

General Protocol for collecting plant specimens

Make a field press:

- Build two 12" X 18" lattices out of 1"-wide slats (4 long, 5 across – secure with rivets so that nothing protrudes on either side of lattice) (material: oak is good, or something tough – to be non-warping is the point)
- Cut a whole bunch of 12" X 18" cardboard sheets (regular >1/8th-inch box cardboard)
- Find something like blotter paper and cut a bunch of 12" X 18" sheets. (absorptive and tough is the point – kleenex won't work, it will come apart and get all over the plants).
- Get a bunch of newspaper. Not the colored adverts – just the B&W pages.
- Get two reasonably-heavy nylon straps, each ~ 6' long with jaw-type buckles.

Take enough of any plant to show its definitive characteristics – older leaves are usually higher up on plant and can be different from younger leaves. Use clippers rather than breaking plants with hands. Caution – thorns!

When students (or teachers) collect plant specimens, they should position the specimens flat between two sheets of newspaper. For any single specimen, position some leaves topside up, others bottomside up. Leaves should not be on top of each other. If pressing flowers, lay so that petals will press in an open position and not on top of each other. Don't bother with cacti, unless you want trouble. Place a card or piece of paper containing the collection info with each specimen (name, date, study site, sample location, general description of whole plant).

Sequence of the 'dagwood sandwich' in the field press:

1. bottom lattice
2. one piece cardboard
3. one piece blotter paper
4. newspaper sheets with specimen in-between
5. one piece blotter paper

Can repeat elements 3-5 up to five specimens max, then

6. one piece cardboard
7. one piece blotter paper

Repeat with more specimens, until field press gets to ~ 1' thick unbound, then

8. one piece cardboard above last blotter paper
9. top lattice

- Lay straps out flat on ground ~1' apart, buckles facing down.
- Place field press on straps so that straps are perpendicular to the longest dimension of the press, and
- so that the buckle ends extend out just far enough on one side to be pulled up onto the top of the press.
- Bring the free ends of the straps through the jaws of the buckles, and back across the press.
- Pull semi-tight. Position buckles so that with further tightening, they will not pull over the far edge.
- Have a heavy person stand on the press.
- Tighten the straps down quite firmly. Just don't break the wood or the straps.
- Wrap the loose ends of the straps around the press and secure.
- Ready to be carried home!

Back in the lab, the press may be left overnight. After 24 hrs, open the press, replace the blotter papers, and re-tighten the straps as above. Let the press sit in a dry place for ~7-10 days. Replace the blotter papers and cardboards once during that period. After this drying time, the plants may be carefully removed and glued (w/Elmer's) onto 12" X 18" sheets, which should be an off-white tight-finish lightweight card stock. Collection information should be taken from the original notes and either written carefully on one corner of the sheet or on a separate info label which is glued onto the display sheet. Store the plants in a dry cabinet away from heat.

If this preparation is done well, a local botanist should be able to use the specimens to ID whichever plants the students have trouble with identifying. A collection like this can also serve as an ID resource for future projects. Used blotter papers & cardboards should be dried out for re-use. Not directly in sun for that may warp them.