

# QUICK FACTS

There are several species of birch that grow across North America. dōTERRA sources Sweet Birch (*Betula lenta*) bark to produce our Birch essential oil. Native to the Northeastern United States, the Sweet Birch tree grows between 60-100 feet tall.

Distilling birch bark adds value to the local economy as doTERRA sources bark from trees that are generally undesired or underutilized.

In many forest operations, it has not been cost effective to harvest and process undergrowth of birch trees, resulting in the trees competing for resources, hindering natural regeneration of new hardwood tree saplings, while also creating a fire hazard as undergrowth builds.

Common names for Betula lenta wood include Sweet Birch, Black Birch, and Mahogany Birch.

The sustainable use of birch trees follows a circular economy model in which harvested wood is used as lumber or for the wood-chip industry, which is ultimately processed into paper. Now with essential oil production, the bark is distilled for Birch essential oil, and all the distilled bark is reused for mulch, leaving nearly zero waste.

In just one month of operations, Woodside Oils repurposed nearly 175,000 kgs (about 385,000 lbs) of bark that would have otherwise been wasted.





Forest in Pennsylvania where birch trees grow abundantly.

Birch essential oil has been used traditionally for many generations, typically only available in small volumes due to the complexity of raw material preparation and distillation. Over a decade ago, dōTERRA sourced a small supply of Birch essential oil from the Northeastern United States. Eventually, dōTERRA outgrew this supplier's production, and Birch oil, temporarily, became a thing of the past. That's when dōTERRA began the pursuit to produce our own Birch oil in sufficient volumes, meeting stringent CPTG® standards.

### **Pushing Back for Purity**

Generations ago, birch oil was commonly produced for supplementary income in the Northeastern United States by families with a significant amount of birch trees on their property and small wooden distillation units.

However, a process for creating synthetic birch oil using synthetic methyl salicylate was eventually developed and was much cheaper than purchasing pure birch oil from local cottage businesses. Distilling pure birch essential oil is a labor-intensive process

with low yields (~0.1%), which significantly adds to the cost.

As brokers and companies moved toward the cheaper synthetic option, many families stopped producing birch oil. It wasn't worth the costs and effort without reliable buyers that valued pure and natural birch oil.

Birch essential oil is predominantly methyl salicylate, similar to compounds found in Wintergreen oil. This chemical makeup means it's easy to fabricate and difficult to detect adulteration. doTERRA® chemists have published years'-worth of peer-reviewed research to detect the differences between Wintergreen and Birch biomarkers, as well as detection of synthetic methyl salicylate.

In 2022, scientists at dōTERRA published a peer-reviewed study that tested 27 commercially available Birch essential oil products and found that none of these products, most of them claiming to be 100% Birch oil, had Birch biomarkers. Rather, wintergreen, synthetic methyl salicylate, or a mixture of both were detected. In other words, none of the products tested contained any birch oil at all!







#### From Generation to Generation

Much of the artisanal knowledge of birch distillation has been lost over the years, but fortunately not all of it. Skip Cavanaugh of Wellsboro, Pennsylvania, is a perfect example of why keeping a history of the past is so important. Starting with his father, Skip and his family have kept generational records about distilling birch oil.

Another resident of Pennsylvania, Royce Novosel-Johnson, and his family own land in rural McKean County, which is abundant with birch trees. Royce knew there was a better way to manage and utilize all the trees to benefit people. In 2016, after searching for a company that valued Birch oil, Royce reached out to doTERRA.

One month later, the doTERRA Sourcing team was on the ground in Kane. Little did we know how long and intensive the process would be to build a sustainable supply of Birch essential oil from the ground up. Cracking the code on producing birch presented many challenges as it is an extremely low yielding oil, difficult to separate from water, and

requires intensive collaboration with the lumber industry. However, the seven-year project turned into a reality when doTERRA inaugurated our own essential oil distillery, Woodside Oils, that produces Birch essential oil in Kane, Pennsylvania and was inaugurated on April 4, 2023.

dōTERRA is the first company in the world to offer pure and natural Birch essential oil on a commercial scale, all while having it produced in an ethical and sustainable manner through our Co-Impact Sourcing® model.

"We're not taking anything out of the supply chain. All we're doing is babysitting the bark and giving it a bath before sending it back."

—AJ McGarity, doTERRA Strategic Sourcing
Special Initiatives Manager



#### A Sustainable Product

Because of dōTERRA Birch essential oil, birch trees now have important added value for forest property owners. If people want to harvest a lumber species like cherry, oak, or maple, they must also harvest birch to do so as they all grow intertwined in the forest and are cut down together. During lumber harvesting, birch and other unwanted trees are typically removed along with the premium species, but they are underutilized and don't have much value.

Woodside Oils proudly prioritizes working with Forest Stewardship Council (FSC)—certified companies to sustainably source our birch bark. FSC certification ensures that our bark comes from responsibly and sustainably managed forests that provide benefits for people, the planet, and the economy. We have developed partnerships with sustainable lumber yards, timber companies, foresters, and private landowners who are harvesting in areas where birch trees are prevalent. These partners typically keep the birch trees mixed with other trees and

use the wood as lumber or for the wood-chip industry to be ultimately processed into paper, but the bark still has no commercial value. Our partners are now compensated for separating and debarking the tree, with the bark sent to Woodside Oils for distillation and afterwards used as mulch, while the wood still continues in its original route, having just made one more useful stop in the process.

In this way, dōTERRA obtains the birch bark needed to produce essential oil without putting a strain on the environment. Removing this species of birch tree also helps to regulate and promote local biodiversity since birch trees grow and reproduce aggressively in these managed areas and often outcompete other native species. Extracting the essential oil adds another layer of value and profitability for family forest operations and demonstrates greater appreciation for and use of the earth's beautiful resources. We never want to waste the gifts nature has given us.

In fact, dōTERRA was recognized as a winner of the 2023 SEAL Environmental Initiative Award for their sustainable sourcing of birch essential oil. This award honors companies that demonstrate measurable contributions to corporate leadership, innovation, and commitment to sustainable business practices.

We're proud to make wise use of these forest resources, adding value for the forest, and deliver pure Birch essential oil to the world.





essential oil is expensive.

"But there's something magical, something alluring about the heritage of birch oil being produced for hundreds of years by small streams in mountain areas using wooden stills. The way we use the oil today is the same way they used it back then – but until now it's only been produced on a small, artisanal scale. We've been working hard to replicate this artisanal approach but on a largescale so we can offer a pure and natural Birch oil to the world."

— dōTERRA Vice President of Global Strategic Sourcing, Tim Valentiner

## dōTERRA

