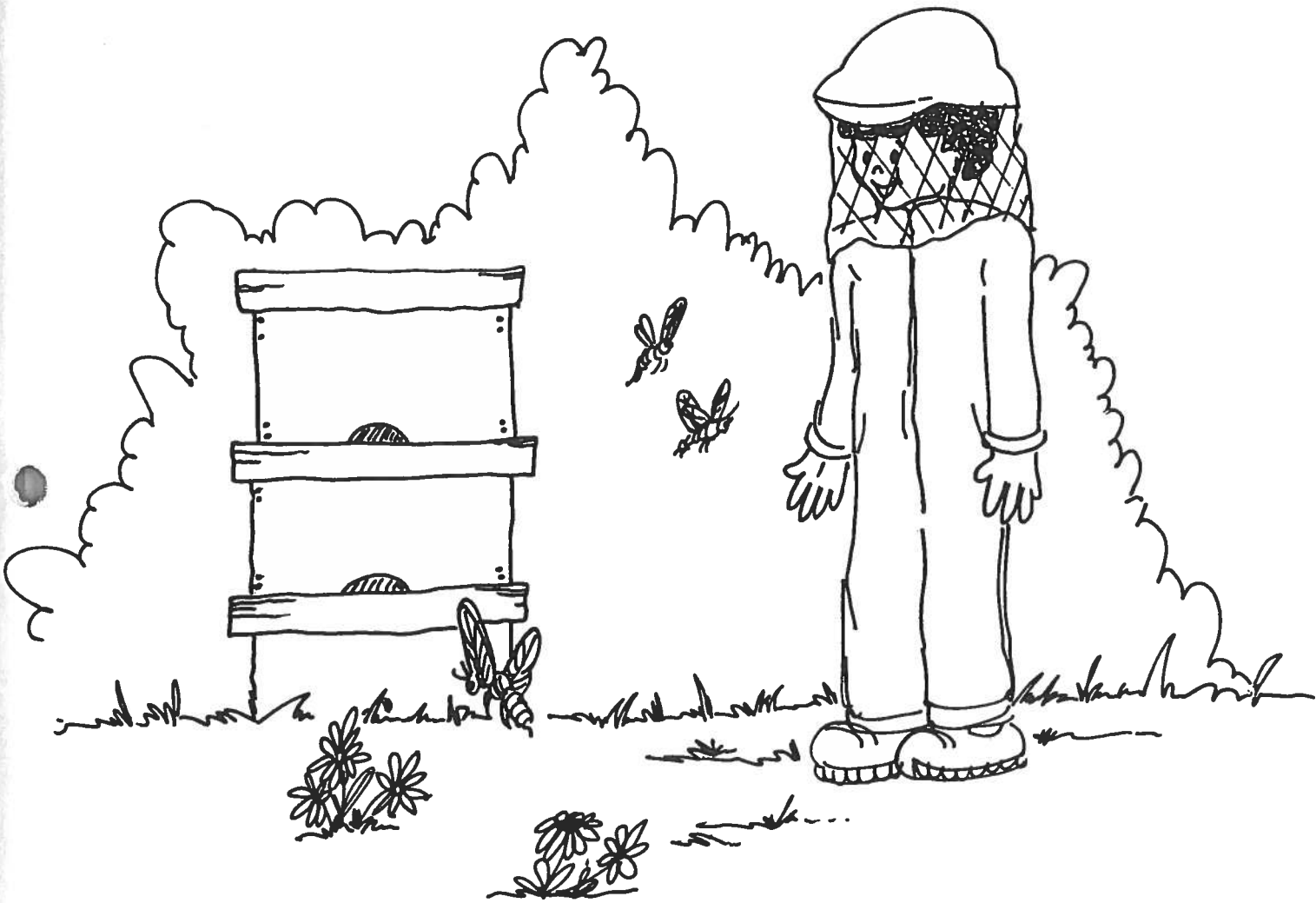


MODULE V
CONTROL AND CAREERS



Humans are often in conflict with insects they consider pests. To control insect pests, it is important to learn as much as possible about them. The activities in Module V will help you understand more about controlling insect pests, and will also introduce you to career opportunities in entomology.

INSECTS IN YOUR GARDEN

Because they are isolated, with an abundance of edible vegetation, gardens have special insect problems. In this activity, learn more about garden pests and ways to control them.

NEEDED:

Vegetable garden (could also be flower garden, or fruit trees or bushes)
Insect collecting net
Information on insect identification control

LEADER DOES:

- 1- Plan this meeting during summer months. Allow half the time for collecting, the other time to identify the insects and research the control methods used to manage them.

MEMBERS DO:

- 1- Collect garden insects and identify them.
- 2- Use the information resources available to find the recommended way to control the insects you found. Take notes and discuss these questions for each insect:
 - What type of damage does the insect cause?
 - During what stage(s) in the insect's life cycle is it a "pest"?
 - What is the recommended control?
 - Is more than one type of control mentioned?
 - How much control should be necessary and for how long?
 - Can you use the recommended control until harvesting the crop, or should use of the control be discontinued a certain length of time before harvesting and eating?

GOING FURTHER:

Write a report on how insects are controlled in another part of the world.

If you have access to a garden, try using pest control strategies to manage several insect pests you find. Keep a notebook to record what you tried, for how long, and with what success. Take photos or make sketches to illustrate your notes.

RESOURCES:

UW-Extension bulletin available from Agricultural Bulletins, 30 N. Murray St., Madison, WI 53715:
- A2088 "Managing Insects in the Home Vegetable Garden"

Films available from Bureau of Audio Visual Instruction (BAVI), P. O. Box 2093, Madison, WI 53701-2093:

- "Insect Enemies and Their Control"
- "Insects in a Garden"

INSECTS AND YOUR PETS OR LIVESTOCK

A lot of money is spent keeping pets and livestock free of insect pests. This activity will give you a chance to study how insects affect animals.

NEEDED:

Pet or livestock animal with pest problem
Pen and paper
Appropriate control

LEADER DOES:

- 1- Locate a pet or livestock animal with an insect problem. (You may want to recruit the help of a local veterinarian or farmer for this activity.)
- 2- Guide members in locating, collecting and identifying the insects causing the problem. You may want to demonstrate the control measure, rather than have members implement the control.

MEMBERS DO:

- 1- Collect and identify the insects causing the problem.
- 2- Discuss what controls can be used and apply the proper control (with the leader's help).

GOING FURTHER:

Interview your local veterinarian and/or health official to learn more about which insects pester animals and transmit diseases in your area. Find out more about these pests at the library. Prepare a written or oral report based on your research.

RESOURCES:

Insects, The Creeping Conquerors, and Human History by
Carson I. A. Ritchie. Elsevier/Nelson Books, New York.

UW-Extension bulletins available from Agricultural Bulletins, 30 N. Murray St., Madison, WI 53715:

- A2118 "Identifying and Controlling Flies for Dairy, Beef, Other Livestock and Pets"
- A2212 "Pest Control on Cattle"
- A2227 "Poultry-Farm Pest Control"
- A3210 "Controlling Fleas"
- G1993 "Controlling Ticks"

Film available from Bureau of Audio Visual Instruction (BAVI), P. O. Box 2093, Madison, WI 53701-2093:

- "Insect Enemies and Their Control"

INSECTS AND PEOPLE CAN WORK TOGETHER

Insects are often "beneficial" or useful to man. Did you know insects are essential to Wisconsin's agriculture? In this activity learn more about how honey bees benefit the people of Wisconsin.

NEEDED:

Source of information about honey bees

LEADER DOES:

- 1- Arrange for a beekeeper to visit a meeting to talk about bees as a hobby or profession. Or, schedule a film or slide show about bees or beekeeping. (Alternative: invite an Integrated Pest Management specialist.)
- 2- Schedule the meeting to begin 15 to 30 minutes before the guest speaker arrives so the group can discuss questions they will want to ask (see MEMBERS DO).
- 3- Have youth leader or older member prepare an introduction for the guest.

MEMBERS DO:

- 1- Discuss questions that you will want to ask when you interview your guest. Suggested questions include:
 - How much honey does a colony produce?
 - Do they remove and use the beeswax?
 - How do they care for the colony?
 - Do they maintain the colony during the winter?
 - Do they ever rent colonies to farmers?
 - Are honey bees important for agriculture?
 - Do insecticides affect bees?

GOING FURTHER:

Talk to several farmers about their dependence on honey bees. Find out if they set out hives in their fields. Do they use insecticides with honey bees in mind?

Visit your local library to find out about five other beneficial insects in Wisconsin. Make a display or write a report about your research.

RESOURCES:

- UW-Extension bulletins available from Agricultural Bulletins, 30 N. Murray St., Madison, WI 53715:
- A2083 "Honey -- Guidelines for Efficient Production"
 - A8IL1125 "Beekeeping in the Midwest"

Films available from Bureau of Audio Visual Instruction (BAVI), P. O. Box 2093, Madison, WI 53701-2093:

- "Life Cycle of a Honeybee"
- "Secrets of the Bee World"

INSECTS CAN BE MORE THAN A HOBBY

Entomology can be a diverse and fascinating career. This activity will acquaint you with some of the different directions that entomology can take.

NEEDED:

Someone who works (or has worked) in entomology or insect control

LEADER DOES:

- 1- Arrange for someone working in an insect-related field to attend a meeting and be interviewed about their profession.
- 2- Plan ahead. Have members think of questions before the meeting. Schedule the guest about 30 minutes after the meeting begins so the group can prepare (see MEMBERS DO).
- 3- Help youth leader or older member prepare introduction for guest.

MEMBERS DO:

- 1- Discuss questions you will want to ask when you interview your guest. Suggested questions include:
 - How many years of study are necessary for their job?
 - How did they get interested in the field?
 - What are their job duties?
 - What skills are helpful in this job?
 - Do they have to take any safety measures?
 - If they are involved in controls, do they use biological as well as chemical controls?
 - What advice would they give a young person interested in a job like theirs?

GOING FURTHER:

Find out what I.P.M. stands for and what this approach to insect control means. What kind of jobs are available with I.P.M.? What kind of schooling does a career in I.P.M. require? Use the information to prepare an oral report.

Start a scrapbook on careers related to the field of insects. Include newspaper articles on insect-related matters.

RESOURCES:

Outlines of Entomology by A. D. Imms. Dutton Press, New York.