

## INSECT COLLECTION

Insects are invertebrates with three pairs of legs, usually two pairs of wings, one pair of antenna, jointed appendages and three distinct body regions – head, thorax and abdomen. Insects belong to the largest phylum of animals known as arthropods. Many small arthropods are mistaken for insects such as spiders, ticks, millipedes, and centipedes. Although some insects may sting or bite, insects play an important role in nature as a food source for other animals and as plant pollinators.

By doing an insect collection, you can not only learn beneficial and harmful insects common to our area, but you will also learn structural modifications of various insects that have enabled them to survive and become such a successful and diverse group of animals. You will also learn to use taxonomic keys to identify insects as well as other organisms.

In order to properly do an insect collection, several techniques must be learned including how to correctly collect, kill, pin, spread, label and display your insects.

Your collection will consist of the following: **two different types of beetles, two different types of butterflies, two different types of moths, one mosquito, one fly, one cicada, one bee, one termite, one dragonfly, one grasshopper, one roach, and one cricket.**

In lieu of an insect collection a research paper may be done. Each of the above listed insects must have at least one page dedicated to information about the insect. The paper should be at least twelve typed, doubled spaced pages using a font size of twelve. A works cited page should be at the end of the paper. You must have at least four different sources. You will submit your paper electronically to “Turn It In” to be checked for plagiarism. I will give you the web site and passwords two weeks before the papers are due. A paper showing forty percent or more plagiarism will result in a zero, thirty-five percent will result in a grade of 60, thirty percent will result in a grade of 70, twenty-five percent will result in a grade of 80, and less than twenty percent will result in a grade of 90 or better.

### Collection Tips

Where to look: Insects are found practically everywhere. They can be found in fields, gardens, woods, parking lots, beaches, swamps, under rocks and under rotting logs. Look in flowers and on grass.

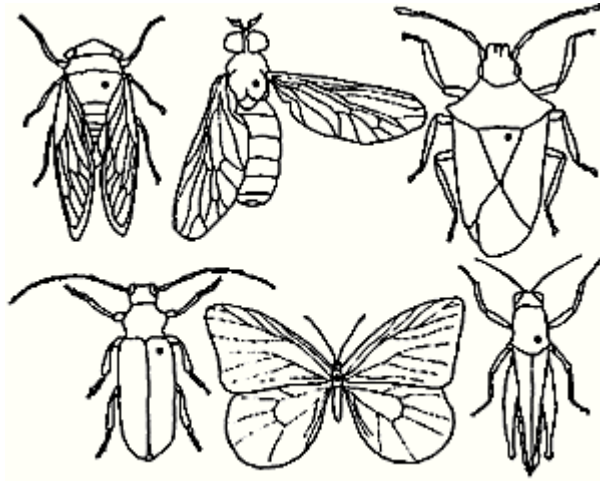
How to collect: You can make a kill jar from any type of household jar. Soak a cotton ball with acetone (fingernail polish remover) or alcohol. Secure the cotton ball to the lid of the jar. You can place the cotton ball on the bottom of the jar, but in many cases it will ruin the insect. Be careful not to place more than one type of insect in a kill jar at a time. (Some insects eat other insects.) You should pin the insect as soon as possible. Place a note as to where it was caught, the date and by whom it was caught with the insect. Place the pinned insects on a piece of Styrofoam inside a box with a lid. Place a mothball inside the box to deter invasion from other insects. (It also hides the smell.)

Classification Guides: Classification guides are available in my classroom. They cannot leave my classroom. You are welcome to come before or after school to classify insects. I discourage use of the internet for classification of insects. It often results in a wrong classification because there are so many different species of insects that look similar but are not found in our location. If you wish to purchase your own classification book I recommend *National Audubon Society of Field Guide to North American Insects* or either *Insects: A Golden Guide*.

Displaying Insects: Remember that your insect collection will not be returned to you, so do not build an expensive case. Sturdy cases can be made using the bottom of a cardboard box. Place a sheet of Styrofoam in the bottom of your case. Make sure all pinned insects are facing the front of your case. Underneath each insect you will place your label. Cover your insect collection with plastic wrap.

Writing Insect Labels: The first line of the label should contain the scientific name (genus and species) of the insect. On the second line write the common name. The third line should contain the town of in which the insect was collected. The fourth and final line should contain the name of the person who collected the insect. Remember if you are handwriting your labels to capitalize the genus and to underline both the genus and species. If you type your labels you should capitalize the genus and italicize both the genus and species.

Grading: Collections will be graded on condition of each insect, correct identification of each insect and overall appearance of the collection.



**Figure 3. Proper insect pinning.**

Example of a typed label

*Anax junius*  
Green Darner  
Gulf Shores  
L. Lowell