

Hughie Jones - March 2017

Yellow Birch *Betula alleghaniensis* *Betulaceae*

When we think of birch trees, it is the paper birch that most of us see in front of us, not the yellow birch. Even the word birch is thought to have come from the Sanskrit word 'bhurga, meaning a tree whose bark is used to write upon. But whatever tree you see, Gary Saunders' words in 'My Life with Trees' captures the spirit of these two trees:

Paper birch is fast-growing, showy, beloved of all; a tree of open sunny spaces that mixes with other sun-lovers, hates wet feet, lives fast and dies early.

Yellow birch is chunky, slow growing, a tree of damp, shady ravines, of swamps and rocky hillsides. It grows slow and dies old. For company it prefers other shade lovers like sugar maple, hemlock, red spruce and beech - that club of elites we call the Acadian Forest. Its bark is so rough and gnarly, especially on older trees, people hardly know it's a birch.

All the birches are pioneer species. When the huge glaciers of the last ice age retreated, birch trees would have been one of the first to re-colonize the rocky, ice-scoured landscape. Also, in early Celtic mythology, the birch came to symbolize renewal and purification. Deities associated with birch are mostly love and fertility goddesses.

Wa'so'q is the Mi'kmaq name for Partridge Island in Nova Scotia. It is the traditional gathering place for the Mi'kmaq. It means 'heaven'. And that's not surprising because its stands of yellow birch provided for all of their needs.

Every part of yellow birch has a use. The sap can be made into syrup or beer and the leaves and twigs into tea. The leaves are edible, and the inner bark can be used as a flour substitute or extender. The twigs of yellow birch when scratched give off a scent of wintergreen. Yellow birch is used as the source for oil of wintergreen to flavour many medicines. The bark of yellow birch is waterproof and was used by native people for making the exterior of canoes and structures.

Yellow birch can also be turned into a tar that was one of the earliest glues used by mankind. At least 75% of lumber sold as birch is yellow birch. The wood is heavy and strong with good bending properties. In addition, it is one of the primary hardwoods used in the distillation of wood alcohol.

It is interesting to note that another use of yellow birch comes through the parasite that grows on yellow birch absorbing some of its properties. Yellow and white birch both have a fungal parasite called Chaga or *Inonotus obliquus*. It grows on a few different species of trees, but the usable variety only grows on these two trees. It looks like a blackened, crusty bursting tumor. Being parasitic, it kills the host tree eventually as it is sucking the nutrients out of the tree - nutrients that are potentially good for us.

One of the compounds found in birch trees is betulin or betulinic acid (compounds which are used as anti-HIV agents). This compound is not digestible by humans, but the mushroom converts it to a usable form which we can ingest. The cultivated form of Chaga does not have those compounds.

Archival records show that the mushroom has been used since the 16th century as a remedy for cancer, gastritis and ulcers. The Mi'kmaq traditional gathering island, Wa'so'q (heaven), left nothing out.



yellow birch (*Betula alleghaniensis*)



Chaga (*Inonotus obliquus*) on yellow birch

SWOAM newsletter article on Chaga - Patty Cormier, District Forester with the Maine Forest Service

<http://treesforlife.org.uk/forest/mythology-folklore/birch/>

<http://www.hardyfruittrees.ca/catalog/forest-tree/yellow-birch-betula-alleghaniensis>

<http://nsforestnotes.ca/2016/08/22/celebrating-yellow-birch/>