



Newsletter  
2012 — Spring Issue

## Hemlock Happenings

A Publication of  
Save Georgia's Hemlocks

*Hemlock Happenings* is an e-newsletter for members, facilitators and other volunteers, donors, and friends of Save Georgia's Hemlocks to share hemlock news, educational information, service opportunities, and announcements. If you'd like to submit an article or announcement, please send it to the e-mail address below. Your feedback is always appreciated.

### News from the front

Following an extremely warm winter, the adelgid population has exploded. New bright white egg sacs appeared earlier and larger than ever, and the first 2012 generation has hatched weeks earlier than usual. Many hemlocks that have been infested for several years have died, and many more are in grave danger. See the latest [HWA spread map](#) from the Georgia Forestry Commission.

Here's the bottom line for property owners. Inspect your trees, and if you see any signs of infestation — little white egg sacs at the base of the needles, thinning foliage, a drab gray-green color, or lack of new spring growth — your trees should be treated immediately. Even if you don't see signs of infestation, it's a good idea to treat your trees this spring as the insects spread incredibly fast. If you'd like a SGH Facilitator to help evaluate your trees and provide treatment advice, call 706-429-8010.

On our public lands, the efforts to save hemlocks continue with carefully managed programs of biological and/or chemical controls. Mark Dalusky of UGA reports, "Hemlock mortality in the woods from Blue Ridge eastward is high except for soil injected and beetle release sites! This is indeed encouraging. While the hemlocks at most of our predator release sites may not look that great, the tree mortality is not significant there. And on some of our predator sites, the trees do actually look good."

Read the full spring 2012 update from the three Georgia beetle labs on the [Biological Controls](#) page of our web site. And please continue to support their efforts with your donations; their mailing addresses are listed on the same web page.

### Dedicated team saves Lake Rabun hemlocks

Bob Pledger, SGH Vice Chairman and hemlock project leader for the Lake Rabun Association (LRA), recently organized and managed a large hemlock help project to treat some severely infested hemlocks along the unoccupied shoreline of Lake Rabun property belonging to Georgia Power. Thanks to his persistence over 3 years, he was able to secure their permission for the LRA to do so.

Eighteen volunteers from the lake community and SGH worked under his leadership to clear access points on very difficult terrain and treated



Bob Pledger treating trees in dense underbrush

121 hemlocks in "The Narrows" section. The treatment was done using Safari, a very reliable, fast-acting product, and was applied by trunk spray to ensure that the chemical went only into the tree and not into the water. Treated trees were marked with a bright dot of spray paint.

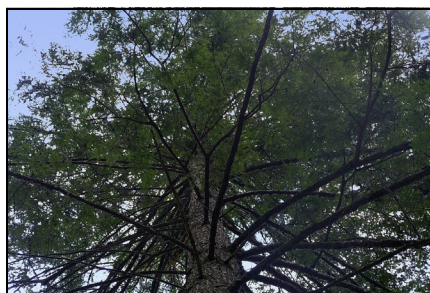
Congratulations to Bob and all the volunteers who showed true commitment to their community and set a great example of what a passionate group can accomplish! Read Bob's [full report](#) in an article he submitted for the LRA Newsletter spring edition.



Louis Belline treating trees from pontoon boat

### Hemlock help for public lands

We are delighted to announce that a Challenge Cost Share Agreement has been established between the U. S. Forest Service and Save Georgia's Hemlocks to allow SGH-trained Facilitators to treat hemlocks in designated Hemlock Conservation Areas (HCAs) of the Chattahoochee-Oconee National Forest. Brian Jackson and Jim Wentworth of the USFS worked closely with us during the past 4 months to craft the agreement, and we very much appreciate their guidance and collaborative spirit.



Hemlock in Wolf Creek conservation area

The initial treatment project took place on Saturday, April 14 in the Wolf Creek HCA near Vogel State Park, and there will be others in the near future. Anyone interested in volunteering is invited to call the Hemlock Help Line.

### Input sought on HCAs

The U. S. Forest Service is currently reviewing the 144 HCAs in north Georgia and is open to suggestions from the public for new areas that should be designated as HCAs or large HCAs that should be subdivided. There is a link to a map and list of the existing HCAs on the [HWA Controls](#) page of our web site, including acreage and type of treatment for each. As there is a set number of trees that can be treated per HCA, subdividing large areas and adding new ones where needed will allow more trees to be saved.

If you have a suggestion for a hemlock area to be considered, please send the information (with GPS coordinates if possible) to:

Brian Jackson, [brianjackson@fs.fed.us](mailto:brianjackson@fs.fed.us).



## CALENDAR

**Annual Meeting** — Save Georgia's Hemlocks will hold its Annual Membership Meeting on **Sunday, July 8** at Unicoi State Park, picnic shelter #7 beside beautiful Unicoi Lake. The board meeting will be from 10 a.m. to noon, followed by the members picnic and program from noon to 3 p.m.



Unicoi Lake and Lodge

Following a time to greet old friends and meet new ones, the program will feature several interesting speakers, a recap of our accomplishments to date, future plans and challenges, hemlock helping efforts of neighborhoods and other groups, and a prize drawing.

We'll provide hotdogs, burgers, and a veggie alternative and ask you to bring a potluck dish to share. There's a \$5 Park Pass fee per vehicle, but the picnic lunch is free. **Please call 706-429-8010 to make your reservation.**

### Hike & Help for the Hemlocks —

We are planning our 2012 Hike and Help event on **Saturday, September 29** in the Long Creek Falls hemlock conservation area in Fannin County. We'll be joined by our old friends in the [Benton MacKaye Trail Association](#), our new friends in [Go Outdoors USA](#), and hopefully other conservation-minded organizations as well.



Long Creek Falls in Fannin County

Similar to last year, there will be options for just hiking or hiking and treating hemlocks along the trail, which leads to beautiful Long Creek Falls. Details are coming soon. **Save the date!**

### Hemlock Help Program coming to Dawson and Pickens Counties

We will implement our Hemlock Help Program in Dawson County on **June 2** and in Pickens County on **June 9**. The rollout will begin with newspaper articles and a free Hemlock Help Clinic for those who want a good overview of the hemlock problem and what property owners can do to save their trees. We will also offer a Facilitator Training Workshop in each county for volunteers who want more in-depth information and would be willing to serve as local hemlock helpers and advisers to their community.

Pickens has had adelgids since 2009, and several communities have treated their trees, but others have not taken action. Dawson is only lightly infested at this point, but many residents here also own property in north Georgia where the infestation is much more severe.

Watch your local newspaper for details. You can also check the [Hemlock Help](#) page of our web site or call the Hemlock Help Line.

### New beetle needs your help

For several years members of the HWA biocontrol project (UGA, USFS Research, VPI and Symbiont BPM) have been working with a lady beetle (*Scymnus coniferarum*) from the pacific northwest that may be one answer to the hemlock dilemma. Here's the good news.

- It is an adelgid-specific predator.
- It is native to the pacific northwest (PNW) and is possibly already present in the east.
- In the PNW, this beetle seems to play the role of primary predator for the second generation of HWA each year. This could provide a complement to the *Laricobius nigrinus* which feeds on the first HWA generation November to April.
- It has co-evolved with *Laricobius*, so these two already play well together.
- It is easily collected from the wild and easily reared, so it's also less expensive to manage than the exotic beetles.
- It may live as long as 2 years and spends its entire lifecycle in the tree with no need for a special "drop zone" of needle duff for pupation so it can occupy special niches (rocky ridges, floodplains, and windy areas) not conducive to the *Laricobius*.

The bad news is the approval process for release is very slow, and time is running out. If you'd like to help facilitate approval of this new beetle, please read the [Beetle Lab Spring Update 2012](#) and then write to your Congressman to encourage speedy publication of the Environmental Assessment supporting *Scymnus coniferarum* in the Federal Register. Contact information and some suggested text are provided on page 3 of that document. Thanks!

### Imidacloprid Use and Honeybees

Over the past decade much information (and misinformation) has been published about Colony Collapse Disorder (a mass die-off of honeybees) and possible links to climate change, habitat destruction, disease, and pesticides. And while scientists still don't have many of the answers, several new studies have addressed concerns about neonicotinoid pesticides, the class to which imidacloprid belongs.

A decline in the honeybee population and the pollination activities they perform could have serious implications for food crops and entire ecosystems. Because SGH is very conscious about protecting not just the hemlocks but *all* of the environment, and because imidacloprid is one of the most widely recommended products for treating hemlocks for the woolly adelgid, we want to clarify some important points.



Photo by Yoshikazu Tsuno/AFP/Getty Images

The key factor in the safety of imidacloprid use is how and where it's applied. If it's sprayed into the air on a breezy day or the dry powder is plowed into fields or seeds coated with it are planted by pneumatic drilling machines, particles of insecticide may be released into the air where they are ingested by the bees or drift onto plants they pollinate.

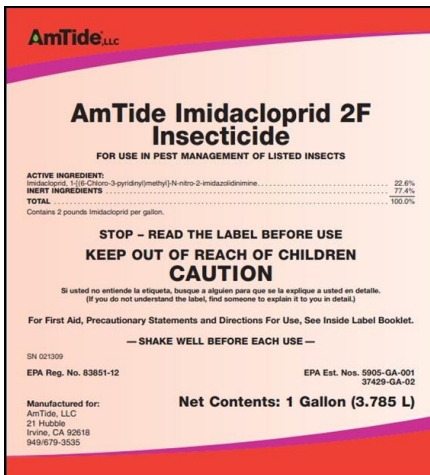
SGH has been advised that applying imidacloprid by soil injection to treat hemlocks poses minimal risk to honeybees. A mild solution is injected in the soil at a depth of 4 - 6 inches close to the base of the tree, so it is not dispersed into the air, onto the surface of plants, or in the root zone of flowering trees or shrubs. It binds quickly to the organic matter in the soil and only moves a few inches from each injection point (per the U.S. Forest Service and UGA). The solution is taken up by the tree's roots and distributed through the tree's tissue for total systemic protection. And since hemlocks are pollinated by wind and not honeybees, soil injected imidacloprid is unlikely to affect them.

[Click here](#) to read our full information statement on this subject. Our next newsletter will include an article on imidacloprid use and ground water.

## FOCUS ON FACILITATORS

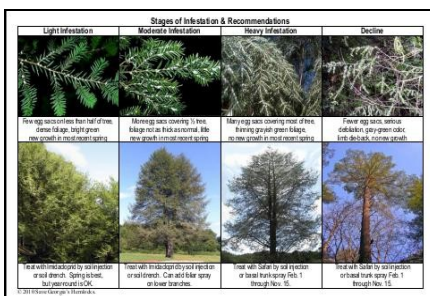
### New product recommendation

We have a new recommendation for an economical treatment product. Amtide Imidacloprid 2F is a liquid formulation that is sold by the gallon for the same price as a case of generic Imidacloprid 75 WSP but contains 40% more active ingredient. Don't let the 22.6% strength mislead you. When it's mixed with the proper amount of water, it gives the same concentration of active ingredient per ounce of solution as the 75 WSP. And since it's a liquid, it tends not to fall out of solution and clog an injector as easily. See the new instructions on the [Resources](#) page.



### Quick reference infestation card

A new tool has been added to the [Facilitators](#) page. The Quick Reference Infestation card shows branch and whole tree photos of hemlocks in 4 stages of infestation and presents the generally recommended treatment for each stage. This card should be useful for explaining the condition of infested hemlocks and advising clients about treatment options during Facilitator visits.



The new laminated half-page size Infestation cards will be sent to all current Facilitators in the next few weeks along with updated laminated pocket-size Dosing card for Imidacloprid and Dinotefuran. It can also be downloaded from the [Facilitators](#) page of our web site.

### Update on Kioritz injector

Frank Gheesling has put in a lot of hours disassembling malfunctioning Kioritz soil injectors from around the state to diagnose their problems, give them a thorough cleaning, try to find replacement or substitute parts, and reassemble them for return to their owners. In some cases, due to the unavailability of replacement parts, an injector's performance cannot be mechanically corrected, and the user must compensate by adjusting either the number of pumps per inch DBH or the concentration of the solution. Anyone wanting help with a malfunctioning Kioritz injector or clarification on making the necessary mixing and dosing adjustments is invited to call the Hemlock Help Line.

**A CALL FOR HELP!** We desperately need more soil injectors, so if you have one you're not using and would be willing to part with it, please call the Hemlock Help Line. If it's in good working condition, we could offer to buy it from you. And even if it's *not* in good working condition, we could use it for spare parts and would give you a tax deduction letter for donating it.

In the meantime, we're looking for a high-tech machine shop that could replicate the parts that most frequently fail and are no longer available. If you know of such a shop, please call the Hemlock Help Line.

### Chemical calculator

Another new tool has been added to the [Facilitators](#) page to help you estimate the amount of product needed and the cost for a treatment project. The Chemical Calculator is a downloadable Excel tool with individual worksheets for several kinds of products. All you do is enter the number of trees of various sizes, and it does the math for you.

### Foliar spray only in special cases

Foliar spray is not a preferred application method in most cases. The concentration of active ingredient is very low when mixed for foliar spray, resulting in a reduced effectiveness and/or a reduced residual protection period. Systemic products applied as foliar spray are only locally systemic, meaning they only benefit the parts they fall on. Much of the material can go into the air instead of onto the foliage. And it can drift onto non-target plants and beneficial insects.

The two cases in which it can be useful are (1) spraying the lower branches of an infested tree that is being treated by soil application, giving them relief sooner than later, and (2) spraying a short hedge or a "nursery" of saplings that are too small to justify soil injection.

### Update on Nu-Arbor injector

Several individuals and groups have recently indicated their intention to purchase a Nu-Arbor 1-Two Root Injector, the new device being offered as a replacement for the Kioritz injector. Frank Gheesling and Dave Teffeteller will be evaluating the Nu-Arbor on its performance in various kinds of terrain, and we'll report their findings to you. And anyone who has one is invited to call the Hemlock Help Line and share their experience and opinions with us.



Since the amount of solution dispensed per stroke by the Nu-Arbor is different from the Kioritz, different mixing proportions and different stroke counts are required. To assist those who are now using this device, we have posted new mixing and dosing instructions for Imidacloprid and Dinotefuran products on the [Resources](#) page of our web site.

### Reminders

All Facilitators are requested to send in your **quarterly activity log** indicating your approximate number of volunteer hours, Facilitator visits you made, and POAs or other groups you shared the hemlock message with. Also if you did any charitable hemlock treatments, please include the number of people you helped and trees you treated. This information helps us present an accurate picture of the overall level of community service we're providing and breadth of volunteer involvement. The form can be found on the [Facilitators](#) page of our web site.

Because new information is continually being developed and treatment options and recommendations change frequently, our **web site is updated at least weekly**. Facilitators and anyone else wanting the most up-to-date information about hemlocks, adelgids, and treatments should always go to the [Resources](#) and/or [Facilitators](#) page and download the newest material. The latest revision date is shown for each document.