keeping Nebraska vibrant, especially in rural areas. Present facts and research in an interesting way for the public to learn from.

Class 9 Ag Literacy-Value Added Agriculture Interview or Research Project (SF250): 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 finding in an interesting way for the public to learn from.

ENTOMOLOGY

ENTOMOLOGY GUIDELINES

- Entomology exhibits give 4-H Members the opportunity to demonstrate their knowledge about insects and insect displays. This category has multiple projects that allow 4-H Members to progress over numerous years. For help getting started with this project contact your county 4-H extension office.
- 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.
- Purchase of commercially-made boxes is allowed.
- All specimens are to be pinned and labeled by the exhibitor. No purchased specimens allowed.
- No projects over 50 pounds allowed.
- Scoresheets, forms, contest study materials, and additional resources can be found at: https://go.unl.edu/ne4hentomology
- Educational materials can be found at: <u>https://4hcurriculum.unl.edu/index.php/main/program_project/61</u>
- Nebraska Extension Publications: <u>https://extensionpubs.unl.edu/</u>
 *Tip: Search Nebraska Extension Publications for Creating a Solitary Bee Hotel

DEPT. H / DIV. 800 ENTOMOLOGY

GENERAL INFORMATION [Scoresheets SF186-191]:

- Learn the difference between an insect and a bug; Identify insect parts and know why each is important; Find and examine bugs and insects in the field; Design your own or create a home for an insect; Make an insect collection; Learn how to identify and classify insects; Complete an insect collection table; Record insect observations.
- Class 1 <u>Entomology Display-First Year Project /SF186</u>; Collection to consist of 25 or more different kinds (species) of insects representing at least 6 orders. Limit of one box.
- Class 2 Entomology Display-Second Year Project [SF186]: Collection to consist of a minimum of 50 kinds (species) of insects representing at least 8 orders. Replace damaged or poorly mounted specimens. At least 25 species must be present from after July 1 of the previous year. Limit 2 boxes.
- Class 3 <u>Entomology Display-Third or More Year Project [SF186]</u>. 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 present from after July 1 of previous year. Limit 3 boxes.
- Class 4 <u>Special Interest or Advanced Insect Display [SF187]</u>: Educational display developed according to personal interests and/or advanced identification capability. This is also 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 insets 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, insect from goldenrod, insect pollinators, etc).

- Class 5 Insect Habitats *[SF188]*: Habitats consist of any hand-crafted objects, made of natural or artificial materials, to be placed outdoors, which promote or conserve insects in the environment. Insects may include bee pollinators, butterflies, beneficial insects, etc. A one-page report describing activities must accompany the exhibit. Report should include placement, target insect, why materials were chosen, functional design, and indicators of success.
- Class 6 <u>Macrophotography [SF189]</u>: Subjects should be insects, spiders or other arthropods, or any nests, webs or constructions they make. All exhibit prints should be either 8" x 10" or 8 ½" x 11" and mounted on rigid, black 11"x14" poster or mat board. Either orientation is acceptable. No frames or mat board framing are 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.
- Insect Poster/Display Exhibits [SF190]: Exhibits can be Class 7 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.
- Class 8 Reports or Journals [SF191]: 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 beehive, observations of insects in a specific habitat, accounts of insect behavior in a forest or flower garden, etc.

FORESTRY

FORESTRY GUIDELINES

- This category provides 4-H Members an opportunity to prepare displays that show their expertise in many aspects of forestry. Involvement in this category will lead to expansion of seed, twig, wood, leaf, and tree knowledge for 4-H Members. In addition, participants would learn more about common Nebraskan trees.
- 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: <u>https://marketplace.unl.edu/ne4h/4h332.html</u>