



Eastern Hemlock  
*Tsuga canadensis*



# TREE OF THE MONTH

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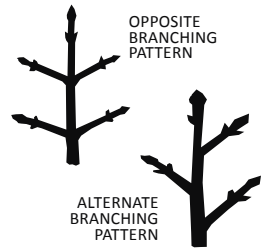
ALSO KNOWN AS: CANADIAN HEMLOCK

Eastern hemlock (*Tsuga canadensis*) is a dense, pyramidal conifer native to much of North America with an alternate branching pattern. Part of the *Pinaceae* family, hemlocks typically grow between 40-75 feet tall and up to 35 feet wide, but can grow up to 175 feet tall and 6 ft. wide. Preferring the moist woods, slopes, rocky hillsides, ravines, and stream valleys of Canada and the northeastern United States, hemlock's range extends down through the Appalachian mountains and into Georgia and Alabama. It tolerates full sun in cooler, northern climates like Massachusetts, but doesn't do as well in the south, where prolonged temperatures of 95 degrees and above can result in foliage damaging sun scald. It also is not tolerant of prolonged droughts.

With the smallest needles and cones in the *Tsuga* genus, hemlock has short, dark green needles with two parallel white lines underneath, arranged in two opposite rows. Small, pendant-like cones are light brown and up to ¾" long. The lower branches often dip towards the ground, which, coupled with the lacy needles, lend it an elegant profile.

On mature trees, the thick, ridged bark ranges from red-brown to gray-brown. Once a commercial source of tannins for leather tanning, the inner bark is good survival food and medicine, only to be harvested in emergency situations.

Needles grow in early spring, and the tips emerge in early summer. Very high in Vitamin C, they can be (responsibly) harvested at these times as trillside snacks and medicine. Traditionally, the whole young twigs were harvested to combine the medicinal values of the sap, bark, and twigs. Following this tradition, pioneers made tea from the leafy twigs and brooms from the branches. Today, herbalists make syrups, elixirs, infused honeys and oils, and teas from hemlock twigs. The needles can be used as a spring tonic or immunity boost during cold and flu season, and can help to lessen the duration of any illnesses that have already set in.



**Eastern Hemlock can be confused with Canada yew (*Taxus canadensis*), a low-lying native shrub that can be toxic if ingested in large doses. For this reason, it is sometimes called 'ground hemlock'. Hemlock also shares its common name with the herbaceous perennial water hemlocks (*Circuta maculata* and *Conium maculatum*), which are in the parsley family (not at all related to the evergreen). No part of the eastern hemlock tree is poisonous.**

Often associating with white pine and yellow birch, hemlock also likes to form pure stands. These pure stands create their own moist microclimates, providing excellent winter shelter for wildlife. Hemlocks play a key role in stream ecology, shading and cooling mountain streams, thus providing habitat for fish and invertebrates. Hemlocks also stabilize the soil in the steep ravines where they often grow, preventing erosion.

Tree of the Month is a collaboration between BEAT, the City of Pittsfield, Pittsfield Tree Watch, and the MA Department of Conservation & Recreation's Greening the Gateway Cities Program. Find out more at [thebeatnews.org](http://thebeatnews.org).

