



President: Brian Heltsley (bkh2@cornell.edu)
Vice President: Peter Hobbs (ph14@cornell.edu)
Treasurer: Arnaud Germain (ag297@cornell.edu)
Secretary/Webmaster: Lydia Shea (lydiacshea@gmail.com)
Senior Sensei: John Wiessinger (natureetours@gmail.com)

fingerlakesbonsai.weebly.com

Wound Healing

Wound healing (info from Mirai Live stream library video, produced by Ryan Neal):

- Some bigger wounds might actually be desirable, adding character and interest
- Even when cleanly cut & covered with cut paste, larger wounds might not callous over
- Wounds that pre-date bonsai work might never have had a chance to heal well
- The main problem is usually that dried out or rotted wood absorbs moisture from the leading edge of the “rolling” callous, causing it to stop advancing. Getting rolling again requires establishing a water-impermeable, smooth, flat surface and re-exposing the cambium around the border.
- Some such wounds can, in fact, eventually be healed over with a 4-step procedure:
 - 1) Clean out the wound of all dried out or rotted wood (carve, chisel, dremel, ...), going into the trunk as far as necessary and out to the border, which you might have to push further. This is easier said than done; it is very easy to damage the tree outside the wound if one is not deliberate and moderate in this process. Some woods are very, very hard, and slipping with a chisel or power tool is pretty easy without conscious effort.
 - 2) Form a new wound boundary using a sharp blade to cut a clean, sloped-edge border. The idea is to form an “on-ramp” to the new surface to be added in the next step
 - 3) Fill hole w/impermeable material (e.g., *Oatey Fix-it STICK*) up to the new boundary. (available at Lowes). The Oatey product is particularly nice: it is a putty-like cylinder with the center and outer cylinder being a two-component epoxy. After cutting off a small “log”, one mashes the two materials together for a couple of minutes until it looks homogeneous. It remains putty-like for about ten minutes. One can press it into the cavity and gently spread it out to the border, being careful not to cover the border itself or form a step. There should be a smooth transition from the border to the new surface. It may take about 5-10 more minutes for it to harden. The stick material is white, so mix some watercolor paint or cement-coloring powder to match the bark (if you care; in the long run the hope is that it gets calloused over).
 - 4) Cover boundary w/cut paste (to keep cambium moist & encourage callous growth). The cut paste has hormones that assist in the rolling.



Photos by B. Heltsley following Mirai Live prescription for wound healing on his American Hornbeam.

