

SUBALPINE FIR

ROCKY MOUNTAIN FIR

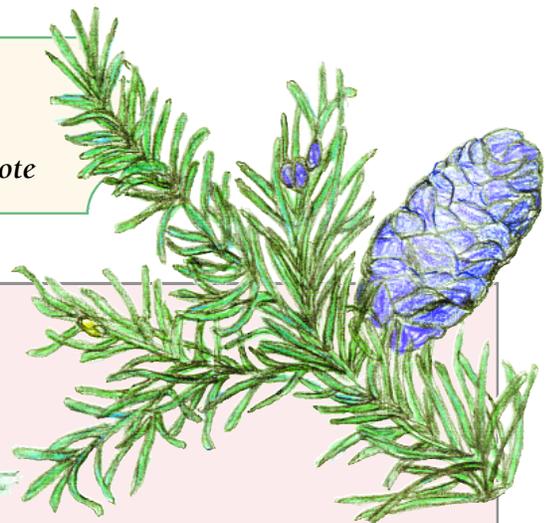
Elnora A. Old Coyote

Subalpine (or Rocky Mountain) fir, is a fragrant evergreen tree, reaching to 100 feet in height and 2 feet in diameter. But at the timberline in the Rocky Mountain regions, it does not grow this way. Instead, it is a flattened shrub, bent and twisted.

When it grows down-mountain in the conifer forests along with engelmann spruce, with lodgepole, whitebark and limber pines, and with alpine larch and aspen, its branches grow in horizontal rows reaching nearly to the ground.

Its dark-purple cones look from a distance as if they are clothed in dressy velvet. The cones shatter individually and the scales fall off one-by-one, leaving the cones' axes bare on the twig, standing upright on the tree like burnt-out candle wicks.

The cones are 2 to 4 inches long, oblong and cylindrical, standing upright on the topmost twigs, much longer than the long-tipped bracts. The seed is 1/4 inch long with dark, lustrous wings, with



Subalpine Fir

Abies lasiocarpa
(Hook.) Nutt.

Pinaceae • PINE FAMILY

INDIAN NAMES

NORTHERN CHEYENNE:
ME E MIA TUN
(sweet pine)

CROW: *baailichitche*
(sweet pine), and
iiwalaasuukuhackisse
(balsam needles)

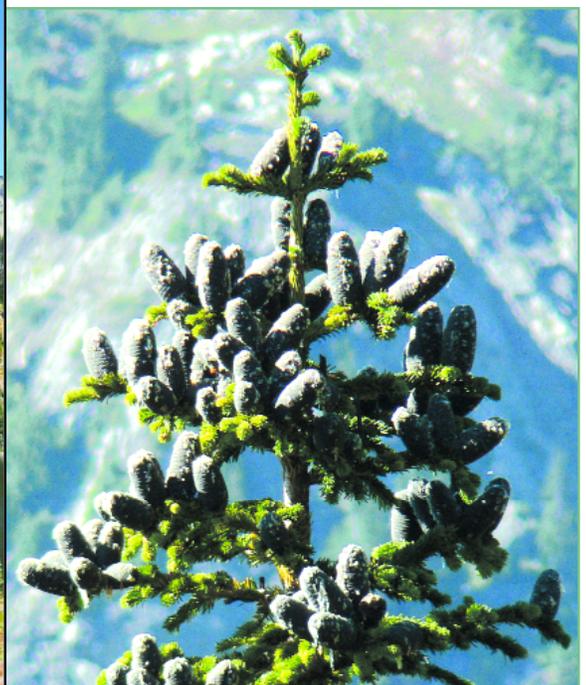
Rocky Mountain fir
lies flat on its face at timberline—
prostrate in the wind's onslaught.

While its grand cousin fir
with narrow spire
towers majestically.

Both seeing God
each in its own posture.

two seeds in each scale. The male flowers are dark indigo-blue; the female flowers are dark violet-purple.

The pointed evergreen needles, 1 to 1-3/4 inches long, are in 2 rows spreading at right angles, crowded and curved upward on the upper twigs. The needles are flat and dark-green, with white lines of stomates on both surfaces.



Young twigs appear pale orange-brown and stout, with rust-colored hairs, maturing to a smooth and gray or silver-white. Winter buds are round, 1/8 to 1/4 inch long, with light orange-brown scales.

The bark is thin, gray and smooth, but with numerous resin blisters on young trees. It becomes 3/4 to 1-1/2 inch thick with shallow fissures, and with ridges of thick, oppressed cinnamon-red scales. The wood is soft and brittle, and not much harvested.



— **ECOLOGY** —

Subalpine fir is named for the area where it is most frequently grows—the subalpine zone or high mountains. Subalpine fir is very tolerant, as are the other trees in the high mountain forests of spruce, fir and hemlock. Fir growth is slow—mature trees may be over 175 years old.

Reproduction is abundant and vigorous. Subalpine fir has a shallow root system. Where the bottom branches are covered with snow, the branches also take root and produce new trees. Subalpine fir grows best in cool, moist places of deep, loose soil.

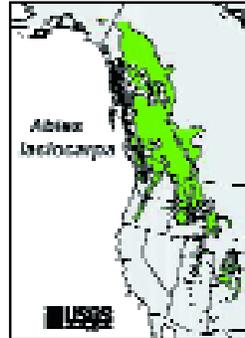
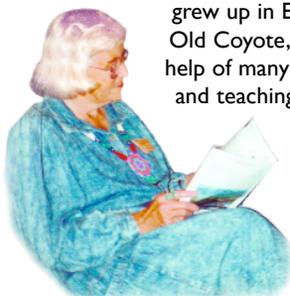
— **FOLKLORE** —

Whether a prostrate shrub at the timberline or a towering spire below, with its dark-green upward-turning needles and purple cones held up like candles, the subalpine fir gives a unique beauty to the Rocky Mountains.

The bark is browsed by big horn sheep, elk, deer and moose. The needles are food for grouse. The seeds are eaten by birds and small mammals. And if a hiker climbs high in the mountains, a cheery fire of resin-covered alpine fir is welcome.

The Northern Cheyenne, for purification during the treatment of a very ill person, would burn the needles of the subalpine fir over the coals of a fire along with other plants. ■

DR. ELNORA (STENERSEN) OLD COYOTE, age 87, grew up in Eastern Montana and married John M. Old Coyote, a full-blooded Crow Indian. With the help of many tribal people, she has been researching and teaching the use of native plants for many years. She has studied and written about over 300 Montana plants. Included here are her notes on ecology and folklore, and her original sketches and poems. Elnora lives in Huntley, Montana, and can be reached at (406) 348-2474.



2008's US CAPITAL CHRISTMAS TREE:

A Bitterroot Subalpine Fir

Last year's Capital Christmas tree was a 70-foot subalpine fir that came from Montana's Bitterroot National Forest. Decorated with more than 5,000 ornaments crafted by people from across Montana, the tree reflected the theme of "Sharing Montana's Treasures." The ornaments depicted our state's heritage, historical events or people, and its natural resources.

The official song of the Capital's 2008 tree lighting ceremony was *Heart of Montana*, written by "Montana's Troubadour" Blackfoot Indian Jack Gladstone from Kalispell. Here are some of his words:

From sapling to a tree she grew in perfect shape and height. Cultures drifted by—time moves like a firefly. Sundown on the Bitterroot, she bathed in sapphire light. She's seen Indians and mountain men and growing pains developin'.

This Lady of the Big Sky, our Lady of the Sun, is part of the Heart of Montana we sing for you. A thousand symphonies of fallen leaves have colored her view. We've brought the Heart of Montana to share with you and yours on these holy days—and New Year, too!

As part of our Capitol's continuing commitment to save energy, for the 4th year in a row, strands of Light Emitting Diode (LED) lights were used to decorate the entire tree. LED lights use up to 99% less electricity, are much cooler and safer, have an extremely long life-span, and are environmentally friendly.

