

USDA Forest Service Botany in the News

Molecular test determines which yews on Huron-Manistee National Forest (NF) are native

Who (*partners*): Huron-Manistee NF, National Forest Genetics Lab (NFGEL), Hiawatha NF, Superior NF, Sleeping Bear Dunes National Lakeshore, Secret Arboretum, Morton Arboretum.

What (*species*): *Taxus canadensis*, Canada yew.

When: 2004 to 2006

Where: Region 9, Michigan

How: Foliar samples were collected from known populations of *Taxus canadensis* and known populations of exotic yew species and sent to NFGEL in Placerville, California. NFGEL found differences in the molecular structure of enzymes between native and exotic yews. When samples from unknown yews on the Forest were compared to the known samples it was possible to determine which ones were native.

Why: *Taxus canadensis* is a sensitive species on the Huron-Manistee NF because much of it has been eliminated by of heavy deer browse. It was not clear if the few remaining yew were natives that should be protected or exotics that should be removed.

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Taxus canadensis being protected from deer on Huron-Manistee NF.



Analysis of genetic differences in enzymes at NFGEL.