

Restoring Wood Bison in Alaska: Frequently Asked Questions



Alaska Department of Fish and Game
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What is a wood bison?

Wood bison are closely related to plains bison, and both are subspecies of the species *Bison bison*. Wood bison inhabited and are adapted to the northern part of North America while plains bison occurred further south. Wood bison are larger, darker, and have a squarer hump than plains bison. They have little or no chap hair on their forelegs, long straight hair sloping down on the forehead, and a smaller, more pointed beard. Wood bison are the largest land mammal in North America. Cows average about 1,200 pounds in weight, similar to an average sized adult bull moose. Adult wood bison bulls are even larger, averaging 1,800 pounds or more.

When did wood bison live in Alaska, and why did they disappear?

Bison roamed over much of North America for several hundred thousand years. Wood bison are the most recent subspecies of bison to inhabit Alaska and northwestern Canada, evolving during the last ten thousand years or so. Historical information indicates that wood bison disappeared from Alaska during the last few hundred years, probably because of the combined effects of changes in the distribution of habitat and harvest by humans. Wood bison apparently disappeared at roughly the same time as muskoxen. The most recent skeletal remains of wood bison in Alaska are estimated to be about 170 years old, based on radiocarbon dating. The last reported sightings of wood bison in Alaska were in the early 1900s. Historic accounts from Alaska Native elders indicate that wood bison were a resource for Alaska's indigenous people as recently as 200 years ago.

Why is wood bison restoration in Alaska being considered?

Restoring wood bison to Alaska would:

- 1) Increase the number of wood bison in the wild, and help ensure their long-term survival. Wood bison populations in Canada were decimated by the early 1900s, as were plains bison further south. Conservation efforts in Canada allowed wood bison to

increase from a few hundred to more than 3,000 bison in healthy, free-ranging herds. Reestablishing wood bison in Alaska would be a major step in international conservation efforts.

- 2) Enhance Alaska's wildlife resources by restoring a key grazing animal to northern ecosystems.
- 3) Increase habitat and species diversity in some areas.
- 4) Benefit Alaska's people and economy. Wood bison could provide a number of socio-economic benefits, supporting viewing, photography, and tourism. Eventually, wood bison could also provide an additional source of food. Communities in northern Canada benefit from wood bison herds by harvesting bison for food, developing local guiding businesses for hunters and tourists, and being involved in managing bison and their habitat. Similar benefits could apply in Alaska.

Is there suitable habitat for wood bison in Alaska now, and where would they be released?

Plains bison have thrived in Alaska since they were introduced in 1928, indicating that wood bison would do well here. A number of meadow habitats in Interior and Southcentral Alaska support the same grasses and sedges that are favored by wood bison in Canada. The Yukon Flats in northeast Alaska may be the single largest expanse of unoccupied wood bison range left in North America. To give you an idea, the amount of wood bison habitat in the Yukon Flats is greater than in the Mackenzie Bison Sanctuary in the Northwest Territories, which supports 2,000 bison. Habitat assessments are currently underway to identify other areas suitable for wood bison in Alaska. Decisions on whether or where bison would be released will not be made until habitat assessments and a process to involve the public have been completed.

Why are plains bison living in Alaska?

Plains bison originally lived only in southern Canada and in the lower 48 states. They were introduced to Alaska in 1928, and four herds of plains bison totaling about 900 animals now live in the state. Wood bison would not be released near existing herds of plains bison to maintain the genetic integrity of the subspecies.

What is the life history of wood bison?

Like moose, bison breed in the fall and have calves in the spring. Most females produce their first calf at the age of three. Bison cows have only one calf each year. Wood bison live in small groups of up to 60 animals during most of the year. Adult bulls generally are separate from cows, calves, and yearlings, except during the breeding season. Bison live an average of 10-15 years in the wild.

What do wood bison eat?

Their major foods are grasses and sedges, such as those found in many northern meadows. (Tussock meadows don't provide good food for bison.) During summer, wood bison prefer drier meadows, but after freeze-up they rely more on wet meadows. During winter, wood bison continue to feed on grasses and sedges and use their large heads to sweep snow aside so they can reach their food.

How would bison get along with other animals and the environment in Alaska?

Wood bison would co-exist with other wildlife, just as they do in northern Canada and as plains bison do in Alaska. They live side-by-side with other animals such as moose, waterfowl, and furbearers. Most of the plants that bison eat are different from those used by moose. In Canada, wood bison live in meadow habitats that are similar to those in Alaska. They often feed and rest in the same areas used by moose, caribou, and other animals. Studies have shown that grazing by wood bison increases habitat diversity, which can benefit other wildlife.

How do predators such as bears and wolves affect wood bison?

Predators generally have less effect on healthy wood bison populations than on other northern big game animals. Because of their large size and because cows and calves stay in herds, wood bison are less vulnerable to predators than are moose and caribou. Bears rarely kill bison, and wolves kill mainly calves and old bison. During the first several years after release, mortality from predation is likely to be low because predators need time to learn how to hunt and kill bison. Even in areas where there are relatively large numbers of bison, predators have less effect than they do on moose. This explains why bison herds are more stable than moose populations.

Could wood bison introduce disease to Alaska?

Disease-free wood bison stock is available in Canada, and would be used for wood bison restoration in Alaska. Both Alaska and Canada have strict disease testing requirements that have proven to be effective

in restoring disease-free herds in Canada. As a result, the risk of introducing wildlife diseases to Alaska is virtually nonexistent.

How large would a bison herd be?

A wood bison herd should include at least 400 to 500 bison to give the herd a strong likelihood of surviving over the long term. Alaska could probably support a number of herds of this size. Population goals and other management objectives for wood bison would be developed by local residents, landowners, state and federal land managers, and other interested people in cooperation with the Alaska Department of Fish and Game.

When could bison be harvested?

Initially, wood bison herds are likely to increase by about 20 percent each year. It would take about 10 to 15 years for a herd of 50 bison to increase to about 500 animals. If allowed to grow to about 400 animals, a herd could support a harvest of 40 or more bison a year.

What is bison meat like?

Bison meat is similar to moose meat or grass-fed beef. It can be prepared the same way as moose, caribou and other game. It also makes excellent dried meat.

Are wood bison dangerous?

Bison generally avoid people. A free-ranging herd of bison would be shy of people, like other large mammals. However, like moose and other large animals, bison can be dangerous if they feel cornered or threatened at close range. Thousands of people visit areas where there are large numbers of bison each year with few problems.

Where can I learn more about wood bison?

Sign up for a newsletter, comment about the wood bison restoration project, or for more information, please contact:

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