



Cornell University  
Cooperative Extension



**Ask the Expert Twitter Session with Cornell's Mark Whitmore  
NY Invasive Species (@NYInvasiveSpp)  
March 20<sup>th</sup>, 2013  
Emerald Ash Borer and Hemlock Woolly Adelgid**

**Questions and Answers:**

**Emerald Ash Borer:**

- 1. Q: Say I remove a tree infested with emerald ash borer, what should I do with all of the wood?**

A: Keep it as close as possible to the site where you removed it. If you can chip it up, or safely burn it that's great. Stripping the bark off the big chunks will kill many EAB but not all of them. If you want to kill all of the EAB you need to take off the outer 1/2 inch of wood. If you move the wood you will be spreading EAB.

- 2. Q. Is it legal to sell the wood I have from an infested ash tree? Do you need to let people know it was infested?**

A: If you have infested wood, you would be doing everyone a favor by not moving it anywhere unless you are sure you are within a generally infested area. Most of the area within the current and proposed quarantine is uninfested and communities need time to plan so they can minimize economic impacts. Moving infested material will likely increase the rate of spread and give communities less time to plan. Just think about how many ash are leaning over roadways or power lines and you can begin to imagine the enormity of the tasks ahead for rural communities.

You still must certify the origin and stay within 50 miles of that spot but my understanding is that if you are within the quarantine you can sell the wood - but you should contact Ag & Markets to be certain.

- 3. Q: Can I protect my ash trees from EAB? Do pesticides work?**

A: Yes. Pesticides have been shown to be very effective at protecting ash trees. However you must plan to treat the trees for up to 12 years while EAB is in your area. Some insecticides (Imidacloprid) require annual treatment and others (Emamectin benzoate) will remain effective up to 3 years. We strongly recommend that you consult with an arborist so you can be sure you are making a wise investment. You may be better off removing trees with problems in the canopy or trees that are leaning over your house. To find a certified arborist in your area, visit: <http://www.isa-arbor.com/faca/findArborist.aspx>

4. **Q: How can I help my community prepare for EAB?**

A: There are a number of things you can do.

1) Most importantly: take an inventory of ash trees so you know how many trees you need to make plans for. 2) Know how close you are to an EAB infestation - go to maps on [www.nyis.info/eab](http://www.nyis.info/eab) 3) Gather information on management options from [www.nyis.info/eab](http://www.nyis.info/eab) 4) Participate in a local EAB task force. These organizations have local information and foster cooperation among agencies, local governments, citizens and tree care professionals to do the most with limited resources and to provide accurate information to the public.

5. **Q: I am undecided about treating the ash trees in my yard or cutting them down. Suggestions?**

A: There are a number of good reasons to preserve street and yard trees through treatment. In summer trees cool your home and reduce water use. They are also important for property value. One of the most interesting impacts is on health - a recent study found that in the Midwest where the urban ash canopy has been reduced significantly from EAB, there is increased mortality from cardiovascular and lower-respiratory tract illness. It is summarized well in this Atlantic Monthly article: <http://www.theatlantic.com/health/archive/2013/01/when-trees-die-people-die/267322/>

6. **Q: What are the economic impacts of emerald ash borer?**

A: The biggest impact will be in populated areas where dead trees pose a public health hazard. Communities and property owners need to plan ahead if they have ash trees they are responsible for. NY has more ash than any other state, so there will be a big impact. A recent economic analysis showed that nationwide, 51% of EAB costs would be born by local governments and close to 40% by homeowners. Click here for the full article: <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0024587>

Although timber is an important resource in NYS, the value of timber lost to EAB is small compared to the impact on other stakeholders. Indeed, recent calculations in conjunction with National Grid indicate a conservative estimate of \$1.5 billion to keep the power line right of way clear of falling ash trees, and that cost will likely be born by rate-payers.

7. **Q: When does the EAB quarantine change go into effect in NY?**

A: The quarantine regulations proposed as an emergency order by NYS Dept of Ag & Markets are scheduled to go into effect May 1, 2013. This will expand the Quarantine across the state and include a total of 40 counties, only 13 of which currently harbor EAB infestations. This will allow free movement of saw timber throughout the quarantine - even during EAB flight season. The more restrictive firewood regulations will still apply in the quarantine. For the updated quarantine map and more information, visit: [http://www.nyis.info/index.php?action=quarantine\\_firewood](http://www.nyis.info/index.php?action=quarantine_firewood)

8. **Q: My ash trees look like heck - How do I know if my tree is infested with emerald ash borer?**

A: One of the problems we have in NYS is that White Ash seeds into wet areas. It does not like to

have wet feet so it grows for a while and then succumbs to some sort of biotic or abiotic factor and begins to decline in health. We call this Ash Decline. The way to tell if your ash trees are infested with EAB is to look for evidence of woodpecker foraging on the bark. The native Downy and Hairy woodpeckers like to eat fat little EAB larvae under the bark, and so, often lead us right to EAB infested trees. Look for scattered "blond" patches on the tree with a black hole where the woodpecker grabbed the juicy EAB larvae. Here are two pictures of ash with woodpecker damage related to EAB: <http://www.nyis.info/images/Woodpecker%20forage%202.jpg> and <http://www.nyis.info/images/Woodpecker%20forage%201.jpg>

9. **Q: If an ash tree is in an area where EAB is confirmed, should you wait for signs/symptoms or treat preventatively?**

A: The earlier the better, especially with large trees. To find out how close you are to an infestation, look at maps here: [http://www.nyis.info/?action=eab\\_maps](http://www.nyis.info/?action=eab_maps) Click on your area on the insecticide treatment zone map and see if you are inside the treatment zone. We will be updating the maps this spring with the latest detection data, so check back.

## **Hemlock Woolly Adelgid**

1. **Q: Is Biological Control a possibility for long-term survival of Hemlocks?**

A: Yes! There is a predator from the Pacific Northwest, *Laricobius nigrinus*, that is looking very promising in slowing down HWA in North Carolina. The problem is it takes time for populations of the predator to build and eat up enough HWA for the trees to recover. We've released *Laricobius nigrinus* at 6 locations in the Finger Lakes and have recovered individual bugs of the F3 generations at 2 sites. [http://www.nyis.info/user\\_uploads/images/Laricobiusadults\\_USFS.jpg](http://www.nyis.info/user_uploads/images/Laricobiusadults_USFS.jpg)

2. **Q: What if my big old hemlock is already infested?**

A: In this case you need to reduce the numbers of hemlock woolly adelgid in the foliage fast with a basal bark spray of Dinotefuran so the tree can recover enough to take up the longer lasting Imidicloprid. Treatment of large trees should only be done by professional arborists and Dinotefuran is a restricted use pesticide in NYS.

3. **Q: Should I treat my hemlocks before I find HWA on them?**

A: This is not necessary. It takes HWA a few years to kill trees so treating the tree as soon as you find HWA on it will save it. The exception is with large, old trees that may have difficulty rapidly moving the systemic insecticides into the canopy. In this case I would recommend treatment when HWA is in your area, perhaps up to a mile or two away.

4. **Q: Can I protect my hemlock from HWA?**

A: Yes, one treatment with the insecticide Imidicloprid, can protect your tree for up to 7 years. Larger trees may need to be treated first with a basal bark spray of Dinotefuran. We suggest

consulting with a certified arborist. To find an arborist in your area, look here: <http://www.isa-arbor.com/faca/findArborist.aspx>

**5. Q: Where is the hemlock woolly adelgid in New York?**

A: Here is the latest map: but in addition to these locations, HWA was found recently in Schenectady County. [http://www.nyis.info/user\\_uploads/files/2012StatusMap\\_030912.pdf](http://www.nyis.info/user_uploads/files/2012StatusMap_030912.pdf)

**6. Q: Do people unintentionally move HWA?**

A: Yes, this is possible but chances are pretty low. First of all, if there are no crawlers present, like from Mid June through the following March (9 months) there is no way you can disperse them. There is the possibility from April through June that HWA crawlers could climb on your clothing - but to move them you would need to then rub around in hemlock foliage so they could crawl off you.

**7. Q: When are HWA crawlers active?**

A: HWA has 2 generations per year on hemlock. Eggs from the first generation - called the sisten generation- begin appearing in late April in upstate NY but this depends on weather. Eggs for the next generation - the progredian generation - appear in May. Progredian crawlers settle down on a twig and enter a resting stage - aestivation - for the summer. Here is a diagram of the HWA lifecycle: [http://www.nyis.info/user\\_uploads/files/HWALifeCycle.gif](http://www.nyis.info/user_uploads/files/HWALifeCycle.gif)

**8. Q: How are hemlock woolly adelgid dispersed?**

A: HWA spend most of their life in one spot and will not move. The first instar that hatches from the eggs is called a "crawler" and is the only mobile life stage. The crawler is very small and can be blown by wind, crawl onto birds feet, or perhas catch a ride on a deer or a squirrel to get to another hemlock tree. Here is a photo of HWA crawlers: [http://www.nyis.info/user\\_uploads/images/5018073.jpg](http://www.nyis.info/user_uploads/images/5018073.jpg)

**9. Q: When is the best time to detect HWA?**

A: From February through May is the best time. That is when you will see plenty of the white fuzz on the twigs near the base of the needles. This is what hwa looks like on the branches: [http://www.nyis.info/user\\_uploads/files/HWA\\_Whitmore\\_highres\\_horiz.jpg](http://www.nyis.info/user_uploads/files/HWA_Whitmore_highres_horiz.jpg)