Western larch

Western Larch (*Larix occidentalis*) often goes unnoticed much of the year. In the fall, in mixed stands with other conifers or growing together, larches stand out when their needles turn a flaming golden yellow before dropping to the ground. The deciduous trees spend winters as ghosts of their former selves. They look dead. Then, in spring, they leap back to life as new needles form and the trees take on a bright green color.

Western larch is also called mountain larch, hackmatac, tamarack, or western tamarack. The Native American name hackmatac is seldom used, and tamarack should be reserved for *Larix larcina* of the northeastern United States and Canada. Western larch, observed by David Douglas and Meriwether Lewis and William Clark, were named by the venerable Thomas Nuttall who described the species in 1849 in *The North American Sylva: or, A description of the forest trees of the United States, Canada, and Nova Scoti:* "We met with this apparently-distinct species of Larch in the coves of the Rocky Mountains on the western slope toward the Oregon."

Larix may be from the Celtic *lar*, or fat, alluding to the abundance of resin in the trees. *Occidentalis* refers to the trees' distribution in the western United States.

Western larch is found in foothill and mid-mountain areas from the east slopes of the Cascade Mountains in Oregon and Washington, east to the Rocky Mountains of British Columbia and Alberta, south through Idaho and western Montana, and in the mountain ranges in northeastern Oregon. Southern Oregonians can see a few trees growing in a forest plantation on the west side of the Clover Creek road between Ashland and Keno.

Western larch grows under relatively moist conditions, often alongside lodgepole pine. It is a sun lover, with very thick, fire-resistant bark that allows it to tolerate and benefit from fire. Rapid growth allows the larch to out-compete more shade-tolerant competitors such as Douglas-fir.

The Oregon Champion western larch is in Eagle Cap Wilderness in the Wallowa Mountains. It is 7 feet in diameter and 103 feet tall. The National Champion is found on the Lolo National Forest in Montana. It is a little over 7 feet in diameter and 162 feet tall. Big trees may live for a thousand years.

Native American use of western larch for food and drugs has a chemical basis. The trees contain polysaccharide arabinogalactan, a substance approved by the Federal Drug Administration as a food additive. Native Americans chewed the resinous exudate as a candy and made various decoctions of needles and branches to treat ailments from colds and arthritis to cancer. A decoction was also used as a wash or bath to make babies strong and as a form of birth control. Today, arabinogalactan is used as an emulsifier, stabilizer, binder, or bodying agent in food, ink, and paint and as a modern remedy for many of the ailments treated by Native Americans.

Western larch is known for its hard, heavy wood that resists decay. The wood has been used for railroad ties, mine timbers, boat construction, telephone poles, pulp for paper, and veneer, and in construction where strong timbers are required.

Written by Frank A. Lang

Further Reading:

American Forests. National Register of Big Trees. "Western larch." http://www.americanforests.org/resources/bigtrees/register.php?details=3041.

Arno, S. F., and R. P. Hammerly. *Northwest Trees: identifying and understanding our native trees* (rev. ed.). Seattle: Mountaineers, 2007.

Moerman, D. E. *Native American Ethnobotany.* Portland, Oreg.: Timber Press, 1998, p. 927.

Copyright © 2008-2014 Portland State University