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How to Preserve and Display Your Specimens

Specimens in your collection can be stored in many ways to reduce damage caused by fluctuations in temperature and humidity. Here are some examples of ways to store and display your collections. Pinning is only used for invertebrates. The animal is dried and prepared so that the animal will not break down over time. The easiest ways to prepare your insects for pinning are drying or boiling. Another way to preserve your insect or other specimen is alcohol preservation. With this method, live-taken or recently dead material is normally preserved in two stages: fixing and then placing in long-term storage. You can use alcohol-based hand sanitizer to preserve your specimen in a glass jar.



Know before you begin

- This activity can be done inside or outside
- All supplies are easy to find, substitute or leave out entirely
- Adult supervision is recommended
- Please choose a safe space to play



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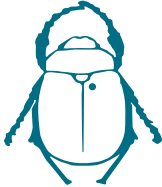
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Pinning Beetles and Other Insects

Materials

- Insect
- Pins
- Probe or tweezers
- Balsa wood scraps or cardboard scraps
- Display box

Instructions

1. After relaxing an insect, loosen its legs, antennae, and other moveable parts by gently wiggling them and then stretching them out. Use a toothpick, wooden probe or teasing needle.
2. Insert an insect pin through the middle of the thorax (the middle section between the head and abdomen), slightly off-center to the right. Push the pin all the way through the insect's body, then about $\frac{1}{2}$ inch into the spreading board or another piece of board. The insect should typically be about halfway up the pin or far enough above the spreading board so that you can freely position the legs. 
3. Gently move the legs and antennae into the positions desired using a probe or forceps. This takes some patience. It may take several attempts before you are able to get a leg or antennae into the position you want. Cross two pins over each other to hold each section of the limb in place

to dry. It is easiest to first position a foot where you want it and pin it in place. Then you can move up the leg to position and pin each additional leg section using two more crossed pins. How you position the legs and antennae is up to you — some people like to pin their specimens in natural stances while others prefer a more creative stance. Let the insects dry for one or two days, or until the legs stay in position when the pins are removed.

4. Very carefully remove all pins except for the one through the insect's thorax. This requires great care as the insect is now very brittle and fragile again. Removing a pin by pulling in the wrong direction can break a leg or antennae.
5. Transfer the insect to the display case. Use the pin through the thorax to pin the insect into the display case. On larger, heavier insects you may want to use additional pins to keep the insect's body from pivoting.





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Displaying Specimens

Materials

- Pinned insect
- Pins
- Probe or tweezers
- Foam
- Display box

Instructions

1. Remove the glass cover from the case and set it aside. Position your insect specimens one at a time in any arrangement desired. Start with the largest insects first and then add the smaller insects, leaving adequate space between each specimen. Push each pin securely into the foam in the bottom of the case.
2. Replace the cover and stand the display case on a shelf, or hang it using the wall mounting hooks on the back.





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Tips and Other Things to Know

You can typically spread two or three butterflies or five to eight beetles on your spreading board at one time, depending on the size of the specimens.

Sometimes you will need to rotate a butterfly's head to get it in the correct position.

Once an insect is dry, a drop of white glue where the wings attach to the thorax or at the leg joints will reduce the possibility of an appendage falling off. Do this before removing the insect from the pinning board.

Label your specimens, if desired, with a piece of paper (about 1 inch wide and 2 inches long) inserted on the pin below the insect. Include information such as species, common name, location collected from and date collected.

Hold it in place with pins.

Be very careful when handling the specimens as they are fragile. Pay special attention to butterflies and moths, as the fine scales of their wings can be easily rubbed off, taking away from the color and beauty of the specimens.

