



WHITEBARK PINE

FRIENDLY SKI AREA

CERTIFICATION GUIDELINES AND CHECKLIST



THE BIG PICTURE

Whitebark pine (*Pinus albicaulis*) are aesthetically unique and ecologically important, but are currently declining across much of their high elevation range. Many downhill ski areas in the western US and Canada have whitebark pine on their slopes and provide the most accessible opportunity for people to see these trees. Ski areas represent an excellent opportunity to improve public awareness of whitebark pine and the ecological and environmental challenges it faces. With climate change threatening snowpack, ski resorts have responded by partaking in environmental certifications to help preserve the precious resources on which they depend. This Whitebark Pine Friendly Ski Area (WPFSA) Certification is the only certification that preserves the local, characteristic forests that people expect to encounter when recreating at high elevation areas.



GOALS AND MOTIVATION

The Whitebark Pine Ecosystem Foundation (WPEF) invites ski areas with whitebark pine to become a certified Whitebark Pine Friendly Ski Area. This program is intended to:

- ➔ **Recognize ski areas** that are leading the way 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 **beome involved** in the charge to save whitebark pine by becoming directly involved in education, conservation and restoration efforts or through monetary donations.





CERTIFICATION DESIGN

The certification checklist includes actions in three categories: 1) Education, 2) Conservation and 3) Management, Restoration and Research. All items with check boxes are required for certification. Items with check circles provide options within a required checkbox, which provide leeway to choose an action which best complements the ski area's goals and resources. Items in all categories will benefit from, or require guidance from WPEF, and requires coordination with the responsible land management agency (i.e. USFS, BLM, etc.) as appropriate.

EDUCATION

- Educate resort employees** working in whitebark pine habitat about whitebark pine ecology and actions the resort is taking as part of the WPFSA Certification Program so that employees will be able to, 1) consider their work's potential impact on whitebark pine, and 2) answer questions or direct inquiring public to additional information.
- Label** one or more prominent **whitebark pine trees** (e.g. next to or in a ski run, near the top of lift).
- Display WPEF-provided poster** that explains the importance of whitebark pine, current threats to the tree and WPFSA Certification Program.
- Include the WPFSA **logo on ski area map and website**. Provide a summary of WPFSA Certification Program on the ski area website that will direct visitors to whitebark educational displays or programs offered at the resort.
- Choose at least **one** of the following five actions:
 - Display ski area-created poster** explaining planned, ongoing or completed whitebark pine conservation and restoration actions at that ski area.
 - Offer guided **snowshoe walks** in which whitebark pine ecology or conservation is a topic.
 - Incorporate whitebark pine educational information into existing **summertime** guided, or self-guided **nature walks**, or create a nature walk with a focus on whitebark pine.
 - Create an **outdoor educational display** about whitebark pine within whitebark habitat (such as on a run, outside of the patrol hut, or outside of a mountain top visitor center).
 - Incorporate whitebark pine information into **children's summer program** or day care curriculum.

CONSERVATION

- Develop a **map** of general whitebark pine distribution within the resort.
- Incorporate an attainable working plan endorsed by the Whitebark Pine Ecosystem Foundation for whitebark pine conservation into **resort management or expansion plans** when revisions or re-permitting occur. If resort expansion plans include the removal of live whitebark pine, adhere to applicable local and federal legislation ((e.g. the Species at Risk Act in Canada)





or the Endangered Species Act in the USA), policies, and best practices that protect and/or require mitigation for the removal of the trees. While preserving as many possible whitebark pine within ski areas is optimal, the WPEF realizes that whitebark pine may need to be removed to accommodate regular resort safety operations, or expansions. To balance whitebark pine removals, consult with the WPEF to develop **mitigation and preservation options**, or **offsets through donations** to WPEF or other organizations capable of successfully completing restoration or planting efforts.

- Develop and implement a **monitoring** protocol to assess an aspect of whitebark pine abundance or health that is important to the resort, and to assess the success of the resort's efforts in whitebark pine restoration or conservation. Repeat monitoring protocol on a recurring schedule (e.g. every 1 to 3 years).

MANAGEMENT, RESTORATION, AND RESEARCH

Choose one of four:

- Actively manage** a given area, or whitebark pine stand, with **one or more** of the following options, or with unique management approaches approved by the WPEF:
 - Protect** large ($\geq 6''$ DBH) whitebark pine **from mountain pine beetle** attack using Verbenone, Carbaryl, or other methods, if guidance from local Forest Service or another consulting body indicates it is needed.
 - Preserve** white pine **blister rust infected trees** by pruning infected branches on trees that do not have any bole cankers in order to retain whitebark pine that provide an important structural component of the area.
 - Reduce fire danger** and competition around larger whitebark pine by removing encroaching trees of other species, especially fir, spruce or hemlock. *Consider retaining trees on the uphill side of whitebark pine to provide a natural protective barrier to prevent damage from skiers.*
 - Other appropriate management plan recommended by experts.
- Identify sites (e.g. around ponds or under cliffs) or out-of-bounds areas of the resort that can serve as sites for whitebark pine **planting** and work with State or Federal agencies to obtain whitebark pine seedlings for planting. If sufficient restoration areas cannot be located within the resort area, contribute monies to planting efforts underway on nearby lands.
- Agree to host "Plus Trees," healthy whitebark pine for **cone caging and seed collection**. Work with local Forest Service office to determine need and collect and send cones to Forest Service nursery or other nursery involved in whitebark pine propagation in order to grow seedlings for planting and/or seeds to donate for genetic rust resistance screening.
- Host a whitebark pine **ecology study or long term monitoring project** with university researchers, or government agencies.



FUNDING

Donations and contributions by ski areas are key to a successful certification program. Certification fee for initial certification is \$500 with a yearly certification fee of \$200/year. To keep costs for certification manageable, ski areas are expected to provide access to whitebark pine for WPEF personnel when performing certification, education, and reporting activities with the ski area. Additional donations of items for WPEF fundraising projects (raffles, pint nights) are always appreciated!

Ski area customer appreciation for whitebark pine conservation and education efforts is invaluable!

REPORTING

To retain certification, ski areas will work with WPEF to complete and submit the annual report to the WPEF Ski Area Partnership Committee. The report will give updates about activities and evaluate outcomes of education, conservation and restoration actions as well as provide feedback to WPEF on things like changes to the health whitebark pine, needs for assistance from WPEF, planned changes that may effect whitebark pine.

WPEF SUPPORT

Whitebark Pine Ecosystem Foundation:

- Serves as a **resource for ski areas** to clarify and provide advice about checklist tasks, and provide information and training on ecology, conservation, and management
- **Provides regional contacts** (i.e. Government agency experts, WPEF board members) that are capable of assisting resorts with their efforts to meet WPFSA certification requirements;
- Provides a general **informational poster** about the WPFSA Certification Program (point 3 under Education section), and a certification plaque;
- Creates a **WPFSA web page** on WPEF's website which will explain the program and house links to participating ski area's WPFSA pages.

Whitebark pine needs your resort's help and attention!

Please consider becoming a Certified Whitebark Pine Friendly Ski Area to solidify and promote your resort's commitment to preserving its local ecology.



CONTACT:

ski_whitebark_friendly@whitebarkfound.org

WHITEBARK PINE ECOSYSTEM FOUNDATION · whitebarkfound.org



version 1.1 April, 2017