Survey Protocol for Hemlock Woolly Adelgid:

- Look at multiple branches/twigs on all sides of a hemlock tree
- Look for hemlocks in poor health: with weakened or declining crown; defoliation; pale, greyish foliage, lack of new buds
- Look on ground for infested hemlock branches that have fallen from the canopy

**HWA Identification: November—April**
- HWA actively growing and developing
- White, waxy wool masses on hemlock twigs at base of needles on new growth
- Best seen looking at underside of twig

**HWA Identification: May—October**
- HWA in period of dormancy called aestivation
- Black nymphs surrounded by white halo of wool
- Easiest to see using magnification (hand lens or magnifying glass)

**Other Clues of Potential HWA Infestation** (These do not guarantee an infestation is present, further surveying needed)

- Weakened tree crown, loss of needles in canopy; absence of new green shoots in June
- Pale, greyish cast to foliage, easily spotted when boating/from a distance
- Woodpecker damage from infestation of hemlock borer (native pest)
- Elongate Hemlock Scale infestation (INVASIVE-REPORT IF SEEN)

**Reporting Protocol:** Use one of the following methods to report a known HWA infestation

**Use NYiMapInvasives mobile app:**
- Download NYiMapInvasives app on your smartphone (App Store or Google Play); create username/password online at www.nyimapinvasives.org
- Report HWA (for infestation presence) or X-HWA (for infestation absence)
- Visit www.nyimapinvasives.org for training dates and resources
- Data uploaded into statewide invasive species map

**Call DEC’s Forest Pest Information Line:**
(1-866-640-0652)

**Email location details/photo/GPS coordinates to NYS Hemlock Initiative:**
nyshemlockinitiative@cornell.edu