

Classroom Activity



Activity: Pressing Seaweeds

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A nice way to integrate art and life science at all grade levels is to have students collect and press seaweeds. Here is the method that I use.

Materials for each preparation

- One "5x 8" index card or a heavy paper that can stand up to being wet such as water color paper.
- One piece of cotton fabric (6" x 9") from bed sheets, pillow cases, etc.
- Two pieces of corrugated cardboard (6" x 9")
- Two pieces thin cardboard (type used for giftboxes, cereal boxes, etc.) (6" x 9")

Tools include an official MME collecting bucket with seaweeds, a shallow pan or tray with seawater, a turkey baster, toothpicks, tweezers, wooden boards, and a heavy weight to press the seaweed (I use a bucket of sand).

Procedure:



Step 1: Submerge the index card into the tray with enough seawater to just cover the paper.

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The 2010 tide tables for the [Ocean Tides Activity](#)
are now available on the [MME website](#).

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Step 2: Select your sample of seaweed to be pressed and float it on to the paper. Use a toothpick to spreadout and untangle the branches.

You want your specimen(s) to fit on your paper and you want them to press flat and not form a clump on the paper so you might have to thin out some of the branches using tweezers.

If you're preparing a sample for identification and classification , you should press an entire plant that is one with its holdfast and other distinctive parts intact.



Step 3: When you're happy with your work SLOWLY remove your sample from the water and rinse debris off the paper with a turkey baster.

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Step 4: Preparing the sandwich.



Place a piece of the thin cardboard on a piece of corrugated cardboard.



Place your specimen on the thin cardboard.



Next, cover the specimen with the cotton fabric. The seaweed has a mucilage (slime) that will naturally adhere your specimen to the paper as it dries; it doesn't stick to the fabric.



Cover the specimen under the fabric with another piece of the thin cardboard.
Without the fabric on the seaweed it would dry and stick to this piece of cardboard.

Finally add another piece of corrugated cardboard and the "sandwich" is complete and ready to be pressed.



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Step 5: Pressing the sample.

Place the cardboard/seaweed “sandwich” between two wooden boards and put a bucket of sand or other heavy weight on the sample to press it.

Change the cardboard and fabric every couple of days until the specimen is dry.

Thick seaweeds such as kelps and rockweeds may take several days to dry. Seaweeds with a thin blades or filamentous thalli dry in a day or two.



Polysiphonia sp.



Ulva lactuca

When dry seaweeds can be mounted as art work as well as identified and classified.

Seaweeds stick to the paper that they're mounted on from their own slime as they dry. However, over time some specimens lose their adhesion. A transparent white glue works well for re-sticking specimens to the paper.

Also, over time some seaweeds (especially the green algae) lose their pigmentation. Most red and brown algae maintain their original color fairly well.