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A Range-Wide Restoration Strategy for Whitebark Pine (Pinus Albicaulis)

By U. S. Department Of Agriculture

Createspace. Paperback. Book Condition: New. This item is printed on demand. Paperback. 118 pages. Dimensions: 11.0in. x 8.5in. x 0.3in. Whitebark pine (*Pinus albicaulis*) forests are declining across most of their range in North America because of the combined effects of mountain pine beetle (*Dendroctonus ponderosae*) outbreaks, fire exclusion policies, and the exotic pathogen *Cronartium ribicola*, which infects five-needle white pines and causes the disease white pine blister rust. The loss of this high-elevation tree species poses serious consequences for upper subalpine ecosystems, both in terms of impacts on biodiversity and losses in ecosystem processes; whitebark pine is now a candidate species for listing under the Endangered Species Act. Large, nutritious seeds produced by whitebark pine are an important food for many bird and small mammal species, as well as grizzly (*Ursus arctos horribilis*) and black bears (*Ursus americanus*), and whitebark pine communities provide habitat for many additional wildlife species. Whitebark pine seed dispersal by Clarks nutcrackers (*Nucifraga columbiana*) combined with hardy seedlings results in early whitebark pine community development after fire and other disturbances; whitebark pine seedlings survive on harsh, arid sites and may act as nurse trees to less hardy conifers and vegetation. Whitebark pine at higher elevations, where...



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