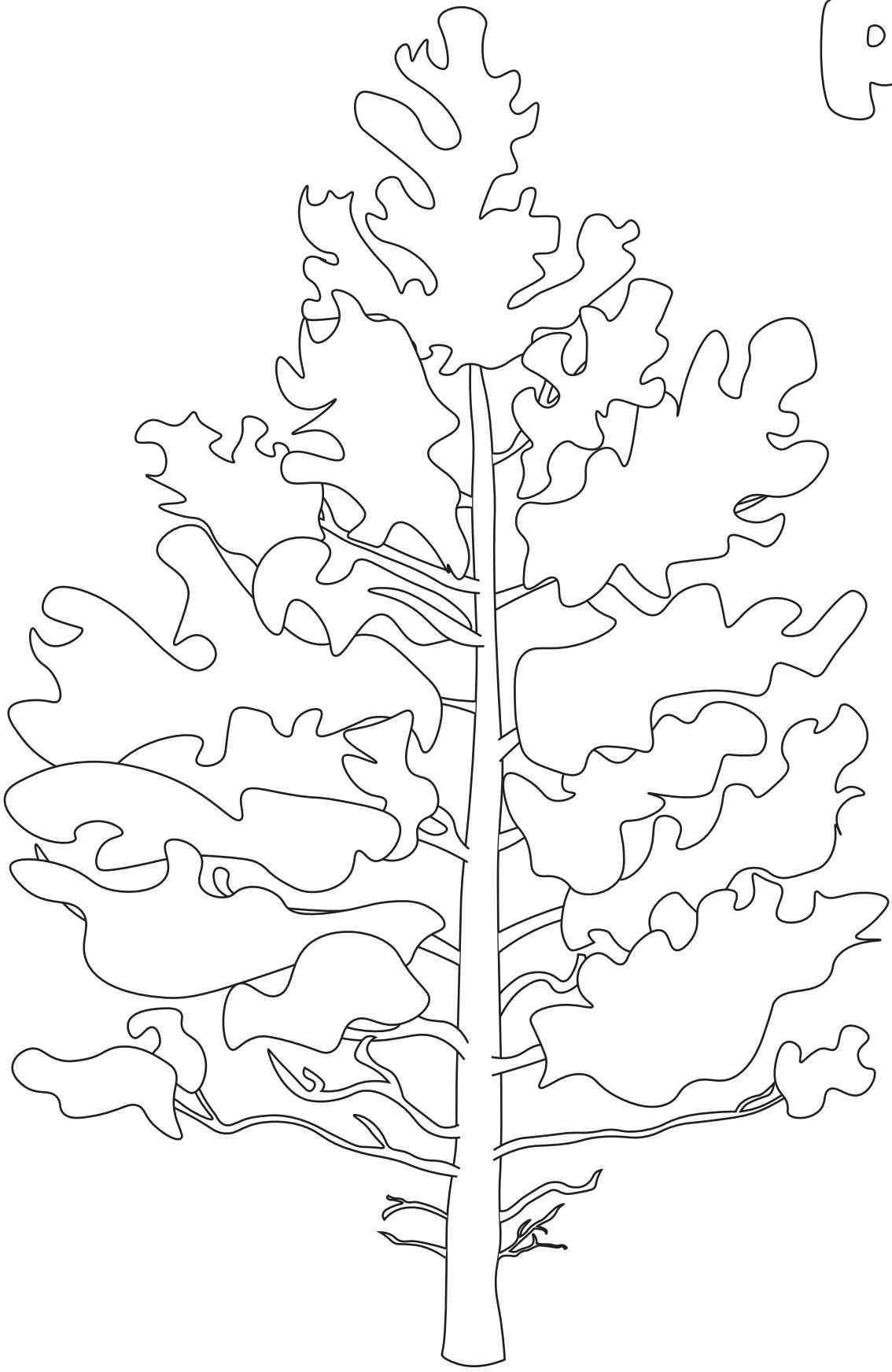


# Ponderosa Pine



**needles**

# Ponderosa Pine

In 1908, the school children of Helena, Montana held a referendum to determine which tree best represented Montana to become the Official State Symbol. The Ponderosa pine easily outdistanced fir, larch, and cottonwood for the designation. Despite their efforts, it was not until 1949 that the Montana Legislature bestowed its blessing following a campaign by the Montana Federation of Garden Clubs.

## Coniferous vs. Deciduous

**Conifers** are often referred to as evergreens. These are generally trees that have needles. A coniferous tree is any tree that reproduces via cones.

**Deciduous** refers to any tree that drops its leaves and goes dormant during winter. When the weather warms, deciduous trees produce new leaves.

## Did You Know?

When you begin talking about trees, a hot topic for conversation is the pests and potential threats to those organisms. It turns out that over 200 species of insects affect Ponderosa Pine throughout its life stages from cone to maturity. For example, *pine cone beetles* cause tree death by transmitting blue stain fungus to the tree, the *western pine beetle* tunnels into full grown trees, cutting off the nutrient supply, *bark beetles* are naturally present – but a population surge can cause issues, the *ponderosa pine budworm* eats new needles, and *dwarf mistletoe* is the most widespread parasite that causes branch and stem deformation.

## Ponderosa Pine and the Lewis & Clark Expedition

In May of 1804, the Lewis and Clark Expedition set off to find the "New World." A journey that would be nearly 80% by waterway. The Expedition would require 25 different vessels to carry the men, their equipment and supplies. Fifteen of these vessels were \*dugout canoes. A dugout uses a single hollowed out tree. When they reached the Rockies, they abandoned their boats as they trekked the mountains by foot. Once west of the Rockies, they carved five additional canoes, this time using Ponderosa Pine.

The Expeditions first encounter with Ponderosa Pine occurred on May 11, 1805. Meriwether Lewis noting in his journals, "saw today some high hills ... whose summits were covered with pine. Capt Clark went on shore and visited them; he brought with him on his return som of the boughs of this pine it is of the pitch kind but I think the leaves somewhat longer than ours in Virginia."

These dugouts, made with the help of the Nez Perce tribe, were roughly 30-feet long and nearly 3-feet wide – think of how large that tree would have to have been! These canoes had a carrying capacity of between two and three tons (4,000 to 6,000 pounds) making them effective vessels for a cross-country expedition.

## Fun Facts

- Ponderosas develop a **deep taproot**, creating a solid foundation and making them nearly wind resistant.
- Because of their **thick bark**, Ponderosa pines are relatively fire resistant.
- **Cones** are 3-6 in. and are reddish brown
- They have 5-7 in yellowish/green **needles** which are normally tufted at the ends of mostly bare branches.
- **Mature Size** = 60-150 ft. tall and a spread of 25-30 ft.
- The Ponderosa Pine was given its name by David Douglas, a Scottish botanist, for its '**ponderous**' or heavy wood.
- Ponderosa pines normally **grow** 13-24 in. per year.
- Ponderosas are known to **live and thrive** for 300-600 years.
- Need at least 6 hours of direct **sunlight** each day.
- Seeds **provide food** for birds and small animals while snags and small branches provide wildlife with **nesting** and roosting sites.
- Native Americans used the Ponderosa pine extensively for **food, medicine, shelter, and warmth**.



Image: Gary Todd "Plymouth Dugout Canoe"

\*\*Dugout Canoes are the oldest boat type and have been found by archaeologists dating back 8,000 years to the Neolithic Stone Age!