

ENVIRONMENTAL EDUCATION & EARTH SCIENCE

(ENTOMOLOGY, FORESTRY, CONSERVATION, WILDLIFE & SHOOTING SPORTS)
(Revised Information for 2021)

See General Rules pg. 2 for additional information.

All static exhibits must receive a purple at the county fair to advance to the State Fair.

ENTOMOLOGY, FORESTRY, SHOOTING SPORTS, CONSERVATION & WILDLIFE exhibits that qualify for State Fair are eligible for the PREMIER 4-H SCIENCE AWARD offered at State Fair. See pg. 5 for details.

ENTOMOLOGY

Entomology exhibits give 4-H'ers the opportunity to demonstrate their knowledge about insects and insect displays. This category has multiple projects that allows 4-H'ers to progress over numerous years.

GENERAL INFORMATION & EXHIBITING RULES – ENTOMOLOGY

1. Specimens in display collections should be mounted properly and labeled with location, date of collection, name of collector, and order name. Follow mounting and labeling instructions in the Nebraska 4-H Entomology Manual. Boxes are preferred to be 12" high X 18" wide, and landscape orientation, so they fit in display racks. Purchase of commercially-made boxes is allowed. All specimens must be from the collector. Exhibitors may, and should, correct and update collections for competition at the State Fair.

DEPARTMENT H - DIVISION 800 - ENTOMOLOGY

Division 800 Classes 001–008

Pay Category A

- SF)CLASS 001 Entomology Display, First Year Project** - Collection to consist of 25 or more different kinds (species) of insects representing at least 6 orders. Limit of one box. (SF186)
- SF)CLASS 002 Entomology Display, Second Year Project** - Collection to consist of a minimum of 50 kinds (species) of insects representing at least 8 orders. Replace damaged or poorly mounted specimens from previous year. At least 25 species must be present from after July 1 of previous year. Limit 2 boxes. (SF186)
- SF)CLASS 003 Entomology Display, Third Year or More Project** - Collection to consist of minimum of 75 kinds (species) of insects representing at least 10 orders. Replace damaged or poorly mounted specimens. At least 25 species must be from after July 1 of previous year. Limit of 3 boxes. (SF186)
- SF)CLASS 004 Special Interest or Advanced Insect Display** - Educational display developed according to personal interests and/or advanced identification capability. This also is an opportunity to highlight favorite insects in a creative arrangement. Insects should conform to pinning and mounting standards as in Classes 1-3 and be protected in an insect box. Each specialty display should include names of the insects, interesting information about them, and why the display was made. Advanced identification collections should have insects grouped with labels that correspond with identification level (e.g. family, genus, species). A specialty collection may consist of insects by taxonomic group (e.g. butterflies, grasshoppers, dragonflies, scarab beetles) or by host, subject or habitat (e.g. insect pests of corn, aquatic insects, insect mimicry, insect galls, insects from goldenrod, insect pollinators, etc.). (SF187)
- SF)CLASS 005 Insect Habitats** – Habitats consist of any hand-crafted objects, made of natural or artificial material which are placed outdoors, and which promote or conserve insects in the environment. Insects may include bee pollinators, butterflies, beneficial insects, etc. A one-page report must accompany the exhibit. (SF186)
- SF)CLASS 006 Macrophotography** – Subjects should be insects, spiders or another arthropods, or any nets, webs or constructions they make. All exhibit prints should be either 8" x 10" or 8 1/2" x 11" and mounted on ridged, black 11" x 14" poster or black matt board. Either orientation is acceptable. No frames allowed or mat board framing is allowed. A caption of a few sentences should explain the subject and be printed on white paper and glued below the print on the poster board. (SF189)
- SF)CLASS 007 Insect Poster/Display Exhibits** -- Exhibits can be posters or three-dimensional displays, and artistic creativity is encouraged. Posters should be no larger than 22" x 28". They should be instructional

and can be attractive and have pictures, drawings, charts, or graphs. Posters and displays may show any aspect of insect life, habitat, or related conservation or management. Examples include life history and other facts about an insect; insect anatomy; how to manage insects in a farm, home, lawn, or garden setting; experiences rearing one kind of insect; survey of an important insect; insect behavior (ex. nesting, finding food, mobility, defenses, etc.); habitats (e.g. forests, grasslands, wetlands, rivers, or lakes) and what insects are found there, etc. Three-dimensional displays, such as dioramas, sculptures, models or decorative boxes should have a page of explanatory information accompanying them and fit within a 22" x 28" area. (SF190)

SF)CLASS 008

Reports or Journals -- Reports and journals should be in a 3-ring binder. A report may be informational, that is, an original article about a favorite insect, a history of insect outbreaks, diseases caused by insects, insects as food, etc. Or, it may be a research report about an investigation or experiment done in a scientific manner. It then should have a basic introduction of the insect studied, methods used, observations, and results of the project. Tables, graphs and images are helpful to include. A journal is an observational study over a period of time with personal impressions. It may cover watching changes in kinds of butterflies over the summer, rearing a specific insect from egg to adult, managing a bee hive, observations of insects in a specific habitat, accounts of insect behavior in a forest or flower garden, etc. (SF191)

FORESTRY

GENERAL INFORMATION & EXHIBITING RULES - FORESTRY

1. The official reference for all forestry projects is Tree Identification Manual (4-H 332) which was recently revised and is available from the office or at UNL Marketplace (<http://marketplace.unl.edu/4h332.html>). Other helpful forestry references include Trees of Nebraska (EC 92-1774-X), Leafing Out (4-H431) (available on UNL Marketplace) and Plant a Tree (EC 17-11-80)
2. Display "boards" must be made from wood or wood composite, e.g., 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.
3. 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".
4. Display "books" must measure no more than 16" x 16".
5. 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.
6. 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.
7. 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.
8. Another important judging factor is how well the exhibitor follows the directions for the exhibit class.

DEPARTMENT D - DIVISION 320 - FORESTRY

Division 320 Classes 001-008

Pay Category L

SF)CLASS 001

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 be no larger than 24 inches by 24 inches by 24 inches. You can use photographs, drawings, samples, charts, posters, etc. Include enough information to adequately explain the topic. Your display should be substantially different from other display classes. Be as creative as you like.

SF)CLASS 002

Leaf Display - This display must include samples of complete leaves from 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, ex. 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, including state, 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.

SF)CLASS 003

Twig Display - This display must include twig samples from 10 different tree species. The display must include at least two samples each of opposite and alternate leaf arrangements from broadleaf trees.

- **Collection:** Twig samples should be collected during the dormant season (November - April) when 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, may be used to mount twigs, but be sure all their 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, including state, county at a minimum)
- **Supplemental information:** e.g. general uses, tree characteristics, etc., may be included with the display to enhance its educational value.

SF)CLASS 004

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 are 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 labels 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, including state, county at a minimum)
- **Supplemental information:** e.g. maturity date, average number of seed in the fruit, etc., may be included with the display to enhance its educational value.

SF)CLASS 005

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 inches by 4 inches by 4 inches. 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 minimum)
- **Supplemental information:** e.g. common products, wood density, etc., may be included to enhance educational value.

SF)CLASS 006 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:
 1. Pith
 2. Heartwood
 3. Sapwood
 4. One growth ring (beginning and end)
 5. Cambium
 6. Bark

A separate label attached to the back of the disc must include:

7. Common name
8. Scientific name
9. Tree classification (softwood or hardwood)
10. Age (of the cross section)
11. Collector's name
12. Collection date
13. Collection location (be specific, state and county at a minimum)

SF)CLASS 007 Parts of a Tree (This project is only for ages 8-11) - Prepare a poster, no larger than 24 inches x 24 inches that clearly identifies the main external parts of any tree:

1. Trunk
2. Crown
3. Roots
4. Leaves
5. Flowers
6. Fruit
7. Buds
8. 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.

SF)CLASS 008 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.

CONSERVATION, WILDLIFE & SHOOTING SPORTS

(WILDLIFE & HOW THEY LIVE, WILDLIFE HABITAT, HARVESTING EQUIPMENT,
TAXIDERMY, OTHER NATURAL RESOURCES & SHOOTING SPORTS)

Conservation, wildlife and shooting sports gives 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 areas.

GENERAL INFORMATION & EXHIBITING RULES – CONSERVATION, WILDLIFE & SHOOTING SPORTS

1. **SHOW WHAT YOU DID AND LEARNED:** All exhibitors will are encouraged to show evidence of their personal field experiences, study 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.
2. **PROPER CREDIT:** Show proper credit by listing the sources of plans or other supporting information used in exhibits.
3. **WHOSE EXHIBIT?:** The exhibitor's name, county, age must be on the back or bottom of all displays. so that the owner can be identified even if the entry tag becomes separated from the exhibit.
4. **WILDLIFE & WILDLIFE LAWS:** "Animal" or "wildlife" in the following classes instructions includes wild fish, amphibians, reptiles, birds or mammals. Please make sure you are following all appropriate wildlife laws. Follow wildlife laws, example: wildlife laws do not allow collection of bird nests, eggs or any of their parts.
5. **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-H125), Outdoor Skills: Learning Science in the Outdoors series (Science Signature Outcome Program) Geology, and Outdoor Adventure. Other resources include: Outdoor Skills: Learning Science in the Outdoors series (Science Signature Outcome Program) outdoornebraska.gov/afterschool/ and www.whep.org.
6. **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" x28") but half size, 22 by 14 inches, is recommended. Exhibits should be as self-explanatory as possible so that all viewers understand the educational points or what the exhibit is all about. written explanations should be short but clear and complete so the viewer can quickly and easily understand the message and purpose of the display.

DEPARTMENT D - DIVISION 340 - WILDLIFE & HOW THEY LIVE

Division 340 Classes 001–011

Pay Category L

- SF)CLASS 001** **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)
- SF)CLASS 002** **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)
- SF)CLASS 003** **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)
- SF)CLASS 004** **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)
- SF)CLASS 005** **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. (SF157) 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.

SF)CLASS 006 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 judges better understand what you did and learned. Positive casts (impressions as they would be in nature) are preferred but not required. (SF158)

- Option 1 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)
- Option 2 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)
- Option 3 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.

SF)CLASS 007 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)

SF)CLASS 008 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)

SF)CLASS 009 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 a particular species of wildlife that you have observed or about the values of wildlife (commercial value, game value, genetic value, aesthetic value, ecological value, scientific value). 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 or written on 8 ½" 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)

SF)CLASS 010 Wildlife Values Scrapbook - Make a scrapbook about the various values of wildlife (commercial value, game value, genetic value, aesthetic value, ecological value, scientific value) following guidelines in the Wildlife Conservation project booklet (4-H 125). (SF162)

SF)CLASS 011 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 display panel. All entries must include a title and brief explanation of the purpose or message (what is the exhibit meant to show). (SF163)

DEPARTMENT D -DIVISION 342 – WILDLIFE HABITAT

Division 342 Classes 001–003

Pay Category L

SF)CLASS 001 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. (SF165) Include the following information:

- the kinds of animal(s) for which the house is intended,

- where and how the house should be located for best use, and
 - any seasonal maintenance needed. Tips: Check NebGuide on bird houses and shelves.
- SF)CLASS 002 Feeders/Waterers** - 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. (SF166) 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.
- SF)CLASS 003 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)

DEPARTMENT D - DIVISION 343 - HARVESTING EQUIPMENT

Division 343 Classes 001–005

Pay Category L

- SF)CLASS 001 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. (SF 168) Include in your exhibit the following information:
- the purpose of each item,
 - when or where each item is used in relation to other equipment, and
 - any personal experiences you've had with the item(s)
- SF)CLASS 002 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 inches in length. Exhibit must be mounted on a board and labeled with the member's name, county and class number. (SF169)
- **Include** with the exhibit the following items as a brief attachment:
 - explanation of cost of materials/components,
 - where materials/components were purchased,
 - how made, and
 - how many 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.
- SF)CLASS 003 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 foot in diameter and can have up to 3 rings. They must be easy to store, durable, and weather resistant. (SF170)
- SF)CLASS 004 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. (SF171)
- Include in your exhibit the following information:
 - the purpose of each item,
 - when or where it is used in relation to other equipment, and
 - any personal experiences you've had with the item(s).
- SF)CLASS 005 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)

DEPARTMENT D - DIVISION 346 – TAXIDERMY

Division 346 Class 001

Pay Category L

- SF)CLASS 001 Tanned Hides or Taxidermy** - Any legal fish, bird or other wild animal properly processed by the member. No requirement as to size or mounting. (SF172)
- Include the following information:

- the animal's name and
- information about the exhibitor's personal field experiences, study or observations that relate to the exhibit.

DEPARTMENT D - DIVISION 347 – 4-H SHOOTING SPORTS

Division 347 Classes 001-009

Pay Category L

(Shooting Sports Contests – See Contests Section)

4-H Shooting Sports requires youth to be under the direct supervision of a certified 4-H Shooting Sports Leader in either shotgun, rifle (BB gun), archery, and/or pistol. No firearms can be entered as an exhibit, nor live ammunition; however information can be shared through picture

DEPARTMENT D - DIVISION 347 – 4-H SHOOTING SPORTS

- SF)CLASS 001 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 469)
- SF)CLASS 002 Storage Case** – Any 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 469)
- SF)CLASS 003 Practice Game or Activity** – Invent or adapt an activity to practice or teach a project skill. Include pictures of youth playing the game, testimonials of 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 469)
- SF)CLASS 004 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 ½ x 11 paper. (SF256 469)
- SF)CLASS 005 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)
- SF)CLASS 006 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)
- SF)CLASS 007 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 ½ x 11 paper. Interviews need to include a picture of the interviewee in their work setting, questions asked, and a transcript of answers. (SF252 469)
- SF)CLASS 008 Community Vitality Display** – Explore the difference shooting sports, conservation, fishing, and hunting make in keeping Nebraska vibrant especially in rural areas. Present facts and research in an interesting way for the public to learn from. (SF251 469)
- SF)CLASS 009 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)

DEPARTMENT D - DIVISION 361 - OTHER NATURAL RESOURCES

- SF)CLASS 001 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. (SF171)