

Background

Whitebark pine (Pinus albicaulis - SARA listed Endangered) and limber pine (Pinus flexilis - COSEWIC recommended Endangered) are key components of forested and subalpine ecosystems in the Rocky and Columbia Mountains. Both pines are experiencing population declines and are at risk due to the combined effects of non-native white pine blister rust (Cronartium ribicola), fire and fire exclusion, mountain pine beetle and climate change.

Both whitebark and limber pine forests are found in recreation areas, particularly overlapping with ski areas and ski area tenures. The Whitebark Pine Ecosystem Foundation of Canada (WPEFC) and Parks Canada have encouraged ski areas to participate in the WPEFC "Whitebark Friendly Ski Area Certification Program" to increase public education and awareness and minimize impact to endangered high elevation pines.

Ski areas are one of the few locations where the public can easily view whitebark pine, and in many cases observe the decline in populations. A number of ski tenure holders including resorts, backcountry lodges, cat, and heli-ski operations are actively participating in whitebark pine recovery efforts.

Program Intent

The intent of this certification program is to:

- Recognize ski areas that are leaders in whitebark pine conservation and management by heralding their efforts to the people who live and play in the mountains of western North America.
- Increase awareness among ski areas and their patrons of issues surrounding the decline and conservation of whitebark pine.
- Guide ski areas in their efforts to conserve and restore whitebark pine.
- Provide an opportunity for ski areas and their patrons to be involved in the charge to save whitebark pine by becoming directly involved in education, conservation and restoration efforts or through monetary donations.
- And, ultimately, preserve and manage for whitebark pine so that high elevation recreationists can enjoy the many benefits of whitebark pine.

Certification Design

Education

- Educate staff/employees on whitebark pine ID and ecology
- Provide educational information to skiers/boarders
- Examples include labelling one or more prominent whitebark pine next to a run or the lift and offering guided snowshoe walks and summer hikes in which whitebark pine is a topic

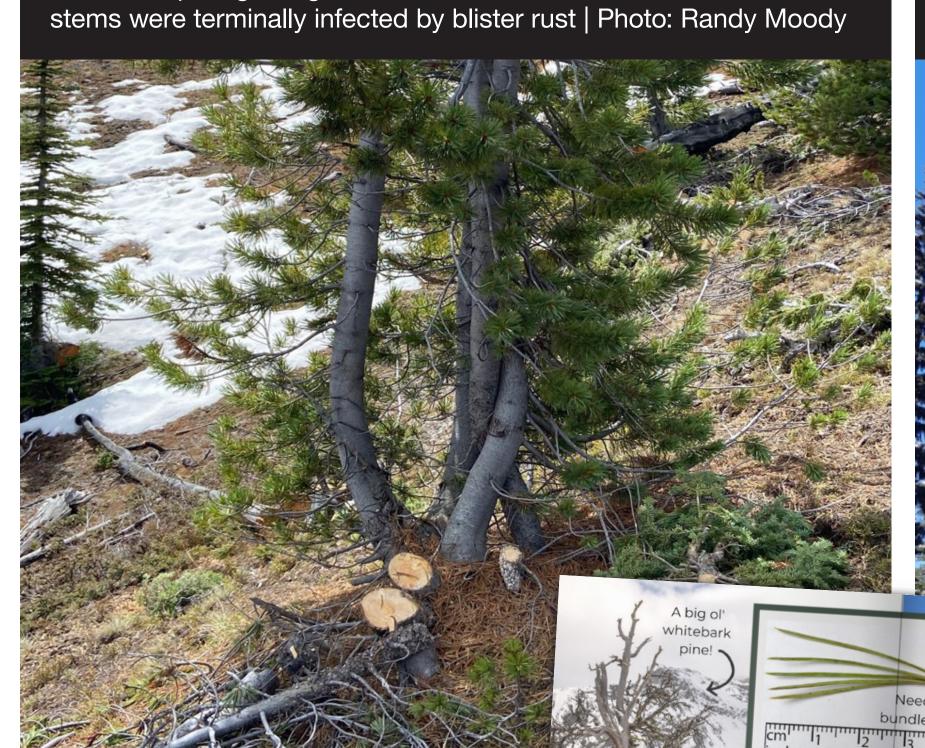
Conservation

- Develop a map of general whitebark pine distribution
- Incorporate a working conservation plan into ski area management plans
- Develop and implement a monitoring protocol to assess an aspect of whitebark pine abundance or health that is important to the resort

Management, restoration and research

- Actively manage whitebark pine. Some examples are: pruning, verbenone application, fuel reduction
- Identify potential planting/restoration sites and, if possible, agree to host seed collection activities
- Host a whitebark pine ecology research or long term monitoring project if appropriate

Tannis Dakin, founder of Sorcerer Lodge



Whitebark pine glading at Panorama Mountain Resort, note cut

Whitebark pine at Kimberley Alpine Resort Photo: Randy Moody



Progress to Date

- Sorcerer Lodge was the first ski operator in Canada to receive WPFSA certification in 2019
- Panorama Mountain Resort recently achieved WPFSA certification in 2023
- Five Canadian ski areas have planted a total of 25,000 whitebark seedlings in their tenures through the Forest Carbon Initiative
- Canadian Mountain Holidays (CMH) has supported restoration work adjacent to their lodges
- Parks Canada is working with ski areas in the National Parks to achieve certification

Next steps

- Thinning near CMH Bobbie Burns
- Certify additional resorts in British Columbia, Alberta and the National Parks
- Continue with outreach to guides, ski patrol, and the public to identify additional whitebark pine sites
- Encourage skiers and backcountry users to report whitebark pine observations and photos using iNaturalist

What are the lessons learned that can inform our collective work to reduce impacts to wildlife and ecosystems?

- Certain activities can benefit both whitebark pine and ski areas / operators so long as they are thoughtfully planned out
- Skiers can have a role in protecting whitebark pine by sending in data and reporting sightings through iNaturalist









HAVE YOU SEEN WHITEBARK

PINE IN THE SUBALPINE?

Whitebark pine is a federally endangered species that grows in the

subalpine throughout British

Columbia & Alberta. If you spend time

at high elevations, you are likely to

see whitebark pine!

Outreach poster designed for skiers



Naturalist