

## **Texas 4-H Entomology Project**

Project Description

Did you know that nearly three-fourths of all animals are insects? Because there are so many insects, they impact our daily lives in both good and bad ways. In this 4-H project, you will learn about entomology – the study of insects. You will learn about the insect world by studying, collecting and identifying various insects. Discover how helpful and harmful insects live, multiply, and affect humans.

Learn how to identify, classify, collect and preserve insects and other arthropods.

This project is easy to afford because insects are free or inexpensive at pet stores or scientific supply houses. Because of their size, insects can be easily housed in small containers for observation.

Basic

Youth are encouraged to explore the basics of entomology by learning general categorization of different types of insects & arthropods, basic anatomy & physiology of insects, and finally, their impacts on people and the environment.

- <u>Texas 4-H Explore Guide Curriculum</u> (texas4-h.tamu.edu/projects/entomology/)
  Explore Guide: Beginning Beekeeping
- <u>National 4-H Entomology Curriculum</u> (shop4-h.org/)
  - Level 1 Teaming with Insects
  - Level 2 Teaming with Insects
  - Level 3 Teaming with Insects
  - Teaming with Insects-Leader's Guide

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With further exploration in the project, youth learn insect collection methods, scientific classification & conservation.

- <u>How to Make an Awesome Insect Collection</u> (https://extension.entm.purdue.edu/)
- National 4-H Honey Bee Challenge Kit

Advanced

Advanced study in the entomology project includes studying integrated pest management programs, insect rearing & ecology systems.

- <u>Texas A&M Department of Entomology</u>
- Entomology CDE Study Guide
- <u>National 4-H Advanced Beekeeping Series</u>



Project Learning Opportunities:

4-H Entomology Judging/Identification Contest

- Contestants will identify selected insects and complete a written exam on insects. Written examination questions will be selected from "Study Materials for 4-H Entomology Contests."
- Local/District level contest may be available. \*Check with your local County 4-H Program.
- State Invitational Contest held annually at Texas 4-H Roundup. Seniors (9-12th grade) only.

Texas 4-H Entomology Collection Contest (Available to all age divisions!)

• Put your collection skills to the test! Collections are judged on the pinning, spreading, labeling and arrangement of insect specimens caught in this state level invitational contest.

Texas 4-H Entomology Photography Contest (Available to all age divisions!)

 Youth learn and apply insect and natural photography techniques to capture insects in their natural habitats and correctly identify them in this state level invitational contest.

Beekeeping Essay Contest (Available to all age divisions!)

• Each year, the Foundation for the Preservation of Honey Bees, Inc. announces their annual Beekeeping Essay Topic for youth to research and write about in a 750-1,000 word essay.

Texas 4-H Natural Resources Photography Contest (Available to all age divisions!)

 The Natural Resources Photography Contest encourages observation within specific Natural Resources project areas & allows youth to demonstrate skills learned in the area of photography, including the use of photographic equipment & processing of photographs.

## Resources:

Texas 4-H Entomology Project Page: https://texas4-h.tamu.edu/projects/entomology/ Texas A&M Dept. of Entomology: https://entomology.tamu.edu/extension/youth/4-h/4h-contest/ Purdue University Department of Entomology: <u>https://extension.entm.purdue.edu/</u> ESA Youth Resources: https://www.entsoc.org/support/chrysalis-fund/lesson-plans Amateur Entomologists' Society: https://www.amentsoc.org/ National Pest Management Association: <u>https://www.pestworld.org/</u> Shop 4-H Mall: https://shop4-h.org/

Did you know?

4-H is a club for kids and teens to develop life skills and make friends. Youth can join 4-H in all 254 counties. Everybody ages 8-18 and in 3rd-12th grades can join 4-H. Kids in Kindergarten to 2nd grades can join as Clover Kids. There are 43 different project areas in five project categories: Agriculture & Livestock, Family & Community Health, Leadership & Citizenship, Natural Resources, and STEM.

Want to get started? First...Contact your County Extension Agent!

 Contact information can be found at texas4-h.tamu.edu > contacts information at the bottom of the page > county offices

## Explore more at texas4-h.tamu.edu

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