

Alberta pines facing onslaught
Resilient trees have 'bleak' future unless conservation steps taken

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Facing an onslaught of mountain pine beetles, a nasty fungus and climate changes, the province of Alberta is hearing urgent calls from biologists and its own species-at-risk committee to classify whitebark and limber pines as endangered.

Three quarters of the high-altitude conifers will likely disappear from Alberta's landscape within 100 years if nothing is done, said a scientific sub-committee of Alberta's endangered species conservation committee.

In a recent letter to Sustainable Resource Minister Ted Morton, the Alberta Forest Genetic Resources Council also painted a gloomy picture of the future for the two trees, which can survive for centuries in the most inhospitable parts of the province.

"Given the limited range of these species within the province, combined with threats from white pine blister rust (the fungus), mountain pine beetles, climate change and the long term effects of fire suppression, we believe the prognosis for these species is at best bleak," said the council, which is mandated by the provincial government to maintain natural genetic diversity and increase forest productivity.

"Alberta doesn't have a lot of species to start with," said council chairman Cliff Smith. "We need to make sure both species are conserved to some degree and still have a presence on the landscape."

The legal designation of "endangered" would mean the two closely related pines -- which eschew flat land for craggy mountain tops and the Eastern Slopes -- are facing imminent extinction within the province.

The provincial government would legally have to enact population recovery and conservation programs if they agree to the classification.

Cyndi Smith, a conservation biologist at Waterton Lakes National Park, said a series of studies in recent years found the pines were infected with pests and dying in high numbers.

The pines themselves are necessary food for animals and help protect the mountainside from erosion.

The park already has a program that is breeding from a small percentage of whitebark pines believed to hold resistance to the blister rust, a fungus that was imported from Asia or Europe about a century

ago and has spread steadily across North America.

Cones are also being protected from the Clark's Nutcracker -- an ash-grey perching bird that feeds on the edible pine seeds or nuts. Even though the nutcracker often helps spread the seeds, Smith said park staff are doing the time-consuming work of placing wire cages around the cones so the seeds mature, can be harvested and then planted to restore population levels.

"We're just getting into some planting, probably not until next year," Cyndi Smith said.

The trees don't begin to reproduce until they are 40 years old, she added.

The whitebark pine is more susceptible to the mountain pine beetle than the lodgepole pine, but has been removed from past outbreaks due to its high-elevation habitat.

The park is preparing to do more

research on the less common limber pine.

Didsbury arborist Gerard Fournier said the province's most famous limber pine is the Burmis Tree, located at the top of a sandstone knoll in Crowsnest Pass. Often photographed for its spooky, gnarled profile, local legend put the tree at more than 700 years old when it died 30 years ago.

Although the tree toppled over in 1998, it was artificially resurrected with stainless steel piping to give the trunks strength and steel brackets to strap down the roots.

"Every tree is precious," Fournier said.

Morton and officials in his department are now considering the at-risk species committee's recommendation, according to Sustainable Resource Development spokesman Dave Ealey.

Already, he said, there is action being taken to help protect the pines.

In Edmonton, Parker Hogan of the Alberta Forest Products Association said whitebark and limber pines sometimes get cut down incidentally as part of large harvests of lodgepole pines, but the logging industry supports the endangered-species designation.

"They are not places that we log anyways, for the most part," Hogan said.

Meanwhile, provincial forestry officials were working Thursday to explain and contain a small flare-up of mountain pine beetle reported by a logging company in the Clearwater area southwest of Rocky Mountain House.

"We're going to make sure we take out all of those infested trees by June 15," said Duncan MacDonnell, another spokesman for Sustainable Resource Development, the provincial department responsible for forestry issues.

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Limber Pine

- Distributed from southwestern Alberta and southern B.C. to northern Arizona, New Mexico and southern California.
- In Alberta it is found in mountainous areas on exposed and wind-swept sites.
- It is a pioneer species that thrives in harsh environments.
- The tree relies on the Clark's Nutcracker to disperse its seeds.
- The limber pine's prognosis is not good because of high mortality and poor regeneration.
- An 1,100 year-old limber pine in the Crowsnest Pass is thought to be one of the oldest trees in Alberta.
- One of Canada's most photographed trees, the Burmis tree in the Crowsnest Pass, is a limber pine.

Source: Alberta Fish & Wildlife; Herald archives

Whitebark pine

- Found in high elevation forest areas throughout western North America.
- In Alberta, the species is found in isolated populations in the Rocky Mountains and south to the Canada-U.S. border.
- The species is under threat from blister rust, the mountain pine beetle and fire suppression programs.

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