

# Making a Spreading Board for Pinning Insect Wings

## OBJECTIVE:

The children will make their own insect spreading board.

## LEARNING & LIFE

### SKILLS:

- Following a printed plan
- Measuring
- Cutting

### MATERIALS:

- 1 sheet of Styrofoam or balsa wood that is roughly 12 to 15 inches long by 4 inches wide by 1.5 inches deep (thicker is fine)
- Ruler or tape measure
- Marking pencil or pen
- Hard surface such as a workbench or scrap board on which it is safe to cut
- Utility, craft or other sharp knife

### AUDIENCE:

Ages 9 and up, with adult supervision of younger children who are cutting Styrofoam or balsa wood

### TIME:

15–30 minutes

### SETTING:

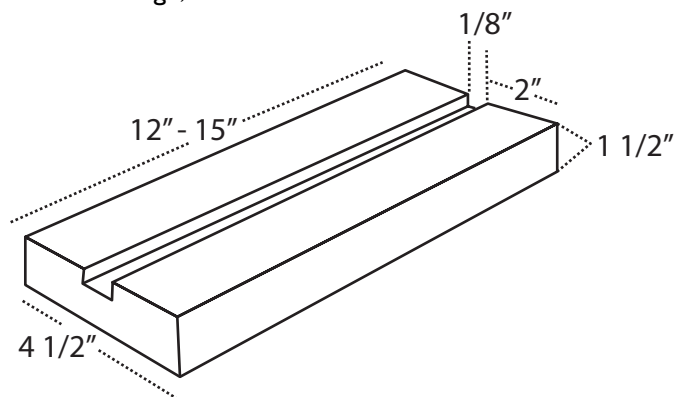
Indoors with a workbench, scrap board or other hard surface on which it is safe to cut

## BACKGROUND INFORMATION:

Every insect collector needs at least one spreading board to help you spread the wings of butterfly, moth, dragonfly and damselfly specimens when you're pinning them to add to your insect collection. (These insects look better when their wings are spread correctly, and they're easier to identify.) You can buy a spreading board at a biological supply house or some college bookstores, or make your own. Follow the steps outlined in this activity to build your own insect spreading board. Ask an adult for help with the measuring and cutting if you need it.

## PROCEDURE:

1. Gather the supplies you will need to make a spreading board. You may be able to find Styrofoam that's about the right size in boxes in which computers or other electronic equipment were shipped. If the Styrofoam sheet you're working with is thinner than 1.5 inches, you can stack two sheets together and secure them with glue or with pins at the corners. (You need the thickness so that insect pins don't poke through the finished spreading board's bottom. You should be able to push a pin down through the center slot of the spreading board until the specimen's wings are even with the top of the sides. If the wings aren't level with the sides of the spreading board, they will either droop or be slanted upward. Entomologists – scientists who study insects – consider neither of these positions correct for specimens displayed in an insect collection.)
2. Next find a hard surface on which it is safe to cut, such as a workbench or a scrap board. (Remember that it may be wise to ask for adult help with the measuring and cutting.)
3. Follow the diagram of a finished insect spreading board as a guide when you're measuring your board. Use the tape measure and marking pencil or pen to mark the dimensions of your finished board onto the Styrofoam sheet. The exact length and width of your spreading board is your choice, but 12 inches to 15 inches long by about 4 inches wide is a convenient size.
4. Carefully cut the Styrofoam sheet to the size you've marked.
5. Now you need to decide how wide to make the groove down the length of the middle of the board. (That groove is where the insects' bodies will rest while you're pinning their wings.) You may want to taper the groove from about 1/8-inch wide at one end to 1/2-inch so that you can use it to pin both small, thin-bodied insects and large, thick-bodied insects.





Some people prefer to make two spreading boards with different width grooves instead. However wide you decide to make the groove, it should be about 1/2 inch deep. Be careful as you cut away the Styrofoam in the groove. It's easy to gouge your fingers!

6. When you're satisfied with the size and shape of your insect spreading board, it's time to try it out! Follow the directions in "Spreading Lepidoptera" on page 18 of *Basic Entomology* (4H1335).

### THINKING IT OVER:

When you've finished building your insect spreading board, think about and perhaps write down the answers to these questions:

- Did you have any trouble finding the supplies you needed for this activity?
- Was it easy or hard to mark and cut your spreading board to the correct size?
- Did you decide to cut a tapered groove in your board, or to make two spreading boards with different sized grooves to fit different sized insect bodies? What factors led to your decision?
- What other insect collecting equipment are you interested in making or buying? Where will you find the information you need to do either?

### TRY THIS, TOO!

Show and describe how you made and how to use your insect spreading board to another member of your family, at your county fair or at a school science fair.



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