

# DO YOU KNOW OREGON FORESTS ?

We love our forests and benefit from them in so many ways. Our forests help filter our drinking water, provide habitat for diverse animal and plant species, supply us with oxygen, moderate temperatures and rainfall and store atmospheric carbon. They provide an active playground and quiet retreat. They supply renewable resources for building materials, paper and heating, along with jobs that support families and communities.

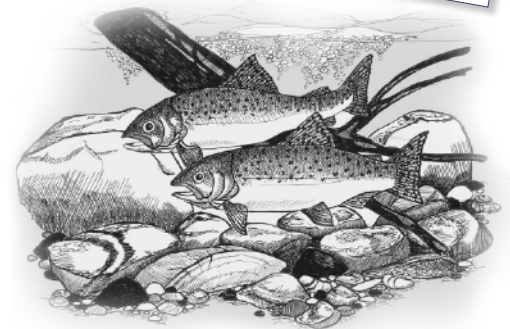
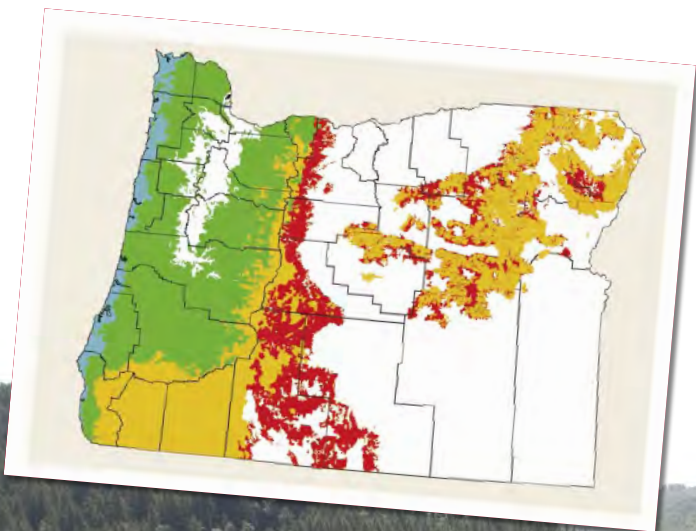
## JUST HOW MUCH FORESTLAND IS THERE ?

A lot. Oregon is made up of 61 million acres of land. Nearly 50 percent of our state is classified as forestland. Oregon today retains 92 percent of the forest cover present in 1850. Only 8 percent has been converted for other human use such as cities and towns, highways and agriculture.

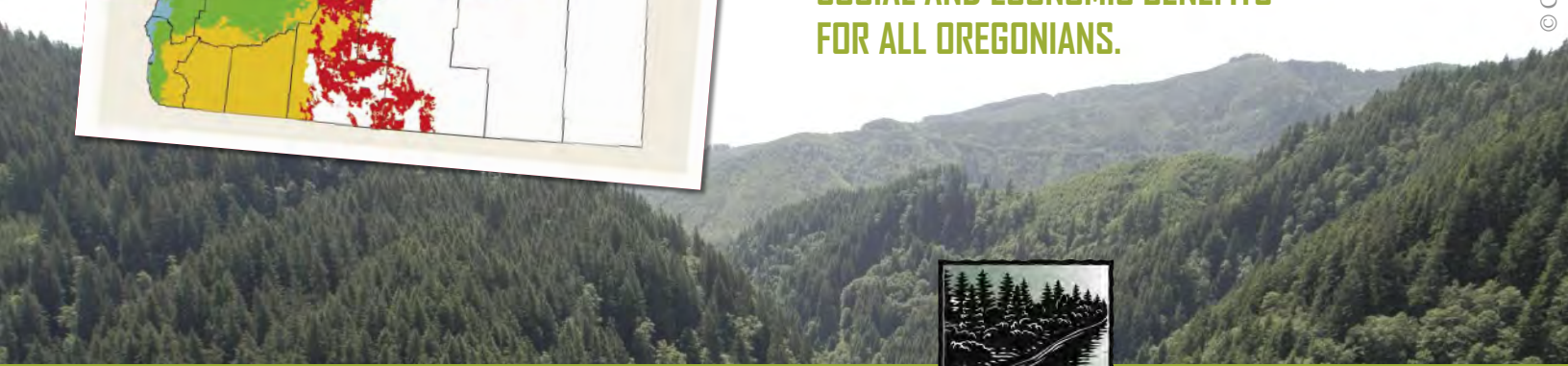
## FOREST TYPES

Oregon is home to more than 65 tree species and four main types of forests. They grow in distinct zones defined by geography and climate:

- Spruce-Hemlock
- Douglas-fir
- Mixed Conifers
- Ponderosa Pine



**FORESTS PROVIDE ENVIRONMENTAL, SOCIAL AND ECONOMIC BENEFITS FOR ALL OREGONIANS.**

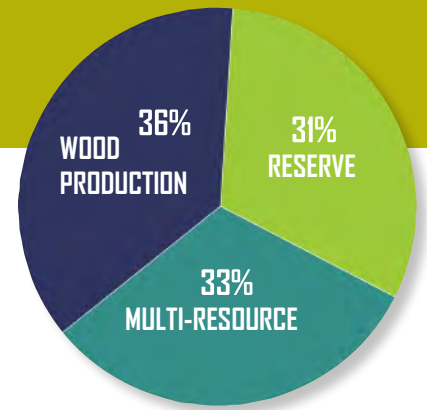


OREGON FOREST  
RESOURCES INSTITUTE

Oregon's Legislature created the Oregon Forest Resources Institute to improve public understanding of Oregon's forest resources and to encourage sound forest practices

Learn more at [www.oregonforests.org](http://www.oregonforests.org)

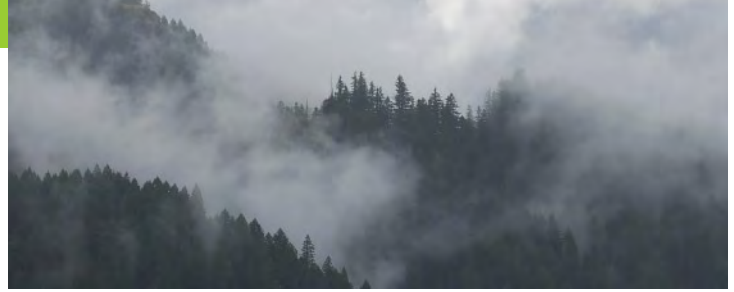
# ARE ALL FORESTS MANAGED THE SAME WAY ?



Oregon has abundant forests that are managed for a multitude of environmental, social and economic values. Forest management is overseen by forestry professionals who plant, grow, thin and harvest trees. Although individual forest landowners may manage their land for different objectives, on a landscape level, the diversity of forest management objectives creates a full range of benefits. Oregon's forests generally fall into one of three management classifications:

## RESERVE

Primarily managed for environmental attributes such as old-growth habitat. These lands are predominately owned by the federal government and may be set aside for parks, wilderness or endangered species habitat. Timber harvest is limited.



## MULTI-RESOURCE

Managed for multiple uses including recreation, water, wildlife habitat and some timber production. These lands are mostly owned by local, state and federal governments. Protected streamside areas (stream buffers) on private land also are considered multi-resource.



## WOOD PRODUCTION

Managed primarily for timber production, these lands are owned by private industrial, family and tribal owners. Privately owned forestlands are now Oregon's primary providers of timber, accounting for nearly 85 percent of the state-wide timber harvest annually.



**DIVERSE FOREST MANAGEMENT PROVIDES ENVIRONMENTAL, SOCIAL AND ECONOMIC BENEFITS FOR ALL OREGONIANS.**



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# WHY DO FOREST ANIMALS LIVE WHERE THEY DO ?

Different forest animals need different types of habitat to meet their food and shelter needs. Some prefer the vegetation associated with young, open forests. Others need habitat features like snags or fallen logs found in older forests. Some animals are found in forests of any age. As forests grow from young to old, the resident wildlife will change as the habitat structure changes.

## YOUNG, OPEN FORESTS

Young, open forests occur following disturbances such as fire or logging. Shrubs, grasses and young trees emerge first.

*Who's here: mountain bluebird, black bear, American goldfinch and others*



## MIDDLE-AGED FORESTS

The trees in a middle-aged forest have outgrown weaker trees and other vegetation. The canopy is open enough for the growth of ground vegetation that some animals prefer.

*Who's here: long-toed salamander, Roosevelt elk, pacific tree frog and others*



## OLDER FORESTS

Older forests contain large trees and have a complex canopy, a highly developed vegetation understory and fallen logs and snags that provide habitat for some animals.

*Who's here: hoary bat, Douglas squirrel, marbled murrelet and others*



**Animals inhabit young, middle-aged or older forests, depending on their specific food and shelter needs.**

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# Goods From the Woods

Through research and advances in technology, we have learned to convert tree fibers and paper-pulping residues into a wealth of products, like the ones listed below. In fact, there are more than 5,000 wood and paper products that make our lives better each day -- everything from baby food and ice cream to rayon and paint, to toothpaste, cosmetics, medicine and house-hold cleaners.

But what makes all of these products special is that they come from a **renewable resource - trees**. Unlike fossil fuels, metals, and plastics, wood can be harvested, used, regrown, and harvested again and again in a never-ending cycle. With proper management of our forests, we can enjoy thousands of products and still have plenty of trees for wildlife habitat, recreation, and aesthetic beauty today *and* in the future.

*Read on to discover more about Goods from the Woods:*



**Shipping Crates:** Wooden crates are made from sweetgum tupelo, yellow-poplar, and maple.

**Toothpaste:** Terpenes, which are derived from wood, are used to make licorice flavor as well as to sweeten the spearmint or peppermint flavor of many toothpastes and mouthwashes.

**Soft drinks:** Many citrus flavored soft drinks contain esters, which are derivatives of trees used to assure a uniform distribution of the citrus flavor throughout the drink.

**Facial tissue:** Papers - including facial tissue, toilet paper, paper towels, newspapers, and writing papers - are made from wood pulp.

**Lotion:** Many products, including lotions, contain Vitamins A & E, which come from wood extracts.

**Glue:** Glues and adhesives can be made from hard resins, which come from trees.

**Dishwashing liquid, soap, and shampoo:** Detergents as well as many soaps and shampoos, are made from crude fatty acids derived from wood. The lemon scent of some dishwashing liquids and furniture polishes comes from trees during pine turpentine processing.

**Chewing gum:** Chewing gum is made by using the rosin or storax of trees such as spruce. Chewing gum may also be artificially flavored with peppermint and spearmint, which come from a group of pine derivatives called terpenes.

**Medicine:** Aspirin tablets and other medicines in tablet form are held together with lignin, which is a natural part of wood. The essential elements of aspirin come from the bark of willow trees. Other medicines used in treating diseases such as high blood pressure and Parkinson's disease contain various wood derivatives.

**Spices:** Many spices used in cooking - such as nutmeg, bay leaves, and cinnamon - come from trees. Cinnamon comes from the bark of laurel trees.

**Crayons:** Carnauba wax, a resin produced by the leaves of the carnauba tree, is the waxy component of crayons. Carnauba wax is also used in car wax, and as a finish coating on furniture, produce such as apples and pears, and a wide variety of other products. The pharmaceutical industry uses it to coat pills. It is a major ingredient in lipstick and other cosmetics.

**Instant hot chocolate:** Instant hot chocolate contains the thickening and preserving agent cellulose or methylcellulose, the main building block of wood.

**Hair spray:** Hair spray, as well as adhesives, is made from tree resins, sticky liquid substances that usually harden when exposed to air.

**Sandwich bags:** Cellophanes are derived from the sugar components of wood during the pulping process and are used in making such products as wrap and tape.

# Wood: The **MAGICAL** Material from the Forest



Wood is truly a magical material. Right now you are surrounded by wood and paper products that make your life better every day. For example, wood flour and melamine resins using cellulose filler are used to make everything from football helmets to TV cabinets and even sausage casings, yes, sausage casings! Turpentine and tall oil reclaimed from the paper-making process are used in paints, soaps, and polishes; related oils are used to make detergents, toothpaste, and shampoos. The anticancer drug, Taxol, is obtained from the bark of a Pacific yew tree.

Some of the many thousands of products made from trees are listed below.

Look around you now and see how many you can find.

## *Paper products*

computer paper, library books, coffee filters, tissues, disposable diapers, postage stamps, paper towels, milk cartons, paper plates, movie tickets, newspapers, animal bedding, grocery bags, building insulation, playing cards

## *Solid Wood Products*

lumber and plywood to build new homes, furniture, toothpicks, baseball bats, canoe paddles, guitars, backyard play sets, ax handles, charcoal, wooden blocks, rulers, birdhouses, crutches, fences, sleds

## *Bark*

corks, anticancer drugs, shoe polish, cosmetics, poultry bedding, oil spill control agents, garden mulch, spices

*Torula yeast* (wood sugars recovered during the pulping process)

baby foods, imitation bacon, cereals, vegetarian foods, baked goods, beverages

## *Cellulose*

rayon and tencel clothing, sanding sealers, pressure sensitive adhesives (tape), floor tiles, toothpaste, carpeting and upholstery backsides, food additives and thickeners, handles for screwdrivers and other tools, football helmets and hardhats, carbon paper, piping for irrigation systems, plastic twines, computer cases, luggage, placemats, sandwich bags

*Lignosulfates* (from spent sulfite pulping liquid) cleaning compounds, ceramics, pharmaceuticals, insecticides, hair spray, deodorants, fungicides, grouting, laundry stain remover, artificial vanilla flavoring

## *And don't forget RECYCLING*

The story doesn't end when a product is made. Many of these products are routinely recovered and recycled. Recycled paper is used in everything from newsprint to corrugated boxes and writing papers. Some products, such as egg cartons, cereal boxes, and tissue are made entirely of recycled fiber. Paper is THE most recycled material of all those that are routinely recycled.

Source: American Forest and Paper Association, [www.afandpa.org](http://www.afandpa.org)



# Trees are nature's masterpiece.



They take in carbon dioxide and give off oxygen.

They sequester carbon, provide shade and shelter, anchor soil, reduce air and water pollution, and provide beauty and recreation for us.

**BUT, if trees are so great for the environment,**

## ***WHY DO WE CUT SO MANY?***

One reason we harvest trees is that the average American uses 18 cubic feet of lumber and structural panel products (plywood and OSB among others) and 750 pounds of paper each year. This is the equivalent of an 18" diameter 100-foot tree each year.

***So, are we going to run out of trees?***

To get some idea of how many trees we have grown and used since 1900, start with 76 million people living in the United States in the year 1900. By 1990, we had grown to more than 250 million people in the US. So, from 1900 to 1990 we grew and used the equivalent of 14 billion 100-foot trees. And, because of modern forest practices, our beautiful green forests are the envy of the world. We still have about two-thirds of the forest cover that existed in the 1600s. And, we have more forest cover today than existed in 1900.

Even so, if we don't understand how forests work best, it's easy to conclude that to get the environmental benefits, it's better to leave the trees untouched. Nothing could be further from the truth. Healthy growing forests do a better job for our environment than older, decaying ones. And, we get healthy, growing trees when we apply modern forestry knowledge to the forest through tree farming and sustainable forest management practices.

**Bottom line: we cut trees to utilize them in our lives today and we replant them to provide for the future.**