



## Entomology Project Brief

### Learning Objectives

- Learn to care for a bee colony and to harvest honey
- Identify common insects
- Understand different insect migration patterns
- Determine how some insects transmit disease
- Build an insect collection
- Understand chemical communications
- Conduct and design an entomology skill-a-thon

### Fair Projects

- Display of insect body parts
- Pitfall insect trap
- Model of an insect's eye
- Display on types of insect control in the home
- Insect display
- Insect trap
- Poster on insect metamorphosis
- Display of insect leg parts
- Poster on understanding insect pesticide labels
- Insect key
- Butterfly garden plans
- Display of various types of insect mouths
- Display of various types of insect wings
- Kill Jar
- Bug collection
- Pinning Kit
- Spreading Board

### Demonstration Ideas

- Making a killing bottle
- Identifying insects
- Mounting insects
- Collecting insects
- Controlling insects
- Making an insect net
- How to handle bees
- Beneficial's vs. Pest
- Proper pinning and I.D. of bugs
- Butterfly garden setup

### Field Trips

- Local Co-op
- Pest management company
- Lawn care company
- Conservation area

Conservation area

### Ideas for Speech Topics

- Butterfly's
- Control Methods
- Importance of some insects
- Insect use in science

### Critical Thinking

- What kinds of diversity do you see every day, and why is it important in your daily life?
- How can people use their differences to make a better community?
- What would your life be like if you did the same things every day?
- How would you describe to a friend what it was like to have an insect for a pet?
- What unexpected things might happen when you are collecting insects?
- What have you learned about planning ahead to keep insects away when you are on a picnic?
- How can you use your knowledge of ants' favorite foods to manage the ants around your house?

### Community Service

- Participate in a Clover Kid activity where you help them pin and collect insects
- Take your insect collection to an elementary school or hospital and show it to others
- Help educate your community about beneficial and harmful insects
- Rake leaves for the elderly in your community

### Science & Technology

How have you used science and technology in this project area?

Examples:

- Conduct experiments
- Investigate insect distribution patterns
- Compare your insect collection against the standard
- Discover how to identify various chemicals
- Compare insect and human speeds

## Show Me Character

**Trustworthiness** - includes honesty, promise keeping and loyalty.

- Do what you say you're going to do
- Be consistent and keep your promises
- Be a friend that can be counted upon

**Respect** - includes courtesy and proper treatment of people and things.

- Act on the assumption that others have the best intentions
- Treat equipment entrusted to you carefully and keep it safe, as if it was your own.

**Responsibility** - includes the pursuit of excellence, accountability and perseverance.

- Don't overextend yourself, so you can give your best effort to things you commit to
- Own your mistakes and learn from them
- Rest if you need to, but don't quit

**Fairness** - involves consistently applying rules and standards appropriately for different age groups and ability levels.

- Live the standards that you set for others
- Treat others as you like to be treated
- Know what's "equal" and what's "equitable"

**Caring** - promoting the well being of people and things in a young person's world. It denotes action and not just feelings.

- Remember that people have feelings
- Know that others want to do well also
- Help others feel good about themselves

## Resources

### 921 Entomology Unit 1

Y620 4-H Project Record  
Y9210 Creepy Crawlies  
LG9200 Insectaganza Helper's Activity Guide

### 922 Entomology Unit 2

Y620 4-H Project Record  
Y9220 What's Bugging You  
LG9200 Insectaganza Helper's Activity Guide

### 923 Entomology Unit 3

Y620 4-H Project Record  
Y9230 Dragons, House and Other Flies  
LG9200 Insectaganza Helper's Activity Guide

## To Order

Extension Publications online at <http://extension.missouri.edu/explore/shop/> or by phone 1-800-292-0969

For additional resources check with your local University of Missouri Extension Center or the 4-H Source Book at <http://www.4-hmall.org/educationalresources.aspx>.

**Citizenship** - includes making the home community and county a better place to live for themselves and others.

- Follow the rules, obey the law, and expect the same of others
- Be a good citizen by keeping your space neat and clean
- Don't use more than your share of the ground; remember you're not the only person or animal enjoying the earth
- Share what you know about insects; help others see the benefit of having them around

## Show Me Standards

Missouri 4-H members will acquire the knowledge and skills to gather, analyze and apply information and ideas, communicate effectively, recognize and solve problems, make decisions and act as responsible members of society.

4-H members will acquire a solid foundation which includes knowledge of:

- **Science** - changes in ecosystems and interactions of living organisms with their environments
- **Health/Physical Education** - diseases and methods for prevention, treatment, and control
- **Mathematics** - addition, subtraction, multiplication and division.

## 924 Beekeeping

Y620 4-H Project Record  
G7600 Beekeeping Tips for Beginners  
G7601 Seasonal Apiary Management

G materials downloadable at

<http://extension.missouri.edu/explore/agguides/pests/>

Download the Butterfly Gardening publication from Missouri Department of Conservation at

<http://mdc4.mdc.mo.gov/Documents/8274.pdf>