

# Entomology

Entomology exhibits give 4-H'ers the opportunity to demonstrate their knowledge about insects and insect displays. This category has multiple projects that allow 4-H'ers to progress over numerous years. For help getting started with this project contact your county 4-H extension office.

## Rules

1. Specimens in display collections should be mounted properly and labeled with location, date of collection, name of the collector, and order name. Follow mounting and labeling instructions in the Nebraska 4-H Entomology Manual. Boxes are preferred to be 12 inches high x 18 inches wide and have a landscape orientation, so they fit in display racks. Purchase of commercially made boxes is allowed. All specimens are to be pinned and labeled by the exhibitor. No purchased specimens are allowed.
2. No projects over 50 pounds are allowed.

## Scoresheets, Forms, and Contest Study Materials

Scoresheets, forms, contest study materials, and additional resources can be found at <https://go.unl.edu/ne4hentomology>.

## Special Awards

Premier 4-H Science Award is available in this area. Please see [click here](#) for more details.

## Divisions

### Entomology

#### Class

**H800001 - Entomology Display, First-Year Project** - (SF186) - Collection to consist of 25 or more distinct kinds (species) of insects representing at least 6 orders. Limit of one box.

**H800002 - 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 after July 1 of the previous year. Limit 2 boxes.

**H800003 - Entomology Display, Third-Year or More Project** - (SF186) - Collection to consist of a 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 the previous year. Limit of 3 boxes.

**H800004 - Special Interest or Advanced Insect Display** - (SF187) - 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 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, insects galls, insect from goldenrod, insect pollinators. etc.).

**H800005 - Insect Habitats** - (SF186) - Habitats consist of any hand-crafted objects, made of natural or artificial materials, 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. See the following resources for reports:

- Nebraska Extension NebGuide: Creating a Solitary Bee Hotel (G2256)
- University of Minnesota: Wild Bees and Building Wild Bee Houses
- National Wildlife Federation: How to Provide Water in Monarch Gardens

**H800006 – Macrophotography** - (SF189) - Subjects should be insects, spiders, or other arthropods, or any nests, webs, or constructions they make. All exhibit prints should be either 8 inches x 10 inches or 8½ inches x 11 inches and mounted on a rigid, black 11 inches x 14 inches poster or mat board. Either orientation is acceptable. No frames 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.

**H800007 - Insect Poster/Display Exhibits** - (SF190) - Exhibits can be posters or three-dimensional displays, and artistic creativity is encouraged. Posters should be no larger than 22 inches x 28 inches. 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 inches x 28 inches area.

**H800008 - 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.

## Resources

### Entomology

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 insect or create a home for an insect; Make an insect collection; Learn where to look for insects; Learn how to identify and classify insects; Complete an insect collection table; Plan an insect collection trip; Raise meal worms; Explore insect legs and collect insects with an extractor; Test ant food preferences; Conduct honey bee learning experiments; Record insect observations; Identify insect mouth types

**URL:** [https://4hcurriculum.unl.edu/index.php/main/program\\_project/61](https://4hcurriculum.unl.edu/index.php/main/program_project/61)

