Tasty Teas (and more) from Trees: Black and Yellow Birch

by Russ Cohen



Black Birch (<u>Betula lenta</u>), also known as Sweet or Cherry Birch, is native to southern New England and the southern half of northern New England. Yellow Birch (<u>Betula allegheniensis</u>) is native to all of New England. Black Birch is a spindly-to-medium-sized tree, typically found in colonies in regenerating forests, which are usually eventually replaced by slower-growing, larger tree species like oak or hemlock. Yellow Birch trees can be considerably larger and longer-lived, sometimes surviving for over two centuries. True to their names, Black Birch's bark (see photo on left) is charcoal-colored, whereas Yellow Birch (see photo on right) typically has a much more golden hue. Another difference is that Black Birch bark tends to be smooth (except on older specimens), whereas Yellow Birch's bark flakes and peels in fine horizontal strips.







[BTW - The leaf shape on both species (see black birch leaf, above left) reminds me of the leaf on the outside of a Breyer's Ice CreamTM box. (This is purely a coincidence, though, as William A. Breyer, in coming up for a logo for his Philadelphia-based ice cream business, modeled it on a "briar" leaf, an intended bit of word play on his name.)]

For the sake of experiencing these trees from your nose (or mouth), though, the two species can be lumped together. Scratch and then sniff (or taste) a Black or Yellow Birch twig, and its pleasant aroma/flavor is likely to put a smile on your face. What you are smelling or tasting is **oil of wintergreen***, which is present in the inner bark in each of these species (although typically to a greater degree in Black than in Yellow Birch).



It is fun to simply chew on a Black or Yellow Birch twig and enjoy its flavor while walking in the woods (or while cross-country skiing or snowshoeing, for that matter – the oil of wintergreen is present year-round). If you are camping and have forgotten your tooth brush, you can use a Black or Yellow Birch twig as a natural toothbrush and breath freshener. [This may not be a far a stretch as it sounds: Xylitol, a compound obtained from birch trees (among other sources), is actually used as an ingredient in some varieties of Tom's of MaineTM toothpastes and mouthwashes, and Trident Original FlavorTM chewing gum, as it contributes sweetness without contributing to tooth decay.]

When oil of wintergreen was derived from natural sources and used as a commercial flavoring, it was distilled from the inner bark of black birch trees – as a result, at one time a lot of black birch trees were being cut down for that purpose. Now, though, wintergreen flavoring in candies, toothpaste, etc. is for the most part synthesized artificially (i.e., black birch trees aren't harvested on a large scale for that purpose anymore). [*Note that while pure oil of wintergreen is toxic, the oil is safe in the low concentrations and amounts naturally present in plants, as well as when used to flavor candy, gum, beverages, toothpaste, etc.]

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The chemical name for oil of wintergreen is **methyl salicylate**, and it is related to salicylic acid, the active ingredient in aspirin, thus has a similar pain-killing effect (in fact, methyl salicylate is one of the active ingredients in BengayTM liniment). So, if you are hiking/skiing in the woods and you twist your ankle, you might want to find a Black or Yellow birch twig to chew on; at the very least it would distract you from the pain in your ankle.

You can make a very nice wintergreen-flavored tea, at any time of year, from peeled Black or Yellow Birch twigs. I advise you against trying to brew this the traditional, way, though (i.e., pouring boiling water from the tea kettle over the birch twigs to steep them). The reason is that oil of wintergreen is volatile (easily driven off by heat), so if you attempt to make tea with boiling or very hot water, your kitchen will smell great but there is likely to be little if any flavor left in your tea cup.



Here's my recommended method: get a couple good-sized containers ready (like quart-sized, wide-mouth Mason jars). Fill them with cool-to-lukewarm (not hot or boiling) water, then place as many peeled twigs, and the peelings from those twigs, that you have the patience to cram into the jars (the more you put in, the stronger the flavor). About three dozen twigs, and the peelings from those twigs, is a good amount. (A carrot peeler works well to peel the twigs, but if you haven't got one, a sturdy pocket knife should do the trick.) Then put the cap on.

While I used to think that you need to put the jars in the sun for a day or two, and slow-brew it, "sun tea" style, to ensure your finished product has a strong wintergreen flavor, I have since found that just letting the jars sit around, unrefrigerated, for several hours seems to be all you need to do to get a strong-flavored tea (once again, if you have crammed the jars with lots of peeled twigs and the peelings).

Oil of wintergreen is also present in the leaves and edible berries of the low-growing plants **Wintergreen** (*Gaultheria procumbens*, aka Teaberry or Checkerberry) and **Creeping Snowberry** (*Gaultheria hispidula*). While that gives those two species a similar flavor to Black and Yellow Birch, they are members of the Heath family (Ericaceae) and thus are not botanically related to Birch trees. That said – all four species are native to New England (although Creeping Snowberry tends to be more easily found in northern New England and/or at higher elevations).

Birch trees can also be tapped for sap in a similar manner to Maple trees -- not just Yellow or Black, but other *Betula* species, such as **Paper Birch** (*Betula papyrifera*), provided the tree is large enough (ideally more than eight inches in diameter). Birch tree sap starts to flow a week or two after the maples have stopped flowing (i.e., typically late March or early April).

Many years ago, I tapped some Black Birch trees on my family's land, and I got about one gallon of sap per hour per tap (!) from the trees. Unfortunately, though, birch sap is even waterier than maple sap (100:1 sap-to-sugar ratio vs. 40:1), and you have to boil the heck out of it to get anything. What you eventually get doesn't have any oil of wintergreen flavor; it has a look and taste very similar to molasses (see bottle at right) – but molasses is so cheap and so easy to get at the store, I suggest that if you want molasses, you just buy it – you're not going to save any time or money making your own molasses from birch sap.

That said – if you were camping during the time of the year when the birch sap was flowing, and you were concerned about the safety of other water sources near you, you could tap the birch trees and get all the pure drinking water you needed that way.



Last but not least, for those so inclined: you could make your own Birch Beer, by, e.g., fermenting the (partially concentrated) Birch sap, and then flavoring it with oil of wintergreen extracted from Black or Yellow Birch twigs.