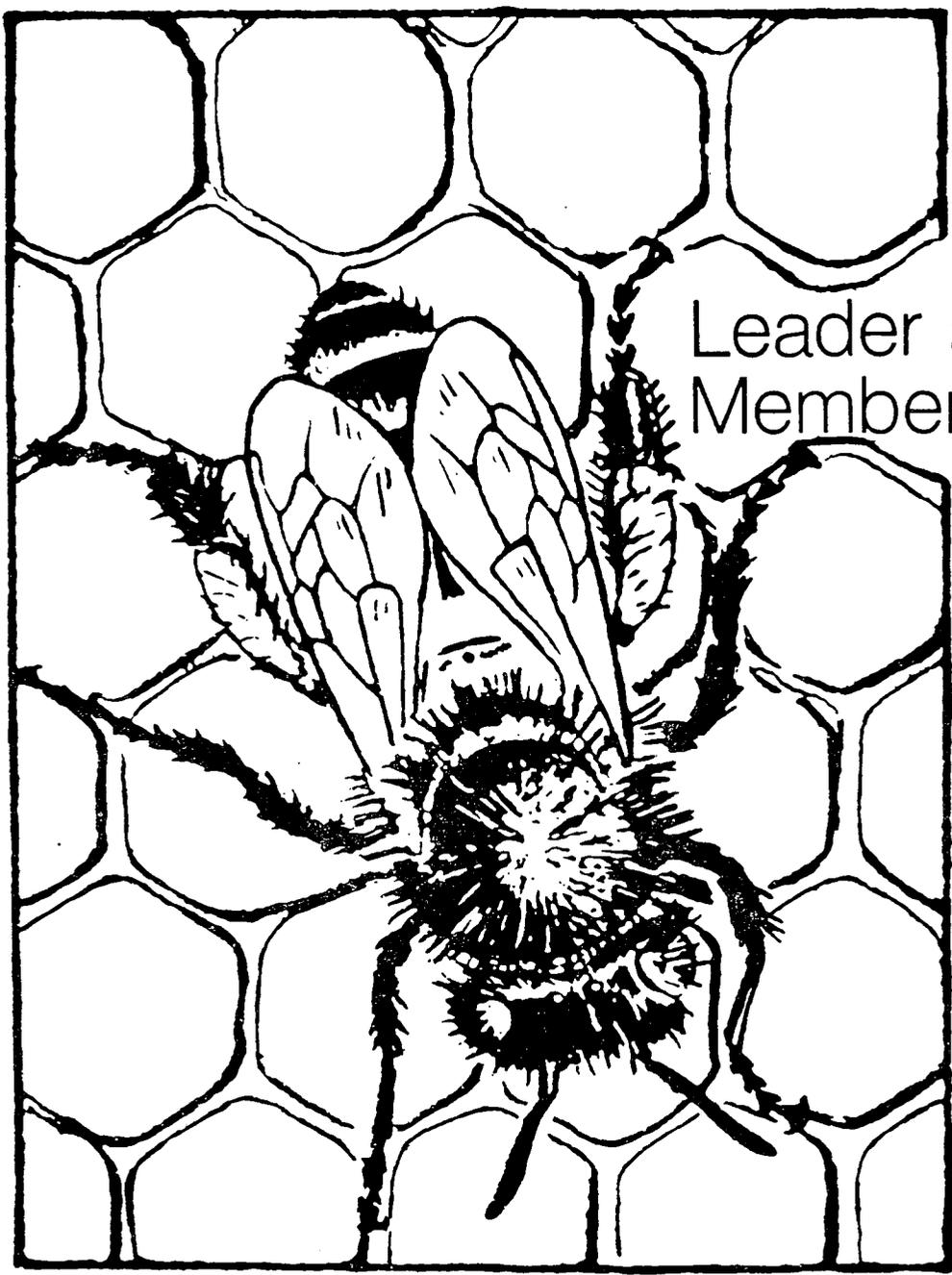


Oregon 4-H Beekeeping Project



Leader and
Member Manual

4-H 321

Reprinted July 1984

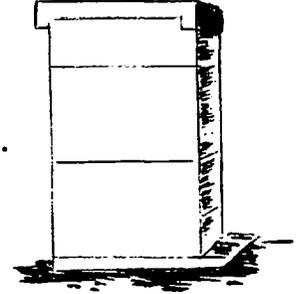
Oregon State University Extension Service



OREGON 4-H BEEKEEPING PROJECT

Beekeeping Project Options:

- A. Own and care for a hive of bees.
- B. Help a neighbor or friend with their bees.
- C. Read and study about bees and observe their habits.
- D. Process, package and sell honey.



Learning Objectives:

- * about bees and how to care for them.
- * about the social life of bees.
- * how bees pollinate crops and increase the yield of many fruit and seed crops.
- * about insects, animals and plants which relate to beekeeping.
- * how to produce, package and market honey.
- * the honey-producing plants in your area.

Project Guidelines Ideas:

(Members and leaders should determine how many of these each member will strive to reach.)

1. Select one or more of the four options listed above for your project.
2. Learn as much about bees and honey as you can.
3. Read at least one book about bees.
4. If you have bees, register your colonies with the State Department of Agriculture in Salem. (All bees in one club can be registered under the club name.)
5. Visit an apiary and arrange for the operator to show you the inside of a hive and how he works his bees.
6. Collect and press flowers used for nectar and/or pollination.
7. Write a 300 (approximately) word essay about bees and share it with your club or others.
8. Give a presentation related to beekeeping to your club, and/or to a local group in your community.
9. Prepare an exhibit or display on bees or beekeeping.
10. Keep a record of your bee project using the Oregon 4-H Beekeeping Record, 4-H 321R.

Ideas for Club Meetings - January through October:

1. Repair and maintenance of bee equipment.
2. How to assemble a bee hive - equipment needed for beekeeping project.
3. Diseases of bees and medication.
4. How to increase and build up a colony. Reports on the Queen Bee.
5. Sources of plants bees use for nectar.
6. How to prevent swarming. How to hive a swarm and feed it.
7. Queen rearing and transfer of eggs to raise queens.
8. Removing honey from the hive, extracting and processing.
9. Selling wax and honey and how to prepare hives for winter.
10. Throughout the year, plan club tours, schedule club members to give reports and presentations, and encourage participation at fairs.

Project Bulletins and Books:

Both leaders and members are encouraged to use the bulletin, "Beekeeping," PNW 79, for project resource information. For junior members the following books and bulletins would be helpful:

Starting Right with Bees, A. I. Root

500 Answers to Bee Questions, A. I. Root

How to Keep Bees and Sell Honey, Walter T. Kelley

(Available from Oregon State University Bulletin Clerk; order through county extension office):

Construction of a Beehive, WRAES 26

Honey Bee Diseases and Their Control, PNW 198 - 25¢

Additional resource books for intermediate and senior members include:

First Lesson in Beekeeping, C. P. Dadant

Queen Rearing, Snelgrove

A Bee is Born, Doering

Swarming and Its Control, Snelgrove

The World of Bees, Murray Hoyt

Bees and Beekeeping, Roger A. Morse

Complete Guide to Beekeeping, Roger A. Morse

Beekeeping - The Gentle Craft, John F. Adams

America's Master of Bee Culture, Naile

The Art and Adventure of Beekeeping, Albi

Let's Build a Bee Hive, Wilbert R. Miller



Beekeeping Films:

Films are available for a fee from Portland State University Division of Continuing Education Film Library, 1633 SW Park Avenue, Portland, OR 97207, telephone 229-4890. The color films are as follows:

<u>Film No.</u>	<u>Title</u>	<u>Length</u>
10878	Beekeeper	14 minutes
12271	Bees: Backyard Science (Revised edition)	13 minutes
0447	Biography of a Bee	14 minutes
11488	Honey Bee - A Profile	12 minutes
2480	Language of the Bee	15 minutes
2851	Mathematics of the Honey Comb	13 minutes
12247	Observing, Recording, Mapping and Graphing	16 minutes
3584	Pollination of Alfalfa	25 minutes
4020	Secrets of the Bee World	13 minutes
4160	Social Insects: The Honey Bee	24 minutes

4-H Beekeeping Exhibits:

4-H members are encouraged to share their knowledge learned with others by preparing exhibits. Fair exhibit categories are:

Junior Division	4th, 5th and 6th graders
Intermediate Division	7th, 8th and 9th graders
Senior Division	10th, 11th and 12th graders

Exhibits should tell about bees, beekeeping, or the value of bees in producing honey and/or for the pollination of crops. They should be attractive, interesting and educational. They may include pressed flowers from honey-producing plants, live bees, honey, wax, equipment, pictures and other items related to beekeeping. Exhibits may be mounted on a display board, placed in a ring binder or displayed in any manner except that they must not exceed 24 inches in depth (front to back), 30 inches in width and 30 inches in height. Labels, charts and narrative descriptions may be used to tell the story. Exhibits should be interesting and understandable to people who are not acquainted with bees.

Presentations:

Presentations are an important part of 4-H. Presentations should show and tell others how to do something learned in the 4-H project. They are given by an individual or a team (two members only). Some ideas for beekeeping presentations are:

- How to raise queens.
- How to assemble a hive.
- How to introduce packaged bees into a hive.
- How to introduce a new queen into a hive.
- How to dress to work with bees.
- How to open and examine a hive.
- How to add, or remove a super to a hive.
- How bees communicate.
- How bees help pollinate fruit and seed crops.
- Explain the life cycle of the honey bee.
- Name, describe and tell the purpose of the body parts of a honey bee.
- How to obtain liquid honey from combs without an extractor.



Presentations may be given at a 4-H club or civic organization meeting, or the fair. For more information on how to give presentations refer to "You Present: Demonstration, Illustrated Talks, Speeches," 4-H 0226.

THINGS 4-H BEEKEEPERS SHOULD KNOW

Answer these questions. (Perhaps members can add more to this list.)

1. Tell the duties of the queen: _____

the workers: _____
the drones: _____
2. Draw or describe the differences in the queen, worker or drone cells.
3. Why do bees need pollen? _____
4. How do bees pollinate plants? _____
5. Name three or more important pollen-producing plants. _____
6. Name six or more of the most important nectar-producing plants near your home. _____
7. Name three or more early season plants that the bees use before the more important honey plants bloom. _____
8. Name three or more late summer or fall plants that bees use after the blooms of the more important honey plants are gone. _____
9. Name several of the fruits or seed crops grown in your area for which bees are used for pollination. _____
10. List the different parts of a standard moveable frame hive. _____

11. Describe briefly how one examines a colony. _____

12. What is used to drive bees from a honey super and how is it used? _____

13. Describe the seasonal pattern of life in a colony. _____

14. How does one control swarming? _____

15. What and when should bees be fed? _____

16. Describe requeening. _____

17. Name common diseases of adult bees and list how they can be controlled.

18. How is honey extracted from comb honey? _____



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