

# Western Red Cedar

*Thuja plicata* By Charles Bolin

In many ways the groves of giant western red cedars found in isolated valleys of northwestern Montana are just as spectacular as the state's renowned snow-capped peaks, vast prairies, and blue-ribbon trout streams. The western red cedar is Montana's largest tree, and certainly one of its most beautiful. Strolling among these ancient giants, I'm always awed by their vastness and soothed by the quiet, peaceful, therapeutic surroundings.

## Range and Ecology

Western red cedars are found throughout wet, low-elevation forests in northwestern Montana, northern Idaho, and western Washington, Oregon, and British Columbia.

In Montana, the tree grows mainly in the Purcell and Cabinet Mountains, Swan Valley, and Mission and Bitterroot Ranges. Two of the best spots to see massive western red cedars are at the Ross Creek Scenic Area, in the shadow of the Cabinets southwest of Libby, and along the Trail of the Cedars in Glacier National Park, east of Lake McDonald. Both locations contain trees over 100 feet tall and 10 feet or more in diameter.

Despite their thin bark and dense branches, western red cedars are relatively resistant to fire. That's due to their enormous size. Mature western red cedar groves have survived many devastating burns when most neighboring trees were reduced to ash. In fact, fire can benefit cedar groves, reducing competition from other species and adding nutrients to the soil.

## Identification

Besides its girth, the most distinguishing feature of the western red cedar is the furrowed gray to reddish-brown bark that runs in deep vertical ridges. The branches, often drooping down then curving upward in a J-shape, hold sprays of soft, green leaves. Instead of the needle leaves found on most conifers, western red cedar leaves are flat and braided. When crushed, they emit a spicy pineapple scent

that I find almost intoxicating.

Considering the tree's vast size, the slender cones are surprisingly tiny, ranging from just  $\frac{1}{3}$  to  $\frac{1}{2}$  inch long.

Though some western red cedars in Montana reach nearly 150 feet high, several other tree species here are taller. Yet none is so broad at the base. It is the western red cedar's combination of girth and height that qualifies it as the state's largest tree. This is also one of the longest-lived tree species, growing for 500 to even 1,000 years or more and giving the term "ancient forests" real meaning.

## Human Use

Years ago, Indians across the western red cedar's range carved out the trunk to make giant canoes and used the wood and bark for hand tools, baskets, rope, fishing nets, even clothing. Many parts of the tree, especially the pungent oil of the leaves, were used to treat ailments. These days the western red cedar is valued for its tight, straight grain and lack of knots, making it ideal for furniture. The aromatic, rot-resistant wood is also used for cedar chests,

as well as posts, decking, shingles, and siding. Its strength, light weight, and warm sound make it ideal for guitar soundboards.

## Wildlife Value

Its size alone makes each mature western red cedar an immense island of biodiversity. The trees provide food, shelter, or both to salamanders, squirrels, songbirds, woodpeckers, elk, deer, bears, mountain lions, and dozens of other wildlife species. Their massive canopies provide cooling shade in summer and catch snow and block wind during the cold months.

## Conservation Status

In the late 1800s and early 1900s, the western red cedar was logged so aggressively that mature trees became nearly as rare as the vanishing woodland caribou that once lived in dense cedar groves. Today older western red cedars are found in many protected sites in Montana, where numbers are increasing—though logging continues to be a threat in some areas. Considering how long some of these giants have been standing, it is likely the western red cedar will be around for a long time to come. 🐻



## Scientific name

*Thuja* is from the Greek *thyia* (a fragrant tree), which itself comes from *thyo* (perfume); *plicata* is from the Latin *plicare* (to fold), referring to the tree's pleated leaf pattern.



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