Bison and Banff National Park

BISON RESTORATION IN BANFF NATIONAL PARK - FAQ

Q. If free roaming bison haven't been in Banff National Park since before the park was created why bring the species back now?

A. Although free roaming Plains Bison were locally extirpated by the late 1870's, captive herds for both visitor experience and conservation purposes were present in the park for most of the last 125 years until 1997. The bison paddock was removed in 1997 to allow the free movement of other wildlife species through the corridor. At that time, Parks Canada made a commitment to move towards re-establishing a free roaming Plains Bison herd. The 2010 Banff National Park Management Plan entrusts us with delivering on that promise.

Q. Why is having free roaming Plains bison herd so important?

A. Restoring bison is important on many levels. They have played an influential role in shaping Canada's ecological and cultural landscape for the past 10,000 years and are iconic symbols of wilderness that inspire the human spirit:

- Bison inhabited areas in Banff National Park since the last period of glaciation over 10,000 years ago. Bison travelled through the montane (lower valley bottom) and subalpine regions at least on a seasonal basis. The foothills and mountains provided protection from harsh prairie winters and frequent warm Chinook winds exposed nutritious grasses and sedges for easy foraging.

- Bison are “ecosystem engineers”. Their presence triggers physical changes in the landscape that benefit other fauna and flora. For example, native plants depend on bison grazing and movement to remain vigorous and disperse seeds. Through trampling, and their “wallows” creating habitat for other species such as insects, rodents, amphibians and birds, bison keep meadow shrub encroachment in check.

- With big males weighing as much as 900kg (2000 lbs), bison make an important “biomass” contribution within predator-prey-scavenger relationships. Whether preyed upon by wolves or dying from other natural causes, a bison carcass can be an important food source for carnivores and scavengers such as grizzly bears, wolverines, foxes, eagles and wolves.

- As with all other threatened and vulnerable species, bison conservation efforts are important at a local, regional and international scale. Having the full assemblage of native plant and animal species including bison within the national parks and protected areas ensures the long term perpetuation of all native species.

- Bison have played a central role in shaping First Nations culture for the past 10,000 years. Bison provided food, clothing, shelter, and tools as well as an important trading commodity for essential goods between neighbouring First Nation societies. The relationship between First Nations and bison is an important chapter in human history.

Q. Why reintroduce Plains Bison and not Wood Bison?

A. The two types of bison were native to Canada. The larger Wood Bison of the north inhabited the boreal forest and taiga, and the smaller Plains Bison of the south lived on the prairies and east slopes of the Rockies. Banff National Park is located in the former range of the Plains Bison, well south of the transition zone between the two species (near Jasper and Edmonton).

Q. Plains Bison is a “Threatened” species – what does this mean?

A. Plains Bison were assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in May 2004 as “Threatened”. COSEWIC defines a Threatened species as one that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction. In Alberta there are close to 100,000 bison farmed for commercial purposes but only 4 small herds totaling less than 1000 animals wild Plains Bison are owned publicly for conservation purposes (Elk Island and Waterton National Parks, and Cold Lake and Fort Wainright Military bases). The introduction of another herd onto the landscape will help address conservation requirements.

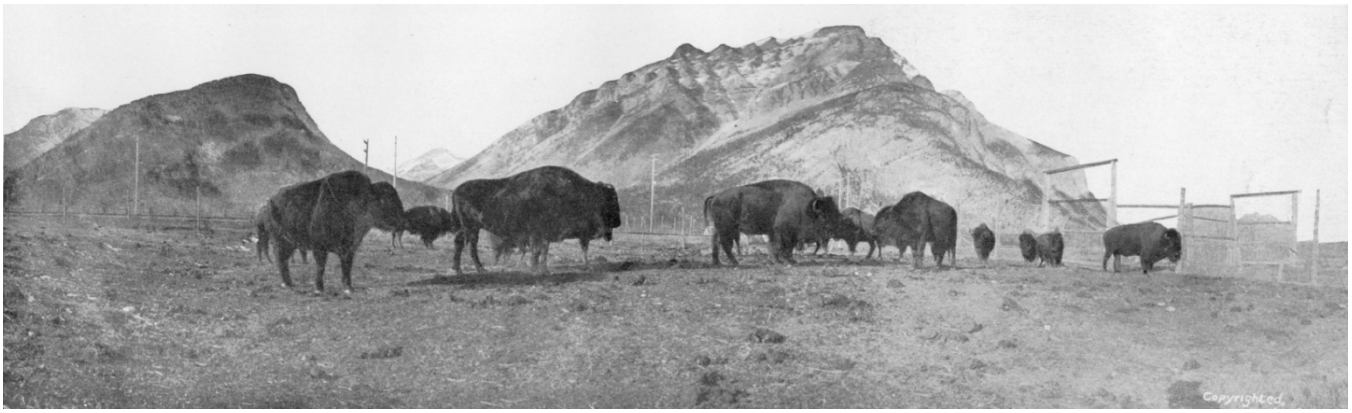
Q. Why reintroduce bison now - aren't caribou more important?

A. Reintroduction of both species is important and they could be complementary. Each species has a unique set of considerations that must be carefully analyzed and assessed.

The 2010 Banff National Park Management Plan requires Parks Canada to investigate the feasibility of restoring a breeding population of caribou, and to proceed with reintroduction of Plains Bison.

Q. How will reintroduced bison affect the future survival of caribou (if caribou are reintroduced)?

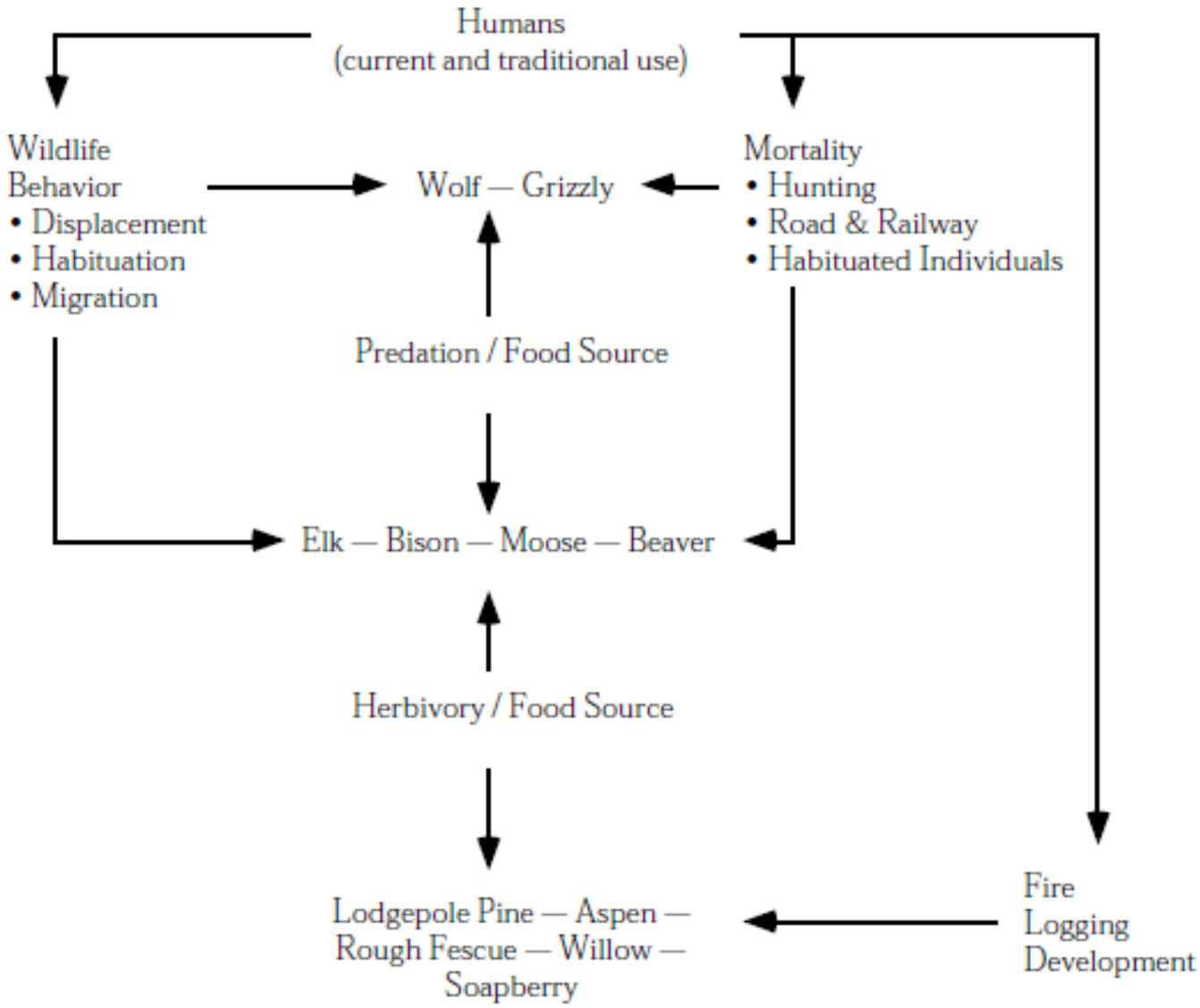
A. Bison and caribou in Banff National Park have adapted to occupy different habitats that do not overlap: caribou keep to higher elevations and feed on mainly on lichens whereas bison feed primarily on grasses and sedges that grow most abundantly in the valley bottoms and on lower elevation slopes.



Q. Would bison increase the number of wolves or other predators?

A. This is unlikely. In ecosystems with a full assemblage of prey and predators, the interrelationships between species and their environment can be both indirect and complex. The response of one species in terms of population size can be either directly or indirectly influenced by many other aspects of their environment.

The simplified tropic model below highlights the cause-and-effect relationships between predators and prey. Drawing on the Yellowstone experience, bison have remained a minor component of the wolf diet since wolves were reintroduced in 1995. The same dynamic, elk remaining as the major prey species of wolves, is predicted for Banff National Park.



In other ecosystems where bison-wolf interactions have been newly re-established, wolves have been slow to respond, in some cases taking almost 20 years before they prey on bison. As a result, predators and scavengers could benefit from bison but not to the extent that predator numbers would necessarily increase.

Q. How would bison interact with elk?

A. In locations where Bison share habitat and coexist with a variety of ungulate species, including elk, (such as Elk Island and Prince Albert national parks, the Northern Rockies [Pink Mountain, BC], Jackson, Wyoming, and Grand Teton and Yellowstone national parks), competition can occur between bison and elk. The degree of competition depends on habitat overlap, diet preferences and the number of grazers relative to the amount of available food (grasses and sedges). Elk numbers in Banff National Park have declined since the 1990s due the recolonization of wolves, while grazing habitats have expanded thanks to the prescribed fire program. With current conditions, it is anticipated that there would be adequate grazing resources for both species.

Q. Will park visitors be safe - on trails, on roads, and in campgrounds?

A. Bison present no more of a threat than any other wildlife in the park if they are viewed from a respectful distance. The mountain national parks have inherent natural hazards including the potential for interactions between humans and wildlife. Bison can accelerate quickly and run up to speeds of 50 km/hour like most wild animals. They will react defensively if they feel threatened. Observing a few basic common sense rules will reduce the risk of a negative encounter.

Through the use of fencing, hazing and habitat enhancement, Parks Canada will work to control bison access to the town sites, highways, the railway and other areas where public safety is a concern. In wilderness areas along the park boundary, “semi-permeable” fences will keep bison inside Banff National Park but permit other wildlife to pass freely in either direction.

In areas of the park where bison might be encountered, whether on a trail, scenic road or day use area, effective public education programs, roving wildlife guardians, signage and responsible visitor behaviour will ensure a safe and enjoyable park experience.

Q. Will First Nations hunting of bison be permitted since that’s what happened historically?

A. First Nation societies and free roaming bison co-existed for thousands of years and evolved important ecological and cultural relationships. Whenever possible, Parks Canada will work with First Nations to re-establish and celebrate these important connections, including the application of traditional ecological knowledge in the management of bison in Banff National Park. Maintaining herd size through culling will be a necessary component of long term bison management just as First Nations hunting was historically important in maintaining population levels. When determined as being necessary for management purposes (i.e. herd size, aggressive behaviour) bison will be culled in a safe and humane manner and the animal will be used by First Nations groups.

Q. Do you currently have a detailed plan for bison reintroduction?

A. A Bison Management Plan will be finalized after a comprehensive public participation process and an environmental assessment are completed. Parks Canada expects that the plan will be completed by January 2013. Any reintroduction would be preceded by a small scale pilot trial to confirm the feasibility of the plan.

Q. How many bison can a winter range sustain?

A. Experience from other studies suggests that good quality winter range in mountain habitats can support approximately 3 bison per square kilometre.

Q. What about disease? Will bison spread diseases to domestic livestock?

A. Parks Canada is conducting a formal disease risk assessment to ensure that every aspect of disease management is considered before bison are reintroduced. The new Banff herd will come from Elk Island National Park. This herd is genetically pure and are routinely vaccinated and certified disease-free. As a further precaution, the new herd will be quarantined and monitored for disease for a minimum period of 4 months once arrived onsite. Containment and control strategies will ensure that bison remain within Banff National Park and do not come in contact with domestic livestock.

Q. How will Parks Canada work with stakeholders and interested groups or organizations?

Parks Canada will use a phased approach for public consultation on bison reintroduction. In Phase One, Parks Canada will work intensively with the provincial government, key stakeholders and First Nations to fully understand and work to address concerns and interests. These discussions will help in the development of the preliminary reintroduction plan. Phase Two will engage the broader public on the preliminary reintroduction plan. Stakeholder meetings and working groups will continue as required with the use of social science tools, and an open comment period with information available on the park website or from park staff on request. Input gathered in Phase Two will be used to refine the plan, the final version of which is anticipated for January 2013. Parks Canada will continue to work with stakeholders as it moves forward into the implementation of the plan.

Q. Where do I go for more information?

More information can be found at http://www.pc.gc.ca/banff-bison or contact Tracey Leblanc, Partnering and Engagement Officer, Banff Field Unit, Parks Canada, 403-760-1342.