**Showcasing the DNR: It’s Forest Products Week – Thank a tree for everything from your roof to shredded cheese**

**By RACHEL COALE**

**Michigan Department of Natural Resources**

What do you need to build a house, or a deck or a chair?

Trees, of course.

But you might also need trees to weave a shirt, whip-up a stellar breakfast or glam-up those Hollywood eyelashes.

Really!

This Forest Products Week, Oct. 17-23, think about some of the more surprising ways trees are rooted in our lives.

“Michigan’s forests are an incredible renewable resource that we manage for wildlife, recreation and timber production to make a huge variety of goods” said Michigan Department of Natural Resources forest products specialist David Neumann.

Traditional forest products contribute more than $20 billion in economic output in Michigan annually (2017 [data](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80943_85943---,00.html)) – including commonplace items like paper, furniture, lumber and other goods. But in forest products where the tell-tale wood grain is hidden, it’s harder to know that an item came from a forest.

From the coffee tree beans that might help you greet your day to the cup of steeped tea leaves or barrel-aged brew you might settle down with in the evening, almost everything we do is connected somehow to trees.

**Clothing and footwear**

To start, what do rough, scratchy pieces of leaves, tree bark and wood chips have to do with your favorite activewear? More than you might think. You could be wearing a tree right now!

Figuring out how prickly tree bits made their way into cozy clothing requires taking a step back – way back – to the 1800s. Rayon was the first tree-based fabric made from purified cellulose fibers, a substance that gives tree cells shape and strength.

Created as a substitute for pricy silk, rayon was the first man-made fiber and involved a chemically intensive process that wasn’t great for the environment.

However, the next generation of tree-based fabrics is here, and things have changed a lot since the 1800s. Today’s lyocell and modal fabrics (sold under the brand names TENCEL or Excel) are made from wood pulp and leaves.

A special process treats pieces of eucalyptus, bamboo, oak or birch and weaves them into soft fabric. Modern methods now use less water in production than even organic cotton. Solvents used in these processes are reported to be recycled at a rate of more than 90%.

What’s the advantage? Tree-based fabrics are great for activewear and outdoor gear since they wick away moisture, are long-lasting and don’t easily snag. Many are certified as using sustainable harvest methods, so you can feel good about wearing a renewable item, too.

In addition to cellulose-based fabrics, you might also be wearing trees on your feet.

Natural rubber boots are made from trees. It started in 1839 when Charles Goodyear of Goodyear Tires invented a way to process the sap of central America’s hevea tree, a natural latex source used by indigenous peoples. Goodyear named his process “vulcanization,” after Vulcan, the Roman fire god.

How can you tell if the trees used to make your clothes were responsibly sourced and replanted? Look for pieces from companies certified under FSC (Forest Stewardship Council) or SFI (Sustainable Forestry Initiative) standards. These independent organizations require audits to ensure sustainable forestry practices are being used, such as replanting, protection of water quality and conservation of biological diversity. Fabric is just the start of the thread weaving trees into our lives.

**Breakfast**

Next time you sit down for breakfast, look at your plate and try to spot how much of your morning starts with trees. A wooden table, a paper napkin, fresh-pressed apple cider, maple syrup, smoked sausage or a cheesy, mushroom omelet all can start with trees.

Some of these products are from obvious tree-based sources, like fruits and nuts from orchard trees and the sweet syrup that starts its journey as sap in a maple grove ([learn how to get started making your own](https://www.michigan.gov/dnr/0,4570,7-350-79119_104319_105740---,00.html)). Even delicious chocolate starts out as a funky-shaped cacao pod from a tropical tree.

Forest flavors can also be more subtle additions to a recipe, such as the smoky bacon or sausage taste that comes from wood chips, or the flavors in our favorite brews picked up from the oak barrels used to store them.

“Aromas of vanilla, clove, smoke, spices and coconut,” are all flavors in wine derived from oak barrels, according to the wine education website and blog, “Wine Folly.”

Michigan’s two barrel-making companies, called cooperages, produce white oak barrels for wine and craft distilling industries.

In addition to adding flavor, trees can provide other helpful ingredients. Natural cellulose fiber keeps shredded cheese from sticking together in one big clump, and farmers-market mushrooms are often grown in sawdust or on cut logs.

**The bathroom**

After breakfast, it’s time to brush your teeth and get ready for the day. You guessed it – trees are in your bathroom cabinet too. Tree resin and cellulose can thicken toothpaste, smooth out deodorant and strengthen nail polish.

And back to those eyelashes. Cellulose fiber is used in many natural mascara brands to add length and lift. Tree-based ingredients are also used in lipstick and in henna hair dye, which is derived from the henna tree native to north Africa and Asia.

Tree oils, including tea tree and sandalwood, and oils pressed from tree nuts like almond and jojoba (a small, shrubby tree in the southern U.S.) are other personal-care items originating with trees.

**And there’s more**

Musical instruments, sponges, car wax, home insulation, [a new type of skyscraper](https://www.michigan.gov/som/0,4669,7-192-47796-547537--,00.html) and more are made from trees. In addition to all the things that trees make, they’re also responsible for making our lives better.

Trees clean water and air of pollutants, provide places to adventure, raise property values, lock up carbon dioxide gas and contribute to the well-being of communities.

So, this week, think about trees providing so many different and important benefits to our lives, and thank foresters for maintaining our state’s forests, and arborists for caring for trees in urban landscapes.

The Michigan DNR takes responsible forestry seriously and has maintained dual certification in sustainable management techniques from two independent organizations since 2005, making Michigan one of the earliest states to do so.

Learn more at [Michigan.gov/ForestCertification](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80915---,00.html).

From right here in Michigan to other states and all the way around the world, trees provide a good deal more to our lives than what meets the eye.

Check out previous Showcasing the DNR stories in our archive at [Michigan.gov/DNRStories](https://www.michigan.gov/dnr/0,4570,7-350-79137_79770_79873_80003---,00.html). To subscribe to upcoming Showcasing articles, sign up for free email delivery at [Michigan.gov/DNR](http://www.Michigan.gov/DNR).

**Note to editors:** Contact: [John Pepin](mailto:pepinj@michigan.gov), Showcasing the DNR series editor, at 906-250-7260. Accompanying photos and a text-only version of this story are available below for download and media use. Suggested captions follow. Credit: Michigan Department of Natural Resources, unless otherwise noted.

**Text-only version of this story.**

**Aspen:** A Michigan Department of Natural Resources aspen harvest yield is shown.

**Cacao pod:** A cacao pod, grown on trees, is the beginnings of chocolate. (Shutterstock image)

**Chips:** Wood chips and wooden barrels are used to produce various flavors for several products. (Shutterstock image)

**Cider:** Glasses of hard cider are shown, one of the many products that are derived from trees. (Rachel Coale photo)

**Jojoba:** A jojoba tree, shown here, is used in oil form to produce personal care items. (Shutterstock image)

**Mascara:** Mascara is one of many personal care items that get their start with trees. (Shutterstock image)

**Platte:** A beautiful fall photograph shows the Platte River State Forest Campground in Benzie County.

**Rubber:** This image shows rubber derived from rubber trees, which is used in numerous products. (Shutterstock image)

**Wine:** Wooden barrels, made from trees, are used for flavoring wine and other beverages. (Rachel Coale photo)