

Ground Hemlock (*Taxus canadensis*)

What is Ground Hemlock?

Ground Hemlock, also called Canada Yew or American Yew, is a small evergreen shrub found in many Island woodlots. It grows by spreading along the ground. Ground Hemlock branches can stand fairly erect and reach heights of 0.7m (2 feet) to 2.4m (8 feet).



Figure 1. Ground Hemlock foliage and small twigs are collected for their medicinal properties. © Photo Photo Credit. J.D. McAskill

What are its uses?

On P.E.I., snowshoe hare will browse on the needles, buds, and branches while some birds and small mammals will eat the berries. It also provides wildlife cover. Newer foliage (needles and green stems) is collected for the extraction of paclitaxel, a compound used to treat various cancers.

Where is it found?

The 1990 forest inventory indicates that Ground Hemlock is found in commercial quantities in 3% of Island woodlands and is most abundant in Prince County. A plant community analysis of the 1990 forest inventory plots by Dr. Doug Sobey indicates that this species is generally limited to hardwood stands. About 19% of upland hardwood communities contained Ground Hemlock, while it is found in 27.5% of wet, red maple dominated communities.

This occurrence information is important for organizing efficient collection. The Island's estimated sustainable harvest is 630,000 kg (1,400,000 pounds) per year. For more information, see the Agriculture and Forestry Management Note # 21, "*Taxus canadensis* in Prince Edward Island. An Examination of factors affecting

distribution and abundance." Available at:

<http://www.gov.pe.ca/af/agweb/>

What are the issues?

Sustainability:

Ground Hemlock is a relatively slow growing plant, and there is limited research on its natural growth rates and the impacts of seasonal harvesting. *Ground Hemlock Harvesting Guidelines* have been developed through the joint efforts of Prince Edward Island Department of Agriculture and Forestry and the Canadian Forestry Service. The United States requires that supplies for pharmaceutical use come from sustainable harvest operations. The *Ground Hemlock Harvesting Guidelines* are available at any Forestry office or on-line at: <http://www.gov.pe.ca/af/agweb/>



Figure 2. Ground Hemlock is usually found in hardwood stands, particularly in wetter areas. It is most common in Prince County

Outdoor Etiquette:

Few forest boundaries are well marked and few landowners regularly inspect their woodlands. Harvesters could cross boundaries inadvertently or deliberately. Follow rules of outdoor etiquette: If you take it in - take it out! Carry a compass and know how to use it!

Land Conversion:

Ground Hemlock stocks are lost when land is converted to non-forest uses such as agriculture or blueberry production.

Cultivation:

Experiments are underway to grow Ground Hemlock in the Maritimes as a field crop. Genetic selection has begun to improve the plant's paclitaxel content.

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