Rescuing & Potting Hemlock Seedlings & Saplings

Hemlock seedlings and saplings that are growing where they’re not wanted or growing too close together are ideal candidates to dig up and pot, either to transplant later or to offer for adoption. It’s best to pot hemlocks when they’re small—1 to 5’ tall. Please don’t dig trees from public lands or property other than your own without specific permission.

**What You’ll Need:**

| Work gloves | Ironite granules |
| Trowel or small-bladed shovel | Soil Moist for water retention |
| Plastic grocery bags or trash bags for the root balls | MiracleGro Quick Start liquid |
| Native soil from original growth site | Bayer Advanced Tree & Shrub for 1-year protection against woolly adelgids |
| Mr. Natural Woodland Soil Mix | Thin bamboo stakes pre-cut to sapling height |
| Mr. Natural Worm Castings or Hen Manure or homemade compost | Roll of velcro tape & scissors |
| Espoma HollyTone (or any slow-release, acid-based fertilizer labeled for azaleas) | Hose or water bucket |

**Sources:** See the Contacts page of our web site for sources of HWA Imidacloprid treatment products. You can get most of the other items at stores such as Home Depot, Lowe’s, Walmart, hardware stores and garden centers. In Georgia, you can usually find Mr. Natural Woodland Soil Mix, Worm Castings, and Hen Manure at Leilani’s Gardens in Dawsonville 706-265-3510, Anderson Feed and Supply in Dallonega 706-864-3364, Ash Brothers Feed & Farm Supply in Cleveland 706-865-2124, and Little G’s Garden Center in Cherry Log 706-273-2012. Elsewhere, check your local garden supply stores and on-line to see where they may be purchased. If you can’t find Mr. Natural WSM, you can substitute MiracleGro Moisture Control, available at places like Home Depot, Lowe’s, Ace Hardware, or Walmart. Call the Hemlock Help Line 706-429-8010 for more information.

Note: Stores/products mentioned above are provided as suggestions only and are not meant as endorsements.

**Choosing the Saplings**

Choose trees that are healthy and have good structure. If they already have a few adelgids on them, it’s OK because you’ll treat them as part of the potting process. If you attempt to move a sickly tree or one that is badly infested, the stress may kill it.

**Timing**

Spring is the best time to dig and pot saplings; fall is second best. Whenever you do it, choose a time when you’ll be able to tend them on a weekly basis.

**Preparing the Pots**

If possible, prepare the pots before you dig the seedlings/saplings so there will be minimal time for them to be out of the soil.

1. Inexpensive plastic pots work fine as long as they’re clean and have drainage holes in the bottom. Choose the size of the pots according to the size of the saplings. Here are guidelines:
   - 6” – 18” = 1 gallon pot
   - 18” – 30” = 2 gallon pot
   - 30” – 48” = 3 gallon pot
   - More than 48” = 5 gallon pot

2. Mix special soil amendments as follows:
   - 1 part top soil (or extra native dug soil from original site)
   - 2 parts Woodland Soil Mix
   - 1 part Worm Castings, Hen Manure or aged homemade compost
   - 1 tblsp HollyTone per gallon of soil
   - 1 tblsp Ironite per gallon of soil

3. Combine the above special soil amendments with native soil from the original growth site in a ratio of 2/3 native soil to 1/3 special soil amendments.

4. Pre-fill each pot 1/3 full with the soil mixture from steps 2 and 3.

5. You can prepare your initial watering mix in advance too as you keep it out of the sunlight until you’re ready to use it. For each gallon of water, add 1 capful of Quick Start liquid and 4 ounces of Bayer Advanced Tree and Shrub. Note: Put the water in the container first; then add the other ingredients.
Digging Up the Seedlings/Saplings

1. Be sure your trowel or shovel blade is sharp. This will minimize root damage.

2. Hemlock roots are shallow and most of their feeder roots are right up under the trunk, but the anchor roots can go out much farther. To cut the roots cleanly, dig a circle around the tree that is as wide as the drip line (the ends of the branches). The depth of the root ball is based on the height of the tree. If tree is 1-2’ tall, dig 6-8” deep; 3-4’ tall, dig 12” deep; 4-5’ tall, dig 15-18” deep. If it’s growing on a hill, there will usually be more or longer roots on the uphill side, so try to get as much of them as possible.

3. Lift the tree out of the ground by putting your hands under its root ball. Never pull it by the trunk to prevent tearing of the root system. Immediately place the little tree in a plastic bag for transport to the new site. You can put as many in a bag as will fit since they’re only going to be there a short time. Tie the bag around the bottom of the trunk to retain moisture.

4. While you’re working, keep the bagged trees in the shade. And if it will be more than an hour before you get them to the pots, add enough water to the bag to keep the roots moist but not soggy.

5. Also dig some extra native soil from the original site to use in making the soil amendments mix (Step 2 above). Amount of this extra soil should be equal to the root ball size.

Potting the Seedlings/Saplings

The key to successful hemlock potting is to be sure the tree ends up “at grade” within the pot, i.e., at the same level in the pot as it was originally growing in the ground.

1. Insert a bamboo stake into the soil that’s in the prepared pot first, sprinkle 1 tsp Soil Moist per gallon of pot size on top of the dirt in the pot, and then put the sapling in the pot as close to the stake as possible. Spread the roots out evenly but gently.

2. Add enough soil amendments mix to just cover the roots plus 1/2 inch more and press down firmly to eliminate any air pockets. The pot should be no more than 3/4 full at this point. Use a short length of Velcro tape to fasten the tree’s main stem to the stake loosely, 2/3 of the way up the stem, leaving a couple inches of play in the loop.

3. Water immediately but slowly, giving 2 cups of the initial watering mix per gallon of pot size. Then place the potted trees in the shade or where they will at least have afternoon shade and be protected from the wind. Don’t bring them indoors.

4. Two or three hours later, inspect the potted trees and add more soil amendment mix to cover the roots if the initial watering uncovered them. Press the dirt firmly down again so the little trees are now sitting at the same level in the dirt as where they were originally growing and water again gently with the initial watering mix.

5. During the establishment period of up to a year, water with plain water once a week if you don’t have rainfall that week. Keep the soil uniformly moist -- not too wet or too dry. Use 1 gallon of water for each gallon of original root ball size.

6. Maintaining stable moisture and temperature levels is very important, especially during the heat of summer and the cold of winter, and the smaller the pot size the more critical this is. Banking some soil or shredded hardwood mulch around the pots up to the level of the dirt in the pot will provide this kind of protection.

7. Giving additional fertilizer after planting is usually not necessary, but if you want to do it, wait at least 2 full seasons. Sprinkle close to the trunk and out to the drip line, and be sure to follow the recommended dosage on the product label as too much fertilizer can kill a plant.

For more information:
Call: Hemlock Help LineSM 706-429-8010
E-mail: donna@savegeorgiashemlocks.org
Visit: www.savegeorgiashemlocks.org