

JUDGES' COMMENTS

This story can only take place in Alberta, but the author brought in an impressive range of voices and a balanced range of perspectives in a compact space. The article is well imagined and well built. Impressive.



PLAINPICTURE/JIM BRANDENBURG

Don't FENCE Me In

Wild bison are coming
back to Alberta.
Are we ready?

By KEVIN VAN TIGHEM

TRY AND PICTURE THEM ALL. On his first visit to the Waterton area in 1865, John (“Kootenai”) Brown wrote: “The prairie as far as we could see east, north and west was one living mass of buffalo. Thousands of head there were, far thicker than ever range cattle grazed the bunch grass of the foothills... None of our party up to this time had ever seen a buffalo.”

They were seeing a doomed species. Deliberately and wastefully slaughtered by a newcomer people, within barely two decades North America’s great bison herds—once totalling more than 30 million—were all but gone. Only empty grasslands and bleached bones remained.

Annual Métis bison hunts, in Brown’s day, sometimes filled more than a thousand Red River carts with bison meat. Those hunts had ended by 1880 for lack of bison. The US Army had overseen the killing of millions of the great beasts; desperate Indigenous people and wasteful colonizers had hunted down the scattered survivors. By 1889 barely 1,200 North American plains bison remained.

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**COLIN KURE,
CATTLE RANCHER**

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CODY SPENCER
BISON RANCHER

Although a few hundred wood bison survived in the far north, the continent's largest land mammal was gone from the plains, foothills and mountains of what would become the province of Alberta. Soon even the bleached skulls and bones vanished, gathered up by settlers and sold for fertilizer.

To the Indigenous people of this place, the empty plains and forests were a silent horror. Their cultures, languages, spiritual traditions and livelihood were all, to varying degrees, tied up in those massive beasts. Losing the bison was like having their very souls torn out. But Canada's first prime minister, John A.

Macdonald, thought it a very good thing. “I am not at all sorry,” he said to Canada's House of Commons in faraway Ottawa. “So long as there was a hope that bison would come into the country, there was no means of inducing the Indians to settle down on their reserves.”

Alberta became a province at a time when wild nature was considered a godless waste awaiting the plows of immigrant farmers to bring it to its God-intended use. Alberta's natural ecosystems were simply raw material for future commerce. The people whose identity resided in the land and its bison were in the way.

With the bison gone, those people retreated to Indian reserves to live as paupers. Bison range got turned upside down and planted to wheat. Much of it was fenced and filled with domestic cattle. When hungry wolves and bears had to shift from wild prey to domestic meat too, the newcomers put out strychnine baits. Ravens and eagles fed at the poison baits and the skies grew emptier. Insects and amphibians that had lived in bison wallows and dung became rare; some, like the Rocky Mountain locust, went extinct. The prairie wind hissed with the hollow lament of ghosts.

Everything had changed. Now, however, the bison are coming back. Everything may be about to change again.

IT COULD BE ARGUED THAT BISON HAVE been back for a while. Starting with a small herd that the Canadian government bought from Montana rancher Michel Pablo and installed between 1907 and 1912 in Elk Island National Park and just south of Wainwright, the number of fenced-in bison in Alberta grew steadily through the 20th century. The Wainwright Buffalo Park was closed in 1939 but Elk

Island has since become the world's most important bison conservation facility. Commercial herds have also grown to feed a growing demand among consumers for high-quality meat. Many of Canada's more than 120,000 captive bison are now raised on Alberta ranches.

But as Lethbridge-area bison rancher Cody Spencer points out, commercial bison contribute little to either ecosystem health or Indigenous cultural renewal; they are simply livestock. Spencer feels there is both room and a real need in Alberta for wild bison too. Alberta's regulatory regime, unfortunately, doesn't allow that. With the exception of two small herds—one in the Hay-Zama Lakes region on the Northwest Territories boundary and another south of Wood Buffalo National Park—bison are conspicuously absent from the province's wildlife regulations and its formal listings of species at risk. In Alberta, unlike other provinces and territories, wild bison can't officially exist.

COLIN KURE WOULD LIKE THAT situation to continue. Kure ranches cattle near Rocky Mountain House and is active in the Alberta Fish and Game Association. He speaks for both the ranching community and many hunters in protesting the recent reintroduction of wild bison to Banff National Park. Parks Canada brought 10 bison cows and six bulls to the park's remote Panther River valley in 2016 and put them into a fenced pasture where, the following spring, the cows gave birth to the first calves of what will soon be a free-ranging herd. Parks Canada plans to turn the bison loose in 2018, with strategically placed fences to keep them from heading east into the foothills where Kure and other ranchers pasture their cattle.

Ranchers worry that government fences won't stop those bison. They expect the big animals to become a costly problem: competing with domestic livestock for forage, breaking down ranch fences and spreading disease. Some hunters fear that bison could displace valued big-game animals such as bighorn sheep and elk from long-treasured hunting grounds, including the Ya Ha Tinda grasslands along the upper Red Deer River.

“There isn't a fence in the world that will hold bison if a pack of wolves gets on them. And a fence that's permeable to elk, deer, bighorn sheep and moose certainly will not contain bison... Those animals will move,” Kure wrote in a letter meant to mobilize public opposition to the plan.

Bill Hunt is Banff National Park's resource conservation manager responsible for the bison restoration initiative. He respects Kure's concerns. His staff spent two years trying to perfect a fencing design

that would work in the park's wilderness landscape. Ranchers who raise semi-domesticated bison have found that six-strand barbed-wire fences, especially when buttressed with one or two strands of electric wire, will keep bison confined. It's the other animals that are a problem: those fences stop them too.

The Banff recovery team couldn't come up with a fence that would stop bison but let other animals move freely through their home ranges. Instead, they are counting on a high-tech solution. The eastern escape routes for park bison are fenced with industry-standard fences, but where monitoring has shown that those fences block trails that are important for elk, sheep and other animals, parks staff tie the six strands up into two strips, creating a gap big enough for wildlife to slip through. All the original bison wear radio-collars that send out a warning signal when the bison wander close to those critical fence-crossing locations. When bison are nearby, park biologists unbundle the wire to block the animals until they wander deeper into the park again.

It's a labour-intensive and costly approach, and it will only work as long as the original radio collars work. Parks Canada isn't collaring calves born in the park, so uncollared bison will soon outnumber the original bunch. And critics still point out a big weakness in the fencing plan: rivers draining out of Banff National Park flood every spring. Fences are bound to wash out. Bison will escape eventually.

Still, Hunt suspects that fears about wide-ranging bison may be overblown. “Historically bison were a nomadic species but I think a lot of that was the sheer number of animals. They would deplete a food resource and move on. So right from the get-go, managing herd size has always been a key concept here.”

The Panther River experiment is premised on the idea that bison born in Banff to young cows who had their first calves in Banff will consider those high valleys their home ranges. It's the same approach tried successfully in Grasslands National Park a decade ago. Then, by keeping herd size within the capacity of the mountain grasslands to feed them, park staff hope the bison will have little inclination to wander.

How to keep the herd size down? There really is only one answer: hunting. Although wolves hunt them successfully in places such as Wood Buffalo National Park, bison are hard to kill. Wild carnivores usually prefer smaller prey. Hunting—either by Indigenous people or licensed sport hunters or both—will have to play a role.

“There are lots of hunters in the Panther Corners area [downstream from the bison reintroduction area] already,” says Hunt. “There's access for horse-drawn wagons. We're hoping there wouldn't be any



Top: Trucks transporting 16 bison drive from Elk Island National Park to Banff National Park, some 400 km away. Middle: The 2017 Panther Valley reintroduction marked the first time wild bison had been seen in Banff since 1885. Bottom: One of 10 calves born in the spring of 2017.

TOP TO BOTTOM: JOHANE JANELLE/PARKS CANADA; DAN RAFLA/PARKS CANADA; KARSTEN HEUER/PARKS CANADA

bison shot when the herd is small and every animal is genetically important, but when the herd gets a little larger, hunting would be a fantastic thing. Not only would it help with population goals but it might encourage bison to stay inside the park.”

The sticky issue remains: What is the status of a park bison when it wanders across the boundary? “In Alberta,” Hunt says, “bison are considered livestock. Because our program is to restore them as wildlife, our bison are not livestock. They’re classified as wildlife in Banff. If and when they do leave the park, they would be non-status.”

That means they can be shot on sight—something that appears unlikely to change soon. Alberta’s Wildlife Act authorizes the minister to change the status of a species of animal only on the recommendation of an advisory committee. But the Endangered Species Conservation Committee has been inactive since before the last election, caught up in the government-wide review of agencies, boards and commissions that has been dragging on since 2015. Wild bison that wander out into the Alberta foothills will remain unprotected and unmanaged until the government gets around to classifying them as wildlife.

WHILE THOSE WORRIED about wild bison are focused on Banff’s new herd, they should also look farther south, where wild plains bison—unmanaged by parks staff—will soon almost certainly reappear.

In the spring of 2016 a herd of 87 bison went by truck from Elk Island National Park to the Blackfoot Reservation in northern Montana to serve as the nucleus of a new free-ranging conservation herd. The herd, which has already grown to more than 150, ranges a large ranch on the northern edge of the Blackfoot reservation—adjacent to the Alberta border. Although some new fencing went up around the boundaries of the ranch before the new herd’s arrival, it’s not nearly to the standard of Banff’s fences. Blackfoot bison will likely wander freely into southern Alberta within a couple of years.

Ranchers north of the border are worried. As one area rancher confided to me: “It took me a while to understand the spiritual importance of the bison to the Blackfeet, and I do. But I don’t know what to expect. Those bison are going to end up nose to nose with Alberta cattle. Are they diseased? Who knows? Nobody has talked to us.”

Disease concerns are understandable. When the Pablo–Allard bison arrived in the Wainwright reserve, area cattle herds already harboured tuberculosis and brucellosis. The cattle infected

the bison and the diseases spread quickly in the overcrowded reserve. A few years later, in what came to be known as the century’s biggest conservation blunder, Canadian bureaucrats decided to close the reserve and ship young animals north to the Peace–Athabasca delta, where the world’s last known population of wood bison had recently been found. They rationalized that the young bison might be disease-free. They were wrong. The new immigrants not only contaminated Wood Buffalo National Park’s wood bison with plains bison genes, they also spread the cattle diseases into the herd.

Yellowstone National Park’s bison are infected with brucellosis too. Unlike tuberculosis, brucellosis is harmless to bison. In cattle, however, it causes cows to abort their calves. American authorities have repeatedly slaughtered bison that wandered out of the park towards cattle herds, triggering controversy. Ironically, analysis has shown that whenever brucellosis shows up in the area’s cattle it’s from elk, not bison.

Where the Banff and Blackfoot bison are concerned, at any rate, Alberta ranchers have little to fear. Both herds originated from Elk Island National Park, where rigorous disease testing and herd health measures have been in place for almost a century, partly in response to the Wood Buffalo disaster. Bill Hunt says Elk Island bison are the gold standard for conservation herds: genetically pure and disease free. “It can’t get any better in terms of where those bison came from. They’ve been maintaining a disease-free status for decades.”

IF BRINGING BISON BACK TO EVEN A small part of their original Alberta ranges is proving complicated and controversial, why even bother?

Retired park warden Wes Olson spent decades working with bison, first in Elk Island and then as the “buffalo cowboy” who coordinated the successful 2005 reintroduction of plains bison to Saskatchewan’s Grasslands National Park. “Bison are a keystone species,” he says. “They affect every other species that lives there.”

One example: in areas with bison, almost a third of all bird nests are lined with bison hair, the second-warmest natural insulating material in North America. The hair not only increases egg hatching rates, it then protects nestlings from predators by masking odours. The absence of bison may help explain why many native grassland bird populations are in trouble.

Another example: bison dung supports over 300 native invertebrate species—a lost food resource for birds like sage grouse, which are now critically endangered in Alberta. Cattle droppings, on the other hand, support few bugs because most cattle

are medicated with ivermectin and other chemicals toxic to invertebrates.

Bringing back bison may help bring back not only bugs and birds, but frogs too. The big hollows worn into prairie by wallowing bison fill up each spring with snowmelt and rainwater. Toads, frogs and insects breed in those temporary wetlands. Restoring that critical habitat may help recover at-risk amphibian populations.

“Albertans are able to coexist with elk,” says bison rancher Cody Spencer. “There are issues, but we know how to manage them. Why would bison be any different?” Pointing to the fact that farmers and ranchers already share land with wild bison in central Saskatchewan and eastern Utah, he says a study south of the border offers good evidence that agricultural conflicts may be less than feared.

In Utah’s Henry Mountains about 300 wild bison share the range with domestic cattle. When areas where their cows congregate began to show signs of chronic overgrazing, ranchers suspected the bison were to blame. Researchers decided to monitor animal distribution and measure grazing rates using fenced enclosures. They found that the bison consumed barely 14 per cent of the available grass, mostly in areas where cattle seldom go. Jackrabbits, surprisingly, were the culprits—eating more than a third of the available cattle forage.

Spencer suggests that bison could even enable us to rethink the whole range-agriculture industry. “It’s awfully costly trying to force-fit cattle into our ecosystems,” he says. “There are all the costs associated with calving, pesticide application, winter feeding, predator conflicts. You don’t have those costs with bison.”

Wild bison ranging freely in the Alberta foothills and prairies will create new opportunities—certainly for those who opt to hunt their own meat, but possibly even for ranchers interested in shifting from babysitting cattle to harvesting semi-wild bison. Regardless of how we exploit the recovered herds, though, a keystone species will once again shape ecosystems that have been without it for a century and a half. The changes may prove profound.

NO LESS PROFOUND WILL BE THE IMPACT on Indigenous cultures. “What would happen if you took the cross away from Christianity?” asks Blackfoot elder and teacher Leroy Little Bear. “The buffalo was one of those things. The belief system, the songs, the stories, the ceremonies are still there, but the buffalo is not seen daily... The younger generation do not see buffalo out there, so it’s out of sight, out of mind.”

Little Bear played a pivotal role in drafting the Northern Plains Buffalo Treaty, which led in part to the Blackfoot bison reintroduction. Initial signatories

in fall of 2014 included the Siksika, Piikani, Kainai and Tsuu T’ina first nations as well as Assiniboine, Gros Ventre, Sioux, Salish and Kootenai tribes from south of the Medicine Line. The Stoney Nakoda and Samson Cree signed on the next year. It was the first treaty among Indigenous nations in over 150 years.

“The Buffalo Treaty is historic,” says Little Bear. “A treaty among just Indigenous cultures to work together on common issues: conservation, culture, education, environment issues, economics and health research. In the centre of that is the buffalo.”

“Our elders said, we want to restore the buffalo. But it’s a big job. We can’t do it on our own. We need partners.”

Marie-Eve Marchand is one of those partners. She was a founding member of Bison Belong, an advocacy network that sprang into life in 2009 to pressure Parks Canada to follow through on its commitment to bring bison back to Banff National Park and to build public support for the initiative. That work successful, Marchand now provides administrative support and media coordination for the Buffalo Treaty. “We eliminated the beaver and the bison, both keystone species,” she says. “Now we’re turning that around.”

Marchand likes to cite Chief Wesley of the Stoney-Nakoda, who said at one Treaty discussion that the bison is important on many levels. “Think of it as our Walmart,” he told her. “But think of it also as our Church.”

“With the return of the buffalo,” Leroy Little Bear adds, “those things that were part of those regularly occurring patterns in nature, the buffalo was part of it. So we’re bringing back those regularities, and those regularities are part of what anchors our societies.”

“But there’s a whole lot more. There’s also their larger role in the ecosystem. As a human species, we play a very small role in that ecosystem. And it’s a big job to bring about an eco-balance. So we need help and the buffalo will do that. Is Alberta ready for that? Probably not.”

Probably not. But if wild bison really are coming back to the western foothills and southern prairies, a lot of things will change—likely for the better. If we think of bison recovery as part of Alberta’s efforts at reconciliation with First Nations, it might change us too. ■

Kevin Van Tighem is a writer, Alberta Views columnist and former superintendent of Banff National Park.

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LEROY LITTLE BEAR, BLACKFOOT ELDER