# California Phenology Project: species profile for Lodgepole Pine (*Pinus contorta*)

**CPP site(s) where this species is monitored**: Lassen Volcanic National Park

*Photo credit: Iwona Erskine-Kellie (Flickr)*

## *What does this species look like?*

This evergreen pine can be either a tall upright tree, or a shrub. The trunk has scaly bark and reaches 2-34 meters in height at maturity. There are two needles per bundle, and needles are 2.5-6.8 centimeters long, with a persistent sheath at the base of the bundle. The seed cone is less than 6 centimeters long and is angled, with knobs at the tip of the scales.

*When monitoring this species, use the USA-NPN **conifers (needle bundles)** datasheet.*

## *Species facts!*

- The CPP four letter code for this species is **PICO**.
- Adapted to fire; populations self-thin as they regenerate after a fire. Fire is required for the cones to release their seeds.
- Attacked by blue stain fungus, which is transferred by the mountain pine beetle.
- Used by Native Americans for building lodges and teepees
- Used for railroad cross ties and building lumber.

*Photo credit: Bryant Olsen (Flickr)*

*Photo credit: enhan (Flickr)*

## *Where is this species found?*

- *Pinus contorta* is found in many habitats from coastal to subalpine forests throughout the Western United States.
- It is found at elevations less than 3500 meters.
- Grows on moist, medium-textured soils derived from granitic, shale, or coarse-grained materials.

For more information about phenology and the California Phenology Project (CPP), please visit the CPP website (www.usanpn.org/cpp) and the USA-NPN website (www.usanpn.org)

Version 2, March 2012

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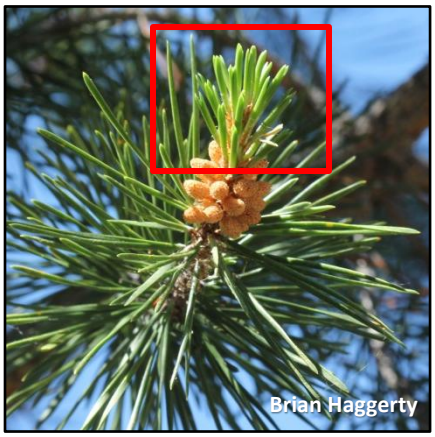
***Emerging needles***




***Young needles***


***Pollen cones***


***Open pollen cones***
*Young needles are also seen in this picture. Pollen is released when cones are tapped.*
*This phenophase is nested; if you say **Y** to "open pollen cones", you should also say **Y** to "pollen cones".*


***Unripe seed cones***
*An unripe seed cone is green or brown with scales closed together.*


***Ripe seed cones***
*A seed cone is ripe when it has turned brown and the scales have begun to spread apart to release the seeds. Do not include open cones that have already dropped all of their seeds but remain on the plant.*

***Phenophases not pictured:*** *pollen release, recent cone or seed drop.*

*For this species, look for seed drop rather than cone drop (cones stay on tree at maturity).*

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