



INSECT COLLECTING



Introduction

Insect collecting is a fun way to explore all facets of insects. A world of insects awaits you when you simply step outside. Most insects live in warm, moist climates, which makes learning about them easy for Louisianians. Insects provide many important functions to our ecosystem, including aerating soil, pollinating flowers, and controlling pests. By simply decomposing, insects help soil to grow. Also, insects can provide edible forms of protein to farm animals and even humans.

Time Required

Two to three hours.

Lesson Objectives

1. Students will learn about the different types of insects in south Louisiana.
2. Students will learn about the parts of an insect.

Video Links

- www.youtube.com/watch?v=grpgFICyod4
- www.youtube.com/watch?v=YyVOsAMS1qo
- www.youtube.com/watch?v=SooNFKqyBtE&t=28s
- www.youtube.com/watch?v=E1aM0ac_e1U
- www.youtube.com/watch?v=1bmlpakKRvg



Korey Pham, research associate at the LSU AgCenter Department of Entomology, demonstrates how to collect insects.

Materials

For collecting:

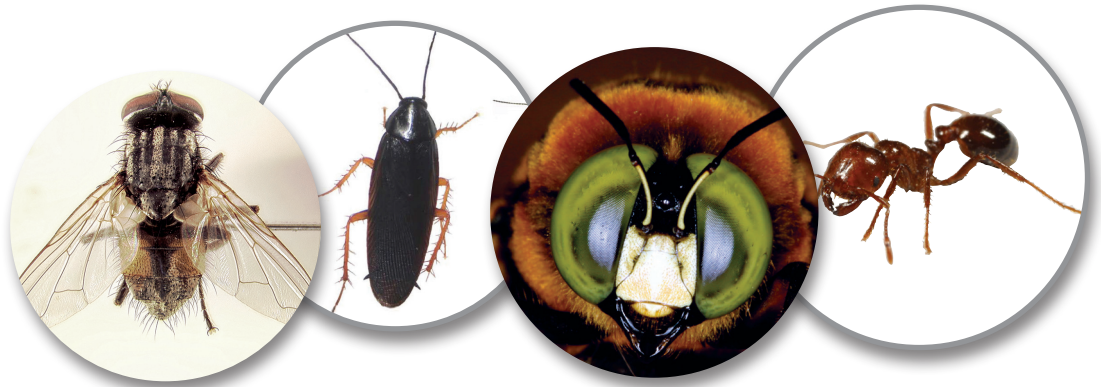
- Containers with lids (jars, plastic food containers, or large medicine bottles).
- Homemade butterfly net (optional). Wrap the top of a plastic grocery bag around a wire coat hanger bent into a circle and secure with tape.
- Tweezers.
- Paper towels.
- Rubbing alcohol (optional).
- Dishwashing liquid.
- Bowls.

For pinning:

- Shallow box (12-inch x 12-inch or other).
- Foam board (cut to fit bottom of box).
- Magnifying glass (optional).
- Scissors.
- Glue.
- Insect pins (or long straight pins used for sewing).

Common insects you might find on your hunt

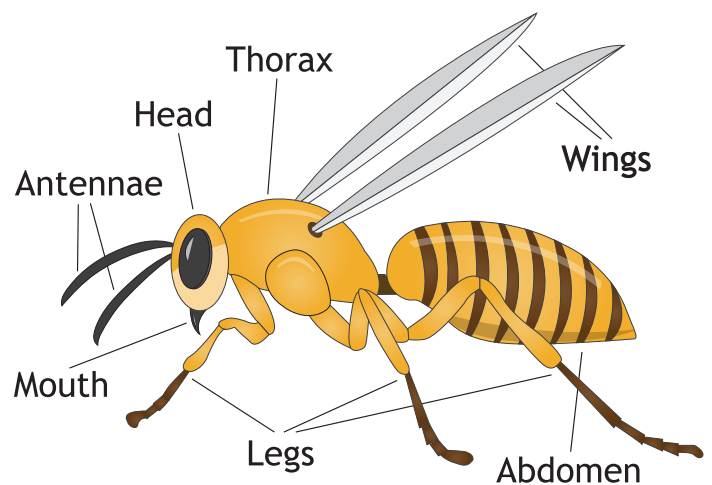
- Ants
- Bedbugs
- Carpenter bees
- Carpet beetles
- Cockroaches
- Houseflies
- Mosquitoes
- Earwigs
- Termites



From left: Housefly, rural cockroach, carpenter bee, fire ant.

Vocabulary words

- **Abdomen:** The last segment on an insect that holds the heart, midgut, and other digestive organs.
- **Antennae:** A pair of long, sensory appendages on insects' heads.
- **Endoskeleton:** Internal skeleton made of bones or cartilage.
- **Exoskeleton:** Rigid body covering.
- **Head:** The first segment on an insect that holds the brain, eyes, antennae, and mouthparts.
- **Hemolymph:** A fluid that is similar to blood.
- **Insect:** A small animal that has three segments and three pairs of legs.
- **Spiracles:** Small holes in an insect body that allows them to breathe.
- **Thorax:** Middle section of a body.
- **Tarsus/Tarsi:** Insect foot.



Activity 1: Insect collecting

1. Go outside and see what you can find!*

Where to look:

On the ground, under rocks or debris, near a porch light at night, around bushes, near pollinating flowers.

How to collect:

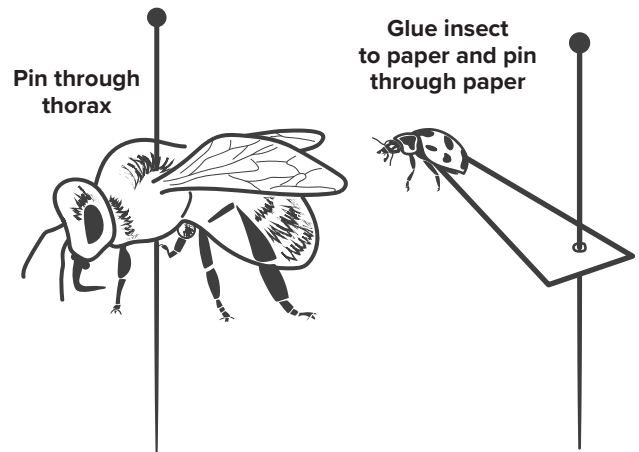
Tweezers: Use tweezers to collect insects on the ground and put them into a “kill jar.” Line the bottom of the jar with a paper towel and wait several hours before removing. Or, fill the jar with rubbing alcohol to kill the insect more quickly.

Butterfly catcher: Use sweeping or downward motions to catch flying insects or those stuck in bushes. When caught, turn the butterfly catcher upside down over a jar and carefully release.

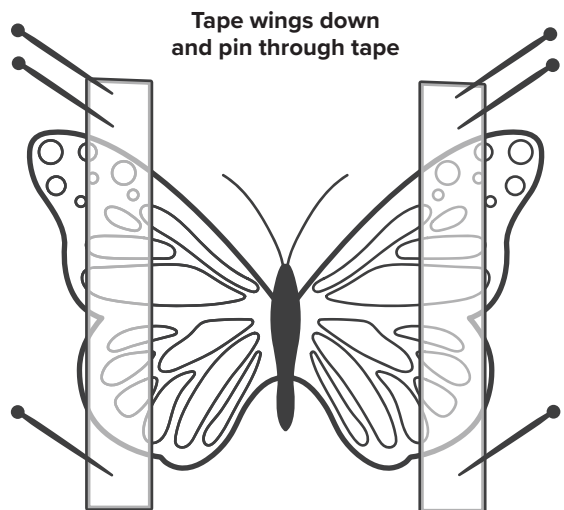
Bowls: Leave bowls filled with dishwashing liquid and water to attract insects. Spray-painting the bowls red, green, and blue will attract different types of insects.

2. Use your insect tracking card to document information.
**Note: Handle insects carefully. The objective is to not squish or flatten the insects and to avoid stings or bites.*

Activity 2: Pin board



1. Cut a foam board the same size of the shallow box and place inside.
2. Use an insect pin or straight pin to pierce the top middle of the insect's thorax and pin to the foam board in the box.
3. For insects with large wings, lay flat and cover wing ends with strips of card stock or paper and pin the edges of the paper to the foam board being careful to avoid pinning the wings.
4. For tiny insects, cut a small piece of paper and punch a pin through. Use glue on the edge of the paper to hold the insect.
5. Let dry for several days.
6. Observe with a microscope.



Insect Tracking Form:

State _____ Parish _____

GPS Coordinates _____

Day _____ Month _____ Year _____

Collector's Name _____

