

ENDANGERED SPECIES OF HEMLOCK FORESTS

The eastern hemlock tree is a keystone species that provides numerous ecosystem services, and provides crucial food, shelter, and habitat for many species, including over 120 species of vertebrates, and 96 species of birds.

Hemlock trees also support several endangered and threatened species in New York and Pennsylvania, including birds, bats, and mammals.



Blackpoll Warblers are songbirds that nest in eastern hemlock and spruce forests. They are endangered in Pennsylvania, and their population is in steep decline in North America.

Yellow-bellied Flycatchers are songbirds associated with hemlock forests, which they often nest in. They are endangered in Pennsylvania due to habitat loss.



Northern Flying Squirrels are endangered in Pennsylvania. They are limited to coniferous forests, particularly in old growth hemlock and spruce forests. HWA infestations are partially to blame for their decline.

Indiana Bats are endangered in New York and Pennsylvania, and like the long-eared bat, are threatened by white-nose syndrome. During migration, they often roost in the cavities or beneath the bark of hemlock and other trees.



Northern Long-eared Bats are endangered in Pennsylvania and threatened in New York. They are often found in hemlock-dominated forests, and have been severely impacted by white-nose syndrome.

Hemlock Woolly Adelgid

Hemlock trees are currently threatened by hemlock woolly adelgid, or HWA, an invasive, sapsucking insect with the potential to kill trees in less than a decade. In the Great Smoky Mountains National Park, HWA has already wiped out entire stands of hemlock trees and devastated local ecosystems.

With HWA currently spreading through the native range of hemlock trees, including forests in New York and Pennsylvania, many of the species that rely on them could be in danger.

What Can We Do?



There is still hope of managing HWA in our forests. Infestations of HWA have been successfully treated with insecticides, biological controls, or a combination of both.

But HWA must be detected early to save hemlock trees, which means forests must be consistently monitored to determine where the insect has spread and assess which trees are the highest priority.

While you are out in the forest, please keep an eye out for HWA, and help protect our hemlock forests! The animals that live there may depend on it.

Identifying HWA

From November to April, HWA forms small woolly masses on the underside of hemlock branches. These are sometimes confused for spider sacs or spittle bugs.



Spittle bugs (left), spider sac (middle), and HWA (right)

If you believe you have found HWA, report your findings! Contact the NYSDEC or the DCNR.

Alternatively, you may use the iMapInvasives app or website to record your findings in New York or Pennsylvania.

- ❖ PA homepage: www.paimapvinvasives.org
- ❖ NY homepage: www.nyimapinvasives.org

For more information about HWA and other invasive species in New York and Pennsylvania, visit:

- ❖ <https://www.dec.ny.gov/animals/265.html>
- ❖ <https://www.dcnr.pa.gov/Conservation/ForestsAndTrees/InsectsAndDiseases/Pages/default>

