

# Hemlock Woolly Adelgid Community Detections

Hemlock Woolly Adelgid (HWA) is an invasive pest which attacks and kills Hemlock trees by feeding on the sap at the base of the tree's needles. Hemlock is a foundational species in Canada, and dieback of trees due to HWA infestations can disrupt the native biodiversity of Canadian forests. Typical methods of surveillance for HWA, such as examining tree branches, can be inefficient.

The Canadian Forest Service, the Invasive Species Centre, and the CFIA collaborated on a community science-based project that used 3D-printed traps to survey for HWA. These traps contain slides coated in petroleum jelly that collect eDNA, which is organismal DNA collected indirectly from environmental samples. This led to the detection of HWA in a new area, indicating that this pest is spreading in Ontario.

This new sampling method allows surveys to detect pests at lower densities in difficult-to-sample areas, supporting early detection and intervention initiatives. This information will be used to inform ongoing survey and management strategies in order to limit the spread and impact of HWA.



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