Summer 2011:
Grasslands research looks at bison impacts

Bison eat a variety of different plants but feed primarily on grasses and sedges and tend to avoid smaller, leafy vegetation. Biologists and First Nations have been concerned that bison may be affecting the unique grassland communities in the Aishihik area.

To find out what is – and isn’t – happening as a result of bison grazing, scientists were out in the field this past summer to measure vegetation at 26 grassland sites in the Aishihik-Sekulmun lakes area.

This work was undertaken by staff from the Canadian Wildlife Service and Environment Yukon, as well as by a graduate student from the University of Alberta. Of the 26 sites sampled, 14 had been sampled by Mary Vetter, then a University of Waterloo student, in 1981 before the reintroduction of wood bison.

The research team had intended to build 12m x 12m fences around eight new sites before winter set in. These will exclude bison so the team can measure changes in grassland composition over time in areas with and without bison grazing.

Preliminary results from this summer’s research should help us determine the potential impact of bison grazing on plant communities. Once we know this, it will then be possible to look at ways to mitigate any long-term effects of bison grazing.

We plan to return to these sites on a regular basis until they are removed in 2021. If you see these exclosures (fenced-off areas) please don’t go inside them – it’s essential the plants are undisturbed.

If you see any damage, report it to the Canadian Wildlife Service (867-393-6700) or the TIP line (1-800-661-0525).

The Aishihik and Kluane areas are interspersed with small grasslands that are home to many rare plant species and may be relics of Beringian steppe communities.

Article prepared by Shannon Stotyn, Canadian Wildlife Service, and Lori Schroeder, University of Alberta

An early start: Biologists flying over the Aishihik herd on May 18 were a bit surprised to see several young calves in the herd. Biologists estimate that they would have been born in early May – most calves are born in late May or early June. (YG photo)
Census 2011:

Aishihik herd now numbers 1,230 animals

Environment Yukon biologists were out in July to count the Aishihik bison herd. Using a mark-resight method, the count was 1,230 animals in 2011, up from an estimated 1,150 two years earlier.

The team employed the same methods used for the census in 2007 and 2009. This year they marked 101 bison with paintballs. Over the following week, using helicopters, three separate crews counted bison on different days in the core range area.

By comparing the number of marked bison against unmarked in each survey, the biologists could estimate how many bison are using the area. The bison surveys had similar proportions of marked vs. unmarked animals, giving biologists greater confidence in the results.

July is the best time to count the Aishihik herd because the animals are congregated in the alpine and relatively easy to spot. However, young calves accounted for a large portion of the population and some were expected to die over the course of summer and fall, lowering the overall population.

*Article prepared by Kathi Egli, Bison Program Technician*

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**Wood Bison Banter**

*Wood Bison Banter* is published once a year by Environment Yukon on behalf of the Yukon Wood Bison Technical Team to highlight current news and rules. It is the reader’s responsibility to know and obey the laws for hunting, land use and safety.

If you would like to submit a story or story idea, or have suggestions on ways to improve the newsletter, please contact Kathi Egli at 867-661-0408 ext. 5662, or kathi.egli@gov.yk.ca. A digital copy of this and past Bison Banters is available at [www.env.gov.yk.ca/bison](http://www.env.gov.yk.ca/bison).

The Wood Bison Technical Team identifies and evaluates research involving Yukon’s bison herd. It recommends changes to the bison hunt rules from time to time in support of the adaptive management approach used by Environment Yukon. The team members are appointed by the following governments and organizations: 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, and Environment Canada.

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**Hunt Wisely Update**

The *Hunt Wisely: Bison* brochure is being updated to include the latest information about wounding loss, meat wastage and firearm requirements. Last season COs dealt with four cases of wasted meat, an unusually high number. While most hunters are using the right sized calibre and ammunition, there are still a few who have not read their permit conditions carefully. Look for the new edition of *Hunt Wisely: Bison* early in 2012. For now, you can pick up the old version at Environment Yukon offices or online at [www.env.gov.yk.ca/bison](http://www.env.gov.yk.ca/bison).

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**Bison–vehicle collisions**

The Wood Bison Technical Team believes that highway corridor hunting has virtually eliminated vehicle accidents with bison. As a result, the corridor hunt will continue in the Extended Season Area (Sept. 1 - March 31).

The corridor hunt has greatly reduced the need to chase bison off the highway as well, although cow-calf groups do appear in summer along with bulls in June. Since there is a lot of daylight in summer the risk of accidents is much lower.
Collaring efforts continue

Yukon government biologists try to keep about 30 bison collared at any time. This year the focus is on collaring more bull bison.

Both the GPS and radio collars allow for bison movements to be tracked by overflights. The GPS collars record detailed movements. The collars are yellow so they can be easily spotted by hunters – it is unlawful to shoot collared wildlife.

Tom Jung and Michelle Oakley collar a bison last winter. (YG photo)
Bison harvest down slightly

119 bison were harvested last winter, about 25% less than the previous year’s total of 152.

However, this decrease comes after two record years and was still the fourth year in a row with 100+ bison harvested.

There were two major changes in 2010-11 which may have been factors:
- The 6-week hunting break in mid-winter, and
- The Nov. 1 start to hunting in the bison management area.

As well, this was the third year the hunt was offered without a permit lottery. New bison hunters were not required to take the bison course, although it continues to be offered to interested hunters.

Almost 38 per cent of the bison were harvested in March, 2011. Of the 115 total, 73 were bulls. Ideally, at least half of the animals harvested should be cows.

Along with the decrease in bison harvested has come a decrease in hunting success by permit holders. Wounding loss is difficult to measure. Kill reports filed by hunters suggest that a significant number of the animals harvested last season had been shot before.

Wolf-killed bison

The Haines Junction Environment Yukon office received three reports of wolf-killed bison over the last year.

Last March, Environment Yukon biologists Troy Pretzlaw and Lorne Larocque were on an aerial survey when they saw a pack attack an adult female bison. (Elsewhere, wolves typically attack calves, yearlings or injured animals.)

“Right at our camera site we saw bison and realized they had at least three wolves working them,” recalls Larocque. “The bison cow they were on seemed to keep dropping back intentionally to try to keep the wolves from the rest of the group.”

“We did see her get latched onto once on the right rear quarter and once on the right shoulder. We saw a wolf getting kicked.” By the time the crew had landed, the bison were 1 km away and it wasn’t clear how things ended.

Wolf predation on bison is becoming a more common occurrence – quite a change from 2007, when we had the first concrete evidence of wolf-killed bison.

Wolves harassing an adult female last March. It seemed that the bison was drawing the wolves away from the rest of the herd. (L. Larocque photo)

How healthy is the herd?

We have no reports of disease in the Aishihik bison, but other bison herds in North America have experienced diseases like anthrax, Johne’s disease, brucellosis and tuberculosis (TB).

To expand knowledge of bison health, the Yukon Wood Bison Technical Team is working with Dr. Mary VanderKop, the Yukon’s Chief Veterinary Officer, to develop a health monitoring plan. A pilot project over the coming year will determine what sampling can be done with the help of hunters.

Maintaining herd health is part of the Yukon Wood Bison Management Plan as well as the National Wood Bison Recovery Strategy.