Digging Hemlock Saplings

Hemlock saplings that are growing where they're not wanted or growing too close together are ideal candidates to dig up and pot or transplant. Please don't dig trees from public lands or property other than your own without specific permission. The best time to dig saplings is spring or fall.

What You'll Need

- Pointed shovel with sharp blade
- Plastic grocery bags for small saplings, trash bags for large ones, to protect the root balls
- Water

About Hemlocks

- Hemlock roots are shallow and most of their feeder roots are in a dense hair-like mass right up under the trunk.
- The lateral anchor roots can go out 1 ½ times the width of the drip line (end of the branch tips).
- The roots should not be allowed to dry out during digging, transporting, or temporary storage.

Choosing a Sapling

Choosing just the right sapling is an important part of the process to ensure they are healthy enough to survive being dug and moved and that their structure will allow them to grow into strong attractive trees.

- The best size to choose is between 1 and 3 feet tall because of the size of root ball you'll need to get. Saplings taller than 4 to 5 feet are not recommended for digging because of the size of the root ball that would be needed for survival.
- Saplings with a straight single trunk will generally grow up stronger than multi-trunk ones, and you'll want to look for saplings that already have good branch structure.
- A healthy sapling will have dark green needles and possibly some bright green tip growth if you're digging in the spring or early summer.
- There should be no bare branch ends, no yellowing, and no fungus. If there are a few adelgids but no serious adelgid damage, that's OK because you'll be able to remove them manually and also treat the tree when you pot or transplant it.

Digging a Sapling

1. To cut the lateral anchor roots cleanly, drive the shovel into the soil at a 45º angle to dig a circle around the tree that is as wide as the drip line. The depth of the root ball is based on the height of the tree.
   If tree is 1-2' tall, dig 6" deep. If tree is 3-4' tall, dig 8" deep. If tree is 4-5' tall, dig 12" deep.
   If the tree is growing on a hill, there are usually more or longer roots on the upside, so try to get as much of them as possible.
2. After making the initial circle around the tree, continue digging around the edges of the circle, pushing the shovel at a shallow angle to get underneath the feeder roots and free them and the rest of the root system from the soil beneath. With each thrust of the shovel, it's helpful to rock the shovel back and forth to help separate the root ball from the surrounding soil.
3. Once you can feel that the root ball is free, open a bag on the ground next to the tree, ready to receive the root ball.
4. Use both your hands to reach under it and lift it out of the hole, being careful to keep the root ball intact as much as possible. Never pull it by the trunk to prevent tearing the root system.
5. Immediately place the little tree in the bag. You can put as many in a bag as will fit since they should be there only a short time. Tie the handles of the bag around the bottom of the trunk, looping them just one time, to retain moisture. Don't make a square knot that will be difficult to untie later.
6. 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 potting, replanting, or temporary storage site, add enough water to the bags to keep the roots moist but not soggy. Newly dug saplings should not be kept in the bags more than one day before they're potted or replanted.
7. Also dig some extra native soil from the original site to use in making the soil amendments mix for potting or replanting.
8. The last step is to re-contour the area where the sapling was removed so as not to leave an unsightly or hazardous hole. Replace the needle duff and leaf debris and press it down to restore site to its original appearance

Call the Hemlock Help Line with any questions.
Also see "Digging Hemlock Saplings – Illustrated" on our Resources page
https://www.savegeorgiashemlocks.org/Resources.htm.

Save Georgia's Hemlocks
Hemlock Help Line℠ 706-429-8010
www.SaveGeorgiasHemlocks.org

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