

Limber Pine (*Pinus flexilis*)

By Christine



Closeup of cone and needles, Photo by L. Hamilton, ANPC https://anpc.ab.ca/?page_id=5955



COSEWIC, Committee on the Status of Endangered Wildlife in Canada



Limber pine (Photo by Wikimedia Commons)

The 'Rocky Mountain white pine' is a pioneer species, long established along the montane and subalpine Natural regions of the eastern slopes of the Crowsnest Pass for over 10,000 years! This slow growing, soft pine is found on the lower levels of gently rolling foothill terrain, as well as on mid-level rocky ridges and outcrops or cliffs. Warm, strong drying winds, and shallow rocky soils provide the ideal fast draining and drought-like conditions it requires.

Limber pine gets its descriptive name from flexible lower branches that grow long and droop, with upturned tips. The leaves appear at the end of the branches and are tight bunches of 5 dark green, 3/4 inch long needles. The smooth, silvery grey bark of a young tree darkens, roughens and creases with age. Height of the tree typically stops around 16 feet as a result of the rough growing environment. The crown rounds out with several branches. Distinguishable green oblong cones are formed, maturing into 6 inch light brown cylindrical shaped cones that open up naturally to release their seeds in September.

This keystone species is integral as an early establisher following fire and facilitates the establishment of other plants by providing protective shelter. It is an important food source for many small mammals, birds and bears. It is the main food source for Clark's Nutcrackers, a bird that facilitates the reproduction process by using its beak to break open the hard outer casing that houses the seeds. It digs shallow holes in the ground and caches the seeds it does not eat. The Pine Tube Moth relies on the Limber pine as its sole source of food, consuming the needles after creating tubelike structures in which it lives and then pupates.

In a healthy, natural environment this species can exceed 1000 years of age. Limber pine is an endangered species and some subpopulations face extirpation (local extinction). Its Canadian range has been steadily declining, severely affected due to a number of threats including the invasive mountain pine beetle, the act of fire suppression, white pine blister rust (the main cause of population decline), and climate change.



<https://www.crowsnestheritage.ca/burmish-tree>

Did you know that the iconic Burmis Tree is a Limber pine? It lived for over 300 years, possibly up to 700 years according to experts, before it died around 1978.

Resource links for more information:

https://www.registrep-sararegistry.gc.ca/virtual_sara/files/cosewic/sr_Limber%20Pine_2014_e.pdf

<https://www.natureconservancy.ca/en/what-we-do/resource-centre/featured-species/plants/limber-pine.html>