

Forestry 240 Wood Science
Arthur Temple College of Forestry and Agriculture
Stephen F. Austin State University

Safety: The Use of Knives and Razor Blades

The following are some comments concerning the use of knives and razor blades in laboratory sessions to examine the biological structure of wood. Cutting tools need to be sharp in order to surface the wood in such a way as to adequately expose the wood surface. Later in the course razor blades will also be used extensively to cut thin wood sections. Please read carefully the following comments concerning the safe use of knives and razor blades in the laboratory. Please discuss any aspect further with the professor should you have a concern.

1. When using a knife or razor blade to trim the end surface of a block of wood, hold the lower end of the block firmly in one hand keeping your fingers (especially your thumb) well away from the end you are cutting. If possible, slide the knife or razor blade toward you in a controlled, sliding (diagonally) motion, letting the sharp edge do most of the work. Please be certain to keep the thumb of your cutting hand well away (down) from the cutting surface. Of course, also be sure to keep the wood block well away from your body so that if the blade slips it does not contact you. Cutting usually works better in a direction perpendicular to the growth rings. Also, the aim is not to remove large amounts of wood but simply to get the surface 'clean' so that features may be observed. **If at any time you find yourself using excessive force to get a cut, this probably means you are doing the cut incorrectly.** Please consult with your professor for advice and a demonstration.

2. For those people who feel more comfortable cutting in a motion away from themselves, please make certain that if the knife slips it does not make contact with yourself (fingers on hand holding block or fingers on hand holding knife). Please never cut on your knee or near someone else:

3. Most of the wood blocks in this course have been cut on previously and so may not need any or much surfacing at all. Check the surface first as often times your cut may not improve what already is there.

4. Please remember, the razor blades when new are extremely sharp. If used properly the sharp edge will do all the work of cutting for you. The same holds true for a sharp knife. Anytime you find yourself using force to obtain a cut you are probably using an incorrect procedure. Please be sure to see the professor to discuss this aspect further if you're not sure what this means. Often times a demonstration can really help.

5. Please let the professor know of any further suggestions or tips concerning safety aspects of using these cutting tools. Your assistance is greatly appreciated.