

Tree of the Month, December 2015:

Shore pine (*Pinus contorta* var. or subsp. *contorta*)

Shore pine (*Pinus contorta* var. *contorta*) is one of the most adaptable conifers of the Pacific Northwest: clinging tenaciously to wind-whipped sea cliffs, enduring the acidic soils of bogs and muskeg, and eking-out a living on nutrient-poor, unstable surfaces like sand-dunes, gravel and hard-pan. In these harsh environments, shore pine may develop a crooked trunk and lose branches to wind shear, or grow very slowly due to lack of resources. In extreme conditions, a 70-year-old tree may reach only one meter tall.

David Douglas, a Scottish botanist exploring the Northwest coast in the 1820s, observed the shapes of these shore pines and gave them the epithet *contorta*, meaning "twisted". Douglas didn't think they had much potential as garden plants; however, if grown in a garden with plenty of sunshine, water and nutrients, shore pine can be a rather handsome tree, reaching 15 meters or more in height, with a straight-trunk and wide spreading crown.

Shore pine grows along the coast, to 600 meters in elevation, from southeastern Alaska to northern California. It is closely related to lodgepole pine (*Pinus contorta* var. *latifolia*), a tall, straight-trunked variety native to the Rocky Mountains, from the Yukon to Colorado. Shore pine is also related to the Sierra lodgepole pine (*P. contorta* var. *murrayana*), found in the Sierra Nevada, Cascade and Klamath Mountains, from Washington to Baja California Norte. *Pinus contorta* is the only pine species native to the Pacific Northwest with short (5 cm) needles in clumps of two.

After only ten years of growth, shore pines produce numerous green, egg-shaped, 3-5 cm cones with prickles on the scales. The cones turn orange-brown as they mature, and old cones often remain in the tree for many years after dropping their seeds.

Shore pine was used medicinally by many indigenous peoples along the Northwest coast, including the Coast Salish, Nuu-chah-nulth, Haida, Nuxalk and Tlingit. The sticky pitch was traditionally used as a glue and waterproof sealant by the Sechelt, Saanich, and Lower Stl'atl'imx. The Nisga'a made rope from the roots.

At VanDusen, shore pine is found in the Woodland Garden and along the southern shore of Livingstone Lake.