

Wood Bison Banter

The latest on Yukon Wood Bison Fall 2008

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First Observations of Wolves Preying on Wood Bison

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In December 2007, Yukon Department of Environment officials were alerted to the first records of wolves preying on the Wood bison from the Aishihik Herd. In one instance, a sub-adult bison was apparently killed by a small pack of wolves in the Aishihik Lake area. In a second instance, a calf was apparently killed by wolves in the Nordenskiold River area. Occurrences were investigated by Shane Oakley, David Bakica, and Larry Bill of the Conservation Officers Services Branch, and in their professional opinion the kills were made by wolves.

Wood bison were first released into the wild in 1988. It then took about 20 years since the time of release



Conservation Officer David Bakica investigates the remains of a wolf-killed bison (Photo by Larry Bill)

until the first records of predation were noted. Former Kluane Regional Biologist, Bob Hayes, predicted several years ago that it would take about 20 years from the time of release until wolf predation was observed – and he was right on the money! It is not known how extensive predation of Wood bison by wolves or bears is in the Aishihik area, but we suspect for the time being it is somewhat rare.

Wood bison are large, formidable prey for wolves or bears. In the NWT, there are wolves that are believed to specialize on hunting bison, including adult bison. In southwestern Yukon, however, there are more prey choices available to predators, and it

may not be worth the risk of being injured for wolves to tackle a group of bison. We suspect that reports of predation will increase, but may take several years, if ever, before local wolves make a major dent in the population of Wood bison in the Aishihik area.

Hunters, trappers and other travelers in the range of the Aishihik Wood Bison Herd that come across any interactions between Wood bison and other species, particularly wolves or bears, are encouraged to report them to the Department of Environment.

For more information or to report an observation, contact Tom Jung, Senior Wildlife Biologist (667-5766)

New Hunt Rules

A recent regulation change means that bison hunters no longer have to enter their name in a draw for permits. Any resident hunter with a valid Yukon hunting licence who has taken the bison hunting workshop may obtain a permit (no charge) and bison seal (\$50) from their local Environment Yukon office. Permits are valid from Dec. 1, 2008 to Feb. 28, 2009. Hunters may hunt for a bison at any time during those three months. All other regulations still apply (i.e. mandatory bison workshop, rifle type and caliber, limit of one permit and one bison per licensed hunter).

Areas Open to Bison Hunting in Yukon

Bison may be hunted in Game Management Zones 3 - 5, and 7 - 9 (except Subzones 4-03 and 4-51). All other Zones and national parks are closed to bison hunting.



The initial allowable harvest for the 2008/2009 hunting season has been set at 200 bison. A review will be done in February to determine if an in-season adjustment can be made to the allowable harvest. All successful hunters must report their kill to an Environment Yukon office within 72 hours. Successful hunters must also deliver the lower jawbone or incisor bar to a Conservation Officer no later than 15 days after the end of the month in which the bison was killed

The Department of Environment will also look at introducing a second season to run from March 1 to March 31 if fewer than 200 bison are harvested before the end of February. The second season will be managed as a type of registration hunt to limit the number of hunters on the land at any one time. Details for this hunt are still being developed.

For more information about the bison hunt, call Carol Domes. Wildlife Harvest Manager (667-8407)

History of Yukon's Wood Bison Recovery Project

Written by Manfred Hoefs

Pleistocene bison have inhabited the Yukon for perhaps as long as 700 000 years. They were one of the most common large grazing mammals in the Beringia Refugium during the ice age. It is assumed that Wood bison evolved from these large, long-horned bison about 5000 years ago. Gradual change in vegetation cover in this sub-arctic area from cold steppe, dominated by grasslands, to spruce forests led to a decline in bison numbers and distribution, since bison feed primarily on grasses and sedges and make little use of forest vegetation. It is estimated that around 1800 there were about 160 000 Wood bison in North America. This estimate was based on the size of the range occupied by bison at that time. Their number began to decline with the arrival of Europeans, who initiated the fur trade and introduced firearms. By the beginning of the 20th century only 200 to 300 Wood bison were left south of Great Slave Lake, while at one time their distribution included eastern Alaska, Yukon, western NWT, northern B.C and Alberta and north-western Saskatchewan.

The establishment of Wood Buffalo National Park in 1922 was the first step to prevent the extinction of Wood bison and to bring about a gradual recovery. The protected herd grew and its size was estimated at 1500 to 2000 in 1925. However, this remarkable recovery effort was jeopardized with the release into the Park of 6673 Plains bison shipped in from Wainwright (Alberta) between 1925 and 1928. Plains bison had become extinct in Canada. To re-establish them, Plains bison, totalling 680 head, were shipped to a large enclosure established near Wainwright, Alberta, in 1909. These bison came from Elk Island and Banff National Parks and from a captive herd in Montana. Without predators or hunting the herd grew quickly and reached a size of 6780 by 1923. It exceeded the carrying capacity of the enclosure and range damage became obvious. Various options were considered of what to do with these bison and the decision was made to take them

to Wood Buffalo Park. There was considerable opposition to this solution to the bison problem by the American Society of Mammalogists and individual conservationists, but the government felt that Wood Buffalo Park was large enough to accommodate both subspecies of bison without negative impacts on either. However, the two subspecies got into contact and hybridized. In addition, the Plains bison brought with them two cattle diseases, tuberculosis and brucellosis, which they passed on to the Wood bison. As a result, Canada had neither pure Wood bison nor Plains bison but a herd of diseased hybrids, whose size was estimated at 12 000 in 1934. It was assumed that Wood bison as a distinct subspecies did no longer exist. However, in 1959 five bison collected near the Nyarling River, in a remote part of Wood Buffalo Park, were subjected to taxo-



Right side view of Steppe Bison cranium with hornsheaths preserved from Old Crow Basin, Yukon from approximately 12,000 years ago. (Photo: www.beringia.com/research/bison.html)

nomic assessments and turned out to be Wood bison. In 1963 and 1965, 124 bison were captured from this herd. Eighteen of these were released on the north shore of Great Slave Lake, an area now referred to as the Mackenzie Bison Sanctuary and 22 ended up in Elk Island National Park. The Mackenzie Herd grew well and currently has a size of about 2000 bison. The Elk Island herd is kept at a level of about 350 bison, and has served as a source of breeding stock for all Wood bison re-introduction initiatives carried out since the early 1980's.

History of Yukon's Wood Bison Recovery Project continued ...

The Canadian Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated Wood bison as "endangered" in Canada in 1978, and their plan included the following goal:" re-establish at least four discrete, free-ranging, diseasefree and viable populations of 400 or more Wood bison in Canada ..."



Bull Wood bison at the north end of Aishihik Lake. (Photo by Kathi Egli)

In the early 1980's the Yukon Government began to participate in Canada's Wood bison recovery program and appointed a representative to the Canadian Wood bison recovery team. The commitment was made to establish one free-roaming Wood bison herd within this territory. At that time, the Canadian Wildlife Service (CWS) was a very active participant in Yukon's program. In 1982 CWS did aerial surveys to locate a suitable introduction site. Over twenty sites were recognized from Little Atlin Lake in the south to the Ross River watershed in the north. Criteria for selection were not only suitable habitat, but also lack of land-use conflicts and remoteness from major roads. The Nisling River drainage was chosen as the site with the best potential. As a follow-up to this aerial survey, CWS conducted on-the-ground assessments in this watershed and determined that it had a carrying capacity of some 400 to 500 bison.

An agreement for a cooperative Wood bison reintroduction project was signed by the federal Minister of the Environment and Yukon's Minister in charge of Renewable Resources in 1983. It stipulated the contributions of both parties to this joint undertaking with the long-term objective to establish one free-roaming Wood bison herd in this territory as part of the national recovery effort. When this herd would reach a size of 200, CWS contribution would

> have been fulfilled. A joint Wood bison management plan was developed, which included these arrangements listed above.

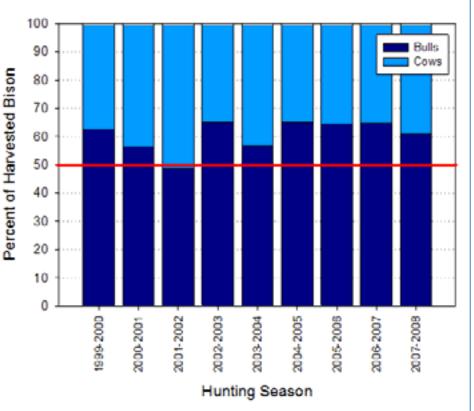
> Because of problems with other Wood bison reintroduction attempts, such as in Jasper National Park, it was decided that for the Yukon project a large enclosure would be constructed to keep the bison for up to two years, to give them time to habituate to Yukon's climate and vegetation, before releasing them to the wild. In 1985 a two-square-mile enclosure was built in the headwaters of the Nisling River, some 80 km west of Carmacks. Members of the Little Salmon/Carmacks First Nation participated in the construction of the enclosure.

All bison shipped to the Yukon as part of this project had their origin in Elk Island National Park. CWS was responsible for organizing these shipments. All bison were tested for tuberculosis and brucellosis and given ivermectin shots to prevent parasites from being imported to the Yukon. The first bison arrived in the Yukon in 1986. Subsequent shipments till 1992, brought the total of 142. The first bison were released to the wild in 1988 and by 1992, 170 bison had been released and the enclosure was dismantled.

The wild herd grew well and its current size is estimated at over 1000. The Yukon Wood bison reintroduction initiative was the most successful one of six projects carried out in western Canada since 1980 to help with the recovery of this species. Yukon's program was a major factor that brought about the down-listing of Wood bison from the "endangered" to the "threatened" species-at-risk category in 1988 by COSEWIC.

The annual Yukon bison harvest is a management tool to control bison numbers in the Aishihik area. Since the inception of the harvest in 1998, close to 700 bison have been harvested from the Aishihik Herd, substantially reducing growth of the herd. The harvest, however, has not stopped the growth of the herd, and the herd now numbers about 1100 animals. In an effort to reduce the potential further growth of the herd, hunters are encouraged to harvest a cow bison rather than a bull bison. From 1999 to 2008, 393 bulls and 257 cows were harvested. The graph shows the percentage of bull bison (dark blue) versus cow bison (light blue) taken over the past few hunting seasons. Wildlife managers contend that harvesting more cows than bulls will help even out the adult sex ratio of the herd (which is likely out of balance because of hunters taking more bulls in the past few years) while reducing the current and potential future size of the herd.

Harvesting Cows Helps Meet Population Target Levels



Graph: The percent of bull and cow bison harvested in the hunting seasons from 1999/2000 - 2007/2008.

See Page 6 for bull and cow visual characteristics.

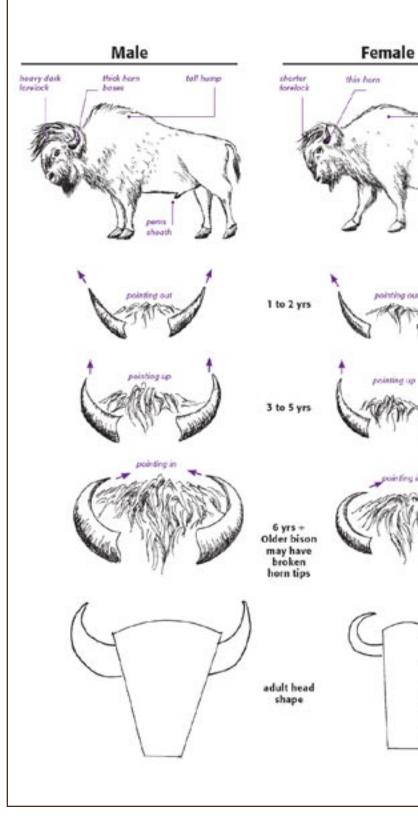


Yukon Wood Bison Technical Team

- Alsek Renewable Resources Council
- Carmacks Renewable Resources Council
- Laberge Renewable Resources Council
- Champagne and Aishihik
 First Nations
- Kluane First Nation
- Little Salmon Carmacks
 First Nation
- Environment Yukon
- Environment Canada

July 21, 2008 - Whitehorse - A technical research group met for a day to identify and review bison research needs. Together the government and First Nation participants debated the merits and priorities of various research oppurtunities. (Photo by Michael Svoboda)

Bull and Cow Wood Bison Visual Characteristics



RECIPE Bison Stroganoff

Meatballs:

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2 lb. chopped bison burger
1 1/2 c. bread crumbs
1/4 c. milk
1/4 c. chopped onion
2 eggs beaten
1 tsp. salt
pepper to taste

-Preheat oven to 375°F. Mix all ingredients together and form into meatballs. Place on a cookie sheet and bake for 25 minutes.

Sauce:

- 1/2 c. chopped onion
- 4 tbsp. butter
- 4 tbsp. flour
- 2 tbsp. ketchup
- 1 -10 oz. can beef consommé
- 1 c. low fat sour cream

-Brown chopped onion in butter over medium heat. Add flour and stir to absorb melted butter.

-Continuing to cook, add ketchup and consommé. Stir until mixture thickens and then add sour cream.

-Pour sauce over meatballs. Bake at 350°F for 25 minutes.

-Cook broad egg noodles as per package directions. Serve meatballs and sauce over cooked egg noodles.