

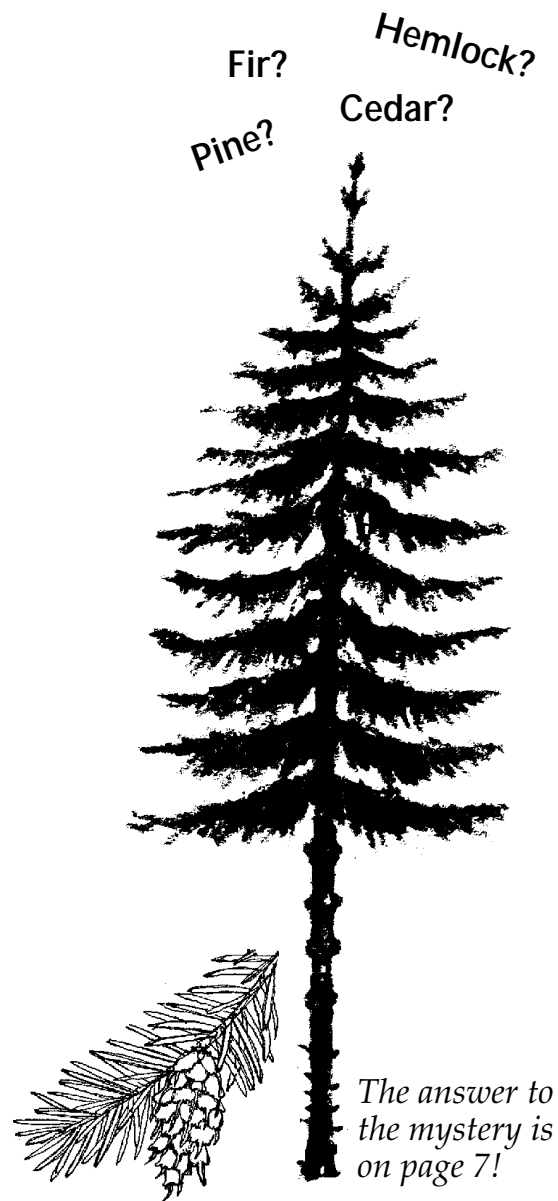
UNDERSTANDING NAMES OF OREGON TREES

S. Leavengood

Why do we call white fir a true fir? Is Douglas-fir a true fir? Is bull pine the same as ponderosa pine or is it a separate species? Is juniper a cedar? Is incense-cedar really a cedar?

It's little wonder that people are confused by tree names. Foresters and lay people often name a tree based on its physical appearance, the wood products industry may call the tree by another name based on the characteristics of the wood, and botanists name a tree based on its anatomical characteristics and evolutionary relationship to other trees.

To avoid confusion, scientists use the Latin scientific name, for example *Pinus contorta* (lodgepole pine). The first term in the scientific name refers to the genus, and the second term refers to the species. Trees in the same genus are closely related and have similar characteristics. Trees in the same species are capable of interbreeding. To put it simply, if you want to know whether a tree is a fir, pine, cedar, or anything else, check the genus name.



**OREGON STATE UNIVERSITY
EXTENSION SERVICE**

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For example, unless a tree is in the genus *Abies*, it is not a true fir, and unless a tree is in the genus *Cedrus*, it is not a true cedar.

Another technique botanists use to distinguish the “false species” is to hyphenate or run together their common names. As an example, white fir is a true fir, but Douglas-fir is not. And Atlas cedar is a true cedar, but western redcedar is not. This trick is not very reliable, however, as people often misspell common names (for example, using red cedar instead of redcedar, or leaving out the hyphen in Douglas-fir).

So, let’s try to answer some common questions about Oregon’s tree species.

SOFTWOODS

TRUE FIRS

Oregon has six native *true* firs:

- White fir (often called concolor fir by nurseries due to its scientific name, *Abies concolor*)
- California red fir (a.k.a. Shasta fir or silvertip fir, scientific name, *Abies magnifica*)
- Grand fir (*Abies grandis*)
- Pacific silver fir (*Abies amabilis*)
- Noble fir (*Abies procera*)
- Subalpine fir (a.k.a. alpine fir, *Abies lasiocarpa*)

True firs often hybridize between species. Thus, Shasta red fir, in addition to being a common name often used to refer to California red fir, also is the name for a recognized hybrid of California red fir and noble fir.

“HEM-FIR”

Having trouble locating a Hem-fir tree? Probably so, because there is no such tree. How is it then that you’ll hear wood products industry people talk about Hem-fir and can find lumber with HEMFIR stamped on it (Figure 1)?

Hem-fir is a species *grouping*. Groupings are used by the wood products industry to denote species with similar properties, in this case hemlock and fir. There are six separate species in the Hem-fir grouping, including western hemlock and five true firs (California red fir, grand fir, noble fir, Pacific silver fir, and white fir). Wood from these trees is graded and sold together under the Hem-fir species grouping.

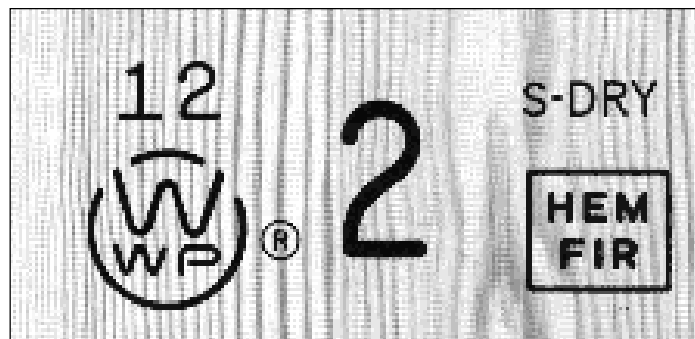


Figure 1. — Don’t be fooled by a “Hem-fir” label. Hem-fir actually is a species grouping that includes both hemlock and fir.

DOUGLAS-FIR

Douglas-fir is *not* a true fir.

Well, what is it then? We could devote several pages to this tree alone.

Douglas-fir truly is a unique species.

This tree has given botanists fits. Over the years, they

have called Douglas-fir a pine, a spruce, a hemlock, and a true fir. The wood products industry often calls the wood of young trees red fir and the wood of older trees yellow fir. The Japanese call it Oregon pine.

Douglas-fir's scientific name is *Pseudotsuga menziesii*. *Pseudotsuga* (pronounced soo-doe soo-ga) means "false hemlock," so at least we know it's not a hemlock!

The needles of Douglas-fir and the true firs look fairly similar, so in some ways, Douglas-fir resembles true firs. Botanically speaking, one reason Douglas-fir cannot be classified as a true fir is the difference in its cones. True fir cones stand upright on their twigs and disintegrate in the wind rather than falling to the ground. By comparison, Douglas-fir cones are quite unique in appearance (Figure 2), hang down from the branches, and usually fall to the ground intact.

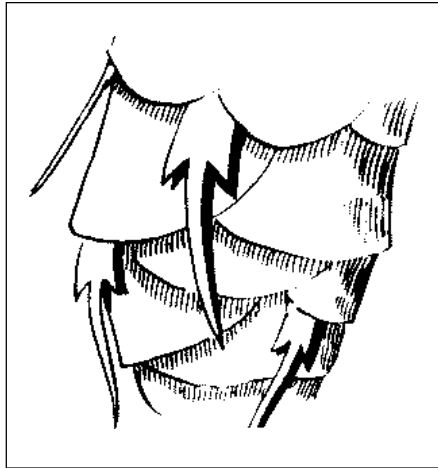


Figure 2.—Douglas-fir cones have pitchfork-shaped bracts that are longer than the scales.

In summary, Douglas-fir is not a pine, not a spruce, not a hemlock, and not a true fir—it's in a class by itself!

CEDARS

We have four "cedars" native to Oregon, and not one of them is a true cedar. In fact, there are no true cedars native to North America. True cedars

are native to the Mediterranean and Himalayan regions and are in the genus *Cedrus*. Oregon's false cedars are:

- Incense-cedar (a.k.a. pencil-cedar, scientific name *Calocedrus decurrens*)
- Western redcedar (*Thuja plicata*)
- Port-Orford-cedar (*Chamaecyparis lawsoniana*). See Figure 3.
- Alaska-cedar (known in Canada as yellow-cypress, scientific name *Chamaecyparis nootkatensis*)



Figure 3.—Port-Orford-cedar (*Chamaecyparis lawsoniana*).

So, why do we call these imposters cedars? It's hard to know for sure. The best guess is that they all have aromatic properties. The true cedars of the world, Atlas cedar (*Cedrus atlantica*) and Deodar cedar (*Cedrus deodara*) for example, also have aromatic wood.

WESTERN JUNIPER

What about western juniper (*Juniperus occidentalis*)? Is it a cedar? No. Some people call it a cedar because of the aromatic properties of its wood and because its foliage is similar to Oregon's false cedars. However, juniper definitely is not a cedar.

Interestingly, the scientific name of eastern redcedar (a.k.a. aromatic redcedar or Tennessee redcedar), which often is used for lining cedar chests and for animal bedding, is *Juniperus virginiana*. In other words, eastern redcedar really is a juniper just like our western juniper!

PINE

What about Oregon's dozens of species of pine? Actually, there are only eight species of pine native to Oregon; however, each species often goes by multiple names, making it seem that we have dozens of pine species.

As an example, the names blackbark pine, red pine, redbark pine, buckskin pine, yellow pine, bull pine, and yellow-belly pine most often refer to a single species—

ponderosa pine (*Pinus ponderosa*). See Figure 4. The reasons for many of these names have to do with the tree's appearance. Like many tree species, ponderosa pine's appearance varies with age. Young trees often have black bark; hence the name blackbark pine. On older trees, the bark becomes cinnamon red; hence the names red pine and redbark pine. If a tree has been dead a long time and the bark has fallen off, leaving a smooth, weathered surface, it may be called a buckskin pine.

Another native Oregon pine that often goes by many aliases is lodgepole pine (*Pinus contorta*). Along the coast, lodgepole pine is known as shore pine. In eastern Oregon, lodgepole pine often is known as jack



Figure 4.—Ponderosa pine (*Pinus ponderosa*).

pine, which in fact is another species of pine. Jack pine (*Pinus banksiana*) is native to the Great Lakes region of the United States and Canada. Jack pine looks very similar to lodgepole pine, and therefore it's possible that Northwest settlers who were familiar with jack pine gave lodgepole its other common name.

Our other native Oregon pines are Jeffrey pine (*Pinus jeffreyi*), knobcone pine (*Pinus attenuata*), western white pine (often called Idaho white pine by the wood products industry, scientific name *Pinus monticola*), sugar pine (*Pinus lambertiana*), limber pine (*Pinus flexilis*), and whitebark pine (*Pinus albicaulis*).

WESTERN LARCH

A very unique tree species in northeastern Oregon goes by a couple of names. This species is a conifer (commonly called "evergreens"), yet it is not evergreen. It is Oregon's only native conifer that sheds its needles every year.

Western larch (*Larix occidentalis*) is the tree's proper name, although it more commonly is known as tamarack. Tamarack actually is another species of larch, namely eastern larch (*Larix laricina*), which is native to the Great Lakes, New England, and all across Canada. Again, it is likely that settlers in the West dubbed western larch "tamarack," a tree they were accustomed to seeing in the eastern United States.

HARDWOODS

MOUNTAIN-MAHOGANY

Mountain-mahoganies are native to eastern Oregon. Notice the hyphen, a dead giveaway for an imposter. True American mahoganies are in the genus *Swietenia*, and African mahoganies are in the genus *Khaya*. West Indies mahogany (*Swietenia mahagoni*) is native (and rare) to extreme southern Florida and is the only true mahogany native to North America.

There are two mountain-mahoganies in eastern Oregon: curleaf mountain-mahogany (*Cercocarpus ledifolius*) and birchleaf mountain-mahogany (*Cercocarpus betuloides*). The wood of mountain-mahogany is very hard and dark reddish-brown like true mahogany wood. This may be why we call these trees "mahoganies."

TANOAK

Is tanoak an oak? No. Notice how the name is run together. Yet another imposter. True oaks are in the genus *Quercus*. Three of them are native to

Oregon: Oregon white oak (*Quercus garryana*), California black oak (*Quercus kelloggii*), and canyon live oak (*Quercus chrysolepis*).

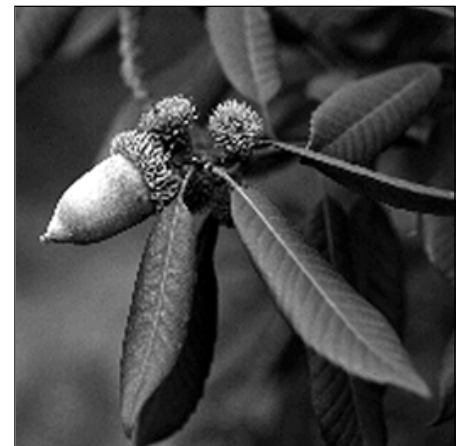


Figure 5. — Tanoak acorn (*Lithocarpus densiflorus*).

Tanoak's scientific name is *Lithocarpus densiflorus*. It has fruit (acorns) similar to oaks, although the acorns have spiny caps like chestnut acorns (Figure 5). The wood of tanoak resembles that of true oaks. In addition to the acorns, this oak-like wood may be why we call it an "oak."

POISONOAK

Is poisonoak a true oak? No, and again, that's why we run the name together. Poisonoak's scientific name is *Rhus diversiloba*. Its leaves look a bit like oak leaves, which may be why we call it an "oak."

POPLAR

What's a poplar? Several species of poplar are called cottonwood, and several are called aspen. Then there are trees with the term poplar in their common name, Lombardy poplar for instance. Will the real poplar please come forward?

Actually, poplar is a term that often is used to refer to any tree in the genus *Populus*, of which four are native to Oregon:

- Black cottonwood (*Populus deltoides* var. *trichocarpa*, where "var." refers to a recognized variety)
- Quaking aspen (*Populus tremuloides*)
- Narrowleaf cottonwood (rare in Oregon, scientific name *Populus angustifolia*)
- Eastern cottonwood (*Populus deltoides*), which recently was recognized as native to Oregon

Adding to the confusion is all the attention that hybrid poplars (a.k.a. hybrid cottonwoods) have received in recent years. Hybrid poplars are trees produced from cross-fertilization of two species in the genus *Populus*. Hybrid poplars may be crosses of cottonwoods; a cottonwood and a poplar (Lombardy poplar, for example); a cottonwood and an aspen, etc. To date, all of the hybrid poplars in commercial plantations in Oregon are cottonwood crosses (typically eastern cottonwood and black cottonwood).

MYRTLEWOOD

Last, but not least, there's myrtlewood (Figure 6). Here's yet another tree that goes by a number of names: myrtlewood, Oregon-myrtle, and California-laurel. Notice the



Figure 6. — Myrtlewood (*Umbellularia californica*).

hyphens; this tree is not a myrtle (not in the genus *Myrtus*) and it's not a laurel (not in the genus *Laurus*). Oregon-myrtle's scientific name is *Umbellularia californica*, and it is the only tree in this genus. Like Douglas-fir, it's in a class by itself!

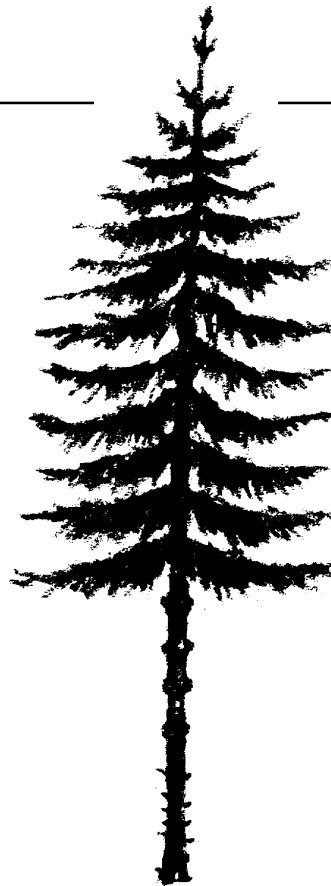
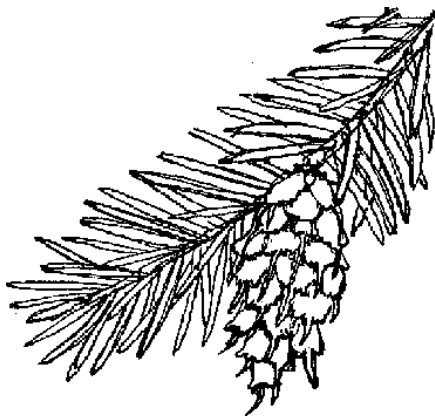
WHY DOES IT MATTER?

Is there really any harm in using common names for trees? Usually not. However, problems occasionally arise. For example, you might call

your county office of the OSU Extension Service to ask for advice about a diseased cedar tree in your yard. To identify a disease, we often begin by looking at common diseases for the genus. The question is, is this "cedar" a *Cedrus* (a true cedar such as Atlas cedar), a *Thuja* (such as western redcedar), a *Calocedrus* (incense-cedar), or maybe even a *Juniperus* (such as western juniper)? Unless we know the genus, the disease may be misidentified, and control recommendations may be incorrect.

WHAT IS IT?

The tree on page 1 is a Douglas-fir. Notice how the cone hangs down from the branch and has pitchfork-like bracts.



FOR FURTHER READING

Trees to Know in Oregon, EC 1450 (Oregon State University, Corvallis, 1999). \$5.00

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