

Picea glauca

[Synonyms : *Abies canadensis*, *Picea alba*, *Picea alba* var. *albertiana*, *Picea albertiana*, *Picea canadensis*, *Picea canadensis* var. *glauca*, *Picea glauca* var. *albertiana*, *Picea glauca* f. *aurea*, *Picea glauca* var. *conica*, *Picea glauca* var. *densata*, *Picea glauca* var. *parsildii*, *Pinus alba*, *Pinus canadensis*, *Pinus glauca*, *Pinus laxa*]

WHITE SPRUCE is an evergreen tree. Native to northern North America it has needle-like leaves (spines) and small hanging reddish-tinged, glossy pale brown cones.

It is also known as Adirondack spruce, Alberta spruce, Alberta white spruce, American white spruce, Black Hills spruce, Black Hills white spruce, Blue spruce, Bog spruce, Canadian spruce, Cat spruce, Double spruce, Dwarf Alberta spruce, Dwarf white spruce, Eastern blue spruce, Eastern Canadian spruce, Eastern spruce, *Épinette blanche* (French), *Fichte* (German), He-balsam, *Hvidgran* (Danish), Juniper, Labrador spruce, Maritime spruce, New Brunswick spruce, Northern spruce, Nova Scotia spruce, *Piceo glaŭka* (Esperanto), Pine, Porsild spruce, Quebec spruce, St. John's spruce, *Sapinette d'Orient* (French), *Schimmelfichte* (German), Single spruce, Skunk spruce, *Smrek sivý* (Slovak), *Smrk sivý* (Czech), Spruce pine, Transcontinental spruce, *Valkokuusi* (Finnish), *Vanlig vitgran* (Swedish), *Vitgran* (Swedish), Water spruce, *Weissfichte* (German), Western white spruce, Yellow spruce, and Yew pine.

The leaves have an unpleasant and pungent fetid smell when crushed or bruised.

The commercially processed wood yields a by-product, Spruce oil.

Warning – prolonged contact with the fresh wood may cause dermatitis.

Glauca is derived from Latin *glaucus* (bluish-grey, greenish-grey) meaning ‘covered with a fine, powdery whitish coating’.

Different parts of the tree played various roles in some North American Indian ceremonial ritual. The roots were used by the Inuktitut Inuits in making their ritual headwear, and pitch featured in Koyukon Indian medicine rituals.

As a source of food the resin was chewed by some of the North American Cree Indians, the Alaskan Inuits, some of the Algonkin Indians, the Tanana and the Koyukon tribes.

Okanagan-Colville Indians made tea from the branches, while the Micmac tribe used the bark. In the Spring the Gitksan Indians and the Inuktitut Inuits ate the substance found in the layer between the wood and the inner bark (known to botanists as cambium) – and this also provided emergency rations for the Tanana Indians (who also ate the sap).

White spruce was not free from superstition. For the Koyukon tribe it not only offered protection if it was slept under but also good luck – should you be fortunate enough to come across golden needles.

The tree offered material for an amazingly wide range of items. The moderately strong and hard wood was in demand for general construction for the Koyukon tribe and for building cabins for the Inuktitut Inuits. The latter and the Tanana Indian tribe made fish traps out of it, while some of the Cree used it to make floats for their fishing nets. Inuktitut Inuits, some of the Cree Indians, and also the Koyukon and the Tanana tribes used this lightweight wood in building their canoes – and some also used it for making their paddles. (Malecite and Koyukon Indians, and some of the Cree made canoe seams watertight with white spruce pitch.) The wood also provided material for Koyukon

sledges, Iroquois scrubbing brushes and Tanana shovels. While rotten wood was ready material for tanning for the Koyukon and Tanana Indians and some of the Cree. Fresh wood provided fuel for the former two tribes as well as the Micmac Indians and the Inuktitut Inuits. The Iroquois tribe started their fires off with the bark.

Bark was used by the Malecite Indians for covering their canoes – and they, the Tanana and some of the Cree used it for roofing too. The latter spread bark on their tent floors (unlike the Inuktitut Inuits who walked on needles). The Tanana tribe also fashioned the bark into cooking utensils too

Roots were extremely useful as sewing thread for quite a few Indian tribes including the Malecite. The Tanana used them to sew their baskets, some of the Cree sewed their canoes with them, and some of the Algonkin Indians used the roots as thread when making not only baskets or canoes but snowshoes as well. Rootlets offered material for fishing lines for Inuktitut Indians, and they and the Koyukon used roots to make some of their cooking tools.

When they were camping the Tanana Indians made their bedding from the tree's branches, as did both the Malecite and Micmac tribes.

It is interesting to note that Tanana Indians also burnt the needles as a mosquito repellent.

As if the foregoing were not enough white spruce offered a source of medicine for many North American Indian tribes including the Malecite. It was valued by the Gitksan, Micmac, Wet'suwet'en, some of the Algonkin and the Tanana Indians and also some of the Alaskan Inuits as a cough remedy. The Tanana, some of the Chippewa, the Okanagan-Colville Indians and the Inuktitut Inuits all used it to treat lung problems generally, and it provided a treatment for tuberculosis for the Tanana, Shuswap and Okanagan-Colville tribes. Both the Wet'suwet'en and Gitksan Indians prescribed it for influenza, and they and the Tanana also used it to ease colds. For some of the Algonkin it offered a remedy for various female disorders, while the Abnaki relied upon it for treating urinary problems, and some of the Cree applied a poultice of it for blood poisoning. The gum was chewed by the Iroquois as a digestive aid, while some of the Algonkin viewed this as a laxative. Micmac Indians turned to it for easing stomach upsets, Koyukon Indians used it for kidney ailments, and the Tlingit tribe and some of the Chippewa chose different parts of it to treat diarrhoea. White spruce was a Micmac cure for scurvy. It was used by Tanana Indians for treating oral sores and sore throats, and the Shuswap tribe turned to it for easing toothache. Among the Chippewa and Tanana Indians and some of the Cree white spruce was a remedy for rheumatism, and it also seems to have been fairly popular with the Koyukon, Micmac, some of the Cree (who used it for both adults and children) the Shuswap, some of the Algonkin and the Tanana Indians for treating various skin disorders. The Montagnais, Wet'suwet'en and Gitksan Indians all took it as a tonic.

The creamy-white or straw-coloured wood has been used for general construction, building interiors and flooring. It has been used to make guitars, violins, and sounding boards for pianos too, as well as boxes and crates. It has also been used for making airplanes, and furniture. But authorities suggest that its main use at the turn of the 20th and 21st Centuries is as pulpwood for paper.

White spruce has been cultivated (often in large plantations) for the Christmas tree trade and has become one of the most popular species for this. It has also been cultivated as an ornamental plant, in addition to hedging or as windbreaks.

The tree provides nesting sites and cover for wildlife, the needles are eaten by grouse and the seeds provide food for many other birds.

Both South Dakota (a state in the United States) and Manitoba (a province of Canada) have chosen white spruce as a civic emblem. In the former instance it had many rivals for this role including cottonwood (*Populus deltoides*) and juniper (*Juniperus communis*) but

white spruce finally prevailed there and in 1947 South Dakota formally adopted it as its official state tree.

Medicinally, local herbalists recommended a tea made from the inner bark for easing liver disorders and the smoke from burning needles as a fumigator or inhalant.