

Hemlock Message Part 2: How can property owners save their Hemlocks?

By: Donna Shearer, Chairman, Save Georgia's Hemlocks

The woods are in their full glory with forests of wonderful hardwoods blanketing the mountainsides and cloaks of emerald green wrapped gracefully along the waterways and coves. It's easy to see why home is where the heart is for the many people who live, work, play, and visit here.



View from the deck by David Wasileski

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 us, 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 out 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 can be saved easily and inexpensively using a combination of 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: Cultural practices are simple physical operations you should do routinely to maintain the health of your trees. They include spreading mulch around them to maintain stable soil temperature and moisture level and keeping them watered during periods of drought. Don't hang bird feeders in or near Hemlocks as birds can be vehicles for hitchhiking adelgids. Where there is overcrowding, remove some trees 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. 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 applied to the soil or in some cases the bark are absorbed and distributed throughout the tree and then kill any insects feeding on it. And as a bonus, systemic products provide residual protection for one to five years, depending on the material used.

The recommended chemical treatment for mildly to moderately infested trees is a water-soluble product the active ingredient Imidacloprid, a mild nicotine-based substance (the same one used in pets' flea collars). It comes in both a powdered and liquid formulation and provides an average of 5 years of protection. The recommended application method is soil injection or soil drench, which places the treatment directly into the feeder root mass.



The steps are (1) mix the chemical with water, (2) measure the trunk diameter of each tree you want to treat, apply a specific amount of mixture to the soil at the base of each tree with the amount being based on the trunk diameter, and (3) mark the tree to indicate you've treated it.

A different treatment material containing the active ingredient Dinotefuran is recommended for very large very sick Hemlocks. Unfortunately it's more expensive and doesn't last as long but does work very quickly to save the life of the tree.

You can get information about the names under which the treatment products are sold, where to buy them, and easy-to-follow, step-by-step mixing and application instructions – complete with pictures, diagrams, and charts – on the Resources page of www.savegeorgiashemlocks.org or from the Hemlock Help Line 706-429-8010.

Hiring a professional: If you aren't into DIY, you can obtain service from with a professional pesticide applicator who is properly licensed and insured, specializes in treating Hemlocks, will travel to your property and provide a free estimate, offers treatment methods other than stem injection. Contact your state department of agriculture by phone or web site.

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 \$0.05 per inch with Imidacloprid or \$0.82 per inch with Dinotefuran. That means you can save a lightly to moderately infested 10-inch thick Hemlock for about \$1.00! If you hire a professional, you should be able to get that size tree treated for \$10 to \$20. For badly infested trees that need to be treated with Safari, the cost will be 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: Bayer makes the original flagship brand of Imidacloprid; however, if you buy a generic Imidacloprid product, you'll get the same material for a lot less money. And do be sure the product label has a designation of 2F, 2L, or 75 WSP.

Concerning professionals, it's a good idea to call more than one service provider to compare their services and prices. 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, and can actually damage the tree.



For more information, visit www.savegeorgiashemlocks.org or call the Hemlock Help Line 706-429-8010.