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Eye on the Environment

Birch Culture

By Erika Edgley

Northwest Montana is a conifer-rich landscape; the climate is too harsh to support most deciduous trees. Glance into the deep woods or scan a mountainside and you will likely see a green swathe of some variation of spruce, hemlock, cedar, larch, fir, and pine trees. Lately however, patches of red are prevalent in many forests across Montana and talk of mountain pine beetle is commonplace.

It's hard not to notice the brittle, rust-toned pine trees; they have become ubiquitous in some places, spotty in others, but present everywhere. But, those of us fortunate enough to live in the Seeley-Swan have diversity on our side. Our lodgepole pines may be taking a hit, but a closer look into the woods reveals that it is not all bad out there.

When walking in the woods, there is nothing more beautiful than spotting the silvery-white trunks of a birch stand. The papery-white bark is often colored with faint traces of maroons, purples, and salmons, giving this deciduous tree a distinctive radiance.

If you look closely at a birch's skin you will see sheets of bark rolling out from her trunk into tight scrolls, and pearl-colored leaflets hanging by fibrous threads stirring with the wind. Aside from its beauty, the paper birch tree is arguably one of the most versatile tree species in the northern woods and has been used for centuries in traditional crafts and livelihoods.

Birch is in my roots. I grew up in the Adirondack Mountains where birch trees are prevalent and to some degree synonymous with rural culture, indigenous history, and rustic art. Sometimes known as silver birch or canoe birch, the paper birch falls under the genus name, *Betula*, along with 16 other birch species in North America. *Betula papyrifera*, is this tree's full genus and species name, and was the first scientific tree name I came to know. "*Betula remember this one*," I would say to myself.

In the Adirondacks, cabins are latticed with birch bark; it is not uncommon to step inside and see picture frames, lampshades and rustic furniture bearing the fancy white bark. In Norway, where my grandfather's family is originally from, birch was a way of life. Scandinavians were a birch bark culture and used the weather resistant bark and fiber for cutlery, skis, canoes, trade, and even clothing. One could pay taxes with birch bark, and records from the 1820's show that farmers would often pay veterinary bills with birch. Even shoes were woven from birch bark and there was a so-called, "birch bark mile" – or the distance a person could walk before wearing through the bottoms (approximately 9 ½ miles). On longer treks, travelers would carry extra strips of birch bark with them to make repairs.

In the early 1200s Norway was in a near constant state of civil war between two of the country's main factions. A group of poor, but devoted men and women known as the Birkebeiners, or birch-leggers, became famous for cross country skiing over rugged terrain carrying the country's infant son King Haakon to safety after his father, King Haakon Sverresson died. The Birkebeiners wore birch bark around their legs and feet for warmth and protection and traversed the mountains on skis made from the flexible, long-grained birch.

These stories lured me to the idea of birch at an early age, and I am drawn to what might be a birch culture in northwest Montana.

Paper birch is one of three native birch species in Montana (water birch and scrub birch being the others) and is classified state-wide as an “S-4” species, meaning that it is “apparently secure, though may be quite rare in parts of its range, and/or suspected to be declining.”

One of the earliest documentations of birch use in the Rocky Mountain West was in a letter written by Thomas Jefferson to Lewis and Clark as they were about to leave on their expedition. The note suggested that they should keep their daily records on “paper of birch, as less liable to injury from damp than common paper” (NHFS, 2007).

A native tree species that we do not have in Montana is the sugar maple (*Acer saccharum*), a syrup producing sweet tree that has New Englanders by the heart-strings. But, we have birch! Birch sap, when tapped in the early spring can be boiled into a sweet syrup as well. It can be used to brew birch beer, which is much like root beer, and birch tar can be boiled to treat leather and weather proof sealed containers. The possibilities of birch are endless.

Paper birch is a fast growing, multi-stemmed tree usually 30-40 meters tall with upward-angled branches and nodding tips (Parish et al. 1996). They are common at low to mid-elevation sites and colonize in places with sufficient sunlight and moisture. Though birch can grow in pure stands, more often than not you’ll find them with conifers and other deciduous trees in our valley, like cottonwoods and aspens and interspersed with shrubs, like rocky mountain maple and service berry.

Birch trees are resilient and can recover fairly easily from both human and natural disturbances, such as wild fire. Though they are unable to withstand prolonged periods of drought or saturated soil, they are extremely frost tolerant making them a hardy species in the north woods. Birch trees can help you survive the frigid winters too. There is perhaps no better fire-starter in our woods than a few curls of birch bark. On occasion, you can find true tinder fungus growing

on the bark of a live birch tree. This dark black conk growth can be harvested and will ignite easily with just a spark and hold a long, slow burning coal.

So next time you’re out in the woods or scanning the mountain sides and see nothing but the rusty-orange needles of a weakening pine, allow yourself to look beyond, and look for birch. The soft colors and elaborate bark patterns alone will be enough to hold your attention, but should you chose to explore further, you will find a tree that can support an entire culture. You will find a tree that can give you fire, furniture, food, and even footwear. Perhaps this is why birch has been called the Mother Tree.

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Citations:

North House Folk School, *Celebrating Birch: The Lore, Art, and Craft of an Ancient Tree*. Fox Chapel Publishing, 2007.

Parish et al., *Plants of Southern Interior British Columbia and the Inland Northwest*. Lone Pine Publishing, 1996.