

NYS Hemlock Initiative Biocontrol Program

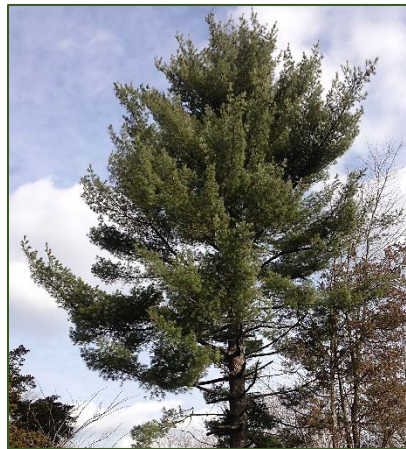
Pine Bark Adelgid (PBA) Survey Protocol

Pine Bark Adelgid (PBA, *Pineus strobi*) Introduction:

- PBA is an aphid-like insect that feeds by sucking nutrients from white pine trees.
- PBA is a food source for silver flies (*Leucopis* spp.), which are hemlock woolly adelgid (HWA) predator species of interest. Finding PBA can help us obtain eastern samples of silver flies for genetic research taking place at our biocontrol lab.

Eastern White Pine Identification:

- **Form:** pyramidal/cone shape, may have multiple trunks/leaders, can reach heights of over 100 ft.
- **Needles:** evergreen conifer with slim, green to bluish-green needles, 3-5" long, arranged in fascicles in groups of 5.
- **Bark:** younger trees have smooth, greyish bark; older trees have scaly, furrowed, greyish-brown bark.
- **Cones:** 4-7" long with rounded scales, cylindrical, mature in late summer.



Pine Bark Adelgid Identification:

- Presence of small, white, cottony patches often found clumped together on pine bark
- Found on trunks, branches, and twigs of white pine trees

PBA Survey Protocol:

- Look on all sides of white pine (*Pinus strobus*) tree, and upwards towards the canopy, as infestations can be higher in the tree above eye-level; most often detected on the smooth bark of the tree and the undersides of branches.
- Look for white, woolly, cottony fluff on trunk, branches, or twigs of white pines.



Report Your Findings:

- **If you find a white pine tree infested with PBA** in your area, please report it to the New York State Hemlock Initiative. Your findings could help us improve our biocontrol program and our silver fly research.
- **Email nyshemlockinitiative@cornell.edu** with site information and GPS coordinates and photos (if possible).