The Bison:

How America's national mammal was almost eliminated

Alison Holderbaum

Hon 2973- Animals/Science/Society

Dr. Aparna Nair

December 16th 2022

Bison are commonly seen as the main representative of the American west and are even the national mammal of the United States¹. They are majestic and powerful, similar to how we view the United States itself. Although we think of the bison as being a uniquely North American species, its ancestors actually originated from Asia. "1.7 million years ago, the Eurasian steppe bison (Bison priscus bojanus) reached North America by crossing the Bering Strait". There were many species of bison throughout history that led to the modern bison (B. bison bison) that we are familiar with. These species adapted to environmental changes caused by the ice age and natural predators such as wolves, sabertooth cats, and short-faced bears³. The long history of the bison and the challenges faced by its ancestors did not prepare it for the impact of humans. "The subspecies we call the American Bison, has had a long evolutionary journey. It is a journey that very nearly came to an end in the last three decades of the nineteenth century in the American West." The near extinction of the American Bison was almost completely caused by overhunting and mismanagement of how the bison could be hunted for resources without decimating the entire species. The American plains were often seen as undesirable places. They had few resources and for a short time were practically unreachable before the widespread use of railroads. "Yet these shortgrass, seemingly inhospitable plains were the home of at lease 30 million buffalo at the beginning of the nineteenth century." The buffalo once completely covered the plains making it impossible to see anything else. "The early explorers were constantly astonished by the multitudinous herds which they met with, the regularity of their movements, and the deep roads which they made in traveling from place to place. Many of the earlier references are to territory east of the Mississippi, but even within the last fifteen years buffalo were to be seen on the Western plains in numbers so great that an entirely sober and truthful account seems like fable." However, by 1903 it

¹ Izadi, "It's Official."

² Kolipinski et al., "Bison."

³ Kolipinski et al.

⁴ Kolipinski et al.

⁵ Kolipinski et al.

⁶ Grinnell, *The Last of the Buffalo*.

was estimated that there were only 34 wild buffalo in the United States⁷. The near extinction of the American Bison was almost exclusively caused by overhunting but there were many reasons for why the bison were over hunted.

Long before the decimation of the buffalo, Native American tribes hunted the buffalo for food and to use to make tools and weapons or clothes to keep warm. "Although the Indian may have been improvident and wasteful as a rule, he was so dependent on the meat of the bison that he, or rather his squaw, laboriously preserved what was not consumed when fresh. Every part of the buffalo was utilized by the Indian. The carefully tanned hides served him both at home and abroad. Not only were his tepee and his lodge covered with them, but his shield and his canoe as well. From the hair he made cord and cloth."8 It is often said that Native Americans used all parts of the animals they hunted and let nothing go to waste. While it is true that they had found uses for almost all parts of the animals, this did not necessarily mean that they used every part of the animal every time. Hunting was required to get the meat that was used to survive but there are only so many bison hides or other inedible parts of animals that can be used. There was still some waste associated with how the Native Americans hunted because they did not always need to use the entirety of the animals that they hunted and it was often easier to just let the extra go to waste than go through the added extra to process it into something that was not needed and would still go to waste. This is in stark contrast to how American frontiersmen hunted buffalo. They were often only in need of the profitable parts of the bison. These were commonly the hides, meat, and sometimes bones. While the bones were sometimes used to make glue and other industrial products, they were often an afterthought due to the profitability of the other parts of the bison. What is our modern society going to do with spare parts like bison bones and organs? We only want the skins and hides to make coats and rugs and decorative items. We only want the horns to make powder horns that will be used to carry the gunpowder that will be used to kill more bison in the cruel

⁷ Hornaday, The American Natural History; a Foundation of Useful Knowledge of the Higher Animals of North America.

⁸ Trexler, The Buffalo Range of the Northwest.

irony that comes with the decimation of a species. Our modern society does not value the "unusable" byproducts that come with the parts of the buffalo that we want.

With the large numbers of buffalo killed for their resources, there had to be an efficient way to process the buffalo for the desired parts. Large numbers of buffalo were processed for their hides in what can best be described as mass processing plants. One image⁹, a sketch published in Harper's weekly in April, 1874, shows what can best be described as a factory that processes buffalo for their hides. This "factory" was set up outdoors and connected to modern resources by train, making it easy to export the goods that were processed there. The sketch shows how commercial the processing of bison had become. Traditionally, the Native American way of processing bison was viewed as more respectful to the bison, especially before the increase in hunting bison for the tribes to trade for other resources.

The respect that used to be given to bison is easily shown through photographs of an indigenous man named Saliva, an Oglala Sioux priest¹⁰. There are multiple images of Saliva, along with other men from his tribe preparing and participating in the Hu Kalowa Pi ceremony. One of the images, entitled "Hu Kalowa Pi-Removes the covering" shows Saliva carefully removing the hide of a buffalo from its skull. This photograph represents what is seen as the traditional indigenous way to remove the skin and hide of the bison from its bones. This image shows what was replaced by the efficient large scale operations that did the same job. Based on this, it would seem reasonable to believe that this image is much older than the images of buffalo hides going through more modern processing. However, these images of Saliva¹³ were taken in 1907, approximately 33 years after the images of massive piles of buffalo hides being cured. Even though this image is more recent than the others, it shows more respect

⁹ Tavernier, "Sketches in the Far West--Curing Hides and Bones."

¹⁰ Curtis, "Hu Kalowa Pi Ceremony."

¹¹ Curtis, "[Hu Kalowa Pi-Removes the Covering]."

¹² Curtis.

¹³ Curtis.

to the bison. The image does not show exactly what methods are being used to remove the hide from the buffalo's skull but it is done in a way that shows more respect to the animal and its life.

In the images of bison going through more "modern" processing, each individual bison is just a number. It is just one of 40,000 hides in the pile¹⁴. This does not respect the buffalo or the life it lived before being killed just to provide something that was seen as a basic commodity. It is just being used to meet a need and for the owner to be able to get rich off of a natural resource that the indigenous culture has relied on for generations. The other images from the Hu Kalowa Pi ceremony continue to show the contrast in how bison were treated by various groups during this time period. One image, entitled "Hu Kalawa Pi, the altar complete" shows Saliva with two other men next to the skull of the buffalo that was skinned in the other photograph. Although there is not much information about the Hu Kalawa Pi ceremony, the fact that a photograph was taken of the three men with the skull of the buffalo that they processed and likely killed is in stark contrast to the images of the large scale processing plants. For the Oglala Sioux, processing buffalo was a much smaller affair. It was done by smaller groups of people and they did not process as many buffalo at a time. In the series of photographs taken of the Hu Kalawa Pi ceremony, only one 16 shows someone helping Saliva skin the buffalo and this other man is only holding up the skull of the buffalo. This is in comparison to the at least fourteen men that are working at the curing plant shown in Harper's Weekly¹⁷. The work that these men do is impersonal and does not show respect for the bison and their lives. These bison are just one more hide that needs to be cured. Just one more to meet today's quota. However, bison were not only used for their hides and while overhunting led to the near extinction of the bison, uses were also found for their bones, specifically skulls. In one photograph, there is an incredibly large pile of buffalo skulls waiting for industrial processing in Michigan ¹⁸. These bones could have been used for a variety of purposes

^{14 &}quot;Buffalo Hides in Dodge City, Kansas - Kansas Memory - Kansas Historical Society."

¹⁵ Curtis, "Hu Kalawa Pi, the Altar Complete."

¹⁶ Curtis, "Saliva, Slow Bull (in Background), Picket Pin's Arm."

¹⁷ Tavernier, "Sketches in the Far West--Curing Hides and Bones."

¹⁸ Bison Skull Pile.

including "for glue, fertilizer, dye/tint/ink, or were burned to create "bone char" which was an important component for sugar refining"¹⁹.

However, the Native Americans were in no way responsible for the near extinction of bison. There were many reasons why bison were over hunted and while the Native Americans were involved in this, they were not primarily responsible for the demise of the American Bison. The main reason was the desire for resources that came from bison and were becoming increasingly profitable in the American East. After the initial contact with settlers for trade, it became more common for tribes to hunt for items to trade than to hunt for the items that they needed. It was easy to hunt enough bison to get enough to trade for the items that they wanted. In one case "'fourteen hundred fresh buffalo tongues', which they exchanged for a few gallons of whiskey... not one skin, nor one pound of flesh was saved from the slaughtered buffalo, everything save the tongues left to rot". 20 While this number may or may not accurate, it reflects the anti Native American sentiment of the time. The U.S. government's goal of killing the buffalo to move tribes to reserves was incredibly successful. "It is estimated that of the 3,700,000 bison killed between 1872 and 1874, only 150,000 were killed by Indians" ²¹ No matter how and why they were killed, losing that many buffalo in a short period of time devastated the buffalo population. "Sadly, the bison that may have numbered as many as seventy million at one time, thirty million by 1830, and seven million by 1870, had been reduced to a few wandering bands with possible extinction looming large."²² If millions of bison were being killed each year, this would quickly decrease the bison population as it would be impossible for enough calves to be born to make up for this loss.

While it may have become more common for Native Americans to waste parts of the bison, they were not responsible for the near extinction of the species. "The nineteenth century Sioux leader, Red Cloud, is said to have observed, "Where the Indian killed one buffalo, the hide and tongue hunters

¹⁹ Bison Skull Pile.

²⁰ thehistoricfoodie, "NATIVE AMERICAN WASTE OF THE BUFFALO &c. ©."

²¹ Kolipinski et al., "Bison."

²² Zontek, "HUNT, CAPTURE, RAISE, INCREASE THE PEOPLE WHO SAVED THE BISON."

killed fifty"²³. The example of trading buffalo tongues for a seemingly unequal amount of whiskey may be one of the more extreme cases, it became more and more common for bison to be hunted for specific profitable parts that were used in trade. Large scale bison hunting began when "Eastern retailers discovered that besides meat, bison skins and furs were warm, useful, and profitable... "24 It was not only the tribes that were hunting the bison for their resources. There were also groups of American settlers who were killing the bison because they were an easy way to make a profit. While the bison were able to provide many resources that were extremely valuable for trading, this was not the only reason that they were killed. Over the course of the 19th century, there were many views of the Native Americans from the American settlers. Many saw them as savages who were a seen as a lesser group than the primarily white American settlers. In the time of Andrew Jackson and the trail of tears, bison were killed to help with the effort to move Native Americans from their homelands to reservations. "The U.S. government and its army sought to exterminate the bison as part of an effort to push the Indians onto reservations and open the Wild West to settlers."²⁵ These mass killings were purposely done to reduce the resources available to Native Americans forcing them to become more reliant on the resources offered by the U.S. government at reservations. "The old plainsmen early argued that as long as the buffalo roamed the prairies the Indian would remain migratory and independent, and would therefore be a continuous source of danger to the encroaching settlers."²⁶ It was well known that "to the plains Indians from the Rockies to the Mississippi the buffalo meant life itself... the bison was their main source of food and shelter."²⁷ It had been known for a long time that the bison were fundamentally important to the lives of the Native Americans in the plains and that they could easily be controlled though the buffalo population. This led to the decimation of the buffalo population as a way to control the Native American population and take away the tribes' freedoms.

²³ Kolipinski et al., "Bison."

²⁴ Kolipinski et al.

²⁵ Geist, Buffalo Nation.

²⁶ Trexler, The Buffalo Range of the Northwest.

²⁷ Trexler.

Using the buffalo as an attempt to gain control over the tribes and take away their independence were incredibly successful. "In 1877, George Lemmon, a former bison hunter, delivered a shipment of beef to the Oglala Sioux of the Red Cloud Agency in western Nebraska. Lemmon's encounter with the Oglalas was far different than it might have been a few years earlier, when millions of bison... had inhabited the Great Plains...The Ogalalas of the Red Cloud Agency, like many other Indians of the Great Plains... were confined to reservations. There, they depended on the inferior cattle provided to them by government contractors such as Lemmon'28 By killing the buffalo, the most important source of food for the Native Americans, the government was able to control the Natives food supply, and in turn controlling every aspect of their lives. While it is out of the scope of this essay, it is important to note that the mass killings of bison, while important to the topic of bison in America, is an unimportant topic compared to the deaths of Native Americans and other consequences caused by the efforts to move Native Americans to reservations and away from their homelands and traditional ways of life.

While it took longer for the United States government's view on Native Americans to change, they realized that they needed to step in to save the buffalo in the early twentieth century. Any program the government had done previously to help protect the bison had not been successful. As said by Frank Rockefeller in correspondence with U.S. Secretary of the Interior Ethan Hitchcock, "I doubt the wisdom of the Government trying to care for buffalo, as I understand so far they have been but poorly protected." There had not been much done to help protect the buffalo despite how quickly their population decreased. In 1902 a "census" was taken to find how many bison remained in America. "From these reports it will be seen that the total number of buffalo or bison, both full and mixed blood, in the United States, is 1,143. Of these 72 are running wild, 50 being in the State of Colorado and 22 in the Yellowstone National Park" Although it was very hard to account for all of the buffalo in the country and get an accurate number of how many were still wild, these numbers help show how few

²⁸ Isenberg, "Social and Environmental Causes and Consequences of the Destruction of the Bison."

²⁹ Hitchcock, "Facts in Relation to Preservation of American Bison."

³⁰ Hitchcock.

buffalo were remaining in the United States. It is important to note that there were also small numbers of buffalo in Canada and other countries but these are often not included in the official counts as these were only for the buffalo in the United States. It was later found that there were even less wild buffalo remaining than originally thought. "...only two small herds of wild buffalo are in existence in the United States... while the Department has no recent information as to the exact number of animals in these herds at the present time, it has reason to believe that the Yellowstone herd does not exceed 25 and the Lost Park herd 8 or 10 individuals." After this count, it was decided that if the government was able to buy buffalo from herd in captivity, "they might be placed on some reservation under competent management, and if properly protected could be preserved indefinitely. Unless this is done there is little or no hope of maintaining the herd for its entirety."³² Bringing back a species from near extinction would be incredibly expensive and difficult, however it was worth the cost. "The total expense would be trifling in comparison with the importance of the end to be gained, and in that way we might, in a small measure, atone for our neglect of the means which would have protected the great herds from extinction. In this way, by proper management, it will be not only possible but easy to preserve fine living representatives of this important species for centuries to come."33By taking action to help increase the number of buffalo, the U.S. government was able to bring back the buffalo from near extinction and attempt to undo some of the harm it did to the buffalo population.

It has taken years of effort, but the bison population is slowly increasing. "There are approximately 31,000 total bison in 68 conservation herds (herds managed in the public interest by governments and environmental organizations) in North America." While this is nowhere near the millions of buffalo that once roamed the plains, it is a significant increase from only 1000 buffalo almost 200 years ago. There are a lot more breeding programs and public awareness of bison than there was when they were nearly eliminated. This has not, however, gained more respect for the buffalo.

³¹ Wilson, "Preservation of American Bison in U.S. and Canada."

³² Wilson.

^{33 &}quot;The Project Gutenberg EBook of The Extermination of the American Bison, by William T. Hornaday."

³⁴ Aune et al., "IUCN Red List of Threatened Species."

Despite education on bison and how to interact with them, there are still frequent incidents of humans getting too close to bison causing harm to one or both of them. "For context: Between the years of 1978 and 1992, 56 people were injured and two people were killed by bison; from 2000 to 2015, 25 people were injured by bison." Buffalo are wild animals and it is well known to stay away from them. After all these years, buffalo are still not respected and their species has paid the price for this.

^{35 &}quot;Why Are So Many Tourists Attacked by Bison at Yellowstone?"

- Aune, K, D Jørgensen, C Gates, L.R. Rogers, D.H. Ranglack, and G Plumb. "IUCN Red List of Threatened Species: Bison Bison." *IUCN Red List of Threatened Species*, September 1, 2016. https://www.iucnredlist.org/en.
- Bison Skull Pile. Circa 1892. Burton Historical Collection, Detroit Public Library. https://commons.wikimedia.org/wiki/File:Bison_skull_pile.jpg.
- "Buffalo Hides in Dodge City, Kansas Kansas Memory Kansas Historical Society." Accessed November 17, 2022. https://www.kshs.org/km/items/view/2088.
- Curtis, Edward S. "Hu Kalawa Pi, the Altar Complete." Still image, 1907. Spiritual life. https://www.loc.gov/pictures/resource/cph.3b43185.
- ——. "Hu Kalowa Pi Ceremony." Image. Library of Congress, Washington, D.C. 20540 USA.

 Accessed November 18, 2022. https://www.loc.gov/resource/cph.3c36598/.
- ——. "[Hu Kalowa Pi-Removes the Covering]." Still image, 1907. https://www.loc.gov/pictures/item/92520019/.
- ——. "Saliva, Slow Bull (in Background), Picket Pin's Arm." Still image, 1907. https://www.loc.gov/pictures/item/2002695463/.
- Geist, Valerius. *Buffalo Nation : History and Legend of the North American Bison*. Stillwater, MN : Voyageur Press, 1996. http://archive.org/details/buffalonationhis0000geis.
- Grinnell, George Bird. The Last of the Buffalo, 1892. http://archive.org/details/lastofbuffalo00grin.
- Hitchcock, Ethan. "The American Bison in the United States and Canada. Letter from the Secretary of the Interior, Transmitting to the Senate Facts in Relation to the Preservation of the American Bison in the United States and Canada.," July 1, 1902. https://congressional-proquest-com.ezproxy.lib.ou.edu/congressional/docview/t47.d48.4249_s.doc.445?accountid=12964.
- Hornaday, William Temple. *The American Natural History; a Foundation of Useful Knowledge of the Higher Animals of North America*. New York, C. Scribner's Sons, 1904. http://archive.org/details/cu31924073178224.

- Isenberg, Andrew. "Social and Environmental Causes and Consequences of the Destruction of the Bison." *Revue Française d'études Américaines*, no. 70 (1996): 15–27.
- Izadi, Elahe. "It's Official: America's First National Mammal Is the Bison." *Washington Post*, October 28, 2021. https://www.washingtonpost.com/news/animalia/wp/2016/04/27/how-the-bison-once-nearing-extinction-lived-to-become-americas-national-mammal/.
- Kolipinski, Mietek, Steven Borish, Arthur Scott, Kristen Kozlowski, and Sibdas Ghosh. "Bison: Yesterday, Today, and Tomorrow." *Natural Areas Journal* 34, no. 3 (2014): 365–75.
- Tavernier, Frenzeny &. "Sketches in the Far West--Curing Hides and Bones." Still image, 1874. United States--West. https://www.loc.gov/pictures/resource/cph.3c00250.
- "The Project Gutenberg EBook of The Extermination of the American Bison, by William T. Hornaday."

 Accessed December 9, 2022. https://www.gutenberg.org/files/17748/17748-h/17748-h.htm#iv_congressional_legislation_for_the_protection_of_the_bison.
- thehistoricfoodie. "NATIVE AMERICAN WASTE OF THE BUFFALO &c. ©." *Thehistoricfoodie's Blog* (blog), June 26, 2014. https://thehistoricfoodie.wordpress.com/2014/06/26/native-american-waste-of-the-buffalo-c/.
- Trexler, H. A. *The Buffalo Range of the Northwest*. The Mississippi Valley Historical Review, 1921. http://archive.org/details/jstor-1886193.
- InsideHook. "Why Are So Many Tourists Attacked by Bison at Yellowstone?" Accessed November 17, 2022. https://www.insidehook.com/daily_brief/travel/tourists-attacked-bison-yellowstone.
- Wilson, James. "Letter from the Secretary of Agriculture, Transmitting to the Senate Facts with Reference to the Preservation of the American Bison in the United States and Canada.," February 18, 1902. https://congressional-proquest-com.ezproxy.lib.ou.edu/congressional/docview/t47.d48.4234_s.doc.208?accountid=12964.