

LIVING WITH PONDEROSA PINE

How healthy forests naturally function.

Ponderosa pine is built for Colorado's warm, dry montane landscape. Healthy stands are dynamic mosaics of tree groups and openings, shaped by moisture, soils, insects, competition, and recurring low-intensity fire.



Ponderosa pine forests are naturally varied—not continuous walls of evenly spaced trees.

● READ THE PATTERN

GROUPS AND OPENINGS

Healthy structure changes across the slope.

- ✓ Look for clumps, scattered individuals, grassy openings, shrubs, and varied ages.
- ✓ Expect denser patches on cooler or wetter microsites and wider spacing on dry exposures.
- ✓ Use old trees, stumps, logs, and regeneration to understand the site's history.

✓ START HERE

- ✓ Identify slope aspect, elevation, soils, drainage, and dominant tree species.
- ✓ Map dense patches, openings, ladder fuels, old trees, and regeneration.
- ✓ Set priorities for wildfire risk, forest health, habitat, views, and access.
- ✓ Use a site-specific prescription rather than one spacing rule.

◎ IN THE FIELD

Three clues reveal how a ponderosa stand is functioning:

CROWNS TELL A STORY

Full, well-lit crowns usually indicate better growing space than narrow, crowded crowns.

● RESTORE FIRE-WISE STRUCTURE

BREAK FUEL CONTINUITY

Ponderosa pine tolerates fire better when flames stay low.

- ✓ Reduce dense ladder fuels beneath important crowns.
- ✓ Separate continuous canopy where it threatens homes, access, or stand resilience.
- ✓ Retain irregularity, species diversity, and wildlife features instead of creating uniform spacing.

FIRE MOVES VERTICALLY

Grass, shrubs, young trees, and low branches can connect surface fire to the canopy.

● SUPPORT TREE VIGOR

SPACE, SOIL, AND WATER

Competition and disturbance influence every tree.

- ✓ Favor vigorous crowns and trees suited to the microsite.
- ✓ Avoid unnecessary root damage, soil compaction, and grade changes.
- ✓ Monitor drought stress, bark beetle signs, regeneration, and wind exposure after treatment.

PATCHES ARE NATURAL

A resilient forest can include dense groups, open ground, old trees, and young regeneration.

▲ THE RAVEN WORKS PERSPECTIVE

Living well with ponderosa pine means working with its ecology. The goal is a varied forest that can carry low fire, support wildlife, and give selected trees enough space to remain vigorous through drought and change.

Read the site. Restore variation. Steward the next forest.

Sources: Colorado State Forest Service ponderosa pine and forest-management guidance.