

# Whitebark Pines in the Gallatin National Forest

Whitebarks (*Pinus albicaulis*) are a critical part of this ecosystem for both humans and wildlife.

Whitebarks are no weaklings. They typically are the first trees to **grow in cold, windy, high elevation sites. They serve as “nurse” trees**, protecting other plants from harsh weather.

- More than 30 million people in 16 U.S. States use drinking water from snowpack that whitebarks help maintain.
- Numerous animal species and more than 190 plants use habitat created by whitebarks.
- Whitebarks produce seeds — a high-energy food source — consumed by dozens of birds and mammals.



*Whitebark pine at home in the high alpine*

Whitebark are essential to OUR wildlife.

Whitebark seeds are an important food source for grizzly bears. The supply varies naturally from year to year. In scarce years, grizzly bears will find other food sources. In some cases, this could put bears at conflict with humans.



*Grizzly Bear*



*Clark's nutcracker*

The Clark's nutcracker is the main carrier of whitebark seeds to new areas. **Annually, Clark's nutcrackers create 100's of underground caches** of whitebark seeds dispersing up to 100,000 seeds!

Whitebark are in long-term decline.

Warmer winter temperatures is leading to wide-spread loss of whitebark throughout its range due to *white pine blister rust*, *mountain pine beetles*, and *fewer high elevation wildfires*.

What is being done?

- The USDA Forest Service and others are working to plant whitebark seedlings that resist blister rust.
- An interagency effort is under way to develop and produce whitebark seeds.
- The USDA Forest Service and partners including private landowners are protect whitebarks from mountain pine beetles.



*Rust resistant seedlings awaiting planting for restoration projects*



*Pheromone packets tell mountain pine beetles to “move on”.*

