

Ponderosa Pine

(Pinus ponderosa)

Probably more picnics have been held in the shade of Ponderosa Pine than any other western tree," writes John Kircher in *Ecology of Western Forests*.

That's a safe bet. For one thing, the ponderosa is the most widely distributed and one of the most abundant trees in the West. For another, ponderosa pine forests are usually open, parklike areas with lots of room for picnicking. Not only are the forests lovely places, but the trees themselves are stately and beautiful. Named for its ponderous size, this pine has a strong, tall trunk topped by an open, irregularly shaped crown. To lunch beneath a stand and then fall asleep afterward in a bed of needles, the smell of vanilla wafting down from the sun-warmed bark, is to experience one of life's great pleasures.

RANGE: The ponderosa pine dominates western North America, from central British Columbia south to central Mexico, west to the Pacific Ocean and east to South Dakota's Black Hills. It typically grows on semiarid plateaus and slopes, often surrounded by juniper and sage.

SHAPE: Pyramidal when young, the ponderosa pine gradually loses low limbs as it grows taller. Mature trees are tall with a large, irregular crown.

IDENTIFICATION: Mature ponderosa pines are easy to identify by their orange-brown bark, which appears as large plates that look like gigantic jigsaw puzzle pieces.



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LEAF: The needles are 5 to 10 inches long and usually grow in bunches of three.

SMELL: When crushed, the needles smell of turpentine and citrus. On hot days, the bark of adult trees can smell like vanilla.

CONES: Oval shaped, 3 to 6 inches long, red-brown in color with a stiff prickle on the end.

AGE: Up to 600 years.

SIZE: Mature trees average 100 to 150 feet tall but can reach 230 feet in height.

ASSOCIATED WILDLIFE: Birds love ponderosa pine forests. Look for western tanagers, chipping sparrows, and mountain bluebirds as well as northern flickers, Steller's jays, great horned owls, and bird hawks such as the sharpshinned and Cooper's. Mammals ranging from golden-mantled squirrels to grizzly bears frequent ponderosa pine parks.

ROOTS: Ponderosa pine taproots can go down 30 feet to reach deep moisture. The root system can spread 100 feet from the trunk.

FIRE: Ponderosa pines thrive in sunlight and require periodic fires. Historically, low-intensity fires caused by lightning or set by Indians burned every few decades and killed competing species that shaded out young ponderosa pines. Older ponderosa pines were protected by their thick bark. As fires have been suppressed, ponderosa stands have become crowded with mature trees competing for limited nutrients and moisture. Young ponderosa pines are then shaded out. Throughout many western



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states, including Montana, ponderosa pine stands have been taken over by more shade-tolerant species such as the Douglas fir.

WOOD: Knotty but clear and even grained, the ponderosa pine is used for doors, windows, furniture, paneling, and shelving.

HISTORY: American Indians traditionally ate the seeds and inner bark, dug out logs for canoes, and used the pitch as waterproofing and ointment. The ponderosa pine was designated as Montana's official state tree in 1949.

— TOM DICKSON