## Making a Phoenix Graft Bonsai

1) Examine the driftwood piece to be used and select the appropriate channel to carve the groove for the whip (a long, flexible seedling) to fit into. Generally this should follow the natural grain of the wood and follow a natural bulge in the driftwood piece, where a live vein had previously existed. It is much easier to carve a channel into an area that is pushed out somewhat (a convexity), than into an already existing crevice (a concavity). The whip will also attach much more easily.

2) Mark the channel with a marker.

3) Using a carbide cutting wheel (available at any hardware store) attached to an electric drill, cut the channel. It need not go all the way to the end of the driftwood, but should extend from the bottom about 2/3 of the way up. Compare the diameter of your fingers to the diameter of the trunk of the whip, and fit your fingers into the groove at various spots to get the size the same as the whip. Where possible cut the channel so that the sides are steep, and even wider on the inside than on the surface. This will help the whip eventually grow into the wood.

4) At the bottom inch of the driftwood, remove a larger section of wood to allow roots to fit into this area.

5) The bottom inch of the wood, which will be covered with soil, can be treated with penetrating epoxy to help preserve it.

6) With screws, securely attach a metal L-bracket to the bottom of the piece so the two ends of the L are sticking out beyond the wood on the side opposite where the whip will be. These will act as anchors to help wire the finished Phoenix Graft into the pot.

7) Remove the whip from it's pot and select the side to face outwards. Ideally this will also be the side with the best branches and have the most roots extending out from the trunk. If you have to choose one or the other, choose the side with the strongest roots. This side will fit into the trunk facing out. The whip should be very flexible and up to twice as tall as the piece of driftwood. A trunk diameter about the size of your little finger is usually good. 8) Prune roots on the opposite side away if they will not fit against the driftwood. Then wrap the roots in a small piece of damp cloth and tie securely to protect them while you are attaching the whip to the deadwood. Try putting the whip into the groove to see how it fits and widen any spots that are too tight.

9) The whip should fit into the groove so that there is about an inch of deadwood extending below where the surface roots of the whip are. Otherwise the base of the deadwood will not be covered with soil in the bonsai pot, or there will be no surface roots, and it will look unnatural.

10) Begin attaching the whip from the bottom up. I like to use ring-shank paneling nails for this, but there are many options. I've even used epoxy, or Gorilla glue, which works, but is somewhat messy.

11) Assuming you're using paneling nails, fit the whip into the groove and drive a nail right through the base all the way into the driftwood. Use a small hammer to avoid damaging the trunk. Some damage is inevitable and the tree will just heal over any small scars. Set the nails so they are flush with the trunk.

12) Put another nail 2-3" above the first one. The base of the whip is usually the stiffest part and needs the strongest anchoring. After the first two nails are set usually you can space the rest about 6" apart.

13) As you set the whip into the groove trim away the back branches as you go. The back of the tree usually changes as you fit it into the groove, so don't cut off any branches until you see you need to. When finished the whip should extend some distance over the top of the driftwood.

14) Once the whip is mounted to the driftwood piece, remove the cloth protecting the roots and pot in a bonsai container and soil. Wire can go over the arms of the L-bracket to hold the tree in place, as the roots of the young whip will not always be strong enough.

15) Put the tree in the shade, or a greenhouse, and let it grow for a season before wiring. When styling is done the top of the whip can be wired and pulled down to create a crown highlighting the driftwood.