



Banff
National Park

Parc national
Banff

Species At Risk in Banff National Park

Essential information for
residents and businesses



Barn Swallow

Canada's *Species At Risk Act*

Canada's *Species at Risk Act* requires you to protect species designated as extirpated, endangered or threatened. Harming a species at risk or its habitat is a serious offence. As a leaseholder, licensee or business operator in the park, you have three key responsibilities:

1.



Know which species
are at risk

2.



Keep their
habitat intact

3.



Protect individual
species at risk

Not sure? Call us first

Phone 403-762-1470 if you have questions about your obligations. Parks Canada will work with you to ensure the species and its habitat are protected.

Également offert en français



Little Brown Myotis



Barn Swallow nest



Whitebark Pine

Be responsible and support the protection of species at risk by:

1. Knowing which species are at risk

It is your legal responsibility to know which species in your area are listed in the Act and to understand your obligations regarding them.

2. Keeping their habitat intact

You must ensure that nests, dens, burrows, hibernation sites or other residences of species at risk are not disturbed or destroyed. This protection extends to all habitat needed for the survival or recovery of an at-risk species.

3. Protecting individual species at risk

You must not kill, harm, harass, capture or remove a species at risk from its habitat. It is also illegal to possess, collect, buy, sell or trade any individual or part of a species at risk.

In Banff National Park, the following species are listed as endangered or threatened, as of March 1, 2023:

- Banff Springs Snail
- Bank Swallow
- Barn Swallow
- Black Swift
- Bull Trout
- Little Brown Myotis
- Westslope Cutthroat Trout
- Whitebark Pine



Westslope Cutthroat Trout



Barn Swallows in Banff National Park



Barn Swallows are medium sized songbirds easily recognized by their forked tail, dark blue back and wings, chestnut throat and forehead, and tawny underparts.



Barn Swallows are present in Banff National Park from late spring to fall. They are often seen in open habitats or along lake and river shorelines foraging for flying insects which are their main food source.



Barn Swallows prefer to nest in and around human-made structures. Their cup-shaped nests can be found attached to vertical surfaces with a supporting ledge, protected by an overhang.



Krivosheev, Vitaley

Barn Swallows are a *threatened* species in Canada

Barn Swallow populations across Canada have declined by nearly 80% since the 1980s. In 2017, the Barn Swallow was designated as *Threatened* under Canada's *Species at Risk Act*.



Super Pin

Barn Swallows need our help!

Protecting Barn Swallow nests and documenting nesting activity and success are two actions Parks Canada and the public can undertake to protect and recover this *threatened* species.

Barn Swallows often return to the same nesting location year after year. Reusing old nests conserves energy and improves breeding activity which contributes towards increasing their population.

Monitoring where and when breeding activity is occurring, and noting the number of young that fledge (successfully leave the nest) assists with understanding which factors may be contributing to the decline of Barn Swallow populations within Banff National Park and across Canada.

Barn Swallows and their nests are protected by law

In Banff National Park, Barn Swallows and their nests are protected by law under the *National Parks Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

It is illegal to disturb Barn Swallows and their **occupied** or **unoccupied** nests. Violators will be charged, be required to appear in court, and could pay fines up to \$25 000.

To report Barn Swallow nesting activity, or if a Barn Swallow nest poses a health or safety risk to humans, call 403-762-1470 and a Parks Canada Resource Conservation Officer will respond.

If you witness anyone disturbing a Barn Swallow and/or its nest, observe, record and report this information to Banff Emergency Dispatch 403-762-1470, anytime day or night.



Protecting Bats and People

What You Can Do

Why care about bats?



Bats play an important role in healthy ecosystems - they eat half of their body weight in insects every night!



Bats are susceptible to a fungal disease called White-Nose Syndrome which often kills 90-100% of bats roosting together during hibernation. This has caused drastic declines in bat populations across eastern Canada.



Six of Canada's 19 bat species live in Banff National Park including the Little Brown Myotis; an *endangered species* that is highly susceptible to White-Nose Syndrome.



All bats in Banff National Park are protected by law under the *Canada National Parks Act*. The Little Brown Myotis, is also protected under Canada's *Species at Risk Act*.



© Parks Canada/Dan Rafia



© Parks Canada/G. Horne

Bats in and around buildings: What to look for

Bats often roost in attics or other hidden spaces in buildings.

Signs that bats may be inside a building include: an accumulation of guano (bat droppings that are solid, black/brown in colour, containing insect wings), noise coming from between walls, and seeing bats exit a building at sunset or entering at sunrise.

Most roosting bats remain in a location for a few days, however some roosts, such as those with females and their young, may include larger numbers of bats that stay in one location for a longer period of time.



If you discover a bat, dead or alive, in a building or on the ground:

- Do not touch or handle the bat.
- Call 403-762-1470 and a Parks Canada Resource Conservation Officer will respond.
- Do not take any actions which could negatively impact the bat or a roost.
- If possible, isolate the bat to one room by closing interior doors and windows.
- Keep people and pets away.



If you are undertaking building renovations or construction activities

Always be on the lookout for signs of bats. If you encounter live or dead bats, or find signs of bats, stop work and immediately call 403-762-1470. A Parks Canada Resource Conservation Officer will respond and advise you of appropriate actions to take.



Coming in contact with a bat may pose serious health risks

- Recently there have been documented cases of bats with rabies in Banff National Park.
- Rabies is a rare but serious viral disease that can infect humans and domestic pets.
- Rabies can be transmitted if you are bitten or scratched by an infected bat. It can also be transmitted if infectious material, such as saliva, gets directly into the eyes, nose, mouth, or a wound.
- If you know or suspect that you have been bitten or scratched by a bat, wash the wound well with soap and water and **immediately** seek medical treatment. **Do not wait.** Rabies is almost always fatal once symptoms appear.
- Seek **immediate** medical advice if you know or suspect that you may have been in direct contact with a bat even if there are no signs of a bite or scratch (e.g. a bat present inside your house when you are sleeping).
- If a pet comes in contact with a live or a dead bat immediately contact your veterinarian.

All bats are protected by law in Banff National Park

- It is illegal to disturb or harm bats or their roosts whether inside or outside a building.
- Violators will be charged, be required to appear in court, and could pay fines up to \$25 000.
- If the violation occurs while performing on-the-job duties, the company's business license may be impacted.
- If you witness anyone disturbing a bat or a roost, observe, record and report this information to Banff Emergency Dispatch 403-762-1470, any time, day or night.
- Natural caves are critical habitat for some species of bat which use them to hibernate during winter. It is illegal to enter any cave in Banff National Park without written authorization from the Superintendent.



Black Swifts in Banff National Park



Black Swifts are recognized by their black plumage, streamlined body and long, curved & pointy wings.



Black Swifts are present in Banff National Park from late spring until fall. They may be seen singly or in small flocks, flying in and out of canyons or foraging high above for flying insects.



Black Swifts nest in canyons often near or behind waterfalls. Each year they lay a single egg in a mossy nest in shallow pockets or ledges along cliff walls.



Both parents care for and feed the chick, until it is ready to fly which may take up to 49 days.



© Amar Athwal

Black Swifts are an *endangered* species in Canada.

Black Swift populations have declined by over 50% in the last 40 years. The cause(s) for their population decline are not fully understood, however, it may be related to changes in the availability of their food supply as they specialize on a diet of flying insects.

Canada hosts 80% of the North American population with only 0.1% found in Alberta. In 2019, the Black Swift was designated as an *Endangered* species under Canada's *Species at Risk Act*.



Black Swifts in Johnston Canyon need our help!

In Banff National Park, Black Swifts are only known to nest in Johnston Canyon. Typically, they return to the same nesting location year after year, however their numbers have declined significantly over the past few decades. Minimizing disturbance to Black Swift nests is an important action people can take to protect and recover this *endangered* species.

From May 1 to November 15, areas of the canyon are closed to protect Black Swift nesting sites. Everyone visiting Johnston Canyon is required to stay on the official trail at all times – it is the law.

Black Swifts and their nests are protected by law:

- In Banff National Park, Black Swifts and their nests are protected by law under the *National Parks Act*, the *Migratory Birds Convention Act*, and *Canada's Species at Risk Act*.
- It is illegal to disturb Black Swifts and their **occupied** or **unoccupied** nests. Violators will be charged, be required to appear in court, and could pay fines up to \$25 000.
- To report Black Swift nesting activity call 403-762-1470 and a Parks Canada Resource Conservation Officer will respond.
- If you witness anyone disturbing a Black Swift and/or its nest, observe, record and report this information to Banff Emergency Dispatch 403-762-1470, anytime day or night.



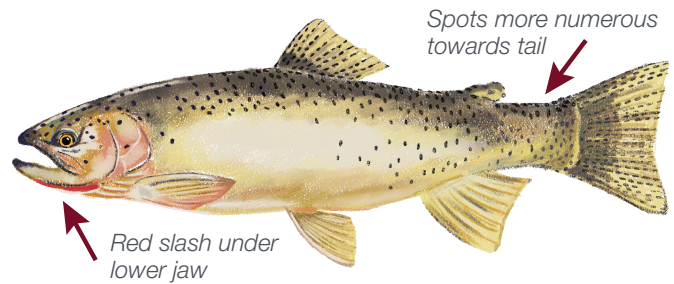
Westslope Cutthroat Trout and Bull Trout in Banff National Park

Westslope Cutthroat Trout




Are best identified by the red slash under the lower jaw.

They prefer cold temperature waters.

Spawning occurs between May and July when water temperatures reach 10 °C.



Westslope Cutthroat Trout is a *threatened species*

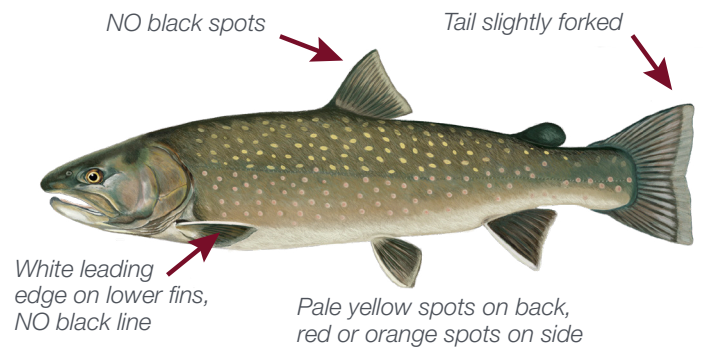
-  Banff National Park has some of the few remaining genetically pure populations of Westslope Cutthroat Trout in Alberta.
-  The main threats to Westslope Cutthroat Trout are habitat loss (outside the park), competition and hybridization with non-native trout species such as Rainbow Trout.
-  In 2013, Westslope Cutthroat Trout was listed as *threatened* under *Canada's Species at Risk Act*.

Bull Trout



Have a slightly forked tail and are typically olive-green to blue-grey in colour.

“No black, put it back”.

Is a cold water species that prefers well-connected mountain lakes and streams. Spawning occurs between mid-August to mid-October.



Bull Trout is a *threatened species*

-  The greatest threats to Bull Trout include degraded and fragmented habitat resulting from development and the introduction of non-native species such as Brook Trout.
-  In 2019, Bull Trout was listed as *threatened* under *Canada's Species at Risk Act*.



Westslope Cutthroat Trout and Bull Trout need our help!



- Knowing how to identify Westslope Cutthroat and Bull Trout is the first step towards protection. Anglers should know how to recognize and safely release these fish species to prevent illegal harvest. **Possession limit is zero.**
- Preventing the spread of aquatic invasive species and disease is imperative to ensure the long term survival of Westslope Cutthroat and Bull Trout. Clean – Drain – Dry everything that has come in contact with the water.
- Felt-soled wading boots are banned in Banff National Park.
- Refer to Banff National Park's Fishing Regulations for information regarding open seasons, special restrictions and closed waters.

Westslope Cutthroat Trout, Bull Trout and their habitat are protected by law

- In Banff National Park, these two fish species are protected under the *Canada National Parks Act* and *Canada's Species at Risk Act*.
- Most national park waters where these fish occur, or did occur, along with associated shorelines, are protected as critical habitat. This includes a 30-metre riparian buffer along the shoreline (above the high water mark) as it provides hiding cover and shade, reduces sediment and erosion, and is an important source of terrestrial insects on which the trout feed. It is illegal to damage the 30-metre habitat buffer.
- Any actions that may cause harm to Westslope Cutthroat and Bull Trout such as introducing sediment, chemicals, or obstructing fish movement are illegal.
- If work is required near or within an aquatic ecosystem, authorization from the Field Unit Superintendent is required at the planning stage **before** any work commences. Contact Banff National Park to get the necessary information related to these species at risk and their critical habitat.
- **It is illegal to possess** Westslope Cutthroat and Bull Trout. Violators will be charged, be required to appear in court, and could pay fines up to \$25 000.
- If you witness illegal fishing activities, please observe, record and report this information to Banff Emergency Dispatch 403-762-1470, anytime day or night.



Westslope Cutthroat Trout



Needles of Five – Keep them Alive

Both Whitebark Pine and Limber Pine have needles that grow in bunches of five.

Whitebark Pine (*Pinus albicaulis*) is a keystone species of high elevation ecosystems in western North America. Listed as endangered in Canada's *Species at Risk Act (SARA)*, this species is in serious decline over much of its range due to the combined effects of white pine blister rust, mountain pine beetle, altered fire management regimes and climate change.

Limber Pine (*Pinus flexilis*) grows at lower elevations than Whitebark Pine. It shares a similar ecology and threats to its survival. This species is recommended to be listed as endangered, and steps that are taken to conserve Whitebark Pine also benefit limber pine.



White pine blister rust (*Cronartium ribicola*) is a serious disease caused by a fungus affecting all five-needle pines. It was introduced to North America from Europe in the early 1900s. Since then it has spread and infected most five needle pine stands and has become the primary reason for decline in these pines' population.

The rust infects Whitebark and Limber Pine through the needles and spreads into the phloem of the tree. As the infection grows, the bark and phloem dies. Less than one percent of all Whitebark Pine is blister rust resistant.

Habitat Loss

Another significant threat to five needle pines is habitat loss resulting from fire suppression and climate change. Whitebark Pine grows best in open, sunny locations and relies on disturbances like fire to remove tree species that are competing for resources such as sunlight and water.

Historically, fires would burn through tree stands removing the vegetation on the forest floor. Larger, or more intense fires would result in the removal of the tree canopy, creating the open space that Whitebark Pine needs to establish.

Decades of fire suppression have reduced the number of open spaces, hindered growth, and increased the amount of competition that Whitebark Pine faces.

When five-needle pines have been weakened by other factors, they are more susceptible to forest insects such as mountain pine beetle.







An Important Partnership

Whitebark Pine and the Clark's Nutcracker (*Nucifraga columbiana*) have evolved to depend on each other for survival. Whitebark Pine cones do not open on their own to disperse seeds. Clark's Nutcrackers use their long, pointed beaks to break apart the large cones and remove the seeds. The birds "cache" the seeds to ensure a reliable source of food through the winter. A single bird can place thousands of seeds, just below the soil's surface, each year. Roughly half the seeds are overlooked and many of these germinate and grow into seedlings.



Identifying Five Needle Pines

	Whitebark Pine	Limber Pine
Needles	Needles occur in bunches of five, ranging from 3 to 9 cms. They are stiff, slightly curved, usually bluish-green, and tend to be clumped towards the ends of the branches.	Needles occur in bunches of five, ranging from 3 to 9 cms long. They are bluish-green and tend to be clumped towards the ends of the branches.
Cones and Seeds	<p>Cones range from 8 to 10 cms long and 6 to 10 cms wide, are egg-shaped and grow at right angles to the branch. Cones are permanently closed and seeds are dispersed largely by wildlife such as the Clark's Nutcracker, chipmunks and squirrels.</p> <p>Pollen cones are bright red to purple-red, and grow in July and August.</p> <p>Seeds are large, light brown and wingless.</p>	<p>Cones range from 8 to 20 cms long, are long and pointed in shape, and yellowish brown in colour. Scales tend to be thickened and clustered towards the tip. Cones open on the tree at maturity to release seeds.</p> <p>Pollen cones are yellow and grow in June to August.</p> <p>Seeds are nut-like and almost wingless.</p>
	 <p>© Parks Canada</p>	 <p>© Parks Canada</p>
Bark	Bark is thin, smooth and chalky-white on young stems. However, as the tree matures the bark becomes thicker and forms darker, narrow brown scaly plates.	Bark on young trees is silvery-grey. As the tree matures the bark becomes thicker, very rough, and dark brown to nearly black with wide scaly plates.
Height	Mature trees grow up to 20 metres tall.	Mature trees grow up to 15 metres tall.
Habitat	 <p>© Parks Canada</p> <p>Grow in subalpine (1500 m) up to treeline, in well-drained to dry sites, often in poorly developed soil or talus, and usually on ridges and south facing slopes.</p>	 <p>© Parks Canada</p> <p>Grow in forests up to 2000 m elevation, in well-drained to dry, rocky sites, often in shallow soil, usually on ridges and south facing slopes.</p>



What is Parks Canada Doing to Help Five Needle Pines?

Parks Canada is leading the efforts to help these trees survive into the future.

Recovery actions include:

- Collecting seeds from cones that show resistance to blister rust
- Growing and planting rust-resistant seedlings
- Reintroducing fire to the ecosystem to improve regeneration habitat
- Contributing to research on the distribution and critical habitat
- Monitoring long-term permanent plots for the spread and impact of white pine blister rust
- Monitoring annual Whitebark Pine cone abundance on permanently marked locations
- Educating visitors and Canadians about the importance of five-needle pine conservation



Where Can You Find Whitebark Pine and Limber Pine?

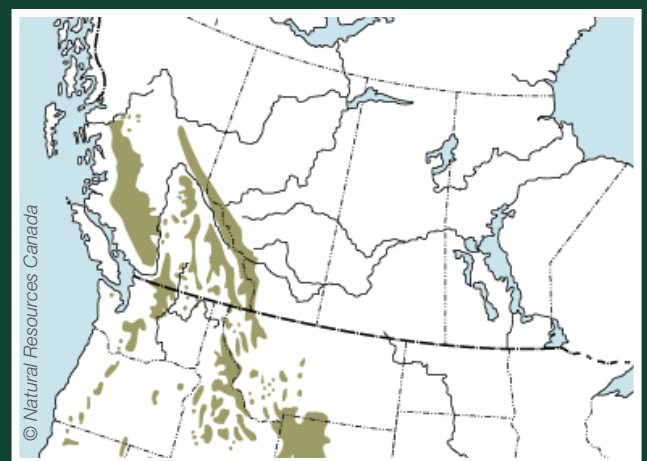
Whitebark Pine has evolved over time to become an important tree of the high elevation forests along the Rocky and Columbia Mountain chains. They are found in seven of Canada's national parks: Mount Revelstoke, Glacier, Kootenay, Yoho, Jasper, Banff and Waterton Lakes.

Limber Pine grow at lower elevations in all of these mountain national parks except Mount Revelstoke and Glacier.

In Banff National Park:

Some notable areas where Whitebark Pine is found include Sulphur Mountain, Cascade Mountain, Cory Pass, Mount Norquay, Parkers Ridge, Molar Pass and Bow Lake.

Limber Pine occurs on Tunnel Mountain and the Fairholme Range, as well as in the Red Deer and North Saskatchewan River Valleys.



Distribution range for Whitebark and Limber Pine in North America

For information about five-needle pine in Banff National Park:

pc.banff.fireinfo-infofeu.banff.pc@canada.ca