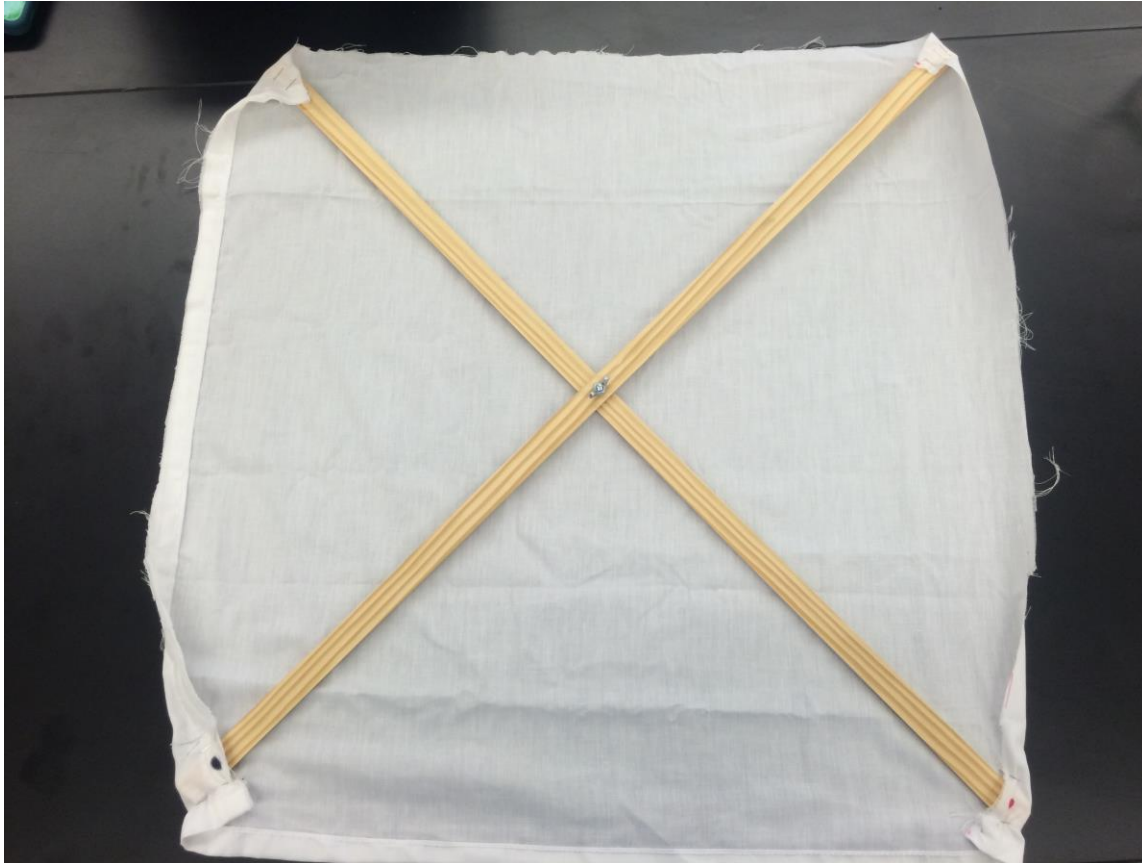


Caterpillars Count!

Building your own beat sheet



Beat sheeting is an alternate way of surveying arthropod activity. This method is more time efficient and could be best utilized for people working with young kids. This method does not require individually turning over 50 leaves and therefore takes much less time and effort.

How to conduct a beat sheet survey:

Hold your beat sheet under a branch or bush. Use a stick (a diameter of 1/2" – 3/4" works best) and vigorously beat the bush 10-15 times with the stick. See what cool arthropods fall into your beat sheet!

Materials Needed:

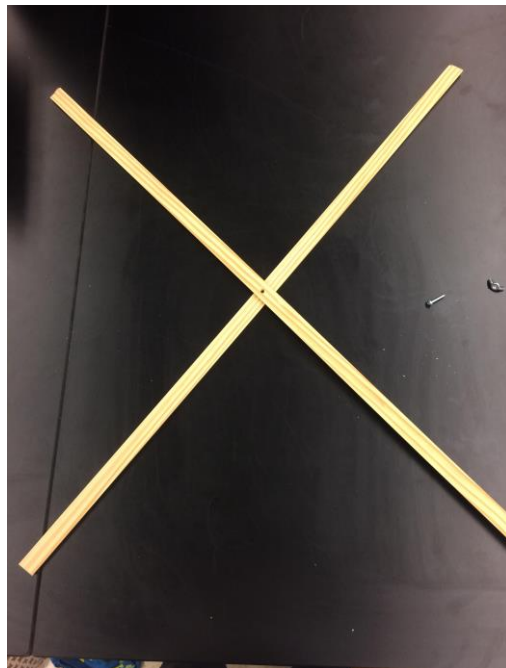
- 10 ft. strips of $\frac{3}{4}$ " molding (each 10 foot strip will yield two beat sheets)
- Wing nuts and screws with sizes that complement one another
- Drill (with a bit that compliments the size of screw selected for the beat sheet)
- Tape measure
- Flat, white sheet (each beat sheet you make will require 4' sq. of fabric)
- Two different colored permanent markers
- Stapler
- Hand saw

Time to Complete: About 30 minutes

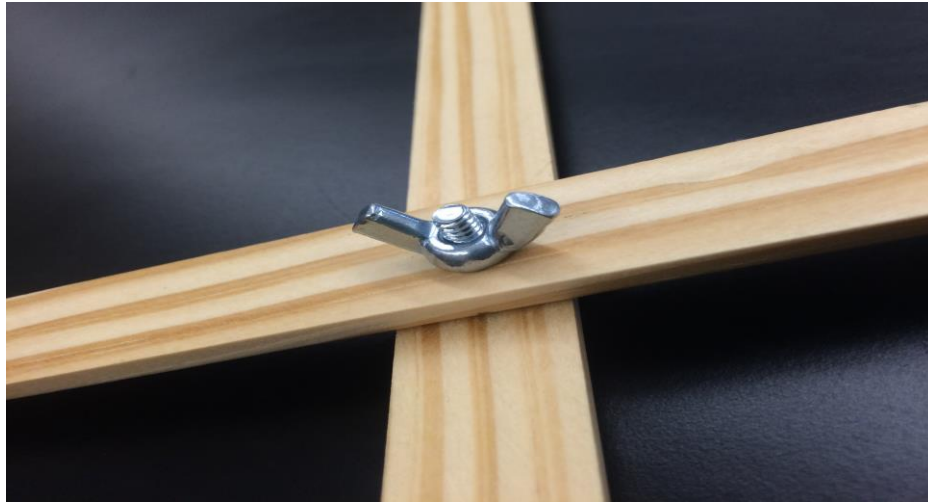
Step 1: Using your hand saw, cut your 10' strips of molding into halves, and then into quarters. This should yield 4 pieces of 2.5 feet each). *Note: Your home improvement store may be able to complete this step for you!*

Step 2: For each beat sheet you are making, gather two 2.5 foot pieces. Using the drill, make a hole in the center of each of the pieces (at 1' 3").

Step 3: Lay one 2.5 foot piece on top of the other, with the holes aligned.



Step 4: Put the screw through *both* holes. Then, attach the wing nut.



Step 5: Take the flat white sheet and cut out a square 2 feet on a side, one for each beat sheet.

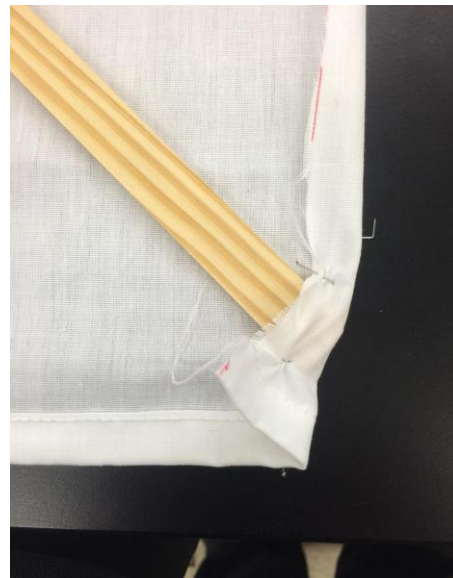
Step 6: Lay the square on a flat surface. Then, place your “X” in the center of the square. The wing nut should be facing *away* from the fabric, allowing you to adjust the tension in the “X.”



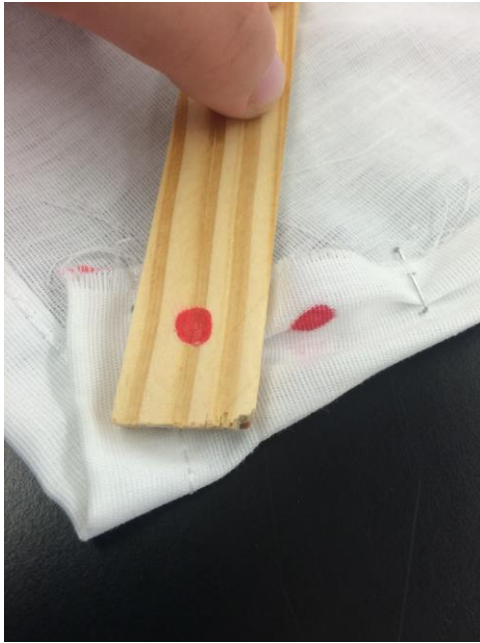
Step 7: Two corners of the wood will be permanently fixed to the fabric. In order to do this, you will fold two corners of fabric over two corners of the wood frame and staple the fabric into the wood. *Note: It does not matter which two corners you choose to be fixed, but they must be adjacent to one another.*



Step 8: The remaining two corners of fabric will be folded over to create pockets for the remaining two corners of wood. Simply grab a corner of fabric and fold it over the wood, making a pocket. The pocket should be snug around the wood, but not too tight. Then, staple the fabric in place. *Note: These staples go through the fabric only!*



Step 9: Optionally, you may draw dots of different color on each of the pockets and their corresponding wooden ends. This will serve as a visual reminder of how to set up the beat sheet properly.



Step 10: Take the wood corners out of the pockets and collapse the “X.” Now, your beat sheet is easy to carry and you can be off on your first beat sheeting adventure.

