

INSECT COLLECTING 101

WHERE TO COLLECT

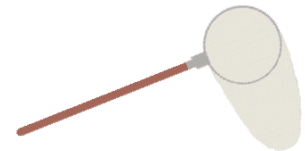
The key to getting different insects is to collect in different habitats at different times of the day. Remember some insects only come out at night.

Places to collect include

- ☞ Your own yard. In particular look for plants with lots of aphids or other pests, as these plants may also have predatory insects.
- ☞ A grassy field.
- ☞ Near lights at night. Lighted gas stations in "the middle of nowhere" are usually a goldmine of insects.
- ☞ In decaying logs, under stones, beneath soil and plant debris.

HOW TO COLLECT INSECTS

- ☞ By hand. Be careful of biting or stinging insects!
- ☞ Plastic bags. Put the open bag over the insect to catch it, and place the bag in the freezer.
- ☞ Insect net. You can purchase one (I have seen them at Target). Or you can make your own out of nylon mosquito netting (available at a army surplus store) or any other netlike material. If you would like to make your own net, there are directions at the back of the packet. To use an insect net, sweep it back and forth several times as you walk through foliage.
- ☞ Beat sheet. Simply lay a white sheet beneath a tree or bush and hit the leaves of the plant with a stick or broom several times so that the insects fall onto the white sheet below.



HOW TO KILL YOUR INSECTS

- ☞ Freeze them. Place collected insects inside small Tupperware containers or plastic bags and put them in the freezer for a few hours to kill them. Insects can remain in the freezer for several weeks until you are ready to pin them. The insects should be removed an hour before pinning, so they have time to thaw and become soft and movable.
- ☞ Use a kill jar. This is a special glass jar with Plaster of Paris on the bottom that you saturate with nail polish remover or some other poison.

HOW TO PRESERVE/PIN INSECTS

Large insects can be pinned. Insects should be pinned in such a way as to make them easy to handle and observe while not damaging them. In the picture below, the dots show where to put the pin for different types of insects.

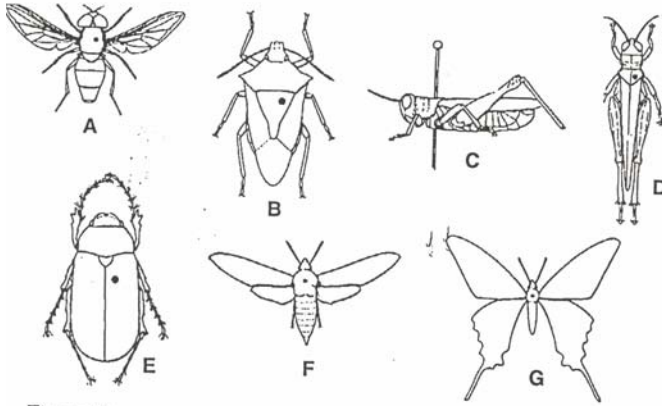


Figure 12

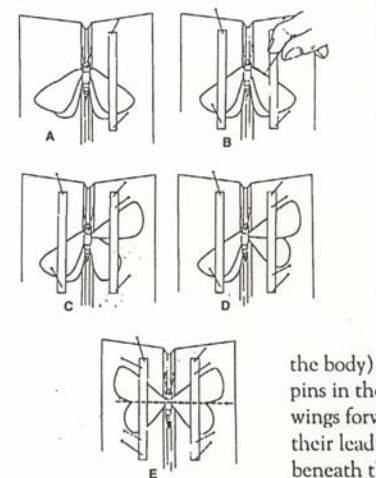
The pin is inserted into the top of the insect's body and pushed through most of the way, leaving enough of the pin at the top to hold the pin without handling the insect itself. The pin must go through far enough that the specimen can be pinned to a piece of Styrofoam without the legs touching the surface.

NOTE some long thin insects such as praying mantids or walking sticks may need pieces of thick paper or cardboard beneath the insect to help support it.

You should pin an insect quickly after it dies or within a few hours of removing it from the freezer since it will be "soft", and there is less likelihood of the legs and antennae breaking off. You can use other pins to construct a support system to hold legs and antennae in particular positions. After 2 or 3 days your insect will "harden" and remain permanently in this position.

Butterflies and moth are handled a little differently. You will want to spread the wings of the butterfly while it is still pliable and use strips of paper to hold the wings in place; after a few days the insect will dry in this position.

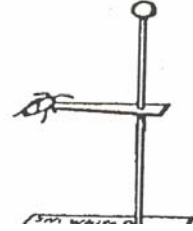
Place pinned insects on pieces of Styrofoam.



the body)
pins in the
wings for
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Figure 17

☞ Small insects (too small to stick a pin through) are "pointed" on small pieces of stiff paper. Cut small triangular pieces of index cards (or other thick white paper), and stick the pin through the piece of paper. Place a small dab of glue on the paper and glue it to the right side of the insect. **PRACTICE MAKES PERFECT**; this is very hard to do. You may have to try 5 or 10 times before perfecting the technique.



☞ If you don't feel comfortable pinning or pointing insects, you can keep them in the freezer (to stop decomposition) until we collect them from you, and they will be pinned here at the University.

NOTE- sometimes ants can go after your insect collection and eat it. If your collection is ant-infested, put it in the freezer for a few hours to kill the ants. Try to keep your collection in an ant proof box or container to prevent problems.

If you become especially fascinated by insect collecting, you can order insect collecting equipment from Bioquip at www.bioquip.com.

If you have any question please do not hesitate to contact me (Esther Dunn) at hadassah@ufl.edu

HOW TO CONSTRUCT AN INSECT NET

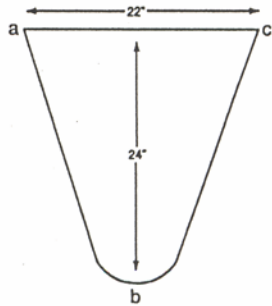


Figure 2a

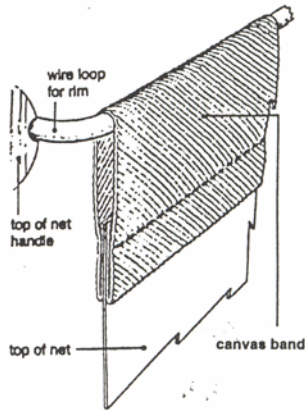


Figure 2b

To construct the net bag, cut out a piece of net material the size and shape as shown in Figure 2A. The bag may be placed on the wire loop before it is attached to the handle or it may be sewn to the loop after it is attached.

It is advisable to sew a muslin or denim band over the loop to increase the durability of the net. To make a loop for the wire hoop, use a strip of heavy muslin or denim 5 x 44 inches. Fold it lengthwise to form a hem around the top of the bag (see figure 2B). The top edge of the net should be placed between the two sides of the folded muslin. Tuck the cut edges of the muslin so that the edge of the net and the tucked edges of the muslin overlap at least 1/2 inch. Join these by twice sewing completely around the material near the middle of the overlap.

When choosing a handle, select a strong, lightweight wooden dowel approximately 3 feet long. A 3/4-inch dowel rod is ideal for this purpose. Cut two grooves along the sides at one end as shown in Figure 2C (page 5). These grooves cradle the bent arms of the hoop and are cut as deep as the thickness of the wire. Make one groove approximately 3 1/2 inches long and the other 2 1/2 inches. At the end of each groove, drill a small hole at a right angle into the handle to anchor the wire.

To make the loop, bend a 4-foot length of approximately 1/8-inch durable steel wire, (preferably piano wire), into a hoop with short arms at each end as shown in Figure 2D (page 5). Take care that the arms and little hooks at their ends are bent correctly to fit along the grooves and into the holes in the handle. After fitting the hoop to the handle and properly attaching the bag, you are ready to make the joint fast between the handle and the hoop.

Wrap the joint tightly with fine wire (Figure 2C) or better still, fit the handle with a sliding metal ferrule. A short piece of 3/4-inch copper or aluminum tubing fits snugly over a dowel rod of that diameter.