Minnesota Unraveled

EP104 - Part One: Searching for Bison in Minnesota History

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Chantel Rodríguez:

Standing in Shakopee looking out, I couldn't make sense of it. Here I was in Minnesota, looking out at a bona fide herd of bison in a state famous for its north woods, prairies and bison were the last thing I expected to see. When I think buffalo, I think Wild West. But I've recently learned that bison lived here in Minnesota for thousands and thousands of years. That was all before Europeans arrived and brought changes that nearly drove bison to extinction. And now they're being brought back. What do we really know about the history of buffalo in Minnesota? How did they almost go extinct? And more importantly, why and how are they being brought back?

For this subject, we are trying something new, a two-part episode on these animals relationship to Minnesota prairies and peoples. This is part one, searching for bison in Minnesota history. But let's not get ahead of ourselves. First things first, what do we even call these creatures, bison or buffalo?

Before we even get started into the history of bison, I want you to clear something up for me and that is, you often hear today the terms bison and buffalo being used interchangeably, as a historian, when you're working with historical records, and I'm assuming most of them written by people of European ancestry, is there a single term that they used in their records historically to talk about buffalo or bison? Or did they kind of use it interchangeably like we do today?

Peter DeCarlo:

You're right that most of the sources I've been consulting are written by European Americans who came into the region 1600s, 1700s, 1800s. And so where the term buffalo comes from, which is the one that predominates in the historical record, the theory is that it comes from French fur traders who came into the region in the 1600s. And for them, they saw this animal they had never seen before, the bison and the closest corollary they had was that it was basically like a cow. The word for beef and cow in French, I don't know how to speak French, but it's les boeuf, and the theory is that the les boeuf morphed into buffalo. So buffalo is the common name for the animal and bison being the scientific name. But in the sources, buffalo is really what caught on for European Americans in the country specifically then United States citizens is what they called it, the buffalo.

Chantel Rodríguez:

That's Peter DeCarlo, he's a historian with the Minnesota Society where he works on histories of the American West, Native Americans and colonialism. But he also does independent research. Most recently, he has been digging into environmental and animal history. Like he said, most of his sources were written by people of European ancestry, but indigenous peoples were here long before the Europeans and had their own names for these animals. For that, I talked to Ferin Davis Anderson.

Ferin Davis Anderson:

I'm the natural resource manager at the Shakopee Mdewakanton Sioux Community in our natural resources department. I'm also an enrolled citizen of the Turtle Mountain Band of Chippewa, Ojibwe, Anishinaabe, Michifs. We have a lot of different names in our tribe, a lot of different people.

Chantel Rodríguez:

Would you mind sharing what you call bison in the language of your community?

Ferin Davis Anderson:

In the Dakota language, there's a lot of different terms that are associated with bison. So our languages are very diverse, they're very complicated, they can be complicated. So in the Dakota language, Pté is one term that is used and it can be to describe a female bison. Ṭaṭaŋka I think is something that's more prevalently known throughout maybe Lakota Dakota communities and that can be associated with the bison species or a male bison.

Chantel Rodríguez:

But what is a bison? For that, I reached out to Mary Mallinger, a conservation biologist at the Minnesota Zoo.

Mary Mallinger:

It doesn't take long for anyone, whether it's a photo or in person, to be impressed by them, primarily their size. They're the largest land mammal in North America. Adult males and females in terms of weight can reach anywhere between maybe 1,500, 1,700 pounds up to over 2,000 pounds. So an adult male bison, a bull, can weigh well over 2,000 pounds. Their heads are often a lot bigger and shaggier and they'll actually get a bit of a beard when they're adult males. They have a really characteristic hump on their back and quite a thick neck and a lot of that is due to the incredibly powerful neck muscles that they have.

And one of the reasons they have those muscles and they're so strong is in areas where there's a lot of snow in the winter, they're native to North America and they survive year-round. So they will actually use their head to basically plow snow. And I mean sometimes it's feet of snow that they have to plow down through to get down to that grass in the middle of winter. So they will plow through snow, creating trails with their feet. Again, incredibly powerful animals. They're huge. They typically in the wild can live about 15 to 20 years.

Chantel Rodríguez:

In true podcast form, I wanted to know what do bison sound like?

Mary Mallinger:

Bison make a variety of sounds, actually and the more time you spend around, it's really fun and enlightening to listen to them. They're definitely not silent. They certainly grunt a lot. And same with when they're wallowing, they have a wide array of vocalizations. But often, especially if you've ever seen males doing it as a display, there's a lot, they're communicating a lot through their physical body language, but also through their voice. And they will speak to one another, I believe, and you can hear them. I think their most characteristic noise is like a very kind of low, rough kind of gruff grunt. And they do that for a variety of reasons, but they actually will sometimes even especially young bison when they're playing together and sometime I've seen them actually jump up on rocks and jump off in a really cute playful way. And they'll almost squeal a little bit, which is really sweet. So generally speaking, they do make actually a surprising number of noises.

Chantel Rodríguez:

Try to picture a bison in your mind's eye. You've got the animal, but think about where you've placed it. What does the landscape look like? I know buffalo are herbivores, so I could picture a large grassland. But if you're anything like me, it probably looks a lot more like Yellowstone than Minnesota. But Peter told me that the North Star State used to be home to bison of its own.

Peter DeCarlo:

Most people think of them as an animal of the American West and that's certainly the history that has entered American mythology. I think an official national story of the country as well, that this is just a charismatic animal of the west. But this is an animal that it's range once extended across most of North America at one point. So in particular here in the region of Minnesota, that's really the basic fact is that in two thirds of the state, if you live here, there were likely bison living where you are right now back in the 1800s and back before that.

Chantel Rodríguez:

Wow, that's fascinating because I think for me, every time I heard of buffalo history, I think of the wild, wild west. But that actually leads me to wonder a bit more about what the landscape looked like in Minnesota in the 1700s. So I wonder if you could paint a picture for me. What did the landscape, the land, the animals, the bison, the ecosystem look like in the 1700s here, what we now call Minnesota?

Peter DeCarlo:

Of course, yes. This is just the most fascinating, satisfying thing for me as a historian. So I always think of history that imagine yourself looking at a landscape and it's shrouded in fog and clouds. And as a historian, every once in a while you can part that fog and see the landscape of history and for a moment be able to figure out what was going on by doing your research. And that's history.

Chantel Rodríguez:

When the fog rolls back from Minnesota history, what is it that we can see?

Peter DeCarlo:

So if we think of from, let's just say from the mid-1600s to the mid-1800s, Minnesota from the northwest corner of the state on a diagonal line, roughly following, if people know I-94 corridor through St. Cloud and then cutting above the Twin Cities a line and then going into Wisconsin. Everything west of that would've been prairie. And specifically for most of the history, tallgrass prairie, so prairie that at its highest would've reached over your head. And this is primarily where buffalo lived, but just to the east of that, there were tendrils of what's called oak savanna. So think again of a prairie landscape but with big large oaks spreading their limbs out basically horizontally and buffalo lived in that landscape as well. And then there was Aspen Parkland in the northwest of the state. But even in the north woods that we all know well as Minnesotans with pine trees, there were along the rivers, especially because Native Americans would burn the landscape to create more prairie, they managed the landscape to create open areas along rivers.

And even up close to Duluth, the headwaters of the St. Croix, even up to the shores of Lake Superior possibly, there were buffalo that lived in that landscape as well. So that's a really good question because part of this history that's so difficult even for myself is imagining what this land was like because it has been changed so drastically by human beings. We talked about the major biomes that existed, the different landscapes, and to layer on top of that, we've talked about bison, but I also want listeners to try to be able to understand the abundance of wildlife that there

were. So there were other animals in the state that we don't typically associate with Minnesota. So elk were across the majority of the state. There were caribou to the north, wolverines all over the place. Wolves, which we think of in just northern Minnesota across the entire state. Passenger pigeons, which are now extinct, in flocks of their millions that would block out the sun. So it was really a land of abundance. It was even a land were grizzly bears sometimes made their way into western Minnesota.

Chantel Rodríguez:

As for how Peter knows all this, writings from people in the past with first-hand experience of Minnesota bison. The majority of these were written by European Americans. Starting in the mid to late 1600s, French colonial administrators funded expeditions to map, "Unexplored territory." Since these were fact-finding expeditions, the sights and sounds were documented in detail. But that doesn't mean the sources provide the full picture. Those writers didn't have all the information they needed to understand everything that they were seeing. So Peter can't take them at face value. He has to place those writings in the context of all that we know now about ecology and about indigenous communities' relationships with the ecosystems they lived in.

Peter DeCarlo:

Being a historian of Minnesota, and particularly, I've always focused on the 1600s, 1700s, 1800s. So a lot of fur trade history, treaty history, things of that nature. I know the written sources of that period well, say it's a scientific expedition going up the Minnesota River and I had used that source to write about interactions with Native Americans or how a treaty might've been negotiated. So for me, it was going back to sources that I knew well to begin with, but reading them in a new way. And that's something that historians do to create more accurate history, to revise old narratives, it's to use sources in a new way. Many of the sources I used were accounts of fur traders, their written accounts, but also the records they left behind of actual the fur trade and accounts of missionaries. And then there's a lot of expeditions that went up the rivers of Minnesota or across the prairies. And so what I've been doing is tracing those and then trying to map, literally creating maps on the landscape of where they note bison existed and then doing that across time.

Chantel Rodríguez:

Wow, that sounds like a lot of work, but very important work. And you said something about using sources in a new way. So I'm wondering if you could give an example of a source that you may have encountered previously and then you returned to it and said, "Wow, there's actually stuff here that I didn't know was there before."

Peter DeCarlo:

Father Louis Hennepin, someone who some listeners may know the name Hennepin, of course, is where Minneapolis is, Hennepin County.

Chantel Rodríguez:

Louis Hennepin was a Catholic missionary who worked in the region during the mid to late 1600s. Exploratory expeditions would often bring along a missionary to minister to the expedition members themselves, but also to preach their faith to any indigenous people they may encounter. Hennepin documented his travels. He was hoping to achieve fame and fortune through regaling European readers with his adventures. But just because he wrote in detail, it doesn't mean he got the details right.

Peter DeCarlo:

So he left an account of his experience in the land that became Minnesota, and he was here in 1680. And so this is a source that rightly so has been classified as a very colonial source, a source that colonizes history of Native Americans, particularly Dakota people. And it's been a controversial history as well. And so it's a source as a historian you need to be very wary of. You need to be careful when you use it. You need to understand the context. There's racist language in it, the language of savagery and civilization. Having studied the period, I knew the source well, so I could go back to it and use it in the way I want it to, this new way, and use it in my mind in a positive way to document a positive history.

So Hennepin is coming up the river and he encounters Dakota people. Now Hennepin writes that he casts it as if he was captured against his will. And then he writes quote, he says, "To oblige us to hasten on, they, the Dakota, often set fire to the grass of the prairies where we were passing so that we had to advance or burn." So he obviously didn't understand what was happening because we know from working with native people, they have a long history of ecology and managing environments. And in this case, they burned prairies. And because they knew if they burned it, then the growth would be more rich and they could return the following season to hunt buffalo there. So that's really a way that you can use a source and read it in a new way.

Chantel Rodríguez:

I think that's also an example of maybe an unexpected source that you're like, I am going to the archive and I'm looking specifically for documents that are going to reference ecology here at the landscape. And that's not how boxes in the archive are actually organized, you have to find them in these really interesting ways of finding an unexpected source where they mentioned something like this.

Peter DeCarlo:

Right. Yeah, it was a lot of feeling that I've been doing this history long enough that I could go back and read them responsibly and carefully. And also doing it with having now studied bison ecology, also understanding the animal that would help me read these sources for accuracy as well.

Chantel Rodríguez:

There's another piece I want to pull out of what Peter's saying. We can't understand how native people relate to bison and the land without first understanding that they have their own way of thinking about the natural world.

Ferin Davis Anderson:

From the western perspective, we use management a lot. And I grew up and went to school in a western context, so management was something that was part of my vocabulary too. But stewardship, I think, is more encompassing because when you're managing something, that means that there's a control over it. And we don't have control over the natural areas that we're stewarding. So we look at it more as a relationship. And so when you consider that you're tending these areas, that you're stewarding these areas, there's more of a reciprocity there, and you're viewing these beings as something other than an object. And so that's why I like to use the term stewardship rather than management or land management because I feel like it's more holistic and all-encompassing and a better terminology for us to use to remind ourselves that, again, these are our relatives, these plants and animals, they're relatives and we need to take good care of them.

It's all about relationships. We're building a relationship. And so to understand what they need from us, that's something that is built into the relationship. So you need to know what these different plants, what their names are. I try to know the Dakota name, the Anishinaabe name, the scientific name. So there's so many different names. And once you get an understanding of what their gifts are, I like to think of the things that they offer as our gifts because that's what they are. And I think in a western context, that's a really tough thing to wrap your mind around, that you're building a relationship with a plant, what does that mean?

And for me, that means I'm trying to understand how that plant interacts with other relatives and how we can be a good relative within that community. And so one way we can do that is just to acknowledge that they're a being or to acknowledge that they have value that's outside of how we would normally think of in a western context. So we often think of these ecosystems as providing services or ecological services. And that's also a very western way to look at things because yes, they're providing services, but I like to view that as they're providing a gift for us and we need to be thankful that that gift is there for us.

Chantel Rodríguez:

Let's take the bison as an example. So we talked a little bit about indigenous worldviews and relative relationships. I'm wondering how that worldview has shaped how indigenous people related to bison historically. If we want to say historically, prior to European arrival, and if there is a difference post European arrival, I'd love to hear that as well. But just trying to understand how your ancestors related to bison in the past.

Ferin Davis Anderson:

So the bison, they were a main part of our diet, a significant source of nutrients, medicine. We used them for clothing, for our shelter, for tools, we had very innovative ways that we use the bison. And examples of that that come to mind are their stomach, we would use their stomachs as containers for water. We would use their parts in our ceremonies. And so essentially every part of the bison was used. And you hear that a lot when native people are talking about the buffalo that no part was unused and they had a significant role in our communities. We relied on them for our livelihoods.

Chantel Rodríguez:

For centuries, the bison were a crucial part of both the physical and spiritual well-being of many indigenous communities in this region. These communities were careful to tend to the needs of the herd. Part of that tending was the fires that Peter mentioned a bit ago. Those were fires set intentionally by community members.

Ferin Davis Anderson:

Our ancestors, they used fire. Now I like to call it cultural burning, which is different than what we used contemporarily or prescribed fire. There's some differences there. But we used fire up until basically the early 1900s, right when the bison were also being taken away from us. That practice was criminalized too because again there was a lack of understanding of the benefits of fire. And so from a European perspective, fire was considered destructive and there were fires that happened in Europe that destroyed crops, destroyed homes, destroyed infrastructure.

But here we had a relationship with fire, just like we had a relationship with bison. And it took many generations of collective knowledge to get that understanding of how we're using fire, when we're using fire, purposes for fire. And so a lot of times we would use fire specifically related to bison to entice them to go to certain areas. And so once an area has burned, the new growth, the vegetation is usually much more nutritious, the bison are attracted to that. And so that would be a strategy that our ancestors would've used to attract bison to certain areas. They didn't do it on accident, they were doing it on purpose.

Chantel Rodríguez:

Ferin is making an important point here. The use of fire to steward the prairie landscape was a practice honed over generations of trial, error and observation. Those very same steps underpin the western idea of the scientific method, testing ideas through experimentation and observation of the results. That overlap is one that isn't lost on Ferin. In her role, she's been able to merge her training as a natural resource manager with her knowledge as a native woman.

Ferin Davis Anderson:

I think that people often forget too that the foundations of ecology is basically understanding the interconnectedness of everything. That's an interconnectedness that we want to learn and we want to bring back that knowledge to the community because our ancestors, they were observational, they were scientists. I like to think of them as scientists because, again, all of our knowledge was from observation for thousands of years. And again, that's basically what science is. You're doing observations and you're determining what's the cause and effect. And so I like to think of our work as bringing that in, but also understanding what the community's relationship is with these relatives. And so once you can understand that and bring some of their knowledge into your work, that's the best.

Chantel Rodríguez:

When we apply this sort of observation to the relationship bison have not just with indigenous communities, but with prairies themselves, the interconnection becomes even more clear. Back to Mary from the Minnesota Zoo.

Mary Mallinger:

Bison are ecosystem engineers, they're also often referred to as keystone species, which means they're very fundamental to an ecosystem, they shape that land, and they have almost an oversized impact on that ecosystem. So for bison, and specifically in grasslands and prairies here in North America, they really do shape the prairie, they shape the landscape in really dramatic ways. A few being that they often act as seed dispersers, so their coats are almost like a Velcro, so as they're walking through a prairie, they'll be dispersing seeds of grasses and other flowers. So they help with a lot of that. They create wallows. They basically roll around in the ground, which is a really awesome thing to watch a 1,700 pound animal doing.

And they will do it for a variety of reasons. Sometimes it's to take a dust bath, so they'll do it and it'll help with protection from fleas and mites and insects and things like that. But those wallows are essentially divots in the land and they will return to those same spots year and year and year. And so they'll often get fairly deep and pretty pronounced and those can actually then when there's rainfall on a prairie, they

will fill with water. And so they can actually act as sort of temporary pools or even watering holes for other animals, for amphibians and things and other insects for breeding grounds. So they really do shape the landscape in really dramatic ways.

Chantel Rodríguez:

Bison were at one time millions strong across America's prairies. What happened to make their populations decline so quickly? There's a story you might be familiar with of intentional slaughter and over hunting. And that's not wrong, but there's more to the story.

Peter DeCarlo:

I think what Europeans bring is a commodification certainly of buffalo as a resource for capitalism and for the market. And I think that influence, of course, if we follow the history, just becomes more and more dramatic and is really pointed to by historians as the main factor on a national scale and continental scale as the near death knell of bison and almost driving them to extinction is the market economy driving the harvest of bison robes for different reasons. There also used to be in the historiography really this argument that the US government, through particularly the US military, was responsible for the destruction of the bison and had it as government policy to destroy the bison herds.

And the motivation to do that was if the herds were destroyed, then Native American tribes that were successfully resisting colonization on the plains would have to surrender because their main source of food and subsistence would've been destroyed. It's really a more nuanced truth, which is that the US government, by not protecting treaty boundaries of native reservations, by not upholding promises and treaties to keep settlers off native land, and US army officers specifically allowing these hide hunters to go onto tribal lands to harvest the bison. That is how the US government played a role in the destruction of the bison and did so purposefully in an attempt to destroy native people on the plains. So those are, on the national scale, the main causes of the near extinction of the bison.

Chantel Rodríguez:

But destroying bison populations didn't necessarily mean slaughtering the bison themselves. Environmental damage and habitat loss played a large role as well.

Peter DeCarlo:

So as European Americans came westward and took up space, they not only hunted and eradicated the bison before them, but they destroyed bison habitat. So across the country, plains were made into cropland. And so even if bison had any chance to recover, they had no land to come back to. And also places where bison liked to go in

the winter, river valleys, woods, those were all taken up by settlement as well. So it's also a story of just destruction of habitat that bison need to thrive.

Chantel Rodríguez:

Here in Minnesota, a similar story played out. In the 1800s, the US government was focused on expanding westward, but that land wasn't empty. Native Americans thrived and continue to thrive on the land. The US government used the collapsing fur trade and the rising native debt it left behind to acquire native land in what we now call Minnesota. Native Americans were left with a painful choice. To survive, native nations were forced into signing treaties with the US government that ceded millions of acres of their land. In exchange, they were to receive goods, services, and money. The United States often failed to uphold its treaty obligations.

Despite these obstacles, native leaders were able to negotiate for reserved portions of their homelands. These would become what we now know as reservations. As more and more native communities were ushered onto reservations, the plains lost their careful stewards and the US government sold its newly acquired land to European settlers. Minnesota's new residents were impressed with the rich, fertile soil of the prairies and cleared more and more land for farming and homes. What they didn't understand was that the soil had ended up that way through indigenous peoples careful tending of the prairie.

Peter DeCarlo:

And by the 1840s and especially the 1850s, it's really clear that there's very few bison left in the state. And I also think a factor is it's when we get to the 1850s, we get to the history of treaties, land cession treaties in Minnesota where the majority of the native population is forced onto reservations with these treaties. And again, this is an animal that for thousands of years evolved and moved in tandem with native people. So without native people on the landscape managing it, to a startling amount, they were managing this landscape, as you read the sources, burning the prairies, drawing the bison up river valleys, without native people on the landscape like that, their habitat would've gone down as well.

And I think the final thing to mention, to make it really clear is that we can say generally after the 1850s, that's when true settlement of Minnesota begins. And so all that cropland that we think of in western and southern Minnesota, cornfields, soybean fields, that's where the prairie was. And when all that habitat was destroyed by European American settlers, if bison were ever going to come back, they had nowhere to come back to.

Chantel Rodríguez:

It's difficult to imagine the Minnesota of today as the home to thousands of bison, whether you consider them magnificent creatures or relatives of a larger family. But this history is about more than just the bison, it's about the prairie and the many people who live on it, all three are interconnected.

Mary Mallinger:

You really can't and I don't believe should even think about trying to separate the history of bison. The history is a very rich, interesting and also tragic history here in North America for both buffalo and people and the land, for all of it really. And so that is without a doubt carried through today. It's with the buffalo, it's with the land, it's with the people. So to not listen to that story and maybe try to facilitate it or tell it depending on who you are, is really doing, I think, an injustice to buffalo in Minnesota, to the land and the people of Minnesota.

Chantel Rodríguez:

But it's equally important to remember that the history of the bison, the prairie, and the people is a living one. Better understanding the landscape of this past can help inform the future.

Peter DeCarlo:

So I think by documenting this and even the basic fact beyond a shadow of a doubt that bison were across the majority of the landscape, it gives conservationists, the public, tribal governments, whoever, the argument that bison were here. And it's that if they were here, they have a right to be here and we can bring them back.

Ferin Davis Anderson:

I think that my takeaway is that if you can ever just go sit with bison, it can be very healing. And I didn't expect that throughout this whole process of reintroducing bison, but it's been a very healing process for me. And if you go sit with them for even a few minutes, you can really feel their impact.

Chantel Rodríguez:

Bringing these animals, these relatives, back to Minnesota requires more than you might think. It requires a deep understanding of the relationship between the people, the land, and the animals. Understanding the history of these ecosystems and our role in them is vital to ensuring their successful present, because the bison need a home to come back to in the first place. And as we now know, that means a

healthy, well-stewarded prairie. That's not something that happens overnight and it's not something that happens on its own. So in part two of our look at Minnesota bison, we'll hear from some of the people doing the work to bring the bison back and why it matters to all the people who call Minnesota home.

Special thanks to Dr. Amber Annis and Chloe Cashman and Deacon DeBoer for their help on this episode. And to Peter DeCarlo for his contributions to their research. You've been listening to Minnesota Unraveled, pulling on the threads of Minnesota history. I'm your host, Dr. Chantel Rodríguez. You can find more information on this episode, including transcripts, bibliographic resources, and MNopedia articles at our website, mnhs.org/unraveled. Minnesota Unraveled is produced by the Minnesota Historical Society in partnership with Pod People. Special thanks to our production team, Rebecca Chaisson, Angela Yih, Buffy Gorilla, and Brett Baldwin. And sound design and editing by Carter Woghan. Lead research by me, Dr. Chantel Rodríguez. Our theme music is Careless Wanderer by Arthur Benson. Funding for Minnesota Unraveled is provided by the state of Minnesota, the Legacy Amendment through the vote of Minnesotans on November 4th 2008, and our generous donors and members. Thank you for listening. Until next time, stay curious. And remember, the tapestries of history are all around you, just waiting to be unraveled.