

COLORADO STATE UNIVERSITY

Beekeeping

Project units 1-4 are designed for members 8-18 years old.

Unit 1

Inspiring youth to:

- Shadow an experienced beekeeper and learn to use equipment, open the hive, and clean up procedures.
- Learn about the history of beekeeping and why honey bees are valuable.
- Learn about the three different types of honey bees, their anatomy and life stages.
- Observe what happens at the entrance of a hive. See the different activities of the honey bee.
- Catalogue various species of flowers and observe the bees landing on the blooms.
- Lease, obtain equipment and take care of honey bees.

Unit 2

Inspiring youth to:

- Learn the various ways of obtaining bees and take care of a beehive of your own for a full year.
- Learn about the various diseases and mites common to honey bees.
- Visit Beekeepers Association meetings and join a community of beekeepers.
- Keep records of the honey bees activities. their conditions, equipment, finances, and your labor.
- Learn how to manage a bee hive and how to keep them alive and healthy.
- Learn how to extract honey and market it for sale.



Unit 3

Inspiring youth to:

- Learn advanced techniques for taking care of bee hives.
- Learn how to keep a strong, populous colonies with young queens and the art of labeling your queens and requeening when needed.
- Learn how to manage mites and other issues with the honey bees.
- Keep record sheets of your work and expenses.
- Learn how to split colonies and increase your hive numbers.

Unit 4

Inspiring youth to:

- Investigate an area of interest related to beekeeping to display in a notebook.
- Write a business plan for your small bee product(s) operation.
- Give a demonstration related to their project about bees to a group.
- Shadow an experienced beekeeper.

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Beekeeping

Project Tips:

- It is recommended that you finish Unit 1 before beginning Unit 2
- For Unit 1, it is recommended to get the book, "The New Starting Right with Bees," and read it as you complete the unit.
- For Unit 2, it is recommended that you subscribe to a beekeeper magazine such as "American Bee Journal" or "Bee Culture," and you may want to get the book, "Honey Bee Biology and Beekeeping."
- For Unit 3, it is recommended that you read "Honey Bee Biology and Beekeeping" and "The Hive and the Honey Bee."
- For Unit 4, it is recommended that find various resources to continue your learning and help with your project.
- Read exhibit requirements for specific instructions to exhibit products or to display an informational board.



Resources:

- Exhibit & Judging
 Requirements
- Record Books
- Manual Information
 Located at: Colorado4h.org

Beekeeping Industry Careers



<u>Beekeeper</u> Raise and sell or manage beehives privately or commercially for use in the industry



Regulation & Inspection Work with U.S. Customs or Border Patrol/Inspection Officer or State Divisions



<u>Education</u> Opportunity to teach others about beekeeping from small to large scale



Insect Pavilion Educational opportunities to showcase insects, their habitats, and different varieties to educate the public



COLORADO STATE UNIVERSITY EXTENSION

Degrees/Certifications:

Master Beekeeper Certification Program Beekeeper and honey production certifications Apiculture Conservation Microbiology Genetics & Research Disease Management Agronomy/Crop Science Entomology Food Safety



Provide sales of products at different retail levels



<u>Food Safety</u> Work with producers and manufacturers to ensure honey-based products' safety and quality for consumers



<u>Diagnostic</u> Provide diagnostic services to test for potential diseases or illnesses



a government division