

# California Phenology Project: species profile for Ponderosa Pine (*Pinus ponderosa*)



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



Photo credit: Erin Willett (Flickr)

## ***What does this species look like?***

Ponderosa pine is an evergreen conifer tree growing 60 to 100 feet tall. The bark has a distinctive orange color with black crevasses. It has long needles in tufts of two or three. Male and female cones occur on the same tree; the small male cones bear the pollen and the large female cones take two years to mature at which time they become woody.

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

## ***Species facts!***

- The CPP four letter code for this species is **PIPO**.
- Planted for erosion control and windbreaks.
- The wood is used for fuel, and their root extract is used to make a blue dye. The pitch is used on whistles and flutes to improve the instrument's tone, and to make turpentine.
- Adapted to frequent, low-intensity fires, and are used to investigate fire history.
- The oldest known individual is 929 years old.
- Wind-pollinated.

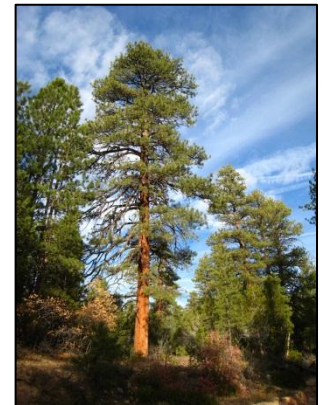


Photo credit: Chris M (Flickr)



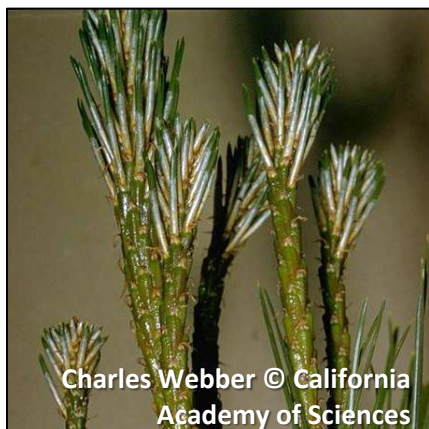
Photo credit: Bryant Olsen (Flickr)

## ***Where is this species found?***

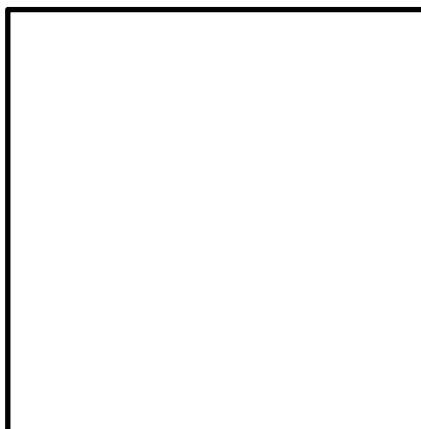
- Most widely distributed and common pine in North America; throughout Western mountain ranges.
- grows on a wide variety of soils.
- It is drought tolerant and well adapted to grow on bare rock, hot, dry sites and cold winters.
- It is found on gentle to steep mountain slopes, ridgetops, and mesas.

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

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species profile for  
**Ponderosa Pine**  
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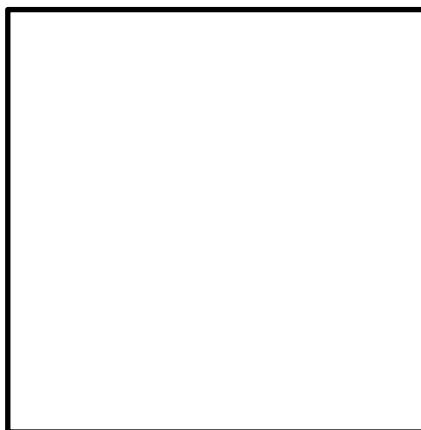
**Emerging  
needles**



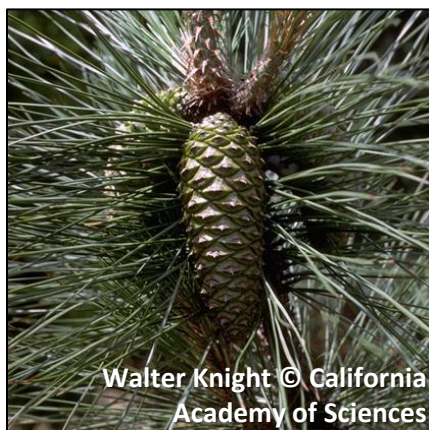
**Young needles**



**Pollen  
cones**

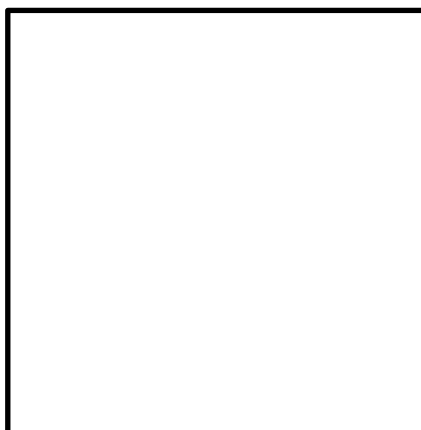


**Open pollen  
cones**



**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**