

“HOW TO” NO.1

INTRODUCTION TO INSECT STORAGE TECHNIQUES FOR SMALL COLLECTIONS

(This sheet is intended to be of help to the non-specialist in small museums, nature centers, libraries, and schools; or to those people who may ‘inherit’ an insect collection but who aren’t familiar with the basics of insect collections care.)

Do you have a display box or two of pinned insects on a shelf? Perhaps a local donor has just dropped off their personal insect collection at your nature center or small historic museum? What can you do to make sure that this collection has a long life, is accessible to your visitors or users, and is best displayed?

KNOW YOUR INSECTS #1: SPECIMEN IDENTIFICATION

Are the specimens labeled? Insect labels are usually underneath the specimen body on the same pin. Labels usually contain locality, date and collector. Sometimes they may have identifications to family, genus, or species. Identifying insects is often a great group project that can involve interested students or visitors.

Are the specimens sorted? Most often, small insect collections are sorted by orders and families (true bugs; true flies; katydids, crickets, and grasshoppers, etc.). If that’s the case, keep them sorted; if not, it may be another learning opportunity.

KNOW YOUR INSECTS #2: WHAT’S EATING MY SPECIMENS?

Chief among the hazards that may affect the long shelf life of your insect specimens are a group of small beetles known as ‘dermestids’ that love to eat dry animal protein, and insect body parts are a main course on their menu.

Clues to look for:

- Live larvae of beetles look like miniature hairy caterpillars.
- Larval sheds look like husks of those miniature hairy things.
- Adult dermestids are about 1/8" long, brown or spotted.
- Holes in pinned insect bodies.
- Beige, tan or brown dust underneath the insect bodies (this is called “frass,” and it is the dermestid larvae’s waste droppings - your specimen is being eaten!!).



What to do:

- It’s best to freeze the whole display box, in a deep freeze of -4 Fahrenheit for 2-3 weeks.
- Clean up the bodies of the adults and larva, sheds, and frass. This way you can see if your collection is infested again.
- Consider getting tighter-fitting boxes. Telescoping lids that fit snugly over the tops are best to keep bugs out. Many small collection boxes have loose lids or deteriorating tape (tape is not really a good thing!), and loose lids invite the dermestids to come in.

KNOW YOUR INSECTS #3: WHAT ELSE IS BUGGING MY SPECIMENS?

Other hazards to insect collections are vibration, or physical damage, and fading from light.

Pinned insects are basically ‘shells of their former selves,’ that is they are dried out leaving only their hollow exoskeletons sticking to the metal pin. Undue shocks and unnecessary movement can cause legs, antennae, and wings to fall off.

Clues to look for:

- Legs, antennae, wings, heads or abdomens have fallen off and are at the bottom of the container.
- Insects spin or swivel on their pins.

What to do:

- Find the leg or wing, head or abdomen that goes with your specimen. Acid-free glue is best, but you may use a commercial variety if that’s what you have. Do not use super glue.
- Put a small spot of glue on the underside of swiveling insects at the place where the pin meets their body.
- Restrict movement of the insect collection display boxes. Put them out low enough for people to see without lifting. Ask people to not pick them up or to be careful when handling them.

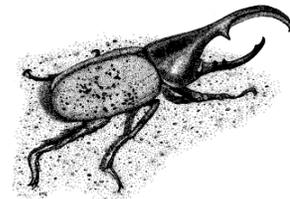
Excess light (especially direct sunlight) will fade anything, insects included.

Clues to look for:

- Bright colors are dull, insects look “washed out.”

What to do:

- Limit time in bright lights. Store insects in closed, dark cabinets when not in use.
- Keep away from ultraviolet, especially direct sunlight. Check during different times of the day: are your insects ever in direct sunlight – even after hours?



Keeping your collection safe and sound will lengthen the “life” of your specimens and increase the opportunities for your visitors or users to access them over the years.

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