Wood bison quietly graze amongst the autumn birches in the Northwest Territories, Canada.

Legal Status Clarified by Bob Stephenson

The future legal status of wood bison in Alaska was recently clarified following a review by the U.S. Fish and Wildlife Service (FWS). The Alaska Department of Fish and Game also



reviewed the issues surrounding the legal status of wood bison and agrees with the conclusions reached by FWS. Wood bison are listed as a threatened species by Canada and as a foreign listed species in Canada under the U.S. Endangered Species Act (ESA). Because the species is listed in Canada, certain

Photo by Bob Stephenson, ADF&G

permits are required to import or export wood bison. In October 2004, the FWS determined

Wood Bison News - Number 1, Spring 2005

News of the Wood Bison restoration project. To subscribe, visit our wood bison web site at http:// wildlife.alaska.gov/management/game/wood_bison1.cfm.

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Page 4

Name Organization address

First public meeting: April 27& 28 at the Wedgewood Resort in Fairbanks. 9:00 a.m. in the Gazebo Room.

that should wood bison be restored to Alaska, the ESA would not need to be modified to add the imported population as endangered or threatened, and that it does not intend to revise the list to include domestic wood bison populations. This means that wood bison in Alaska would have the same legal status as other resident wildlife, and would not be listed as threatened or endangered in the U.S.

Inside:

| Wood Bison Restoration Planning Set to Begin | Page 1 |
|--|--------|
| History and Conservation of Wood Bison | Page 1 |
| Looking for Wood Bison Habitat in Alaska | Page 2 |
| ■ Legal Status Clarified | Page 4 |

Wood Bison News

Number 1, Winter 2005

Photo by C. Gates



Mature wood bison bull. Wood bison currently live in nortwestern Canada, but were once present in much of Alaska.

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http:// wildlife.alaska.gov/ *management/* game/ wood bison1.cfm



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The Alaska Alaska.

ADF&G has been exploring the possibility of restoring wood bison since 1991, in cooperation with various U.S. and Canadian agencies, tribal governments, and public groups. Scientific studies have been conducted, and preliminary talks with many segments of the public have helped identify potential issues and concerns and gauge the level of support for the idea. Now

History and Conservation of Wood Bison by Bob Stephenson

Bison were one of the most common large mammals in Alaska for a few hundred thousand years or more. Skeletal remains and historical accounts show that wood bison persisted in a large part of their original range in Alaska and Canada during the last 10,000 years, and played a role in the economies of Athabascan people in central and eastern Alaska during this period. Radiocarbon dates for bison skeletal remains range from over 40,000 to 170 years old. Wood bison were the



Drawing courtesy W. Olsen

Wood bison public planning set to begin

by Margo Matthews

Department of Fish & Game (ADF&G) is preparing to involve the public in decision-making and planning for wood bison restoration in

"Returning wood bison to Alaska would help secure their future."

the public, landowners and natural resource managers will have an opportunity to formally consider the proposal.

ADF&G is about to establish a "Wood Bison Restoration Advisory Group" representing a variety of local, statewide and national interests, including people representing wildlife conservation, hunting,

> Native Alaskan, viewing, and environmental interests. ADF&G plans to conduct two or more meetings of the Advisory Group this spring and summer to help determine whether wood bison should be restored, and if so, to recommend locations for restoration.

If the decision is made to move forward with restoring wood bison to Alaska, the next step (continued on page 2)

last subspecies of bison to live in Alaska, occupying the state for most of the last 5,000 to 10,000 years. Wood bison and plains bison are the two subspecies of North American bison, but wood bison are better adapted than plains bison to northern environments.

Archaeological evidence and oral accounts from Native Alaskan elders show that (Contnued on pg. 3)

Wood Bison News

Mike Taras up to

sedges, examining

habitat quality in

July 2004. These

sedge meadows

wood bison with

summer or winter

could provide

habitat.

his elbows in

Looking for wood bison habitat in all the right places by Craig Gardner

For thousands of years, bison roamed meadow habitats across most of Alaska. Bison are grazers, meaning they primarily eat grasses and sedges. Bison were once the most numer-



ous and perhaps the most important large grazer in Alaska. Since their extirpation within the last few hundred years, no other animal has filled that role in Alaska's meadow ecosystems. Without bison. some characteristics of these meadow systems have probably

Photo by C. Gardner, ADF&G

changed. They are probably lower in species diversity and biological productivity and richness compared to when bison were present. One of the objectives of restoring wood bison to Alaska would be to reestablish a large grazer to help maintain these meadow ecosystems.

Before wood bison restoration could be seriously considered, we had to determine if there is still suitable habitat in Alaska that could support viable wood bison populations. To answer that question, ADF&G biologists began evaluating the large expanses of sedge and grass meadow systems in Interior Alaska in the early 1990s. Once potential areas were

located, we evaluated habitat quality by measuring plant species composition and abundance, snow characteristics, and soil and water conditions, and compared the results with known wood bison ranges in Canada.

Studies conducted in Canada show that wood bison are dietary generalists, meaning they can use a variety of forage to meet their nutritional requirements for maintenance and growth. Wood bison do display preferences or certain types of meadows during different times of the year, and also prefer certain sedge and grass species because of their nutritional quality. However, if the most preferred sedge species are not present, wood bison have been found to thrive on lower quality forage, because of their ability to efficiently utilize nutrients.

Research has shown that wood bison do not occupy areas in which meadows are absent. In Canada, meadow habitats represent 5-20% of most ranges. Wood bison are well adapted to northern habitats and can handle relatively deep snow and extremely cold temperatures (less than -40° F.). The foraging activities of adult bison are not restricted by snow depths of up to 30 inches, and calves are not restricted in up to 24 inches of snow. Wood bison can withstand deeper snow without affecting mortality or productivity, as long as wind or icing does not increase snow density. (continued on next page)

Wood Bison Planning Set to Begin (continued from Page 1)

will be to establish a planning group for a specific area. This team would include representatives of local communities, wildlife conservation interests, wildlife viewing and habitat conservation interests, private landowners, ADF&G, and appropriate state and/or federal land management agencies. This group would address issues in greater detail, including those that apply to the local area, and develop implementation and management plans that would ensure that all

wildlife users would share in the benefits of wood bison restoration.

ADF&G believes it is important for the public to play a major role in the decision-making and planning for this wildlife conservation initiative. If you are interested in participating or being informed of progress, call, e-mail, visit our web site, or visit our office. Our contact information is on Page One and Page Four of this newsletter.

Habitat (Continued from pg. 1)

Based on our studies, there are several areas in Alaska that could support populations of wood bison and that can be considered as possible release sites. The Yukon Flats north of Fairbanks offers abundant high quality habitat and favorable snow conditions, and could support at least 2,000 wood bison. The Minto Flats area west of Fairbanks also contains suitable habitat, and could support over 400 wood bison. Other areas that show promise are the lower Innoko River valley near Shageluk and Holy Cross, the Hogatza River valley near Huslia and Hughes, and the North Fork of the Kuskokwim River valley near Lake

Photo by M. Taras, ADF&G



Vast expanses of wet sedge meadows in southwestern Alaska could provide wood bison with winter habitat.

History and Conservation (Continued from pg. 1)

wood bison were hunted by humans until they disappeared from Alaska during the last few hundred years. The most likely reason for the extirpation of bison was the combined effects of hunting by humans and changes in habitat distribution. By 1900 only a few hundred wood bison remained in Canada, but as a result of conservation efforts there are now over 3,000 wood bison in healthy, freeranging herds. Restoring one or more wood

bison populations in Alaska is a high priority in wood bison conservation, and would help secure the long-term survival of this historically important northern mammal. Alaska, Canada, and a variety of public and private organizations have cooperated in developing the opportunity to restore wood bison in Alaska. These efforts will continue during the upcoming wood bison planning process.

Minchumina. These areas offer an abun-

dance of the sedge and grass species favored by wood bison. Before these areas can be considered for wood bison restoration, though, additional snow surveys and spring access evaluations need to be completed. There are also a number of other areas in the Interior that appear to be suitable



for wood bison. Hopefully, they will be evaluated sometime in the future.

Cow wood bison with calf.

Wood Bison News

Prior to their disappearance, bison were an important source of food for the Gwich'in on the Yukon Flats. Reverend David Salmon emphasized that "they lived on it'' before moose became more common....Bison were said to be a ''good animal," providing valuable food and

material for the people. In discussing the history of bison in the region, **Rev.** Salmon often commented that the Yukon Flats ''is their country ...they belong to it'



Rev. David Salmon

For more information or to subscribe to this newsletter. Visit our wood bison web site at:

http:// wildlife.alaska.gov/ management/game/ wood_bison1.cfm