



## **How to Prepare a Herbarium Specimen**

**Materials for pressing:** newspapers, 11 ½” by 16 ½” cardboard pieces, string. A plant press, wax paper, blotting paper, or white tissue paper might also be useful.

**Materials for mounting:** small paintbrush, Elmer’s or white PVA woodworking glue, cookie sheet or other flat smooth washable surface, 11 ½” by 16 ½” herbarium paper, paper for label, permanent ink pen or printer.

### **How to press the specimen:**

Have materials ready because some plants wilt quickly.

Carefully cut or dig up a single, typical, healthy plant that will be able to fit on the herbarium paper. If the plant is very small, more than one can be on the same page.

Specimens should represent the whole plant: showing how the leaves are arranged (alternate, opposite, whorled, etc) and attached to the stem. Include flowers and buds if a flowering plant. Include fruit or seedpods and seeds if possible; these can be dried separately. If digging up the plant, rinse the soil from the roots and pat dry.

Lay the plant on some sheets of newspaper that are on top of an 11 ½” by 16 ½” piece of cardboard.

A layer of wax paper or white tissue paper helps keep a delicate plant or delicate parts intact.

Flatten and arrange the plant as best you can (a second pair of hands can be helpful, or some small soft weights.)

If parts of the plant are thick, put extra layers of newspaper on the thinner parts to make sure that all parts of the plants are being pressed flat.

Put a few more sheets of newspaper, then another piece of cardboard on top. Extra sheets of blotting paper can be used between the newspaper and cardboard.

Tie all of these layers tightly together with string. Or, if you have a plant press, use that and tighten the straps or screws.

After 2 to 24 hours the plant will have relaxed and you can open up your "sandwich" and rearrange the specimen.

Arrange the plant as naturally as possible. Avoid crowded or overlapping parts by removing or folding some. Leave a small border. Leave space on the bottom right corner for the 4" (or smaller) herbarium label.

Stem may need to be bent into a V or N or Z shape to fit on the page. Be sure to turn over one or two leaves to show the underside of the leaf.

Re-make your "sandwich", replacing any newspapers that are damp, and tie it tightly with string (or use the plant press and straps.) Unless there is adequate pressure on the plant its leaves will curl.

It is also important to maintain a flow of air so that the plant dries instead of rotting or getting moldy. The channels in the corrugated cardboard aid air-flow.

Place in a dry, warm, well-ventilated space, e.g. above a radiator. A fan helps. Check newspaper every day. If damp, replace it. Most specimens dry in 2 to 3 days although some take up to 2 weeks.

### **How to mount the specimen:**

Have your pressed and dried specimen and herbarium mounting paper ready. Plan where you will place the specimen. Leave the lower right corner for the label.

Brush Elmer's wood glue mixture (2 parts glue: 1 part water) onto a smooth, flat washable surface such as the back of a cookie sheet or a sheet of glass. The area of glue should be as large as the specimen so that you can cover the entire back of the specimen with glue at once.

Quickly lay the specimen onto the glue, press lightly all over, carefully pick up the specimen and put it on the herbarium paper. Press gently down on all parts of the specimen.

If the stem is thick, put a drop of glue across it and onto the paper on either side.

Allow to air dry. Keep horizontal to dry and to store. Re-glue loose parts. A small paper envelope can be attached to hold loose dried fruit or seedpods and seeds.

### **How to make a herbarium specimen label:**

To make a label, write, print or type information with permanent ink on good-quality paper about 4" high and wide or smaller. Use a glue stick to attach the completed label to the lower right-hand corner of the herbarium mounting paper. Label information includes: plant family, botanical and common names, date and locality in which it was collected, its habitat and a description of the plant.

Information drawn from "Preserving Botanical Specimens" from the University of Minnesota Herbarium and from various university websites.