

## **Tree of the Month, February 2015:** **Mountain hemlock (*Tsuga mertensiana*)**

Mountain hemlock (*Tsuga mertensiana*), with its slender, conical form, is well adapted to snow. This species is native to the west coast of North America, from southeastern Alaska to the Rocky, Columbia, Insular and Coast Mountains in BC, the Olympic and Cascade Mountains in Washington and Oregon, and the Klamath and Sierra Nevada in California. In Alaska and Northern BC, mountain hemlock can grow from sea level to 1000 m, but further south it grows at higher elevations: 1600-2300 m in the Cascades and 2500-3050 m in the Sierra Nevada. Mountain hemlock often grows in areas with a dense snow pack, and the tree's narrow shape helps it to shed snow. During winter storms, however, heavy ice and snow can build up on the crown. Luckily, a mountain hemlock's trunk and branches are quite flexible and will bend under the weight instead of breaking. When the snow melts the trees sometimes spring back upright, startling hikers. Generally mountain hemlocks are 20-40 m tall, but at high elevations they are often stunted and twisted by freezing winds.

Mountain hemlocks have soft, blunt, blue-green or yellow-green needles (7-25 mm long) that radiate outward from their branches. Their dark purple cones (4-8 cm long) fade to red-brown as they mature.

*Tsuga mertensiana* is named for Karl Heinrich Mertens (1769-1830), a German naturalist who sailed with Captain Fedor Lütke aboard the *Senyavin*, a warship sent to map Russian territory in Asia and North America. In 1827 Mertens collected mountain hemlock near the settlement of Novoarkhangelsk (New Archangel), now known as Sitka, Alaska.

At VanDusen you can find *Tsuga mertensiana* in the Cascadia and Canadian Heritage Gardens.