

Creating Scale Trees from Natural Materials

Bryan Krueger 2008



model shown in progress

For my latest display base, I wanted to show a model positioned next to a scale live tree. I've added dead trees and stumps before, but have never replicated a live tree. I was always daunted by the leaves. I work primarily in 1/20 scale and in that large of a scale, leaves will need to look like scale leaves and need to be more than loose herbs or synthetic materials sprinkled loosely or on a fibrous binding material. Smaller scales have numerous options. There are highly detailed photo-etched brass leaves, and while these look great in brass, any painted samples I have seen look like painted brass, they are also usually etched with a stem and these are unrealistically flat. Another option is die-cut or laser cut scale leaves, These look great, come in several styles and colors, but are really suitable in for 1/35 scale or smaller. For larger scale leaves I just couldn't find suitable many options.

A couple of years ago, Michael Fichtenmayer had posted a model tip about using a decorative hole punch to cut out scale leaves. My wife had a leaf punch sitting in the desk drawer and it looked like a suitable size. At the time, I tried the technique and created some loose leaf litter for small display bases and the effect was very realistic.

Being daunted by the prospect of building a scale tree had bothered me long enough. It was time to roll up my sleeves and get to work. To build this tree, I used roots from the backyard, a leaf shaped hole punch and plenty of real leaves. There are a few things I learned along the way and I'll discuss as I go along.

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The leaves for the tree are from rose bush. Select leaves that are thin enough for the scale. There are several styles and sizes of hole punches but try to find one where the leaves look relatively in scale, it doesn't have to be exact. This one looks like an oak leaf and fortunately is about the right size. I could not find any markings on this hole punch, sorry.

For green foliage, use green leaves, for autumn, use brown leaves that aren't dried and crumbly. Though this photo doesn't show it properly, I aligned the punch along the veins of the leaf to mimic the central vein and crease of a real leaf. Also, don't let the cut leaves pile up and stick in the cutter, this will cause ragged cuts. Tap each one out after it has been cut.

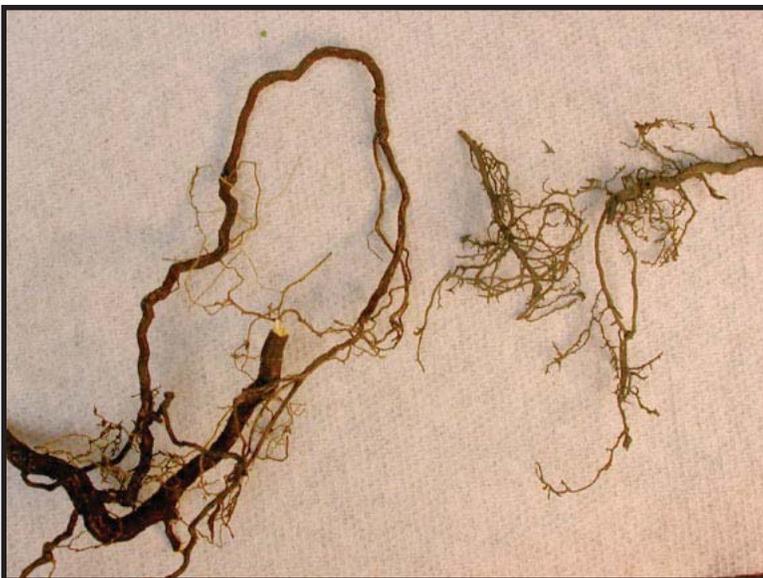
It is better to punch out more than you plan to use. Lay the leaves between two pieces of paper towel with a flat bottom dish on top, without the weight they will curl, and toss in the microwave for 45-60 seconds at a time until thoroughly dry. They will be brittle, so handle carefully.



The roots are collected from various outdoor improvement projects. Find a suitably sized root for the main trunk of the tree. Smaller branches can be added later to fill in the mass. Larger branches will require a little more surgery and epoxy putty to blend into the main branch. The tree will have to be painted later anyway as the often brown or sepia color of the roots are not an accurate match for the more common grays and tans of real tree trunks. Check your references. Mine was a tree visible from the work bench.

For this base I chose a twisted mangled root with some pieces broken off. It looks like it is hundreds of years old but stunted by the elements. More artistic than accurate.

Do not use sticks or branches from a real tree, these never look in scale. There are a few shrubs and bushes that have convincing scale texture, so it is worth while to look around or even help a neighbor with a gardening project.



Select small suitable roots for the smaller branches of the tree. From that big stack of roots, only a few are really useful as scale branches.

Small bits and pieces can be used as ground debris or roots poking up through the ground. Press these into the groundwork while it is still wet.

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There are two ways to attach the leaves, the quick way and the slow way. The quick way is to gently brush the roots with Matte Gel Medium and gently press into the dried scale leaves. Some are in line and some are just kind of haphazard. This doesn't look that great. It is better to take the time and do it right.

The slow way is one at a time with a pair of tweezers. Dip each leaf into the Matte Gel Medium and place on the end of the root. The Matte Gel Medium is thicker than white glue, so the leaf stays put while the Gel dries and won't droop. Also, it dries dead flat, not satin or glossy like PVA glues. Repeat a few times and you have a branch. Don't expect to finish the tree in one sitting.

The branch on the left was the quick way and the one on the right was the slow way. Try to be random with the placement.



Here the first branches are shown next to the painted tree. Some branches had leaves attached before being glued to the main trunk, and some leaves were glued to the tree while on the base. Attach the branches with Matte Gel Medium. It dries quickly and very flat, unlike PVA/Elmers glue which can have a satin sheen. Fill in the scale tree with enough leaves and branches to give it volume but no overpower the model.

Though I didn't document it with photos, painting is a very important step in the process. As you can see from this photo and the first two on page one there is quite a difference from the pile of loose roots. Fortunately it's an easy process to describe. First I airbrushed the main trunk and any branches I planned to use with a medium gray acrylic. I made sure some of the natural color shown through the paint. Next I applied a wash of black acrylic paint and followed this with drybrushing of grays, browns, and tans, staying darker at the base and lighter towards the top. I kept a good eye on the tree outside.



Drill a suitably sized hole into the main part of the root to accept the end of the smaller sub assembly branches. Again I used Matte Gel Medium. Some leaves are glued in place to the main branch to help blend it all in.

A close-up shows the details of the leaves. With careful cutting, every scale leaf could fall on a real vein, but I was pushing the limits of my patience as it was. With a close up view like this, the real texture of the leaves look out of scale, but from a regular viewing distance, the textures blend in and you see the canopy of the tree and not just the leaves.

The leaves have been lightly airbrushed with a green acrylic. I do not know what rate the natural green of the leaves will disappear. I may have to come back and paint the leaves again. An alternative could be to paint the leaves before they are cut with the hole punch.