



Newsletter  
2012 — Fall 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 calendar item, please send it to the e-mail address below. Readers' feedback is always welcome.

### News from the front

...This is truly great news. A fourth predatory beetle called *Scymnus coniferarum* (Scw) has been approved for release in the battle against the hemlock woolly adelgid. Mark Dalusky of UGA and Amanda Newton of NGCSU are hoping to begin rearing it next month.

Dalusky explains, "This lady beetle is native to western North America and complements the *Laricobius nigrinus* (Ln) beetle beautifully in the Seattle/Tacoma area where we have consistently collected both Ln and *S. coniferarum*. We have found the *Scymnus coniferarum* adults feeding on HWA in October/November, and the larvae are abundant from late March/April through May when most Ln are aestivating in the soil."



What does this mean for the hemlocks? We have another weapon in the biological controls arsenal that is a native to western North America, is an aggressive feeder, and hopefully will fill in a time gap in which other predators are not actively feeding on HWA. YEA!!!

Read more from the [Southern Lab Consortium](#). And please consider making a monetary contribution to [support the work of the beetle labs](#). Sources of funding that are independent of the large granting agencies are vitally important in the struggle to save the hemlocks in the Southern Appalachians.

## VOTE NOW for SGH to win Cox Conserves Heroes Award — Voting ends October 29!

Donna Shearer, founder and Chairman of Save Georgia's Hemlocks (SGH), is one of three finalist for the 2012 Cox Conserves Heroes award for her work and that of SGH to save north Georgia's Eastern and Carolina Hemlocks. These species are in grave danger of being wiped out by an invasive Asian insect, the hemlock woolly adelgid.



The winner will be selected by popular on-line vote through October 29, and their nonprofit organization will receive an award of \$10,000. That could go a long way toward helping a lot more people save a lot more hemlocks!

Please vote for Donna and Save Georgia's Hemlocks between now and October 29. Go to [www.wsbtv.com/coxconservesheroes](http://www.wsbtv.com/coxconservesheroes) and cast your vote. And THANKS!

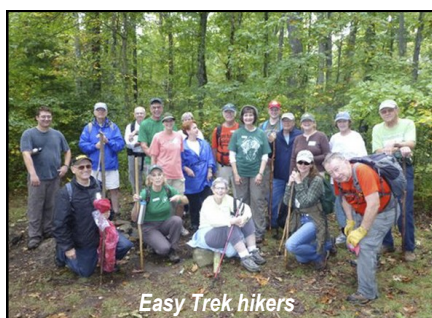
### Annual Hike & Help the Hemlocks

SGH and the Benton MacKaye Trail Association (BMTA) partnered again this year to hold their annual Hike & Help the Hemlocks event on Saturday, September 29. By all accounts, it was a great success.



One of the five treatment teams

Thirty volunteers treated hemlocks for the woolly adelgid in the Noontootla area of Fannin County, while twenty BMTA Easy Trekkers enjoyed an invigorating 4.4 mile hike in the woods. At lunchtime, everyone shared a picnic beside beautiful Long Creek Falls.



Easy Trek hikers

After lunch, Jim Wentworth of the U. S. Forest Service gave us an update on conditions in the national forest and efforts being made to save the hemlocks.



Jim Wentworth

Ralph Heller (BMTA) reported on their recent and upcoming hikes and trail maintenance activities. And Barry Henson (Go Outdoors USA) described their work in the Dick's Creek and Noontootla areas.



Ralph Heller

Barry Henson

Ralph Artigliere (Trout Unlimited) introduced their Trout Adventure Trail, an exciting new educational initiative that will roll out this fall.

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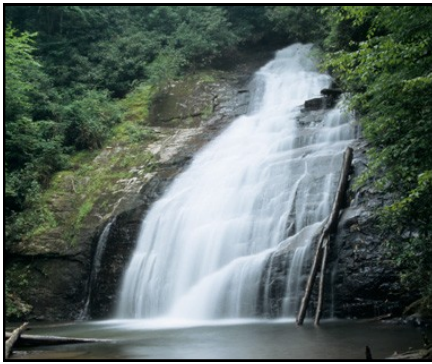
## CALENDAR

### Helton Creek Falls, 11/10

Our next opportunity to help the Forest Service treat hemlocks will be at Helton Creek Falls, Saturday, November 10. This is a great way to learn about the treatment process, make a real difference in the health and beauty of our mountains, and meet other good folks who love the outdoors.

Helton Creek is located off Ga Hwy 129, south of Blairsville. The plan is to work from 10 a.m. to noon, break for lunch, and then finish the project by between 2 and 3 p.m.

Please see our [Hemlock Help](#) page for details and driving directions. Registration is required.



### Very productive festival season

SGH had an information booth at the **Foxfire Mountaineer Festival** in Clayton for the first time this year, and we definitely want to do it again. About 70 people visited our booth to learn about the hemlock problem and available solutions. Many were surprised to discover they could treat their own trees easily and inexpensively.

Thanks to Bob Pledger, Buz Stone, Ruddy Deas, Joel Hitt, Mike and John Touchstone for staffing the booth, sharing the hemlock story with visitors, and advising people who had technical inquiries on how to save their trees.

We also had a booth at the **Apple Festival** in Ellijay on October 13 and 14. More than 200 people visited our booth and received information about saving their hemlocks, and many expressed interest in working with us on future service projects.

Thanks to Frank and Linda Gheesling, Don Roberts, Ralph and Marge Heller, Mike Carpenter, Jim & Marty Hamby, Clyde and Bev Lightfoot, and Bruce Granger for the wonderful way they raised awareness of the hemlock problem and actively engaged people in saving their trees.



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Amanda Rose Newton (new manager of the North Georgia predator beetle lab) updated us on biological controls to combat the woolly adelgid, including a new beetle that has recently been approved.



And last but not least, Bob Pledger (SGH) reported on our recent service projects and more that are planned.

**Many thanks to all who participated!**

### Kudos to BMTA and Blue Ridge

Thanks to the efforts of Ralph Heller and the Benton MacKaye Trail Association (BMTA), Blue Ridge City Council members approved for Blue Ridge to become a BMTA Trail Town along the corridor of the 288-mile trail at their Oct. 9 meeting. Blue Ridge is a natural trail town because there are over 80 trails within 20 miles of the city, including the BMTA and Appalachian Trail as well as biking and horse trails. [from an article in *The News Observer* by Cynthia Maude, October 19, 2012]

SGH is very happy with this news because anything that makes it easier for people to enjoy our mountains and forests can also help raise awareness of the special treasure this area represents and increase support for preserving it.

The BMTA has been a long-time friend and partner of SGH, and we have worked together on many hemlock treatment projects over the past three years. We appreciate all that they do in "leaving a footpath for generations to follow."

### Hemlock Facts and Fiction

Sometimes fiction is fun, but in the case of the hemlock trees vs. hemlock woolly adelgids, fiction can be fatal. For the sake of the trees and the people who love them, we would like to offer the following reality check.

**FICTION:** Hemlocks are pretty much like any other trees. If one kind dies, some other kind will take its place.

**FACT:** Hemlocks are a keystone species in the environment, and there are no other trees that perform the same vital functions. With a massive die-off of these majestic evergreens, wildlife will lose habitat, and shade-loving plants will suffer; water quality in our streams and rivers will deteriorate, and soil erosion and the danger

of forest fires will increase; property values and revenue from tourism and recreation will decline.

**FICTION:** If your hemlocks don't have adelgids now, there's no need to be concerned.

**FACT:** The infestation spreads incredibly fast, so if there are adelgids anywhere within 25 miles of your property, your hemlocks are in danger.

**FICTION:** If your hemlocks already have adelgids, there's nothing you can do. Just cut them down.

**FACT:** As a property owner, you can treat and save as many of your trees as your wish, even if they're badly infested. Treatment should be done as soon as possible because the adelgids multiply so rapidly that they can overwhelm and kill even a large hemlock in as few as 3 to 6 years. Many trees have already died.

**FICTION:** Treating hemlocks is difficult, complicated, and prohibitively expensive.

**FACT:** The treatment process is easy enough that most property owners can do it themselves if they choose to, and step-by-step instructions are available on our [Resources](#) page. If you treat them yourself, the cost can be as low as \$.14 per inch of trunk diameter for lightly to moderately infested trees or \$.82 per inch of trunk diameter for heavily infested trees. Even if you hire a professional, the cost is still much less than losing your trees.

**FICTION:** The treatment products are dangerous to people and the environment.

**FACT:** The misuse of any chemical can be harmful; however, if you read and follow the labeling, you can treat your trees or have them treated with an appropriate systemic product without endangering yourself, your children and pets, wildlife, beneficial insects, water systems, or the environment.

**FICTION:** Spraying your trees with insecticidal soap or horticultural oil is cheaper than using systemic materials and takes care of the problem just as well.

**FACT:** These non-systemic sprayed products kill only the exposed insects they fall directly on, so the bugs that are still in their egg sacs, hiding on the underside of the branches, or up too high to reach are not affected. Non-systemic products provide no residual protection, so they have to be repeated every few weeks or months, which means spending more time and money. Systemic products are much more reliable and economical, plus they give an average residual protection period of 1 - 2 years with Dinotefuran and 5 - 6 years with Imidacloprid.

## FOCUS ON FACILITATORS

### Welcome to Chris Curtin

We are pleased to announce that Chris Curtin of Ellijay joined our board on Oct. 1. With her background in education, fund raising, and community outreach, she brings a wealth of talent to SGH. Her training as a Master Naturalist, passion for the tree, love of people, and boundless energy will be great assets in our efforts to raise awareness and save the hemlocks. Welcome, Chris!



### New advice for soil injection

Mark Dalusky, Research Coordinator in Forest Entomology, University of Georgia has provided new advice for treating hemlocks by soil injection that will make your applications more efficacious and give you more windows of opportunity for treatments in Georgia.

**Amount of water:** For Imidacloprid, the recommendation is to use the mixing and dosing rates for wet soil (one 1.6 oz packet with 12 oz water). For Dinotefuran (Safari) the amount of water has been drastically reduced and accordingly the number of pumps also. See updated instructions on our [Resources](#) page.

**Injection site and depth:** Inject as close to the trunk as possible, even right up against the large roots of the root flare and in the sinuses between the roots within 12" of main trunk. For Imidacloprid the injection depth should be 2-4" and for Dinotefuran about 2", being sure in both cases you're injecting into the soil, not leaf litter.

**Time of year:** Anytime the ground isn't frozen or saturated is OK. You may sacrifice a few months of residual protection, but when time is a limiting factor, go ahead and inject. Injection in a severe drought is still not recommended, but testing suggests the active ingredient persists several years until normal rainfall returns.

**Residual Efficacy:** We've now seen 6 years residual protection with Imidacloprid. We suggest monitoring after 5 years, but if you don't have the resources to monitor, then retreat on the 6th year post-application. Depending on reinfestation pressure in your area, residual protection could be longer.

**Restrictions on stream-bank hemlocks:** Before there was a full EPA forestry label for Dinotefuran, there was a 25' set-back from the stream-bank in which you could not treat trees. That no longer exists on the new label; the only restriction is no direct application into water.

Read the full text of Mark Dalusky's comments in Other Articles on our [Resources](#) page.

### User review of Nu-Arbor injector

Since the Kioritz soil injector is no longer made, we've received calls asking the advisability of buying a Nu-Arbor 1-Two Root Injector. Bob Pledger tested one to evaluate its use for treating hemlocks in landscape and forestry settings and shares his personal observations. Read his full comments on the [Facilitators](#) page.

#### PROS:

Tank capacity (4 gal) is designed for treatment of a large number of trees and minimizes the number of mix and load cycles required.

Best use is on relatively flat terrain with little underbrush and/or surrounding limbs around trees to be treated.

Tube and probe length provides more functionality in application at varying depths and is best used by an experienced applicator.

Dose dispensed is 1/4 oz solution per stroke, requiring fewer strokes than Kioritz injector.

#### CONS:

Unit including tank, hose and body is heavy, especially when tank is filled to capacity.

Weight and bulk of unit make it impractical for use in heavy underbrush or on steep terrain.

Adjusting calibration of unit requires tools and partial disassembly.

Probe length may make it difficult for shorter people to operate.

Short hose length reduces flexibility of movement and reach.

Lack of depth gauge may make it difficult for inexperienced users to inject to proper depth.

Aggressive pumping force is needed to dispense desired dosage.

Time and effort are required for cleaning unit.

#### SUMMARY RECOMMENDATION:

The Nu-Arbor injector is better suited for use by experienced users in relatively flat, open landscape settings and less well suited for use by inexperienced users, particularly on steep heavily forested settings.

### Fungal pests that attack hemlocks

With warmer winters and humid spring/summer seasons, eastern hemlocks are increasingly susceptible to fungal diseases. By themselves, they generally don't kill mature hemlocks they infect but can be problematic for seedlings and for trees that are already stressed by adelgids or other factors. Here are a few frequently observed fungal diseases.



Tip blight

**Tip blight** infects trees during the spring after new shoot growth begins and causes the new growth tips to die. Infected dead tips, often covered with fungal structures, stay attached to the tree for quite some time, putting the tree at increased risk of developing secondary fungal infections. Where possible, snip off the dead tips. In heavily infected stands, do some thinning to improve air circulation and speed the drying of foliage after wet weather.



Twig blight

The fungus responsible for **twig blight** enters the tree through wounds and infects wet foliage, causing the needles to turn brown and affected twigs to die or form witches' brooms — masses of spindly twigs that form on branch tips. Pruning of infected twigs usually removes the source of future trouble.



**Needle blight** produces spores on the underside of hemlock needles, causing large patches of needles to turn brown and drop off. Affected areas can be pruned to reduce infection and help air circulation within the tree. Thinning overcrowded trees can also improve air flow.

Whenever you are pruning infected trees, remember that fungal infections are transmissible from tree to tree. Clean your pruning tools with a mild solution of bleach after each tree and at the end of work. Wash your gloves after working with infected trees. Another cultural practice that can reduce re-infection is to place the prunings and the leaf litter from under the tree into a heavy duty trash bag and dispose of it. Then replace the leaf litter with clean mulch.

Most web sites for fungal diseases of hemlocks don't offer any recommendations for chemical remedies. In most cases, fungal infections aren't severe enough to warrant chemical treatment or clear up when the weather improves. However, we do know of some products that can help. Call the Hemlock Help Line.