



-NOTICE-

THIS IS WHITEBARK PINE COUNTRY!

- ◆ AVOID TREE STEMS AND LIMBS ABOVE SNOW. DAMAGE FROM OVER-SNOW VEHICLES AND BACKCOUNTRY SKIERS CAN LEAD TO WHITEBARK PINE DEATH.
- ◆ AVOID AREAS OF INADEQUATE SNOW COVER AND STEEP SLOPES TO PREVENT IMPACTS TO SOIL AND VEGETATION.



<https://www.activetwa.org/snowmobile-impacts.html>



DID YOU KNOW?

- ◆ Whitebark pine, a slow-growing and long-lived tree of the upper subalpine, is a keystone species whose presence helps the ecosystem slow snowmelt and increase water supply throughout the dry summer months.
- ◆ This declining species faces several threats, including the disease whitepine blister rust, mountain pine beetle epidemics, and climate change.

Please do your part to help us protect this important species and its habitat!



NEEDLES OF FIVE...LEAVE IT ALIVE!

Whitebark Pine (WBP) – A Living Legacy

Facts:

- They typically grow above ~6,500 ft. elevation- on summits, ridges and rocky exposed slopes.
- They are slow growing; cones not produced until ~ 30-60 yrs. The oldest whitebark pine is in Idaho and is >1,270 years old!
- Act as snow fences to hold moisture later in the spring gradually releasing water into the stream systems.
- The seeds are an important food source for wildlife including black bear and the Clark's nutcracker.

Why is this species such a big deal?

- On December 15, 2022, the U.S. Fish and Wildlife Service published a final rule (87 FR 76882) to list the WBP as a threatened species under the Endangered Species Act.

General Information Regarding WBP:

- The Clark's nutcracker (right), a native bird in the crow family, can carry up to 30 WBP seeds at a time and cache them up to 19 miles away from harvest site for future food source.
- The four main causes of WBP loss are white pine blister rust, mountain pine beetle attacks, fire exclusion and climate change.
- It is very important that we do our best to protect the remaining WBP. These survivors may contain genetic resistance to the rust that could be critical to the long-



WBP Mature Female Cones



Fascicles at Branch Ends



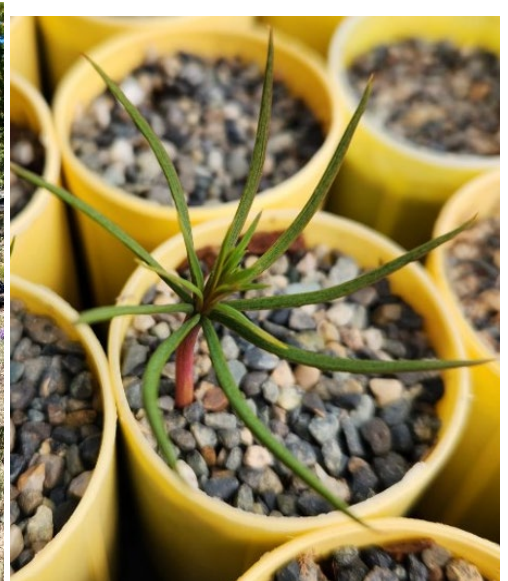
Mature WBP



Identification

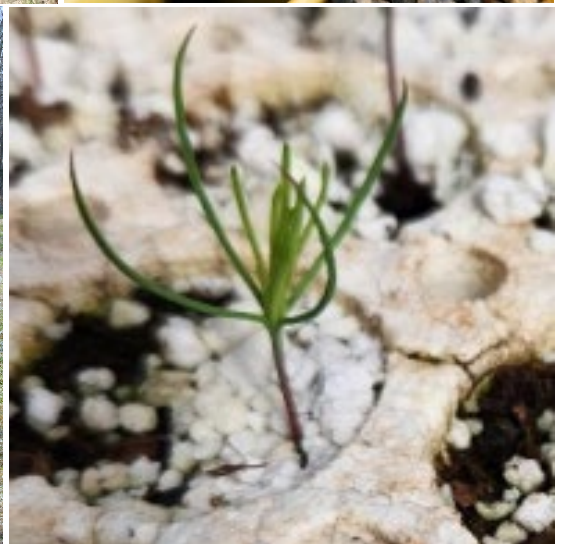
- 5 needles per fascicle (group)
- Needle fascicles clustered on the end of branches
- WBP can easily be confused with lodgepole pine, which can have similar bark, but only 2 needles per fascicle
- Needle clusters on the branches have thicker and more clumpy appearance than lodgepole pine
- Crown is broadly branched and open
- Thin, gray bark
- Female cones purplish-brown; often in groups of 2-5 (3) cones.

Left Photo: Mature, cone producing WBP with multiple boles and tops. **Middle Photo:** Mature WBP with single bole and top. Notice the dying branch on the left of the tree from white pine blister rust infecting the tree. **Right Photo:** Mature lodgepole pine (LP). Notice the taller, skinnier appearance of the top of the tree.



Left Photo: WBP sapling-notice the “shiny” appearance to the needles and smooth, gray bark.

Right Photo: WBP seedling-notice that they have 7-9 (most commonly 8) cotyledons (outer needles). Groups of inner, true needles will be in multiples of 5. WBP seedlings often germinate in groups because of how they are cached by Clark’s nutcrackers.



Left Bottom Photo: Lodgepole Pine Sapling-notice the “pointy” top and dull appearance on the needles and needles growing out of the lower stem.

Right Bottom Photo: Lodgepole Pine Seedlings. 4-6 cotyledons (most commonly 5). Needles 16-30mm. Inner, true needles will be in multiples of 2.