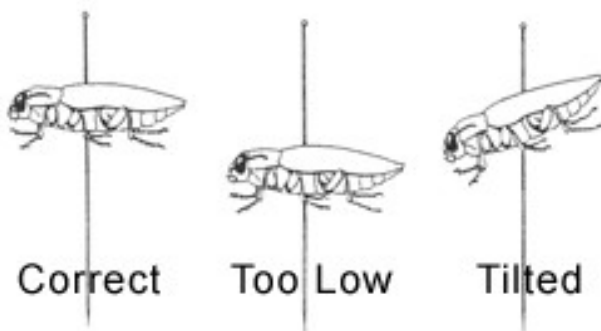
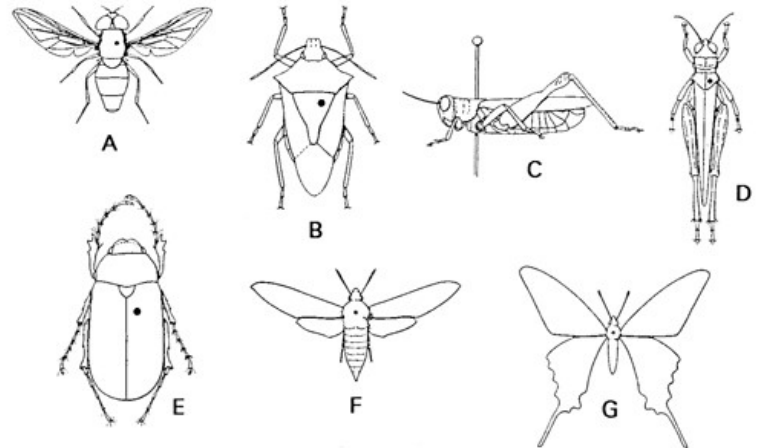




# Insect Pinning

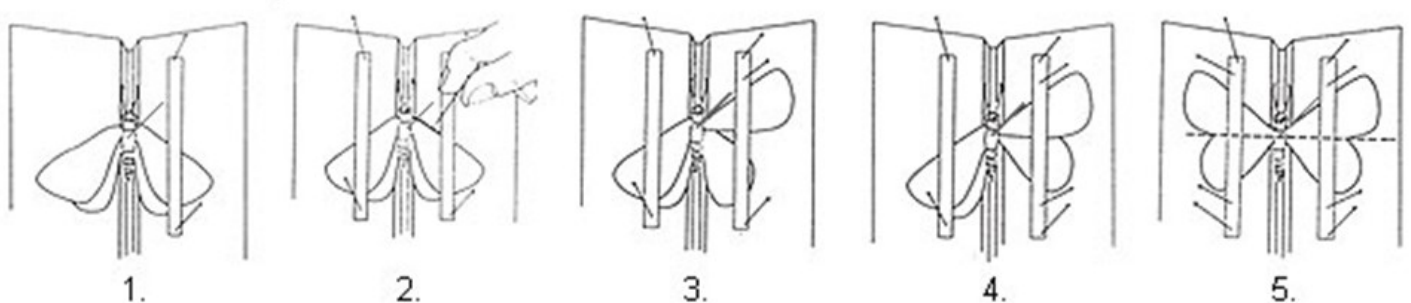
## Pin Placement

Pin placement varies based on type of insect. Pins should be placed through the thorax of insects. If an insect folds its wings over its back, like beetles, true bugs, or grasshoppers, the pin will go through their right wing. The black dot on the figure to the right indicates the correct pin placement.



## Insect Placement

Insects should be placed on the pins so they are level and uniform. Poke through the insect on the top and hold to ensure the pin does not go through at an angle. Ensure the insect is not tilted. Use a pinning block to place insects at a uniform height; use the top step of the pinning block.



## Wing Spreading

When spreading the wings of butterflies and moths, it is important that you are able to clearly see the hindwing and the forewing. Instead of using strips of paper, like shown above, using pieces of tracing or parchment paper to help spread the wings will keep wings flat and uniform. Place wings in desired position, place the paper on top of the wings, and then pin around the wings. Be careful as you manipulate the wings because the scales easily rub off.

## Insect Labels

When creating an insect collection, it is important to have labels with the specifics of where and when the insect was found. Include the state, county, city, precise location, date of collection, and the collector. Below are examples of a finished label. Center the insect over the label to ensure a uniform look throughout the collection.

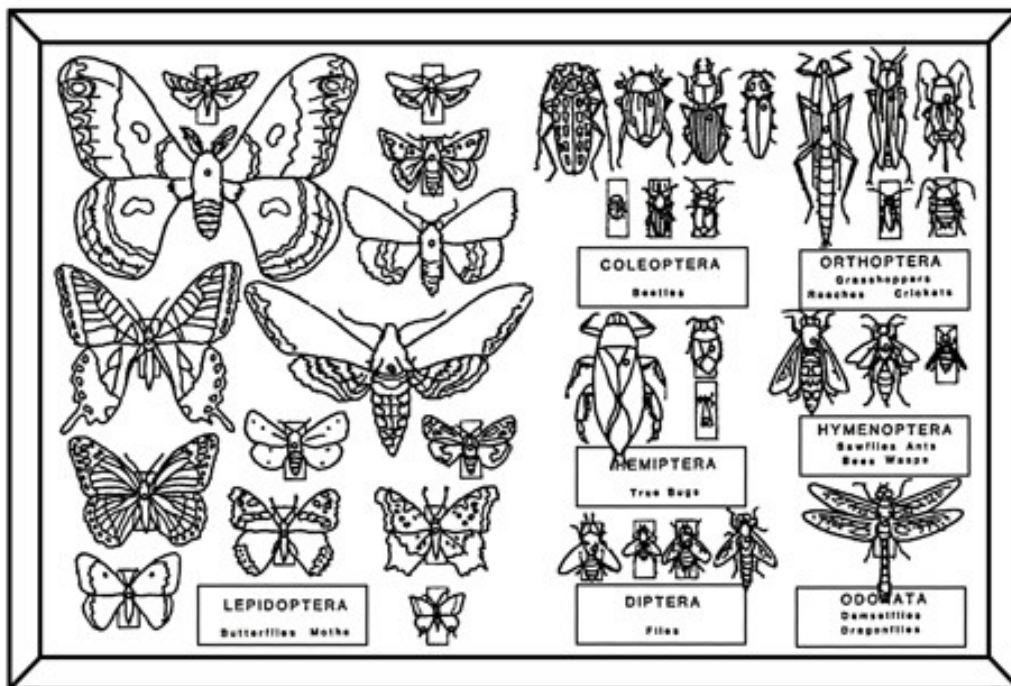
State: County  
City, Precise location  
Date  
Collector

IL:Kankakee Co.  
Bourbonnais, Perry Farm Pk.  
Aug 31, 2016  
DW Rosenberger

## Organizing the Collection

When organizing your insect collection, it is important that your insects are grouped together by order. You may continue to organize your collection down to lower classifications (family, genus, species) if you so wish, but identifying insects down to the species level is often challenging.

Insects and labels should be facing the same way. Order labels are helpful when it comes to organizing your insect collection, but not necessary. Try to have uniform spacing between each insect throughout the collection.



# Insect Collection Supplies List

BioQuip is a one-stop-shop for entomology and field biology supplies.

<https://bioquipinc.com/>



## **Storage Box or Drawer**

You will need a box or drawer to safely store and/or display your collection. We prefer the Cornell drawer system, but you can browse the website for other options as well.

Cornell University Drawers: <https://bioquipinc.com/catalog/cabinets-drawers/cornell-university-drawers/>

Other options for storage/display: <https://bioquipinc.com/product-category/cabinets-drawers/boxes-display-cases/>

## **Trays**

Trays go inside of your drawers to separate your insects based on order, family, etc. They fit together like a puzzle. Make sure to plan ahead so all trays fit inside your box. Be sure that your trays correctly match your drawer type!

<https://bioquipinc.com/product-category/cabinets-drawers/unit-trays/>

## **Pins**

Any of the pins offered through BioQuip will work well! I always have a pack of size 0, 2, and 3 on hand. The smaller the number the smaller the thickness of the pin, but the length stays the same.

Black Enameled 1208B Series: <https://bioquipinc.com/catalog/mounting-curating-equip-supplies/1208b-series-insect-pins/>

**Pin Holder:** <https://bioquipinc.com/catalog/mounting-curating-equip-supplies/four-hole-pin-holder/>

**Pinning Block:** Use the pinning block for consistent insect and label heights on your pin.

<https://bioquipinc.com/catalog/mounting-curating-equip-supplies/1144-pinning-block/>

**Spreading Board:** Use a spreading board to spread the wings of butterflies, moths, etc.

Economy Board: <https://bioquipinc.com/catalog/mounting-curating-equip-supplies/economy-spreading-boards/>

## **Tracing Paper or Parchment Paper**

Use tracing/parchment paper for spreading butterflies, moths, etc. Place the transparent paper over the wings to flatten them, and then pin around the wing. With this method, you will get a nice, flat shape and avoid ripping the delicate wings or dotting them with pin holes.

**Nets:** For collecting insects in the field.

See all net options here: [https://bioquipinc.com/?s=insect+net&post\\_type=product](https://bioquipinc.com/?s=insect+net&post_type=product)

Pocket nets are fun and handy, too! <https://bioquipinc.com/catalog/collecting-equipment-supplies/nets-accessories/insect-nets/pocket-net/>

## **Collection Containers**

I use small plastic portion cups and baggies for collecting insects. I keep plastic portion cups from when I go out to eat at restaurants. I hate throwing them away, so I reuse them for insect collecting!

After you collect the insects you can simply pop them freezer to kill them. Keep them there until you're ready to pin another day (this is what I do).

You can also use glass collection jars charged with ethyl acetate ("Kill Jars") to kill the insects on site. These are available on BioQuip: <https://bioquipinc.com/catalog/collecting-equipment-supplies/1121-series-collecting-jars/>

If you do want to make homemade kill jars, they're easy to make and you can reuse glass jars from food instead of throwing them away. Use ethyl acetate as the killing agent.

Here's a how-to: <https://thedragonflywoman.com/2010/10/05/killjars/>



## Insect Card Points

Cut out pre-sized labels carefully. Dots indicate correct location of pin.

