

Greetings students,

In the enthralling realm of ecology, the creation of an insect collection stands as a fundamental skill for aspiring naturalists and ecologists alike. Preserving the delicate beauty and scientific value of insects requires meticulous care, especially when it comes to pinning these fascinating creatures. Follow these steps to master the art of correctly pinning insects for your collection.

Materials Needed:

Insects: Choose specimens that are intact, undamaged, and representative of the species you wish to document.

Pins: Utilize high-quality stainless steel insect pins with a fine point for precision.

Pinning Block: A sturdy pinning block provides a stable surface for pinning and helps you secure insects at a uniform depth on the pin. Wooden pinning blocks are available to use in my lab or can be checked out from the library.

Collection box: A box is available for you to check out from the library.

Labeling Materials: Ensure you have small labels and an archival waterproof pen for accurately documenting specimen details. We'll go over labeling in detail on another day.

Procedure:

Prepare the Insect:

If you aren't going to pin the insect right away, store it in the freezer until you are ready to prevent it from drying out.

Handle the insect with care, avoiding damage to wings, legs, and antennae.

If your insect is a bit too dry, gently relax the specimen by placing it in a [relaxing chamber](#) for a few hours to a few days.

Positioning on the Pin:

Place the insect with its back facing upward, as symmetrical as possible.

Insert the pin through the right side of the thorax, ensuring it emerges centrally through the bottom.

Securing the Specimen:

If desired, use forceps to hold the insect in place while pushing the pin through the body.

Position the insect on the pin, ensuring it is straight and parallel to the pin.

Spreading:

For Lepidoptera (moths and butterflies), it is required that you spread the wings using a spreader. Pin the insect normally first. Secure the insect body in the groove in the middle of the spreader. Use pins with ¼” strips of paper to hold the wings in place. Use a pin to inch the forewings forward and the hindwings out, being careful not to damage the wings. The goal is to ensure that both forewing and hindwing are easy to see. Leave the insect in the spreader for several days to allow it to dry in the proper position. Then remove it and place it in your normal collection, disposing of the paper strips and returning the extra pins. For more detailed instructions, [see this Purdue extension website](#).

You are only required to spread wings for Lepidoptera. However, some people enjoy spreading the wings of insects in other orders, for aesthetic reasons. A large beetle with its wings spread, showing the membranous wings hidden below its elytra, can look cool!

Labeling:

Use the pinning block to position the insect at the correct level on the pin.

Attach a small label beneath the insect with important information: Name of collector, zip code, date collected, order, and family. Write legibly and use archival paper and waterproof ink to prevent smudging or fading over time. (We'll discuss labeling in detail later.)

Arrangement in the Collection:

Place the pinned insects in a systematic order within the collection box.

Group specimens by order, family, or any other classification system you choose.

By mastering the art of insect pinning, you contribute to the legacy of scientific understanding and gain a deeper appreciation for the intricate world of ecology. Take pride in your curated collection, a testament to your dedication to the study of nature.

Happy collecting!

Dr. Gorski, Wiley University