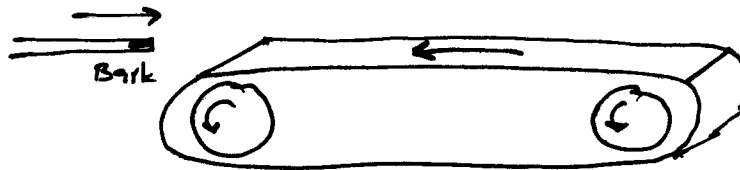# Sanding Cores

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Proper sanding of the mounted tree cores is essential to see their ring boundaries under the dissecting microscopes. Use progressively finer sandpaper in order to remove striations created from the previous grades of sandpaper. The final surface should be polished so that each individual cell of the cross-sectional view can be clearly seen under a microscope at 40× magnification.

Belt sanders with coarse grit sand paper (first 80-, then 120-grit) will be used to make a flat surface on the mounted tree cores. You don't want to take off much wood, just establish a flat surface.

- Be sure to go against the sandpaper direction (or else the bark is liable to fly off the core)
- After you first pass with the 80-grit paper, examine the core to see if it is mounted properly (i.e., vertical plumbing). If not, we will soak the core in water and then remount.
- If you change the angle of the core between sanding grits (e.g., first sanding along the length of the core, then at a 45° angle), you can see the striations from the previous belt. Once they are removed, you can move on to the next finer grit.
- Use the gum eraser to keep the belts free of resin and sawdust.

After belt-sanding, continue sanding by hand using successively finer-grit sandpaper (220-, 320-, 400-grit). It's important to use a sanding block behind the sandpaper (and not your fingers) to maintain the flat edge on the core.

After the 400-grit paper, tap the core upside down to get rid of the sawdust.

At this point, you may use finer-grit paper (600-, 800-grit), or sanding film (30-, 15-, and 9-micron) to produce a fine surface on the cores. This fine sanding is basically buffing the core, taking only about 30 seconds with each. (Don't use the paper if it becomes worn out.)

A final buffing with lamb's wool polishes the core a bit, and also removes some of the trapped sawdust.