



RANCHERS CO-EXISTING WITH WILD PLAINS BISON

The Challenge

Prior to European settlement, plains bison were a primary source of sustenance for Indigenous (known as First Nations) Peoples living on the Canadian prairies. Once numbering in the millions, hunting brought the plains bison (*Bison bison*) to near extinction in the late 1800's. Since 1969, a free-ranging population of plains bison has been roaming the southwest corner of Prince Albert National Park, Saskatchewan after being introduced to the area to provide an additional meat source for Indigenous Peoples.

The Sturgeon River plains bison population peaked between 2006 and 2008 at over 400 animals, but by 2012 the population had declined to about 200. The greatest problem facing the bison is a lack of habitat due to land conversion and competing land use, such as agriculture and urbanization. Other threats include domestic cattle disease and the risk of genetic contamination from escaped ranched bison, including some that may carry cattle genes.



Prince Albert Model Forest, Canada

Established: 1992 | Area: 367 000 ha

Facts

- Plains bison were listed as threatened in Canada in 2004 by COSEWIC, the Committee on the Status of Endangered Wildlife in Canada.
- The total number of free-ranging and semi-captive mature plains bison is just under 1000, and there are fewer than 5 populations.
- The Sturgeon River plains bison population lives in an unfenced area within their historic range, the only herd of its kind in Canada.
- There are about 50 landowners in the area of which 25 farm or raise cattle and domestic bison.

About 20–30 years ago, the animals began leaving the National Park to roam on farms and ranches in the surrounding area. Bison venture out of the National Park mainly during spring and autumn, most likely looking for high-quality vegetation. Bison prefer to graze newly cut hayfields with fresh growth, but will also eat other agricultural products thereby reducing available food stocks for cattle. They will also wallow (roll about or lie relaxed in mud or water, especially to keep cool, avoid biting insects or spread scent) and make trails in crops and pasture causing damage to fences and hay bales left in the fields, and occasionally disturb other livestock. As well, once they visit an area, they usually return to those same meadows and fields.

Gord Vaadeland, Executive Director of the Sturgeon River Plains Bison Stewards and a 3rd generation rancher, has observed the situation first-hand. “At one point, we counted 385, 1200-pound animals on our ranch, which is a bit of a different impact than a couple of deer,” said Vaadeland. “In about 2006, it reached a point where landowners decided they wanted to be organized because a lot of talking was happening, and not a lot of results from that.”

Finding a solution

With help from Prince Albert Model Forest, landowners decided to organize themselves into the Sturgeon River Plains Bison Stewards to have their views heard and to find a balance between bison conservation and agricultural and ranching activities. “Through the Model Forest, we were able to support them in creating this stewardship group that looks after the bison and assists with the research that’s done,” explained Susan Carr, General Manager of Prince Albert Model Forest. “[The group then] tried to come up with strategies for how to keep bison away from their own domestic bison and cattle.” Added Vaadeland, “The Model Forest was absolutely critical to the formation of our group.”

Prior to this, the National Park had been working with local landowners to prepare a plains bison management strategy. With the emergence of the Plains Bison Stewards, the ranchers were able to take a lead role in developing a long-term management plan in cooperation with Parks Canada, the provincial government, Indigenous Peoples and local communities. “It’s not the first wildlife management plan in the world,” said Vaadeland. “The unique thing about this, though, is that it was led by the ranchers.”

In addition, the Sturgeon River Plains Bison Stewards initiated a regional outreach program in cooperation with Prince Albert National Park. The program includes public information sessions, visits with farmers and ranchers, production of the Bison Times newsletter, a website and e-mail updates.

The Sturgeon River Plains Bison Stewards is a group of more than 60 concerned ranchers, farmers and other stakeholders (conservation NGOs, municipalities, eco-tourism companies, and people concerned about this unique herd) working with Prince Albert National Park and the Saskatchewan Ministry of Environment to allow Canada’s only wild herd of plains bison still living freely within its historic range to co-exist with local landowners in a mutually beneficial way.

Results and impact

To reduce the negative impacts of bison, the Plains Bison Stewards encourage and facilitate conservation actions on private lands, including:

- working with federal and provincial governments for habitat management to encourage bison use of non-problem areas (provincial or federal lands away from agriculture)
- diverting bison from problem areas before they get there, such as the ongoing construction of diversionary fences on private land
- liaising with compensation programs and helping landowners submit claims

“We’ve definitely reduced financial loss through our project, we’ve definitely improved tolerance of local people, and then definitely brought a lot of international attention” said Vaadeland.

The Plains Bison Stewards have also partnered with Laval University in Quebec City, to better understand bison ecology. This knowledge helped in the development of a collaborative management plan based on the goal of the herd becoming a self-sustaining, free-ranging plains bison population. The plan also helps determine best management practices. For example, National Park staff are now using prescribed burning at certain times of the year to promote the expansion of meadows and augment bison habitat.

The existence of the Sturgeon River plains bison population has also allowed Indigenous communities to once again benefit from the presence of bison on the landscape. In recent years, local hunters have been able to harvest wild plains bison as a means of providing nutritious food for their communities. It has also resulted in a tremendous opportunity to reconnect Indigenous youth with their heritage through local education programs.

To date, Indigenous communities have contributed to the development of the management plan in an advisory role, but the Bison Stewards envision a larger role for them in the future through the development of an Aboriginal/Landowner Caucus related to the harvest of bison on private land, as well as an Aboriginal Elder/Youth Knowledge Exchange program. According to Vaadeland, “The real benefit of working through the Model Forest is the ability to establish relationships with First Nations communities. It provided us with the connections we’ve needed to continue to foster those relationships.”

Moving forward, secure funding will be critical to long-term conservation efforts as well as conflict resolution. Completion of the management plan, which was endorsed by the Government of Canada and the Province of Saskatchewan in 2013, will aid the Bison Stewards in applying for funding from a wide range of groups. Through the support of the Prince Albert Model Forest, landowners, local municipalities and communities, wildlife organizations, Indigenous Peoples and the Bison Stewards will continue to cooperate in managing the bison herd. “They’ve been really successful” concluded Carr. “That whole seed of an idea started here with Model Forest support.”

To find out more

- International Model Forest Network: imfn.net
- Prince Albert Model Forest: pamodelforest.sk.ca
- Sturgeon River Plains Bison: bisonstewards.ca
- Video: youtu.be/nVW84oQ07DA

The International Model Forest Network brings people together to test and apply innovative approaches to the sustainable management and use of the world’s landscapes and natural resources.

IMFN.NET



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