

Save Georgia's Hemlocks

Part 2: How can homeowners save their Hemlocks?

By Donna Shearer, Chairman

The north Georgia mountains are in their full glory this season with the hardwoods splendidly attired in red and gold and cloaks of emerald green wrapped gracefully along the waterways, coves, and mountainsides. It is easy to see why home is where the heart is for the many people who live, work, play, and visit in this county.



But friends, beware! It's time to take action now to prevent a massive heart attack that's lurking. A tiny but deadly outsider has intruded among you, carried lightly on the wind, riding secretly on the wings of birds and the backs of deer, and even hitchhiking cleverly on the clothes of unsuspecting outdoor enthusiasts returning from the woods. And once arrived, it has been quietly multiplying and now threatens to send the Hemlocks the way of the American Chestnut.

But good news! Most Hemlocks on private property in this part of the state can be saved easily and inexpensively using cultural and chemical controls. Here's how.

Your choices. Basically, once your Hemlocks become infested with the woolly adelgid, you have three choices. 1) Do nothing and your trees will die. 2) Treat them yourself. 3) Hire a professional to treat them.



Doing it yourself. Taking care of your own Hemlocks is the most cost-effective option and involves using a combination of simple cultural and chemical controls. Cultural controls are physical operations you should do routinely to maintain the health of your trees. They include spreading mulch around your trees to maintain stable soil temperature and moisture level and keeping them watered during period of drought. Don't hang bird feeders in or near Hemlocks as birds can be vehicles for hitchhiking adelgids. Remove some trees where there is overcrowding to give the others less competition for water, nutrients, light, and air circulation. Cut any infested trees that you don't intend to treat chemically to avoid providing a continuous banquet for adelgids.

Chemical controls fall into two categories – non-systemic and systemic. Non-systemic products are topical treatments such as insecticidal soaps and horticultural oils that are sprayed onto the foliage and kill insects usually by smothering them. This approach is only partially effective as the treatment must fall directly on all the adelgids when they're out of their egg sacs (mid-June through September), provides no residual protection, and must be repeated frequently. Systemic products are applied to the soil, the foliage, or in some cases the bark; are absorbed and distributed throughout the tree; and then kill any insects that feed on the tree, providing residual protection for one to five years, depending on the product used.



The recommended chemical treatment for mildly to moderately infested trees is a water-soluble powder containing a 75% concentration of the active ingredient, Imidacloprid, a mild nicotine-based substance (the same one used in pets' flea collars). The recommended application method is soil injection, which places the treatment directly into the feeder root mass. The preparation steps are to measure the trunk diameter of the trees you want to treat and add them up for a total, acquire the treatment product, borrow a soil injector, and read the treatment instructions. Ellijay resident Ginny Herman has treated her own trees and says, "The treatment process itself really is not too difficult for most homeowners." After mixing the chemical solution and pouring it into the injector tank, treat each tree by making one injection hole in the soil for each inch of trunk diameter and pumping the handle of the injector a certain number of times to dispense the proper amount of solution in each hole.

You can get information about the names under which the treatment product is sold, where to buy it for a reasonable price, and where you can borrow a soil injector for free on the Save Georgia's Hemlocks web site (go to www.savegeorgiashemlocks.org and click on the Contacts page). And the most up-to-date, easy-to-follow treatment instructions – complete with pictures, diagrams, and charts – can be downloaded from the Resources page of the web site. (Also see “Avoiding pitfalls” below.)

Hiring a professional. If you aren't into DIY or if your trees are so badly infested that they need treatment with a stronger product called Safari, you can contract with a professional for the services. You can go to www.savegeorgiashemlocks.org and click on the Contacts page for a list of qualified local companies that are properly licensed and insured, specialize in treating Hemlocks, will travel to your property and provide a free estimate, offer treatment methods other than stem injection, and charge “good neighbor” rates. If you shop for a professional elsewhere, be sure they meet all these criteria. (Also see “Avoiding pitfalls” below.)



Calculating the cost. For most trees, saving them is amazingly inexpensive. The cost is based on the treatment product used and the size (trunk diameter) of the tree, but here are some examples. If you treat your own trees, you can do it for as little as 15 cents per inch of trunk diameter. That means you can save a large Hemlock 12 inches in diameter for about \$1.80! If you hire a professional, you can get that size tree treated for an average of \$18. For badly infested trees that need to be treated professionally with Safari, the cost is about 3 times higher but still quite reasonable in the overall scheme of things.

If you're considering *not* treating your trees, here are some “hidden” costs you might want to think about. Having a single large tree taken down and hauled away can cost anywhere from \$300 to \$1500. Healthy mature trees such as Hemlocks can contribute 7 – 10% of the property value; so on a \$200,000 property, losing all the Hemlocks could cost the homeowner \$14,000 - \$20,000 or even more. Cha-ching!

Avoiding pitfalls. Concerning chemicals, the most cost-effective way to buy Imidacloprid is in the 75% WSP (water soluble powder) formulation, which comes in a 4-pack. Bayer's Merit is their original flagship brand, but if you have the option to buy one of the generics listed on the Chemical Controls page of the web site, you'll get the same product for a lot less money. Also call more than one store, because prices vary. Don't use Bayer's Advanced Tree and Shrub product because the concentration of active ingredient is too low for treating adelgids.

Concerning professionals, if you're considering one that's not listed on the Contacts page of the web site, be aware that some service providers are unlicensed and/or uninsured; some are lacking in up-to-date specialized knowledge; and some charge exorbitant rates. So call more than one service provider, compare their services and prices, and ask the right questions before entrusting your trees to someone.

And above all, do NOT allow your trees to be treated by trunk injection, a process of drilling holes into the tree trunk and trying to inject chemical into the vascular system of the tree. It is extremely expensive, can fail to work properly up to 40% of the time (according to the U.S. Forest Service), and can actually damage the tree.



Part 3 of this series will provide information about what's being done to save the Hemlocks in our national forests and other public lands and how you can help. In the meantime, please visit www.savegeorgiashemlocks.org to learn more or call the Hemlock Help Line 706-429-8010 to get help for your trees.

The writer gratefully acknowledges the following sources: U. S. Forest Service, Georgia Forestry Commission, Georgia Department of Natural Resources, and the University of Georgia.