

Potting up your collected pine

Ponderosa pine are one of the easiest trees to transplant out of the wild. By following a few simple steps survival is usually better than 90%. The tips below can be used to augment your own experience with bonsai in your climate.

The same techniques are used for any collected conifer, although the best soil and aftercare may vary somewhat from species to species and from location to location.

1) First prepare the pot. Put screens in the drain holes and guy wires through bottom to hold the tree in place. I recommend either #3 aluminum wire or annealed #12 copper wire to hold the tree in place.

2) Unwrap the tree and use a chopstick to remove excess soil and duff from the root mat. Don't use a root rake because it tears too many roots. Do not bare-root the tree. I recommend leaving about 60% of the root mat essentially intact, except for the removal of excess soil (soil with no roots in it). The outer edges of the root mat should be opened up so the roots will be integrated into your bonsai soil.

The root mats on many of these trees tend to be wide and very flat (thin). Water can easily penetrate through them after the removal of excess soil. It is not necessary to bare-root a tree with roots like this. The tree will be stronger if a large part of its root system is left undisturbed.

The situation to watch for is a tree that has a deep root system with a lot of soil attached to it. In this case the heavy soil around the roots will drain much differently than your bonsai soil and the tree will be either too wet or too dry. In this case enough soil should be removed so that air and water will be able to freely drain through. Still, it should not be completely bare-rooted. This approach is what has worked best for me over the years.

If you use mycorrhizal inoculants, or other products, now is the time to apply them.

3) Your bonsai soil should be coarse and free draining. I use a mix of 50% pumice, 20% red lava, 20% pea gravel, 5% charcoal and 5% crushed pine bark, all screened to remove dust and particles < 1/8" inch diameter. This works well in my area, which is semi-arid with generally low humidity. Use a soil mix that works well in your area.

4) Put some soil in the bottom of the pot, then position the tree as desired. Add soil so all air spaces beneath the root mat are filled with soil. Add soil on the sides of the root mat. Cross the wires across the roots as close to the trunk of the tree as possible. Put a rubber pad under the wire where it crosses the roots to protect them from being cut by the wire. Use pliers to twist the wire tight while pulling up. Tighten securely so the tree is solidly positioned and does not wobble. You can also cut bamboo props and wedge them between the sides of the pot and the tree trunk. As a last resort, use guy wires to hold the tree in

position. In any case, the tree should be secure enough that it will not wobble or lean in the pot.

5) Put the remaining soil in the pot. Use your fingers, rather than a chopstick, to make sure soil fills in all spaces around the root mat and no holes remain. A chopstick may damage the roots.

6) Water the tree well. Apply a mild fertilizer and put the tree in a warm location out of direct sun. Don't let the tree freeze after potting. If you can keep it at a temperature between 50 and 80 degrees new root growth will be maximized. The tree will not need full sunlight until the needles have come out and are about an inch long. If the tree is developing slowly you can keep it in a shaded location for the whole first season.

7) The buds should begin to open and needles emerge. This happens about May 15th here, but is often delayed on newly collected trees. Newly collected pines often produce shorter than normal needles the first year. By late July new buds should be visible (the bigger the buds, the stronger the tree) and at least a few new, white roots should be visible if you dig in the soil around the edges of the root mat.

8) Water the tree regularly, but let the soil drain and dry out a bit between waterings. If the soil is damp, but still has room for air to penetrate, it's perfect. The pot should not be allowed to become a bowl of water with dirt in it, at least for long periods.

9) Use any mild fertilizer after the tree begins to grow. It is best to leave it in its original growing container for three growing seasons before repotting. When you repot many new roots will have grown and you can then clean the original root mat much more thoroughly.

10) Your tree was sprayed with permethrin after it was collected. This will protect it from bark borers and other insects for up to a year. Be aware that needles and shoots that emerge after treatment are not protected though.

11) Good luck and have fun!

Photos:



This is an excellent root mat on a collected pine. The fine fibrous roots are growing in a matrix of soil and decomposed organic material.



Using a chopstick, carefully rake away excess soil. The idea is to open the root system up enough that air and water can easily flow through. If you think of a screen door as one extreme and a sponge as the other, you want to clean the root system so it is between these two extremes. In some cases this will require very minimal, or no, cleaning. In other cases it may require a bit of work.



Here is the root system after cleaning. The photo may not show it clearly, but there are several openings alternating with areas that have only had the surface soil removed, leaving the fine roots undisturbed. All excess soil is removed. The root mat is now thin and open enough that it won't cause drainage problems when potted in bonsai soil.