

Lodgepole Pine (*Pinus contorta*)



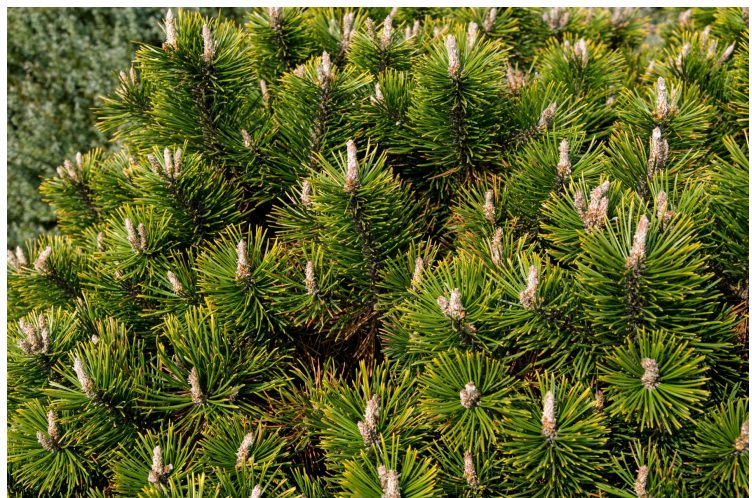
Summary:

Lodgepole pines are evergreen trees native to western North America, with a large portion of their population being found in the Sierras in California (Calscape 2026). They get their name from their long, pole-like trunks, reaching heights up to 75 feet. Lodgepole pines have narrow, cone-shaped crowns made up of yellowish-green to dark green needles and thin gray bark colored (UCANR 2025). Lodgepole pines are moderately important for timber, but not often used in landscaping (Calscape 2026).

Lodgepole Pines and Fire:

Lodgepole pines are considered fire-dependent trees largely due to their serotinous pine cones, meaning they only open in the presence of fire. Though lodgepole pines die easily when a fire passes through, their cones give them a special advantage in spreading seeds to the next generation (NPS 2021). Their cones are tightly sealed with resin that melts during a fire, releasing seeds that have been stored for years. These seeds germinate in conditions that favor the tree's seedlings, where the forest floor is clear and plenty of sunlight shines through an open canopy (NPS 2021).

One of the concerns with lodgepole pines is overstocking. Because they are typically killed in a wildfire event, a lot of new growth occurs at once. Following a wildfire, they seed densely, forming fully stocked, pure stands of lodgepole pine (Cloughesy 2013). These stands grow well when young, but quickly become overcrowded, eventually stagnating until growth stops. They are also likely to outcompete other plant species in the region (Cloughesy 2013). The trees may also become weak and therefore more prone to pests and diseases. Overstocked forests are just one of the consequences of decades of fire suppression and can only be addressed with improved forest management practices (Avitt 2022).



References

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