



Environmental and Earth Sciences

4-H Entomology

North Dakota 4-H Project Sheet

The life of insects tells many amazing stories. What is an insect? What do insects do?

- Learn basic facts about insects.
- Identify the insects that live near you.
- Learn about pest management.
- Participate in online insect monitoring surveys.
- Learn which insect is the biggest, fastest or strongest in the world.
- Learn about insects and how they benefit the environment.



Pass it on!

Now that you know how, share it with others. Here are ideas to get you started.

Communication

- Give a presentation on your favorite insect.
- Make a video on how to collect and pin insects.
- Teach your club how to identify common area insects.

Citizenship

- Monitor the city park for mosquito populations.
- Adopt and maintain a butterfly flower garden at a park.
- Do a presentation at a city council meeting about WINGS butterfly survey results in the community.

Here's what you can do all year!

Starting Out Basic/Level 1	Learning More Intermediate/Level 2	Expanding Horizons Advanced/Level 3
<ul style="list-style-type: none"> • Learn what insects do for us. • Learn the basic parts of an insect. • Collect and identify different insects. • Learn about plants and other insects that insects may eat. • Learn about insect predators. • Learn how insects pollinate plants. • Examine parts of a plant and discover the function of the parts. • Learn about first aid for an insect bite. • Learn how to pin insects for display. 	<ul style="list-style-type: none"> • Learn how insects adapt to their environments. • Learn about insect life cycles. • Participate in developing a butterfly garden. • Learn to build insect traps. • Participate in the Butterfly WINGS, Lost Lady Bug or Pollinator: Live online learning activities. • Discover the different ways insects survive winter. • Learn how color influences insect life. 	<ul style="list-style-type: none"> • Start an insect collecting club. • Learn about insect control methods in forestry. • Do an insect survey for a local farmer or city garden. • Learn about integrated pest management for the yard or garden. • Experiment with insect populations in organic production. • Participate in beekeeping or start a honey business. • Mentor other youth in online survey activities.

Leadership

- Organize the activities to complete an insect survey.
- Help an adult teach a class about insects.
- Volunteer to help with garden tours and identify insects.

Entrepreneurship

- Offer to monitor and control insects in an organic garden.
- Start an insect pest-control business.

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NDSU is an equal opportunity institution

Learn more at www.ndsu.edu/4h/ or contact your county NDSU Extension office.



Here are other opportunities to explore entomology:

- Design an ant farm and show it at your school science fair.
- Collect insects and show them in your science class.
- Help other youth design and build insect traps.
- Job shadow at a pest control service or honey operation to explore careers that interest you.
- Contact your county NDSU Extension office for other local workshops, activities and events.
- Interview a beekeeper about his/her business.
- Interested in a college education in the area of entomology? Schedule a visit with North Dakota State University to explore these majors: (www.ndsu.edu/entomology/).

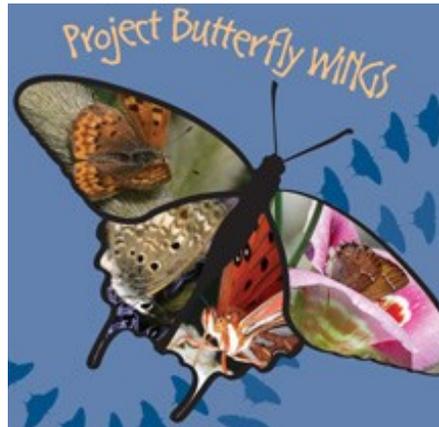


Exhibit Ideas

- Exhibit an insect collection.
- Make a poster about the parts of a insect and life cycle.
- Build an anatomically accurate model insect from clay.
- Do a poster about ants along with an ant farm exhibit.
- Create a logbook and picture record of one year of insect surveys in your area.
- Design and construct a butterfly flower garden.
- Complete an exhibit of the equipment needed for beekeeping.
- Prepare a poster to show how to harvest honey.
- Display different types of traps and insect-collecting methods.
- Make a cost/profit comparison about starting your own honey business.
- Do a poster about insect pests in organic gardening and how to control them.
- Keep an insect journal.
- Build a lady bug house.
- Complete a comparison of chemical and biological control of insects in a garden.

4-H Resources	Other Resources	Recordkeeping
<ul style="list-style-type: none"> • National 4-H Entomology Curriculum - Teaming with Insects, Level 1 (HBC101) - Teaming with Insects, Level 2 (HBC102) - Teaming with Insects, Level 3 (HBC103) - Teaming with Insects Facilitators Guide (HBC212) • National 4-H Butterfly Curriculum - Butterfly WINGS Youth Guide (HBC111) - Butterfly WINGS Leader Guide (HBC111) 	<ul style="list-style-type: none"> • Entomology Educational Trunks <p>Online Insect Monitoring</p> <ul style="list-style-type: none"> • Butterfly WINGS • Pollinator: Live • Lost Lady Bug • Kentucky Bug Connection 	<ul style="list-style-type: none"> • Planning for My Project Adventure (PA093) • ND 4-H Project Plan (PA095) • ND 4-H Plan of Action (PA096) • ND 4-H Participation for 11- 19 (PA098)

Learn more at www.ndsu.edu/4h/ or contact your county NDSU Extension office.