

Hemlock Woolly Adelgid Volunteer Early Detection Survey Protocol

Prior to survey...

- ⇒ We are asking volunteers to adopt a trail, stream corridor, or other hemlock dense area.
- ⇒ Know any survey concerns or limitations, such as terrain, property boundaries, trail closures etc...

Safety

- Steep slopes, cliffs, and otherwise rough or hazardous terrain indicate areas to be avoided.
- Ticks. Ticks are especially of note in the spring and fall, and are active any day above 45°F. Check yourself constantly, especially after walking through an area with undergrowth vegetation. Lyme disease is no joke, it is on the rise in NYS, can be difficult to treat, and if left untreated can lead to permanent life changes. Check yourself constantly.
- HWA is most visible from late November to April. Because HWA surveying is not very active, *overdress* (bring extra layers!). You may get a lot colder than you expect. Educate yourself on winter outdoor safety and frostbite.
- Use common sense. Tell someone what your plan for the day is. Please use the buddy system and make sure you two (or more!) can make eye contact while surveying.

Equipment

- GPS, if possible
- A good map of your survey area.
- Data collection forms
- Hand lens
- Clipboard
- Whistle is a good idea
- Camera, if possible
- Close-focus binoculars (not required)

Survey

- ⇒ Start survey in an easily accessible location, preferably following along a trail or other established route. Survey hemlocks with branches within arm's reach, examining the *underside* of branches, closest to the tips (the most recent growth) for the white woolen egg sacs of HWA. Select a random tree to begin the survey. Continue to select random trees. Try to inspect around 100 hemlock trees per survey (takes about 20 minutes if no HWA is found), no more than 6 branches per hemlock tree. Large stands should be surveyed at several locations. If hemlock density is low search for trees to inspect for 30 minutes. If detection is made

collect GPS information on the provided form. In some cases GPS units have trouble getting signal in dense stands and ravines. At least one GPS point at the start and end of survey area should be taken and recorded whether HWA is present or not.

- The use of close-focus binoculars can be helpful if the branches are 7-15ish feet off the ground
- Hemlock branches can be found on the ground at certain times of year after being clipped off by porcupines or strong winds, these branchlets provide a good way to check on what may be going on further up in the canopy. Also check hemlock bark for woolly masses after spring rains.

⇒ HWA is most often discovered in areas close to water or water falls and in areas frequented by humans and/birds. Pay particular attention to these areas when surveying.

⇒ IF HWA IS PRESENT: Take a GPS point (best) and mark locations on your map, take notes of the location on data form so the infestation site can be found again.

⇒ Once survey has been done...

- Fill out a data collection form.
- Submit your form(s) with a map if possible. Please submit negative findings as well as positive ones.
- Pat yourself on the back for your stewardship efforts.

⇒ Additional Information...

- Take notes on any conditions which are stressing the hemlock other than HWA, including past injuries, presence of grapevines, etc... Note adjacent points of reference, invasive plants etc...

⇒ If you are unsure about a possible detection, take several good quality photos with suspect location on a map and send to Mark C. Whitmore <mark.whitmore@cornell.edu>

⇒ **If you are a ADK trained volunteer send data and mapped location to:** cathypedler.adk@gmail.com

⇒ **If you are surveying on non-NYS Parks property report positive or negative results to the NY DEC Forest Health and Protection Unit at 1-866-0652 or visit:** www.dec.ny.gov/animals/7250.html to submit electronic form.

⇒ **If you are surveying on NY State Parks or Historic sites send data and mapped location to:** alyssa.reid@parks.ny.gov

⇒ OPTIONAL: If you have training in iMap Invasives, you can enter your data under Survey/Host Tree

Hemlock Woolly Adelgid Volunteer Early Detection Survey Form

Date	
Trail/Location	
Observer(s)	
Time Spent	
Are Hemlocks Present?	
# of Hemlocks Examined	
HWA Present?	

Take GPS Points at start and end of survey area. If HWA is present or suspected please take a GPS point.

Observation	LAT or N	LONG or E	HWA?	Notes
Start				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Finish				

Upon survey completion, please submit to Cathy Pedler at cathypedlar.adk@gmail.com Director of Government Relations and Conservation, Adirondack Mountain Club, 301 Hamilton Street, Albany, NY 12210