits** - These are displays that show educational information about a topic of interest. Board exhibits can hold objects such as fishing equipment or casts of animal tracks. Mount all board exhibits on 1/4" plywood, Masonite, or similar panel no larger than 24" high by 24" wide. Poster exhibits should be on regular poster sheets, no larger than standard size (22" x 28") but half size, 22" x 14", is recommended.

Scoresheets, forms, contest study materials, and additional resources can be found at: <https://go.unl.edu/ne4hconservation-wildlife-shooting>

PREMIUMS: Purple-\$3.00; Blue-\$2.00; Red-\$1.50; White-\$1.00

### DIVISION 340 - WILDLIFE

- D340001\* **MAMMAL DISPLAY** - Board or poster exhibits. Display may show any aspect of wildlife, wildlife habitat, or related conservation. Examples: life history or other facts about one type of wildlife; how to manage wildlife on a farm or in town; managing habitat for one kind of wildlife; life requirements for one kind of wildlife during one season or through the year; wildlife behavior and habitats. For more ideas, refer to project booklets. (SF154)

- D340002\* **BIRD DISPLAY** - Board or poster exhibits. Display may show any aspect of wildlife, wildlife habitat, or related conservation. Examples: life history or other facts about one type of wildlife; how to manage wildlife on a farm or in town; managing habitat for one kind of wildlife; life requirements for one kind of wildlife during one season or through the year; wildlife behavior and habitats. For more ideas, refer to project booklets. (SF154)
- D340003\* **FISH DISPLAY** - Board or poster exhibits. Display may show any aspect of wildlife, wildlife habitat, or related conservation. Examples: life history or other facts about one type of wildlife; how to manage wildlife on a farm or in town; managing habitat for one kind of wildlife; life requirements for one kind of wildlife during one season or through the year; wildlife behavior and habitats. For more ideas, refer to project booklets. (SF155)
- D340004\* **REPTILE or AMPHIBIAN DISPLAY** - Board or poster exhibits. Display may show any aspect of wildlife, wildlife habitat, or related conservation. Examples: life history or other facts about one type of wildlife; how to manage wildlife on a farm or in town; managing habitat for one kind of wildlife; life requirements for one kind of wildlife during one season or through the year; wildlife behavior and habitats. For more ideas, refer to project booklets. (SF156)
- D340005\* **WILDLIFE CONNECTIONS** - Board or poster exhibit. The purpose of this display is to show interconnections and related aspects among animals, plants, and other habitat components. All displays should show two or more interactions (connections) that occur between/among animals or between animals and their habitat. Displays might show how animals interact with other animals, with people, or with their habitat. Examples:
- ◆ Food Chain Display. Use pictures, drawings, or other items to illustrate the source of food energy and where it goes - who eats whom or what. Use arrows to show the direction of the energy (food) flow.
  - ◆ Show the role of predators, scavengers, insect eaters, or others in nature.
  - ◆ Show how wildlife numbers (populations) change through the year.
  - ◆ Show predation, competition, or other behavioral interactions of wildlife.
  - ◆ Choose one kind of wildlife and make observations through a season or year, keep notes of interactions, then make a display of what you saw. (SF157)
- D340006\* **WILDLIFE TRACKS** - Board or diorama-type box exhibit. Make a display of animal tracks using plaster-of-paris casts. There are 3 options. For all options, include a brief description of your experiences in making the tracks so the judge better understands what you did and learned. Positive casts (impressions as they would be in nature) are preferred, but not required.
1. **Option one** should show plaster-of-paris tracks of five or more kinds of wildlife along with a picture or illustration of each kind of animal. **OR**
  2. **Option two** should show two or more plaster-of-paris tracks of one specific kind of wildlife and should include a picture or illustration of the animal, what the animal may eat, and what may eat the animal. **OR**
  3. **Option three** should show two tracks and include the animal's habitat needs including preferred food, shelter, water, and space in addition to picture or illustration of the animal. (SF158)
- D340007\* **WILDLIFE KNOWLEDGE CHECK** - Use electrical circuits, pictures, or other methods of teaching wildlife identification or other wildlife related knowledge. Plan size and shape to fit transportation and display; maximum size 24" x 24". (SF159)
- D340008\* **WILDLIFE DIORAMA** - Box must be no larger than 24" x 24". The exhibit might show a grassland, prairie, agricultural, woodland, riparian (stream or river corridor), wetland, and/or other area with wildlife habitat. Example: show a large unbroken grassland or prairie for species such as meadowlarks, greater prairie-chicken, lark bunting, grasshopper sparrows, Ferruginous hawk, burrowing owl, horned lark, upland sandpiper, or pronghorn; AND/OR show an area interspersed with several habitats such as windbreaks, farm fields, woods, waste areas, ditches, and pastures for edge-adapted species such as white-tailed deer, Northern bobwhite, mourning doves, cottontail rabbits, fox, squirrels, Northern cardinals, or blue jays. Label the habitats displayed and show at least five kinds of wildlife in their proper habitats. (SF160)
- D340009\* **WILDLIFE ESSAY** - Learn how to share educational information by writing. Choose a conservation or wildlife topic that interests you and write an essay about it. For example: write about particular species of wildlife that you have observed or about the values of wildlife. You might write about wildlife on a farm, in town, in a backyard, at a backyard feeder, or at other places. You might write about hunting, fishing, or ethics and proper behavior for hunting or fishing. The essay is between 100 and 1000 words long and typed, double spaced on 8 1/2" x 11" paper. You might use books, magazines, or personal interviews as resources, but you must give credit to all sources by listing them. (SF161)
- D340010\* **WILDLIFE VALUES SCRAPBOOK** - Make a scrapbook about the various values of wildlife following guidelines in the Wildlife Conservation project booklet (4-H 125). (SF162)
- D340011\* **WILDLIFE ARTS** - The purpose of this class is to allow artistic exhibits that contain educational information about conservation and wildlife. Examples might include paintings, photographs, wood carvings, painted duck decoys, or songs or poems written by the exhibitor. Entries must be appropriate for fair display and no larger than 24" x 24". For example: paintings or photographs should be displayed in notebook format or mounted on a sturdy panel. All entries must include a title and brief explanation of the purpose or message (what is the exhibit meant to show). (SF163)

D340012 **OTHER** - Any other wildlife exhibit. (Be sure to include proper documentation)

### DIVISION 342 - WILDLIFE HABITAT

- D342001\* **HOUSES** - Make a house for wildlife. Examples: bird house (bluebird, purple martin, wood duck, kestrel, barn owl, etc.) or bat house; no insect houses. Make the house functional so that dimensions, hole size, etc. are appropriate to fit the intended species' needs. Include the following information:
- 1) the kinds of animal(s) for which the house is intended,
  - 2) where and how the house should be located for best use, and
  - 3) any seasonal maintenance needed. Tips: check NebGuide on bird houses and shelves. (SF165)
- D342002\* **FEEDERS/WATERS** - Make a bird bath or feeder. Examples: seed, suet, or nectar feeders. Squirrel feeder okay; no insect feeders. Indicate the kinds of animal(s) for which the feeder or waterer is intended. Make the feeder or waterer functional so that it fits wildlife needs. Include the following information:
- 1) where and how the feeder or waterer should be located for best use, and
  - 2) how it should be maintained. Tips: check NebGuide on feeding birds. (SF166)
- D342003\* **WILDLIFE HABITAT DESIGN BOARD OR POSTER EXHIBIT** - Choose a backyard, acreage, or farm, and design a habitat plan to meet the food, water, shelter, and space needs of at least three kinds of animals you would like to attract. Draw an outline of the area and show what plants or other habitat will be provided. Indicate how the various parts of your plan provide the desired habitat needs. You might include an aerial photo of the area if you have one. (SF167)

### DIVISION 343 - HARVESTING EQUIPMENT

- D343001\* **FISH HARVESTING EQUIPMENT** - Board exhibit. Display of equipment used in fish harvesting. Examples: fishing knots, hooks (with corks over ends for safety), lures. Label all items displayed. Include in your exhibit the following information:
- 1) the purpose of each item,
  - 2) when or where each item is used in relation to other equipment, and
  - 3) any personal experiences you've had with the item(s). (SF168)
- D343002\* **BUILD A FISHING ROD** - Build your own fishing rod for exhibit and for fishing use. Rod building blanks and kits with instructions are available for this purpose. A fishing rod educational exhibit may not exceed 96" in length. Exhibit must be mounted on a board and labeled with the member's name, county and class number.
- ◆ Include with the exhibit the following items as a brief attachment:
    - Explanation of cost of materials/components
    - where materials/components were purchased
    - how made
    - number of hours required for construction.
  - ◆ Identify all parts.
    - Necessary components which must be included are grip, line guides (based on manufacturers specifications), guide wraps, and hook keeper. Reel seat needs to be aligned with guides, and guides aligned accurately down rod. Guide wraps of size A to D, nylon or silk thread.
  - ◆ Exhibit will be judged on: workmanship, labeling of parts (guides, etc.), correct information, and neatness. (SF169)
- D343003\* **CASTING TARGET** - Make a casting target for exhibit and use, following guidelines on the reference sheet. Target must be under 36" x 36". The bullseyes/rings must be 1' in diameter and can have up to 3 rings. They must be easy to store, durable, and weather resistant. (SF170)
- D343004\* **WILDLIFE HARVESTING EQUIPMENT BOARD EXHIBIT** - Display of equipment used in harvesting wildlife. Examples: expended ammunition casings (no live ammunition permitted), steel traps, hide stretchers, fleshers, etc. For displays of shotguns, rifles, or bows, use drawings or pictures. Label all items displayed. Include in your exhibit the following information:
- 1) the purpose of each item,
  - 2) when or where it is used in relation to other equipment, and
  - 3) any personal experiences you've had with the item(s). (SF171)
- D343005\* **INVENTING WILDLIFE/FISH HARVESTING EQUIPMENT, AID OR ACCESSORY** - Use engineering principles to invent or adapt equipment that helps you harvest fish or wildlife. This could include wildlife calls, adapted fishing pole for shallow water, a blind, decoys, etc. Share your drawing (or adapted plans), how the equipment works, how you tested it, and the results of testing your prototype and any adjustments you made. (SF168)
- D343006 **TACKLE BOX**
- D343007 **POSTER ON DIFFERENT BAITS** (22" x 24")

### DIVISION 346 - TAXIDERMY

- D346001\* **TANNED HIDES or TAXIDERMY** - Any legal fish, bird, or other wild animal properly processed by the member. No requirement as to size or mounting. Include the following information:
- 1) the animals name
  - 2) information about the exhibitor's personal field experiences, study, or observations that relate to the exhibit. (SF172)

## DIVISION 348 - BIRD BEHAVIOR

- D348001 **WOODEN BIRD HOUSE** - Built and constructed for a specific bird. Include card with name of bird and birdhouse requirements.
- D348002 **WOODEN BIRD FEEDER or FEEDING STATION**
- D348003 **SCRAPBOOK or ESSAY** - Show pictures of birds, stories of unusual birds and news of game birds in Nebraska
- D348004 **OTHER BIRD EXHIBIT** (Be sure to include proper documentation)

## DIVISION 361 - OTHER NATURAL RESOURCES

- D361001\* **DESIGN YOUR OWN EXHIBIT IN NATURAL RESOURCES, CONSERVATION, GEOLOGY, OR ECOLOGY** - This class is for educational exhibits about natural resources, conservation, wildlife, or ecology that do not fit into other categories. Entries must be appropriate for fair display and no larger than 24" x 24". All entries must include a title and should be clear (a brief explanation or other method) about the intended purpose or message—what the exhibit is meant to show. Think about accuracy, creativity, educational value for viewers, and evidence of exhibitor's personal experiences and learning. (SF164)

## DIVISION - FORESTRY

- The official reference for all forestry projects is the Tree Identification Manual (4-H 332) which was recently revised and is available for purchase from UNL Marketplace. Other helpful forestry references include Trees of Nebraska (EC 1774), Leafing Out (4-H 431), and Plant a Tree (EC 17-11-80).
- Display "boards" must be made from wood or wood composite, i.e., plywood, fiberboard, or masonite, 1/4" to 1/2" thick and no larger than 24" x 24". Display boards may be coated, e.g., painted or varnished, on both sides to prevent warping.
- Display "posters" must be made from a material, e.g. foam board or poster board, that will stand upright without buckling, and be no larger than 24" x 24".
- Display "books" must measure no more than 16" x 16".
- At least 5 of the 10 samples in Class 2, 3, 4, and 5, must be from the list of 60 species described in 4-H 332. Samples must be from 10 different tree species. For example, Emerald Queen Maple and Crimson King Maple are both varieties of the same species (Norway Maple), and thus have the same genus and species name, i.e. *Acer platanoides*. All samples must be from trees, NO shrubs. If more than 10 samples are included in the display, only the first 10 samples from the current year will be judged.
- **Due to emerald ash borer infestation, no true ash species (Green Ash, White Ash, Black Ash, or Blue Ash) may be included in any collections. Inclusion of a true ash species will result of the project being disqualified.**
- Remember that other general labeling standards apply. For example scientific names are always italicized or underlined. Also, the first letter of a Genus name is always capitalized. The first letter of a species name is always lower case. When required, always indicate complete scientific names (Genus and species) and common names, (e.g. Norway Maple) even when "variety names" are included. For example, the scientific name of Emerald Queen Maple is *Acer platanoides* and the common name is Norway Maple. "Emerald Queen" may be included as the variety name, but variety names are not required.
- How well the exhibitor follows written directions is an important factor in judging.

Scoresheets, forms, contest study materials, and additional resources can be found at: <https://go.unl.edu/ne4hforestry>

PREMIUMS: Purple-\$3.00; Blue-\$2.00; Red-\$1.50; White-\$1.00

## DIVISION 320 – FORESTRY

- D320001\* **DESIGN YOUR OWN EXHIBIT** - Prepare an educational exhibit about some aspect of trees, forests or forestry that is of special interest to you. Possible topics include paper recycling, wild fire, forest products, forest wildlife, or forest pests. The only requirement is that the display must be no larger than 24" by 24" by 24". Photographs, drawings, samples, charts, posters, etc. can be used, but include enough information to adequately explain the topic. Your display should be substantially different from other display classes. Be as creative as you like.
- D320002\* **LEAF DISPLAY** - The leaf display must include samples of "complete leaves" from at least 10 different tree species. The display must include at least two samples of simple leaves, compound leaves, and conifer leaves. Leaves should be pressed, dried and mounted.
- **Collection:** Whenever possible, collect leaves from mature trees. Collect leaves any time after they have reached full size, usually beginning in early summer. Leaf samples should be in good condition and representative of the average leaves on the tree. Keep in mind that shaded leaves are often much larger than normal. Carefully remove leaves from the twig with the entire petiole or rachis intact. After collection, fresh leaf samples can be temporarily stored within the pages of an old magazine, but they should be properly pressed and dried for display. Be sure to record pertinent information during collection. All collection must be done by the exhibitor.

- **Mounting:** Leaves may be displayed in a notebook or on a display board. Any method may be used to mount leaves, e.g., wire, glue, tape, staples, plastic bags, but be sure all their features can be clearly identified.
- **Labeling:** The label for each sample must include:
  1. common name
  2. scientific name
  3. leaf type
  4. leaf arrangement (for broadleaf trees)
  5. leaf composition (for broadleaf trees)
  6. collector's name
  7. collection date
  8. collection location (be specific, state and county at a minimum)
- If a twig is included with a sample, indicate "twig included" on the label. For example, the twig may be included with an eastern red cedar sample because the leaves are very small and difficult to remove from the twig.
- **Supplemental information:** e.g., general uses, common products, fall color, etc., may be included with the display to enhance its educational value.

D320003\* **TWIG DISPLAY** - The twig display must include twig samples from at least 10 different tree species. The display must include at least two samples of opposite and alternate leaf arrangements from broadleaf trees.

- **Collection:** Twig samples should be collected during dormant season (November—April) when the buds are mature. Twig samples must be at least 6 inches long and exhibit buds. Leaves must be removed and side branches must be trimmed to less than 1 inch in length. All collection must be done by the exhibitor.
- **Mounting:** Twigs must be mounted on a display board. Any method, e.g. wire, glue, tape, staples, plastic bags, etc., may be used to mount twigs, but be sure all features can be clearly identified. The non-terminal end must be cut at a slant so the pith can be seen.
- **Labeling:** The label for each sample must include:
  1. common name
  2. scientific name
  3. leaf arrangement (for broadleaf trees)
  4. collector's name
  5. collection date
  6. collection location (be specific, state and county at a minimum)
- **Supplemental information:** e.g., general uses, tree characteristics, etc., may be included with the display to enhance its educational value.

D320004\* **SEED DISPLAY** - The seed display must include seed samples from at least 10 different tree species.

- **Collection:** Tree seeds should be collected at the time of year when they mature, which varies widely depending upon tree species. For example, Silver Maple seeds mature in May while Red Oak acorns do not mature until September. Seed samples should be free of insect or disease symptoms. Remember to display seeds, not fruit. For example, the seed of honey locust is enclosed in a pod. Remove and display the seed, not just the pod. It is acceptable to display the fruit with the seed, but clearly label each. All collection must be done by the exhibitor.
- **Mounting:** Seeds may be displayed in a variety of ways, e.g. mounted on a display board, displayed in jars in a rack, etc., but they must be securely mounted and easily viewed. Be as creative as you like.
- **Labeling:** The label for each sample must include:
  1. common name
  2. scientific name
  3. type of fruit, if known (e.g. samara, pod, nut, legume, etc.)
  4. collector's name
  5. collection date
  6. collection location (be specific, state and county at a minimum)
- **Supplemental information:** e.g., maturity date, average number of seed in the fruit, etc., may be included to enhance its educational value.

D320005\* **WOOD DISPLAY** - The wood display must include wood samples from at least 10 different tree species.

- **Preparation:** Samples may be of any shape, e.g. sections from a board, wood cylinders turned on a lathe, horizontal or vertical cross sections of a small log with bark attached, etc., but all samples should be the same shape, e.g. all wood cylinders or all sections of a board. Each sample can be no larger than 4" by 4" by 4". Cut surfaces should be sanded to show the grain. Treating samples with a clear finish (no stain) is optional. All collection must be done by the exhibitor.
- **Mounting:** Samples may be displayed in a variety of ways, e.g. mounted on a display board, displayed in a box or rack, etc., but they must be securely mounted and easily viewed. Be as creative as you like.
- **Labeling:** The label for each sample must include:
  1. common name
  2. scientific name
  3. wood type (softwood or hardwood)
  4. collector's name

- 5. collection date
  - 6. collection location (be specific, state and county at a minimum)
  - **Supplemental information:** e.g., common products, wood density, etc., may be included to enhance educational value.
- D320006\* **CROSS SECTION DISPLAY** - A disc cut from a tree species listed in 4H 332. The sample must be collected by the exhibitor, within one year of the state fair judging day. The disc must measure 6 to 12 inches in diameter and 1 to 3 inches thick. The bark should be firmly attached, which may be difficult if the tree was dead when the disc was cut. Sand at least one side of the disc so the grain can be easily seen. If the disc is treated with a clear finish, both sides must be treated to minimize warping. As the disc dries, some cracking or checking can be expected and is allowed.
- **Labeling:** The following parts must be clearly and accurately labeled on the cross section with pins, paper tags, or some other form of identification:
    - A. pith
    - B. heartwood
    - C. sapwood
    - D. one growth ring (beginning and end)
    - E. cambium
    - F. bark
  - A separate label attached to the back of the disc must include:
    - 1. common name
    - 2. scientific name
    - 3. tree classification (softwood or hardwood)
    - 4. age (of the cross section)
    - 5. collector's name
    - 6. collection date
    - 7. collection location (be specific, state and county at a minimum)
- D320007\* **PARTS OF A TREE - This project is only for ages 8 - 11.**  
Prepare a poster, no larger than 24" x 24" that clearly identifies the main external parts of any tree:
- A. Trunk
  - B. Crown
  - C. Roots
  - D. Leaves
  - E. Flowers
  - F. Fruit
  - G. Buds
  - H. Bark
- Identifying other internal parts, e.g. phloem, xylem, cambium, annual ring, pith, etc., is optional. Attach a separate label on the back of the poster that includes the exhibitor's name and age.
- D320008\* **LIVING TREE DISPLAY** - A living tree seedling grown by the exhibitor from seed in the display container. The seed must be from a species listed in 4H 332. The seedling must be 60 days to 1 year old (on State Fair judging day). The display container must contain at least 8 inches of soil (potting mix or suitable natural soil), have drainage hole(s), and a drain pan to catch drainage water.
- **Labeling:** A waterproof label must be attached and include:
    - 1. common name
    - 2. scientific name
    - 3. seed treatments (if any)
    - 4. planting date
    - 5. emergence date
    - 6. exhibitor's name
  - **Supplemental information about the tree:** e.g. - where the seed was collected, growth measurements, uses for that species, etc., may be included in an attached notebook, poster, etc. to enhance educational value.
  - Supplemental information will be an important factor in judging.

## DIVISION - 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.

- 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 2016), Common Grasses of Nebraska (EC 170), and Common Forbs and Shrubs of Nebraska (EC118).

- 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.

### DIVISION 330 - RANGE MANAGEMENT

PREMIUMS: Purple-\$3.00; Blue-\$2.00; Red-\$1.50; White-\$1.00

#### BOOKS (Classes 1-6)

- 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.
- 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.

Scientific name: <i>Schizachyrium scoparium</i> (Michx.) Nash Common name: Little bluestem County of collection: Boone County Collection date: 6 August 2021 Collector's name: Joe Smith Personal collection number: 37 Value and Importance: Livestock Forage: High, Wildlife Habitat: High, Wildlife Food: Medium OR Life Span: Perennial OR Season of Growth: Warm Season OR Origin: Native
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- D330001\* **VALUE & IMPORTANCE FOR LIVESTOCK FORAGE & 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 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. (SF260)
- D330002\* **LIFE SPAN BOOK** - A collection of 6 perennial plant mounts and 6 annual plant mounts selected from grasses or forbs. (SF260)
- D330003\* **GROWTH SEASON BOOK** - A collection of 6 cool-season grass mounts and 6 warm-season grass mounts. (SF260)
- D330004\* **ORIGIN BOOK** - 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. (SF260)
- D330005\* **MAJOR TYPES OF RANGE PLANTS BOOK** - A collection of plant mounts of 3 grasses, 3 forbs, 3 grass-like, and 3 shrubs. (SF260)
- D330006\* **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. (SF260)

#### DISPLAYS (Class 7)

- 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 titled. Make sure to label display with exhibitor's name, address, and county on back side.
- D330007\* **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. (SF259)

## BOARDS (Classes 8-9)

- Boards should be no larger than 30" wide by 36" tall. Boards should be adequately labeled.
- D330008\* **SPECIAL STUDY BOARD** - 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 and should be placed in a sheet cover attached to the board. (SF260)
- D330009\* **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. A short essay must accompany the display to explain the purpose of the rancher board, what was learned, etc. (SF260)

## DIVISIONS - SHOOTING SPORTS

4-H Shooting Sports requires youth to be under the direct leadership of a certified 4-H Shooting Sports Leader in either shotgun, rifle (BB gun, pellet rifle, .22), archery, and/or hunting skills. No firearms can be entered as an exhibit, nor live ammunition; however, information can be shared through pictures. **Classes 4-9 can be entered by anyone in the conservation and wildlife area.**

- To participate in these competitions, a 4-Her **MUST** have been enrolled in the Boone County 4-H Shooting Sports Club during the current year and **MUST** have attended at least **three** practices in each discipline with a certified instructor to compete in that division at the fair.
- To compete in:
  - ◆ BB Gun/Archery - Open to all youth age 8 & older before January 1 of the current calendar year.
  - ◆ Air Rifle - 4-Her must be in their second year, or age 9 & older before January 1 of the current calendar year.
  - ◆ .22 Rifle/Shotgun - 4-Her must be age 10 & older before January 1 of the current calendar year. Youth 10 and 11 years of age **must be** accompanied by an adult.
- **Dress Code** - Participants are expected to dress appropriately for the events in which they participate and contestants **must** wear the official County 4-H/FFA dark grey colored t-shirt with current logo on back. Both young people and adults should wear attire appropriate for the weather while remaining modest and socially acceptable. Clothing with sexually suggestive wording or graphics, and alcohol or tobacco advertisement is not appropriate.
- **Footwear Policy** - **Any participant while on the shooting line or shooting in any outdoor shooting event is required to wear shoes that completely cover their feet. Examples of footwear that are not acceptable include, but not limited to: sandals, clogs, crocks, flip-flops, and bare feet.**
- Please read carefully to assure entry in proper age division. All ages will be before January 1 of the current calendar year.
- BB Guns are defined as: Any spring gun or air powered gun that shoots BB's. Must be smooth bore, weigh 6 pounds or under, will be shot at 5 meters (16' 4"). No scopes allowed.
- Air Rifles are defined as: Any hand pump or CO2 air rifle with or without rifling in the barrel that uses .177 caliber pellets. Scopes will not be allowed! Targets will be shot at 10 meters (32' 9").
- Members are encouraged to use their own firearms. Club guns will be available to use if needed.
- Auto shotgun must have shell catcher.

### The following are rules for firearms brought to the fair match:

- ◆ They meet the specific criteria mentioned in the definitions above.
- ◆ All firearms be clean and in good working condition.
- ◆ Shooters are responsible for and must wear ear protection for .22 Rifle and Trap Shooting Competition. Safety glasses will be provided and must be worn for all events.
- ◆ All ammunition must be separate from the gun. For trap, a maximum load of 1 1/8 ounce of size 7 1/2, 8, 8 1/2, or 9 shot must be used.

PREMIUMS: Purple-\$3.00; Blue-\$2.00; Red-\$1.50; White-\$1.00

## DIVISION 347 - EXHIBIT CLASSES

- 4-H Shooting Sports requires youth to be under the direct leadership of a certified 4-H Shooting Sports Leader in either shotgun, rifle (bb gun), archery, pistol, blackpowder/muzzleloader, and/or hunting skills.
  - No firearms can be entered as an exhibit, nor live ammunition; however information can be shared through pictures.
- D347001\* **SHOOTING AID OR ACCESSORY** - Any item which helps the shooter/hunter better perform their sport, examples: rifle sling, kneeling roll, arm guard, shotgun vest, target boxes, shooting stick, etc. Include your design, or plans you adapted, what the item is and used for. (SF253)
- D347002\* **STORAGE CASE** - An item with the purpose to safely hold a firearm, bow, ammunition, and/or arrows, examples: soft sided shotgun case, quivers, firearm safe. Include your design, or plans you adapted. Explain how the storage case is used. (SF254)

- D347003\* **PRACTICE GAME OR ACTIVITY** - Invent or adapt an activity to practice or teach a project skill. Include pictures of youth playing the game, testimonials for 4-H members who played the game, what skill is being worked on, and directions for the game. Explain how you came up with the game or adapted it to fit the needs of your group members. (SF255)
- D347004\* **SCIENCE, ENGINEERING, TECHNOLOGY ADVANCEMENTS OF SHOOTING SPORTS, CONSERVATION or WILDLIFE ESSAY OR DISPLAY** - Choose a specific area of shooting sports and share how it has advanced, include a timeline and photos or illustrations. Keep your topic narrow and manageable. Essays are limited to 1000 words and should be on 8 1/2" x 11" paper. (SF256)
- D347005\* **HEALTHY LIFESTYLES PLAN** - Include a shooter's, (hiker's, camper's, angler's) diet and exercise plan, and how the 4-H member will benefit or improve from following the plan. Ideally, the 4-H member would follow the plan and include some journal entries about adaptations or improvements made while following the plan. (SF257)
- D347006\* **CITIZENSHIP/LEADERSHIP PROJECT** - Share a display on a citizenship project or leadership project the 4-H member took on individually or with a group to improve some aspect related to 4-H Shooting Sports, Conservation or Wildlife. Examples could be range development, conservation planting to attract wildlife, a camp, or 4-H recruitment event. Include who benefitted from the project, what the 4-H member's role was, and any results. (SF258)
- D347007\* **CAREER DEVELOPMENT/COLLEGE ESSAY, INTERVIEW OR DISPLAY** - Research opportunities for careers related to this area or opportunities for college majors or college activities to help discover using project skills beyond a person's 4-H career. Essays are limited to 1000 words and should be on 8 1/2" x 11" paper. Interviews need to include a picture of the interviewee in their work setting, questions asked, and a transcript of answers. (SF252)
- D347008\* **COMMUNITY VITALITY DISPLAY** - Explore the difference shooting sports, conservation, fishing, and hunting make in keeping Nebraska vibrant especially in rural area. Present facts and research in an interesting way for the public to learn from. (SF251)
- D347009\* **AG LITERACY-VALUE ADDED AGRICULTURE INTERVIEW OR RESEARCH PROJECT** - Explore how traditional ag producers are adding value to their production agriculture operations through conservation efforts, hunting, raising pheasants, shooting sports related tourism, etc. Present findings in an interesting way for the public to learn from. (SF250)

#### **DIVISION 458 - ARCHERY**

- BareBow - (BB), Compound, Recurve/Long Bow, or Genesis, must be shot with fingers, no sights or stabilizers allowed.
- Freestyle - (FS), any bow, shot with a mechanical release, sights, stabilizers, and peep sights allowed.

**Enter only one of the following:**

- D458001 **ARCHERY - BAREBOW** - 8-11 Years Old  
 D458002 **ARCHERY - BAREBOW** - 12-14 Years Old  
 D458003 **ARCHERY - BAREBOW** - 15-18 Years Old  
 D458004 **ARCHERY - FREESTYLE** - 8-11 Years Old  
 D458005 **ARCHERY - FREESTYLE** - 12-14 Years Old  
 D458006 **ARCHERY - FREESTYLE** - 15-18 Years Old

#### **DIVISION 461 - BB GUN**

- Course of Fire - 10 shots prone, 10 shots standing, 10 shots kneeling, 10 shots sitting (Total of 40 shots).

- D461001 **BB GUN** - 8 Years Old  
 D461002 **BB GUN** - 9 Years Old  
 D461003 **BB GUN** - 10 Years Old  
 D461004 **BB GUN** - 11 Years Old  
 D461005 **BB GUN** - 12-13 Years Old  
 D461006 **BB GUN** - 14 & Over

#### **DIVISION 462 - AIR RIFLE**

- Course of Fire - 20 shots standing, 10 shots prone, 10 shots kneeling (Total of 40 shots).

- D462001 **AIR RIFLE** - 9 Years Old  
 D462002 **AIR RIFLE** - 10 Years Old  
 D462003 **AIR RIFLE** - 11 Years Old  
 D462004 **AIR RIFLE** - 12-13 Years Old  
 D462005 **AIR RIFLE** - 14 & Over

## DIVISION 463 - .22 RIFLE

- NRA 1/2 scale metallic silhouette targets will be shot.
  - ◆ 10 - Rams at 100 meters or 109 yds.
  - ◆ 10 - Turkeys at 77 meters or 84 yds.
  - ◆ 10 - Pigs at 60 meters or 66 yds.
  - ◆ 10 - Chickens at 40 meters or 43 yds.
- Only .22 long rifle ammunition can be used. Hot loads, such as "stinger" are not permitted.
- Any sights, telescopic or metallic may be used.
- Trigger guard must be present. Any trigger not subject to discharge. In event of accidental discharge, trigger shall be adjusted or gun replaced.
- The stock must be traditionally styled from conventional configurations such as factory rifle stocks or silhouette stocks.
- The barrel can not exceed 30" from face of closed bolt to end of barrel.

### Enter only one of the following:

- D463001 **.22 RIFLE** - Open Sites - 10 & 11 Years Old
- D463002 **.22 RIFLE** - Open Sites - 12 & 13 Years Old
- D463003 **.22 RIFLE** - Open Sites - 14 & Over
- D463004 **.22 RIFLE** - Scope - 10 & 11 Years Old
- D463005 **.22 RIFLE** - Scope - 12 & 13 Years Old
- D463006 **.22 RIFLE** - Scope - 14 & Over

## DIVISION 464 - TRAP SHOOTING

- D464001 **TRAP SHOOTING** - 10 & 11 Years Old - Course of Fire - 25 - 16 Yards
- D464002 **TRAP SHOOTING** - 12 & 13 Years Old - Course of Fire - 50 - 16 Yards
- D464003 **TRAP SHOOTING** - 14 & 15 Years Old - Course of Fire - 25 - 16 Yards; 25 - 20 Yards
- D464004 **TRAP SHOOTING** - 16 & Over - Course of Fire - 25 - 16 Yards; 25 - 20 Yards; 25 - Doubles - 16 Yards

# HEALTHY LIFESTYLES

## DIVISIONS - FOODS, NUTRITION & FOOD PRESERVATION

The purpose of Food & Nutrition exhibits is to encourage the knowledge about healthy eating and safe cooking practices. This category has multiple projects that allow 4-H'ers to progress over numerous years. In addition, 4-H'ers will learn different types of cooking methods to improve their knowledge of cuisine.

- **SUPPORTING INFORMATION** - Each exhibit must include the recipe. Recipes may be handwritten, photocopied or typed. Place food on the appropriate size plate or container and put in self-sealing bag. Attach entry tag and recipe at the corner of the bag on the outside. For non-food entries, please attach the entry tag to the upper right hand corner of the entry. Additional information including recipes and supplemental information should be identified with 4-H'ers name and county.
- **CRITERIA FOR JUDGING** - Exhibits will be judged according to score sheets available at your local extension office. Make sure to follow all entry instructions required for your exhibit. Incomplete exhibits will be lowered a ribbon placing. Commercially prepared mixes are ONLY allowed in Cooking 201 Creative Mix Class. Prepared baking mixes, biscuit mixes, or other pre-made mixes entered in other categories will be lowered a ribbon placing.
- **FOOD PROJECTS** - Exhibits should be entered using a disposable pan or plate and covered by a plastic self-sealing bag. Extension Staff and the Fair Board are not responsible for non-disposable containers, lost bread boards, china or glassware.
- **INGREDIENTS** - Any ingredient that the 4-H'er uses must be able to be purchased by the 4-H'er. Ingredients such as beer, whiskey, rum, etc. may NOT be used in any recipe file or food exhibit. Exhibits that include alcohol will be disqualified.
- **FOOD SAFETY** - Exhibits are on display for several days. Please think FOOD SAFETY! Items that require refrigeration will not be accepted, judged or displayed as exhibits must be safe to eat when entered, whether they are tasted or not. Glazes, frostings, and other sugar based toppings are considered safe due to the high sugar content. Egg glazes on yeast breads and pie crusts BEFORE baking are acceptable. Eggs incorporated into baked goods and crusts are considered safe. The following food ingredients are considered unsafe for fair exhibits and will be disqualified:
  - ◆ Egg or cream fillings and cream cheese frostings
  - ◆ Any meat item including meat jerky, imitation meat bits (bacon bits, pepperoni, etc.)
  - ◆ Melted cheese on top of food exhibit (cheese mixed into baked goods is considered safe and will be accepted)
  - ◆ Uncooked fruit toppings (i.e. fresh fruit tart)