



The Origin of Public Bison Herds in the United States

Judith Hebbring Wood

Wicazo Sa Review, Vol. 15, No. 1, The Secular Past, the Mythic Past, and the Impending Future. (Spring, 2000), pp. 157-182.

Stable URL:

<http://links.jstor.org/sici?sici=0749-6427%28200021%2915%3A1%3C157%3ATOOPBH%3E2.0.CO%3B2-B>

Wicazo Sa Review is currently published by University of Minnesota Press.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/umnpress.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

The Origin of Public Bison Herds in the United States

Judith Hebbbring Wood

By the early 1800s the buffalo's range was, roughly, the Mississippi River to the east, the Rocky Mountains to the west, up into Canada to the north, and down into Texas to the south. By the mid-1880s, because of the railroad pushing west, the popularity of bison hides and tongues, the U.S. government's policy to defeat the Plains Indian, and a population crash caused by disease (probably passed from domestic cattle being driven north from Texas), the once massive single herd was split into two much smaller herds, which historians call the southern and northern herds. These remaining buffalo were primarily Plains bison.

There were some key people who captured and nurtured a few buffalo in the late 1880s when they were nearly all gone. Men have been given credit for these efforts, but women also played a major role. It was at the urging of their wives that Goodnight, Dupree, and Philip, all cattlemen, became saviors of the buffalo. It was primarily through the efforts of women's groups that funds were raised to purchase the buffalo that stocked the National Bison Range in Montana.

These few captive animals became the seed stock for the public reserves and parks that have been established throughout the years. These public herds have been the source for private commercial and hobby herds. Most of the buffalo that have been returned to Indian Country have come directly from the public sector.

Many of our public keepers have maintained a relatively hands-off approach in their management, and there still remain a few truly

free-roaming herds out there in addition to Yellowstone. These are the ones in Canada, Alaska, and the Henry Mountains of Utah that we usually don't hear about. Some of our public herds, many of them state owned, need to be self-supporting, and therefore intense management is practiced on them; it is questionable just how wild these so-called wild herds remain.

In the private sector, starting in the 1970s, the trend has been to domesticate the buffalo to make manipulation for profit easier. Dehorning, selective breeding, and a variety of other practices unnatural to the buffalo have become the norm with many producers. Now we are beginning to see animals that hardly resemble real buffalo. They look more like furry cattle with their thick legs and blocky butts. Ironically, these are the animals that are most prized on the show circuit.

Indian people, I believe, are approaching the situation from the right direction. Tribal philosophy is one of respect for all living things, and Indians have a special reverence for the buffalo. The manipulation and exploitation that we see so much of today is disrespectful to the buffalo from the Indian perspective and is also offensive to many non-Indians. But we must keep in mind that these animals were being manipulated long before individuals and tribes began to raise them.

On the bright side, we have learned there is much more genetic variety in public herds than might be expected. We have also learned that diversity is important to herd health and that inbreeding can be a major problem in captive herds.

The Indian tribes get most of their buffalo from the public sector. The public sector keeps the best for themselves. The next best are selected for their public auction offerings to the private sector. What's left is what goes to Indian tribes. The tribes need to be careful not to perpetuate the cull animals they may have received from the public sector. Nature had its own way of dealing with substandard animals. I agree with the hands-off philosophy most tribes practice, but hands-off today isn't truly natural. Also, consideration must be given to where the buffalo came from and who did the selecting before they became tribal buffalo. Nature didn't allow every buffalo to breed and people shouldn't either. Most people can distinguish between a nice-looking buffalo and an ugly one. Butcher the ugly ones; they are probably the result of inbreeding.

Marlene Groves of Buffalo Groves, Inc., in Elizabeth, Colorado, developed the buffalo origin spreadsheet from my narrative (figure 1). From the spreadsheet, she created a flow chart (figure 2). These two graphics will help the reader follow the very complex trail of buffalo in North America from their early captors to the first private and public refuges to the parks and refuges we are familiar with today.

Charles Goodnight of Texas was the first on record to capture buffalo calves. He picked up a few stragglers in 1866 and gave them to

Figure 1

<i>Year</i>		<i>Ref</i>	<i>#</i>	<i>Herd Total</i>	<i>Ref</i>	<i>Notes</i>
1866	Charles Goodnight	CG	+ ?		So. P	Picked up straggler calves and gave to a friend for shares
1873	Samuel Walking Coyote	SWC	4		No. P	2 heifer and 2 bull calves, cut from herd near Buffalo, MT
1873	James McKay	JM	3		No. P	2 heifers and 1 bull
1874	James McKay	JM	3		No. P	2 heifers and 1 bull (the bull died)
1877	James McKay	JM	-5		SB	4 bulls, 1 heifer from McKay
1877	Samuel Bedson	SB	5		JM	4 bulls, 1 heifer from Samuel Bedson
1878	Charles Goodnight	CG		14	CG	By now he had 2 bulls, 7 cows, and 4 calves
1879	James McKay	JM		13	JM	Total ending herd was 13
1880	James McKay	JM	-13		SB	Auctioned (all buyers not known), some to Bedson
1880	Samuel Bedson	SB	8		JM	8 from McKay estate
1880	Samuel Bedson	SB	3		No. P	3 calves captured
1882	Fredrick Dupree (Dupris)	FD	9		No. P	Captured 9 along the Yellowstone River in Montana
1884	Samuel Walking Coyote	SWC	-10	13	PA	Sold 10 PA
1884	Michel Pablo / Charles Allard	PA	10	35	SWC	10 from SWC @ \$250 ea
1886/87	Buffalo Jones	BJ		57	BJ	Over two years Buffalo Jones captured a total of 57
1888	Samuel Bedson	SB	-83		BJ	Entire herd sold to Buffalo Jones
1888	Buffalo Jones	BJ	83		SB	Entire herd from Samuel Bedson
1888	Buffalo Jones	BJ	-8		CP	Sold to Corbin Park
1888	Corbin Park	CP	8		BJ	8 from Buffalo Jones
1888	Corbin Park	CP		30	CP	A total of 30 (not all sources known)

Figure 1. Buffalo Origin Spreadsheet. Courtesy of Marlene Groves, Buffalo Groves, Inc.

Figure 1 (cont.)

<i>Year</i>		<i>Ref</i>	<i>#</i>	<i>Herd Total</i>	<i>Ref</i>	<i>Notes</i>
1889	Buffalo Jones	BJ		150	BJ	Buffalo Jones had the largest private herd of 150
1889	National Zoological Park	NZP	4		Dr MG	Dr. MG donated 1 cow and 3 bulls
1891	Buffalo Jones	BJ	-10		E	10 to a wealthy englishman
1891	a wealthy Englishman	E	10		BJ	10 from Buffalo Jones
1892	Buffalo Jones	BJ	-10		CP	8 cows, 2 bulls sold to Corbin Park
1892	Corbin Park	CP	10		BJ	8 cows, 2 bulls bought from Buffalo Jones
1893	Buffalo Jones	BJ	-29		PA	To Pablo Allard
1893	Michel Pablo / Charles Allard	PA	29		BJ	29 from Buffalo Jones
1893	Antelope Island	AI	12		So. P	12 buffalo isolated on an island in the Great Salt Lake
1896	Michel Pablo / Charles Allard	PA	-150	300	CC	Allard's 50% to heirs, many sold to Conrad
1896	Charles Conrad	CC	?		PA	From Allard's heirs
1896	Corbin Park	CP		85	CP	Herd total up to 85
1897	H K Glidden	G	-13		W	Animals to Whitney
1897	Whitney	W	13		G	3 bulls and 10 cows purchased from H. K. Glidden
1897	Michel Pablo / Charles Allard	PA	-3		NZP	NZP acquired 1 bull and 2 cows from Pablo Allard herd
1897	National Zoological Park	NZP	3		PA	NZP acquired 1 bull and 2 cows from Pablo Allard herd
1898	Fredrick Dupree (Dupris)	FD		83	FD	Fred died and his son Pete took over the herd
1898/00	Buffalo Jones	BJ	- ?		NYZ	Animals from Buffalo Jones
1898/00	National Zoological Park	NZP	+ ?		BJ	Sold animals to New York Zoo
1901	Fredrick Dupree (Dupris)	FP	-83		FD	According to one account 83 animals were sold

Figure 1 (cont.)

<i>Year</i>		<i>Ref</i>	<i>#</i>	<i>Herd Total</i>	<i>Ref</i>	<i>Notes</i>
1901	Scotty Phillip	SP	83		FD	Pete died 1900 / Scotty Phillip bought the herd 1901
1902	Charles Conrad	CC		46	CC	At Conrad's death herd of 11 bulls, 23 cows, 12 calves
1902	Michel Pablo / Charles Allard	PA	-18		YNP	18 cows from Pablo Allard's herd went to Yellowstone
1902	Yellowstone National Park	YNP	18		PA	18 cows from Pablo Allard's herd went to Yellowstone
1902	Charles Goodnight	CG	-3		YNP	3 bulls to Buffalo Jones for Yellowstone National Park
1902	Yellowstone National Park	YNP	3		CG	3 bulls from the Charles Goodnight herd
1904	Corbin Park	CP	-3		NZP	3 to NZP
1904	National Zoological Park	NZP	4		CP	4 cows (3 from CP)
1905	Corbin Park	CP		160	CP	Herd total up to 160
1906	Michel Pablo	PA	-709		CG	Entire herd sold for \$245 each to Canadian Government
1906	Canadian Government	CAN	709		PA	Entire herd from Michel Pablo, 3-5 years to deliver
1907	National Zoological Park	NZP	-15		WMW	6 bulls and 9 cows by the ABS to WMW
1907	Wichita Mtns Wildlife Refuge	WMW	15		NZP	6 bulls and 9 cows by the ABS from NZP
1907	Whitney	W	-15		WMW	15 of the original Whitney animals went to WMW
1907	Wichita Mtns Wildlife Refuge	WMW	15		W	15 animals came from the original Whitney animals
1908	Charles Goodnight	CG	-1		NBR	Seed stock animals for the National Bison Range
1908	National Bison Range	NBR	1		CG	Seed stock animals (at least 1) from Charles Goodnight
1908	Charles Conrad	CC	-34		ABS	Lettie Conrad sold 34 select buffalo to the ABS
1910	American Bison Society	ABS	34		CC	34 select animals from Lettie Conrad to NBR
1913	John Gilbert	JG	-6		FN	6 females (yearling to 9 years)

Figure 1 (cont.)

<i>Year</i>		<i>Ref</i>	<i>#</i>	<i>Herd Total</i>	<i>Ref</i>	<i>Notes</i>
1913	Fort Niobrara	FN	6		JG	Entire herd from John Gilbert
1913	Yellowstone	Y	-2		FN	2 bulls went from Yellowstone to Fort Niobrara
1913	Fort Niobrara	FN	2		Y	2 bulls from Yellowstone went to Fort Niobrara
1913	American Bison Society	ABS	-14		WCNP	7 bulls and 7 females
1913	Wind Cave National Park	WCNP	14		ABS	7 bulls and 7 females
1914	Scotty Phillip	SP	-36		CSP	Animals to state SCP
1914	Custer State Park	CSP	36		SP	Animals from SP started CSP
1916	Yellowstone National Park	YNP	-6		WCNP	6 animals probably from the PA & CG herds
1916	Wind Cave National Park	WCNP	6		YNP	6 animals probably from the PA & CG herds
1916	Wichita Mtns Wildlife Refuge	WMW		82	WMW	Herd grew to 82 head
1925	Scotty Phillip	SP	-200		HH	Hollywood hunt was organized for dignitaries, etc.
1925	Scotty Phillip	SP	- ?		HON	The rest of the buffalo went to Henry O'Neil
1925	National Bison Range	NBR		700	NBR	By the mid 1920s there were about 700
1928	National Bison Range	NBR	-28		A	28 buffalo were introduced to A
1928	Alaska	A	28		NBR	28 buffalo from NBR were introduced
1933	Charles Goodnight	CG		250	CG	Herd up to 250 head
1935	Custer State Park	CSP	-4		FN	4 bulls to Fort Niobrara
1935	Fort Niobrara	FN	4		CSP	4 bulls from Custer
1937	Custer State Park	CSP	-4		FN	4 more bulls to Fort Niobrara
1937	Fort Niobrara	FN	4		CSP	4 more bulls from Custer

Figure 1 (cont.)

<i>Year</i>		<i>Ref</i>	<i>#</i>	<i>Herd Total</i>	<i>Ref</i>	<i>Notes</i>
1940	Corbin Park	CP		18	CP	Herd total down to 18
1940	Fort Niobrara	FN	-4		WMW	4 bulls sent to WMW
1940	Wichita Mtns Wildlife Refuge	WMW	4		FN	4 bulls from FN
1940	Wind Cave National Park	WCNP	- ?		PRIR	Animals went to PRIR
1940	Pine Ridge Indian Reservation	PRIR	+ ?		WCNP	Animals from WCNP
1941	Yellowstone National Park	YNP	-18		HM	15 two-year heifers and 3 bulls (18 total) sent to HM
1941	Henry Mountain	HM	18		YNP	15 two-year heifers and 3 bulls (18 total) from YNP
1945	Yellowstone National Park	YNP	-5		HM	5 more bulls sent to HM
1945	Henry Mountain	HM	5		YNP	5 more bulls came from YNP
1948	Yellowstone National Park	YNP	-22		GT	The first herd sent to GT
1948	Grand Teton	GT	22		YNP	The first herd started in GT from YNP
1951	Wichita Mtns Wildlife Refuge	WMW		700	WMW	About 700 were counted
1951	Wichita Mtns Wildlife Refuge	WMW	-10		MGR	7 cows and 3 bulls went to MGR
1951	Maxwell Game Refuge	MGR	10		WMW	7 cows and 3 bulls came from WMW
1952	National Wildlife Refuge	NWR	-4		FN	4 bulls to FN
1952	Fort Niobrara	FN	4		NWR	4 bulls introduced from NWR
1950/9	Wind Cave National Park	WCNP	-800		CSP	In the 1950s 800 went to CSP
1950/9	Custer State Park	CSP	800		WCNP	In the 1950s 800 came from WCNP
1954	Yellowstone National Park	YNP		1,477	YNP	Total count up to 1,477 in 1954
1956	Fort Niobrara	FN	-29		TRNP	29 head from FN started the TRNP

Figure 1 (cont.)

<i>Year</i>		<i>Ref</i>	<i>#</i>	<i>Herd Total</i>	<i>Ref</i>	<i>Notes</i>
1956	Theodore Roosevelt N.P. South Unit	TRSo	29		FN	This herd was started with 29 animals from FN
1960s	Custer State Park	CSP		3,000	CSP	In the 1960s the herd totaled around 3,000 head
1962	Theodore Roosevelt N.P. South Unit	TRSo	-20		TRNo	20 animals were moved to start a North Unit herd
1962	Theodore Roosevelt N.P. North Unit	TRNo	20		TRSo	20 animals from the South Unit herd started the North Unit herd
1963	Grand Teton	GT		0	GT	All animals were destroyed due to brucellosis
1963	Fort Niobrara	FN	-3		GT	3 animals (assumed bulls) to GT
1963	Grand Teton	GT	3		FN	3 animals (assumed bulls) from FN
1963	Theodore Roosevelt N.P.	TR	-25		GT	25 animals went to GT
1963	Grand Teton	GT	25		TR	25 animals from TR
1964	Theodore Roosevelt N.P.	TR	-25		GT	25 more animals went to GT
1964	Grand Teton	GT	25		TR	Another 25 animals from TR
1964	Theodore Roosevelt N.P. South Unit	TRSo	-25		BNP	25 cows went to BNP to start this herd
1964	Badlands National Park	BNP	25		TRSo	25 cows came from TRSo to start this herd
1964	Fort Niobrara	FN	-3		BNP	3 bulls went to BNP to start this herd
1964	Badlands National Park	BNP	3		FN	3 bulls came from FN to start this herd
1965	Yellowstone National Park	YNP	-3		BNP	2 or 3 bulls went to BNP
1965	Badlands National Park	BNP	3		YNP	2 or 3 bulls came from YNP
1967	Yellowstone National Park	YNP		397	YNP	Total count down to 397 in 1967
1970s	Custer State Park	CSP		1,400	CSP	In the 1970s a plan to maintain a core herd of 1,400
1987	Antelope island	AI		500	AI	In 1987 the herd numbered about 500

Figure 1 (cont.)*REFERENCE KEY*

Alaska	A
American Bison Society	ABS
Antelope Island	AI
Badlands National Park	BNP
Buffalo Jones	BJ
Charles Conrad	CC
Canadian Government	CAN
Charles Goodnight	CG
Corbin Park	CP
Custer State Park	CSP
Dr. V. T. McGillicuddy, Rapid City	Dr MG
Wealthy Englishman	E
Fredrick Dupree (Dupris)	FD
Fort Niobrara	FN
Genesee Park	GP
Grand Tetons	GT
Henry Mountain	HM
Kansas Garden City	KGC
James McKay	JM
Maxwell Game Refuge	MGR
National Bison Range	NBR

Figure 1 (cont.)*REFERENCE KEY*

Northern Plains	No. P
National Wildlife Refuge	NWR
New York Zoo (Bronx Zoo)	NYZ
National Zoological Park (DC)	NZP
Michel Pablo / Charles Allard	PA
Samuel Bedson	SB
Southern Plains	So. P
Scotty Phillip	SP
Samuel Walking Coyote	SWC
Theodore Roosevelt N.P. South Unit	TRSo
Theodore Roosevelt N.P. North Unit	TRNo
Whitney	W
Wind Cave National Park	WCNP
Wichita Mtns Wildlife Refuge	WMW
Yellowstone National Park	YNP

Figure 1 (cont.)*1999 TOTALS*

250	Theodore Roosevelt N.P. South Unit
120	Theodore Roosevelt N.P. North Unit
450	Badlands National Park
150	Grand Teton
200	Maxwell Game Refuge
50	Kansas Garden City
550	Antelope island
180	Farewell (1 of 4 in Alaska)
50	Chitna (1 of 4 in Alaska)
100	Copper River (1 of 4 in Alaska)
375	Delta (1 of 4 in Alaska)
2,500	Yellowstone National Park
1,400	Custer State Park
550	Wichita Mtns Wildlife Refuge
350	Wind Cave National Park
250	Fort Niobrara
400	Henry Mountain
40	Genesee Park
50	Davis Park
350	National Bison Range
<hr/>	
8,365	

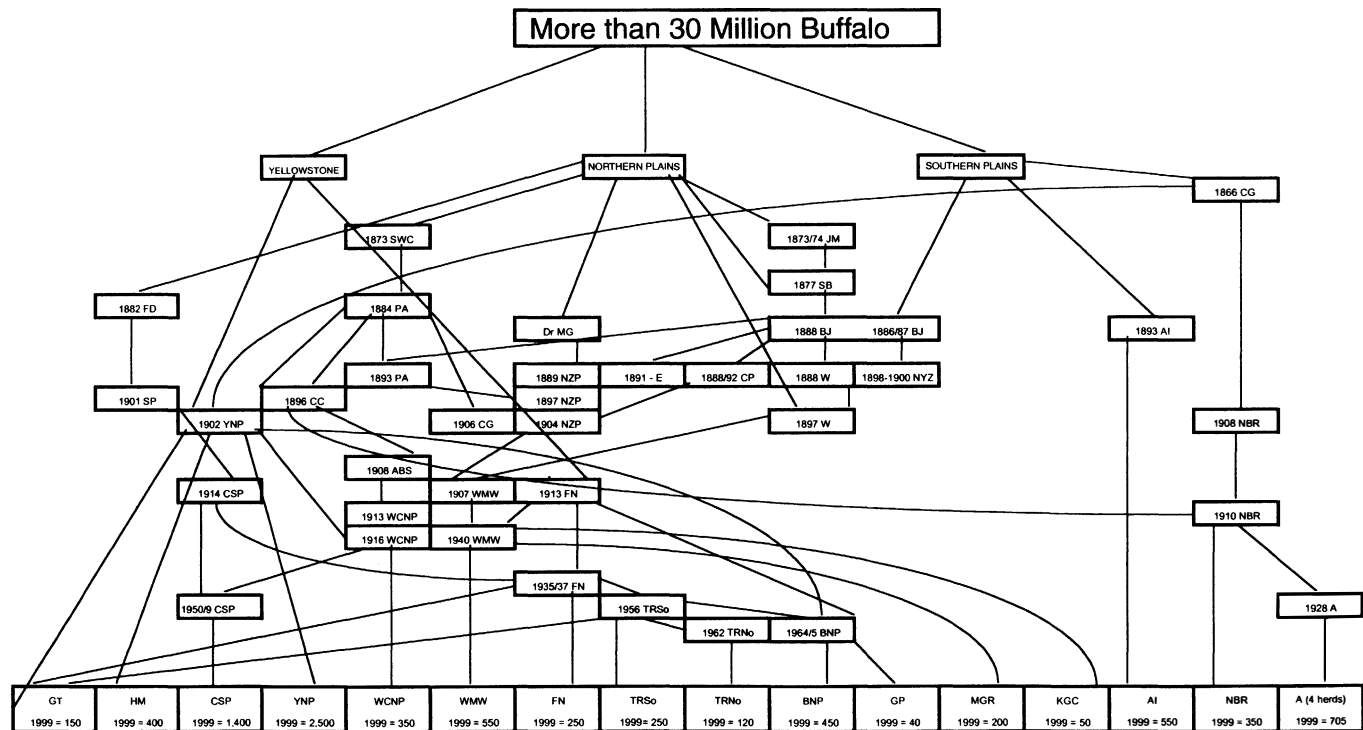


Figure 2. Buffalo Origin Flow Chart. Courtesy of Marlene Groves, Buffalo Groves, Inc.

a friend to raise on shares. That early effort by Goodnight turned into a dead end, and his story actually starts in 1878. As a result, I'm going to start with Samuel Walking Coyote, a Pend d'Oreille Indian who captured four calves in 1873 while on a hunting expedition on the Milk River near where the town of Buffalo, Montana, now stands near the Canadian border. The four calves were cut from the herd, and it was common for calves that were separated from their mothers to follow the horses of the hunters. Many calves were captured this way.

Walking Coyote took the calves to the St. Ignatious Mission in the center of the Flathead Reservation the following year. The calves just followed the horses over the Rocky Mountains. They were quite tame and were objects of curiosity at the mission. There were two heifers and two bulls, and the heifers each had a calf when they were four years old. By 1884 the herd numbered thirteen head. There are several stories on why Walking Coyote captured the calves. The one told most frequently is that he had been banished from his tribe, perhaps for practicing polygamy and maybe for killing one of his wives. The calves were captured and were meant to be a peace offering for readmittance into his society. As far as I know, that never happened, because ten of them were sold to Michel Pablo and Charles Allard in 1884 for \$250 each. These ten formed the nucleus of the Pablo-Allard herd, which eventually became the largest herd in the United States. There is no record of what became of the other three buffalo owned by Walking Coyote. It can be assumed that they were butchered and eaten by tribal members. Walking Coyote's wealth didn't serve him well; he was found dead the following year under a bridge in Missoula, Montana.

The Michel Pablo-Charles Allard partnership started with the purchase of Walking Coyote's ten buffalo. Allard was a rancher on the Flathead Indian Reservation and Pablo, half Indian, was his neighbor and the agency's interpreter. By 1889 the herd had grown to thirty-five, and in 1893 twenty-six purebred bison were purchased from Buffalo Jones and added to the herd.

When Allard died in 1896, the herd numbered three hundred and was split in half. Allard's 150 went to his heirs who sold most of them to Charles Conrad of Kalispell, Montana. The rest went to various dealers.

Pablo's herd of 150 stayed intact and continued to multiply. In 1905 Pablo offered to sell his herd to the U.S. government for \$250 each. The government thought this price was too high and offered \$25, which Pablo rejected. The following year he struck a deal with Canada and sold them for \$200 each plus \$45 a head to ship them north. The public got wind of their government's action in this matter and put the heat on Congress for allowing what they considered to be the United States' buffalo to leave the country. Congress reconsidered

and offered Pablo more money. Some accounts report up to \$700 a head. Pablo was suspicious of the U.S. government and refused to back out of his agreement with Canada. Over the next three to five years, 709 buffalo were shipped by rail, over five railways, from southwest Montana to central Alberta, a distance of twelve hundred miles. Reportedly, this was accomplished with a loss of less than ½ of 1 percent. Those buffalo went on to repopulate Canada, and eventually the herd grew to the degree that excess animals were shipped to Wood Buffalo National Park and other refuges in Canada.

James McKay, a Canadian of Scotch and Metis Indian heritage, and Charles Alloway were partners in the freight business. The two were sportsmen and each year they participated in the annual Red River buffalo hunt with the Metis. The hunt of 1872 was unsuccessful, for the most part, and it looked like buffalo were becoming scarce. In 1873 McKay and Alloway set out to capture some buffalo calves. They caught two heifers and a bull from what remained of the northern herd and took them to Deer Lodge in western Montana where they were raised by a domestic cow. In the spring of 1874 they again set out, this time with a large brigade, to capture more buffalo. They captured two heifers and a bull calf, but the bull calf died. In 1877 Samuel Bedson purchased four bulls and one heifer from McKay. By 1879 the little herd had grown to thirteen pure buffalo and three crossbreeds.

Mrs. McKay died in early 1879, and before the year was over, James passed away also. In January 1880 an auction was held at Deer Lodge to dispose of the small herd. Samuel Bedson of Manitoba purchased eight, and a couple were sold to Canadians who later presented them to the Dominion of Canada (they were placed in Rocky Mountain Park at Banff, Alberta). It is unknown where the rest of the small herd went.

Col. Samuel L. Bedson, warden of the penitentiary at Stony Mountain, Manitoba, purchased four bulls and one heifer from McKay in 1877. He pastured the buffalo on the prison grounds. Bedson purchased eight more from McKay's estate in 1880 and later captured three additional calves to add to his herd. In 1888 the herd numbered eighty-three, and they were probably the only Plains bison left in Canada at that time. It isn't known if Bedson purchased McKay's crossbred animals, but a few years later he became interested in crossbreeding and conducted some experiments on his own.

In 1888 Buffalo Jones of Garden City, Kansas, purchased the entire herd of eighty-three. These animals included the eight buffalo that went to Corbin Park in New Hampshire that same year. Some also went to Whitney in 1888 and to the New York Zoological Park in 1898 and 1900.

Charles Goodnight rode among the southern herd during the Civil War, which gave him an appreciation for buffalo. He picked up

his first straggler calves in 1866 and turned them over to a friend to care for on shares. The friend got tired of it and sold out, reportedly without sharing the money with Goodnight. Goodnight married in 1870 and established the J. A. Ranch in Palo Duro Canyon in the Texas Panhandle in 1876. He had sixteen hundred head of longhorn cattle at that time and shared the area with about ten thousand wild buffalo, which were being systematically picked off by hide hunters.

At the urging of his wife, he seriously set about gathering buffalo for a herd of his own in 1878. That year he had fourteen head: two three-year-old bulls, seven cows, and four calves. One of those cows was a hybrid, and Goodnight later experimented with cattalo crosses. In 1902 three of his bulls went to Buffalo Jones for Yellowstone National Park.

Col. Goodnight died in 1929. In 1933 the herd, which originated from the southern herd, numbered 250 head. Some of his animals went to Buffalo Jones in Kansas around the turn of the century, and others were seed stock for the National Bison Range in 1908.

In 1882 Frederick Dupree, originally spelled "Dupris," captured nine calves along the Yellowstone River in Montana. Fred's wife, Mary, a Lakota Sioux from the Cheyenne River area of South Dakota, had urged Fred to save some buffalo. Those calves were loaded on wagons and brought to the Dupree cattle ranch near the present site of Eagle Butte, South Dakota. Fred died in 1898; at that time the herd numbered eighty-three.

Fred's son, Pete, who was a small boy when the calves were captured, took over the herd. He died a short time later in 1900. Scotty Philip purchased the Dupree herd from Pete's estate in 1901, and the herd was moved from the Dupree ranch near the Cheyenne River to near the Bad River in Stanley County, South Dakota.

Charles Jesse Jones was more of a con artist than a buffalo savior in his early efforts, but his activities had a significant impact on the preservation of the southern herd gene pool. Jones was a hide hunter in the 1870s, and, being an entrepreneurial sort of guy, he began bringing back orphaned calves from his hunting trips. He charged admission to view them at fairs and then auctioned them off as pets. By 1877 he had already earned the nickname Buffalo Jones. He moved from Texas and went on to become a founder of Garden City, Kansas.

The blizzard of 1886 triggered the scheme that shaped his life and guaranteed him a place in history. He remembered the calves he captured in the 1870s and decided "tame" buffalo were the answer to harsh prairie blizzards. Not only that, the meat was better than beef, the hides thicker, the milk richer than dairy cows, and their fur was softer than lamb's wool. Even with all this and his connections from being a delegate to the Republican Convention in 1884, he found no partners to his buffalo scheme. The notion that the answer to all the

West's problems was the animal that Westerners had been trying to exterminate for twenty years was hard to grasp.

In 1886 he set out to capture buffalo and caught fourteen on his first trip. He force-fed them condensed milk and brought the ten survivors home to Garden City where they thrived. He went on more buffalo capturing trips, and by 1887 he had a herd of fifty-seven. Jones wanted to have the largest herd in the world, so in 1888 he purchased the entire Bedson herd of eighty-three at Stony Mountain, Manitoba. The Bedson herd was virtually all the Plains bison remaining in Canada at that time.

Jones became a crusader for the buffalo and went one on one with Generals Sherman and Sheridan and others in the "exterminate the buffalo and solve the Indian problem" crowd. Jones met plenty of opposition in his crusade but was awarded a pension for life by Congress for his preservation work. Buffalo from his herd were sold regularly to wealthy ranchers and private and public zoos, worldwide.

In 1889 he had 150 head of buffalo, the largest private herd of the time. He organized what he called the "last hunt" in an effort to bring what remained of the wild southern herds to Kansas. The buffalo were not at all cooperative and would turn back south when they reached the end of their normal range. Jones went so far as to bring a herd of his "tame" buffalo up to comingle with the wild ones, in the hope they would all drive peacefully the two hundred remaining miles north. The wild ones split off and headed south again at the end of their range. He tried roping and hobbling the adult buffalo, but they died within twenty-four hours of being hobbled. The rest dropped dead one by one on the trail to Garden City. Only seven calves survived the last hunt at a very high cost to the few remaining wild buffalo.

The last hunt strained Jones's finances, and in 1891 he sold ten adult buffalo to a wealthy Englishman in an attempt to recoup his losses and pay his debts. It wasn't enough, and around 1894 he was forced into bankruptcy where he lost everything, including his buffalo. The buffalo were sold at auction to pay his debts, and those animals went on to start new herds in New Hampshire, Massachusetts, Yellowstone, and elsewhere.

By 1902, Jones had rebounded and was named Yellowstone National Park's first herd keeper/game warden. Ironically, the animals purchased to supplement the few wild buffalo left in Yellowstone were from his herd or descendants of his herd. His position at Yellowstone was abolished in 1905, and he embarked on his cattalo project. That project also became history, although the Canadian government picked up on the idea, experimented with it, and then dropped the project as unfeasible after many years of unsuccessful crossbreeding attempts.

Jones died in 1919 of African fever during his final career as an

African big game hunter. One of his claims to fame in that final era of his life was roping a gorilla in a tree.

Buffalo are native to the greater Yellowstone area and were observed there by early travelers both before and after the creation of Yellowstone National Park in 1872. There is an early diary account, written in 1783, of the sighting of Wood bison in the area. Some accounts called the native strain Mountain bison. Most experts now believe they were a northern, slightly larger strain of Plains bison.

By 1893 only twenty wild Yellowstone Park buffalo remained. Ironically, the U.S. Cavalry was appointed in 1886 to protect the buffalo from poaching, which was rampant. Appointing the U.S. Cavalry to protect buffalo was like asking the fox to guard the henhouse. The official position of the United States at that time was to annihilate the Indian or at the very least to bring them all onto the reservations. Eliminating the Indian's way of life, the buffalo, was also U.S. policy.

The Lacey Act was passed in 1894, which imposed penalties for poaching, but there was still little enforcement. The rewards of poaching far outweighed the chance of being caught.

In 1900 there were only thirty-nine wild, free-roaming buffalo in the United States, all in Yellowstone. In 1902 only twenty-three were counted. 1902 was the year Roosevelt appointed Buffalo Jones the Park's first game warden. Officials were fearful the buffalo would disappear completely from Yellowstone. In 1902 eighteen cows from the Pablo-Allard herd were introduced, and later the same year three bulls were brought in from the Goodnight herd in Texas. These new animals were kept separate from the wild herd at first and were "farmed" on the Buffalo Ranch in Lamar Valley until the 1930s when the Park Service gradually restored them to a more natural distribution. (The Park Service took over the management of Yellowstone in 1916.) In 1917 brucellosis was first identified in the farmed herd, the result of bottle-feeding a buffalo calf domestic cow's milk.

Even with the release of the farmed buffalo, their return to the wild state was gradual; artificial manipulations, such as feeding in the Lamar Valley, herd reductions, and other activities to achieve range management goals continued until the 1960s. During this period of active management of the Yellowstone herd, the highest reported count was 1,477 in 1954. In 1967 when herd reductions ceased, 397 buffalo were counted. Since buffalo and other Yellowstone wildlife have been allowed to reach population levels dictated by environmental conditions, the herd in some years has swelled to nearly four thousand. Population booms are generally followed by population crashes due to the limited resources and harsh environment of the Yellowstone region. The most recent crash, which was not a natural crash, was in the winter of 1996/97, when thousands of buffalo were killed after wandering into Montana in the search for food.

As a result of years of interbreeding between the original wild herd and the farmed herd, the Yellowstone buffalo are now one genetic population of Plains bison.

Austin Corbin formed the Corbin Park Association in 1888 in Newport, New Hampshire. He started to populate Corbin Park in the late 1800s with thirty buffalo, along with many other species. We know that eight of those buffalo came from S. L. Bedson of Stony Mountain, Manitoba, via Buffalo Jones, in 1888. Three or four more came from Wyoming. In 1892 Corbin paid Jones \$1,000 each for two bulls and eight cows, all five year olds. These animals were captured in Texas and were from the southern herd.

Most of the animals brought into Corbin Park didn't thrive, but the elk, wild boar, and buffalo did. By 1896 there were eighty-five buffalo in the park and surplus buffalo were sold to zoos and parks around the country.

Corbin died in 1904, but the Park Association continued under his son, Austin Jr., who brought in E. Harold Baynes to assist. Baynes was a founder of the American Bison Society, which was formed in December 1905 at a meeting of the New York Zoological Society. The American Bison Society was instrumental in getting Congress to establish parks and refuges for buffalo. Many of these refuges were stocked, due to the efforts of the American Bison Society and the New York Zoological Society, from the Corbin Park herd in New Hampshire.

In 1905 the Corbin Park herd numbered 160, one of the largest herds in the world at that time. By the 1940s the buffalo herd was down to eighteen. They had developed brucellosis and were destroyed to protect the neighboring dairy herds, from which they no doubt contracted the disease in the first place.

The Whitney herd started from three bulls and ten cows purchased from H. K. Glidden of Moosehead Ranch, Jackson, Wyoming, in 1897. The Whitney buffalo were moved to October Mountain at Lenox, Massachusetts. Six of the fifteen original animals that started Wichita Mountains Wildlife Refuge either came directly from or were descendants of the Whitney herd.

Charles E. Conrad was also a major player near the turn of the century. Conrad made much of his fortune through the trade in buffalo hides and tongues in the days when there were so many buffalo that no one foresaw the day when they would be nearly extinct. In those days there was no money to be made from live buffalo, only dead ones.

Conrad became alarmed when it became apparent that the buffalo would soon be gone and he embarked on a project to preserve them. Following Charles Allard's death in 1896, the Pablo-Allard herd of three hundred was split between Pablo and Allard's heirs. Some of Allard's share went to his widow, and she sold them to Charles Conrad.

The Conrad herd eventually settled at Smith Valley west of

Kalispell, Montana. Conrad died in 1902; at that time his herd numbered forty-six: eleven bulls, twenty-three cows and heifers, and twelve calves born in 1902, according to Probate Court records.

Conrad's widow, Lettie, assumed the management of the herd, and they soon outgrew the available facilities. Lettie determined that one hundred head was the maximum that could be sustained and developed a marketing program to sell off the excess animals. She kept the calves and sold the older, mature animals. In 1906 the demand for live buffalo was high, and people from all over the United States and Canada came to study and purchase the buffalo. Zoo curators, government researchers, representatives of conservation organizations, and persons seeking to start herds, all came. The going price was \$250 to \$300 a head, crated and ready to ship. The crates were carefully constructed with the safety of each individual animal in mind, and not one buffalo died that was shipped in the specially designed Lettie Conrad crates.

In 1908 thirty-four head of carefully selected buffalo from the Conrad herd were sold to the American Bison Society. These animals became the nucleus of the National Bison Range herd near Moiese, Montana.

Dr. Hornaday, chief taxidermist for the Smithsonian National Museum, started an initiative in 1888 for a National Zoological Park in Washington, D.C. The park opened in 1891, but animals were acquired prior to the opening. Eugene Blackford of New York City bought two buffalo from Frederick Nowell of North Platte, Nebraska, and donated the four-year-old bull and three-year-old cow to the Smithsonian in 1888. Dr. V. T. McGillicuddy of Rapid City, South Dakota, donated a seven-year-old cow and three bulls in 1889. These animals were transferred to the new zoo in 1891. In 1897 a bull and two cows were received from the Pablo herd, and in 1904 the herd was completed with four cows, three of them from the Corbin herd in New Hampshire. Hornaday had visions of this national herd being seed stock for many other herds, but in the first fifteen years only eight calves were born, and the herd became primarily an exhibition herd. Dr. Hornaday went on to become director of the New York Zoological Society.

James "Scotty" Philip, a Scottish immigrant who became a South Dakota cattle rancher, saw his first buffalo in 1874 in Kansas. He married Sarah Larrabee (sometimes spelled "Larvie"), a Cheyenne Indian, and they settled on reservation land in Dakota Territory near the Bad River, close to the present town of Philip.

In 1880 Scotty met Fred Dupree, and in 1901, at the urging of his wife, he purchased the Dupree herd from Fred's son's estate. Philip was concerned about the stability of his reservation location, so he homesteaded a site near what is now Fort Pierre, South Dakota, and moved his "73" ranch operation to that location in 1893.

There are conflicting accounts of the purchase of the Dupree herd. One account says eighty-three head were purchased in 1901. That number coincides with the number reported in the Dupree herd upon Fred's death in 1898. Another account says approximately one hundred, the entire herd, were sold to Philip. Another says fifty-seven head were sold to Philip, but there is no mention of what became of the remaining animals. Still another account says that two hundred buffalo were sold to Philip, including some hybrid animals that Scotty is reported to have said "weren't worth a damn."

The most accurate account of the transaction, I believe, is that Philip purchased about one hundred head from Dupree's estate, including some hybrid animals. Fifty-seven were rounded up and moved to Scotty's pasture on the first trip. Subsequent roundups brought the remaining animals to their new home. The purebred buffalo numbered eighty-three. The crossbred animals were slaughtered or sold. Some older buffalo and renegades refused to move from the Cheyenne River ranch and a hunt was organized to deal with them.

Philip, with the help of Congress, was able to lease thirty-five hundred acres of public land to pasture the herd, which eventually grew to more than nine hundred. He was instrumental in getting South Dakota to set aside land for Custer State Park, though he failed in his attempts to persuade the federal government to set aside land in western South Dakota for a wildlife refuge.

Descendants of the Philip herd went to Custer State Park, the San Luis Obispo Preserve in California, founded by William Randolph Hearst, the Cimaron Boy Scout Ranch in New Mexico, the 101 Ranch in Oklahoma, the Marquis' Little Buffalo Ranch in Wyoming, Martin Collin's Buffalo Home in South Dakota's Black Hills, Sutton Ranches near Agar, South Dakota, and many other herds that are still intact today.

Philip died in 1911 and was buried in the family's private cemetery below the buffalo pasture. Following the funeral, hundreds of buffalo stood on the hill overlooking the graveside services, presumably to say good-bye and pay their last respects. After Philip's death, his son-in-law, Andy Leonard, kept the herd together until 1925. Some were sold off through the years, and in 1925 two hundred were marked for a big hunt for Hollywood dignitaries and other so-called important people. The rest went to Henry O'Neil of Rapid City, South Dakota, in the late 1920s.

PUBLIC HERDS IN THE 1900S

The fifty-nine thousand acres that now make up the Wichita Mountains Wildlife Refuge near Cache, Oklahoma, was once reservation land of Oklahoma's Apache, Comanche, and Kiowa Tribes. The area

was established in 1901 with eight thousand acres as Wichita Forest Preserve. It was designated as a National Game Preserve in 1905, and those eight thousand acres were fenced for a buffalo refuge. In 1907 Congress appropriated \$15,000, and the nation's first bison range was stocked with six bulls and nine cows brought in by the American Bison Society from the New York Zoological Society. Six of those animals came from the Whitney herd, which had its origins in the Glidden herd of Jackson, Wyoming. Except for four bulls that were brought in from the Fort Niobrara Wildlife Refuge in 1940, the Wichita Mountains herd has been closed. By 1916 the herd grew to eighty-two head, and in 1951 about seven hundred were counted. Those numbers were reduced, and today between five and six hundred buffalo are maintained on the refuge along with Texas longhorns, elk, and white tail deer.

Shaw and Carter started a research project in 1981 to evaluate the genetic diversity of the Wichita herd. The herd was sampled and blood typed, and it was found that there was more genetic diversity in this essentially closed herd, which began with only fifteen animals, than was expected. Reproduction has been stable through the years and there appear to be no inbreeding problems.

Buffalo have a great capacity to adjust to their environments, and southern-acclimated animals tend to be smaller than their northern counterparts. It is speculated that in warm climates buffalo don't need as much body mass to carry them through the winter months.

The National Bison Range was established in 1908, primarily through the efforts of the American Bison Society. The U.S. government purchased the land near Moiese, Montana, from the Salish, Kootenai, and Pend d'Oreille Tribes. The Range was originally established under the Bureau of Biological Survey, and eventually came under the U.S. Fish and Wildlife Service. By 1909 sufficient funds were raised by the American Bison Society (mostly through the donations of women's groups) to purchase a small herd to stock the Range. Except for Montana, support from the West was weak, with only paltry support from the Great Plains states. Not one cent came in from Texas, Kansas, or the Dakotas.

Thirty-nine buffalo, thirty-four from the Conrad herd near Kalispell, Montana, were the beginning of the National Bison Range herd in 1910. One cow from Charles Goodnight of Texas, animals from Corbin Park in New Hampshire, and some remnants of the Buffalo Jones herd, which were captured in Texas in 1877, made up the rest.

By the mid-1920s, seven hundred buffalo roamed the 18,542 fenced acres of the refuge. In 1952 four bulls from Fort Niobrara Wildlife Refuge were introduced. Management practices were established to keep the numbers limited to what the land could comfortably support and the herd is now maintained with a stable population of between 300 and 350 buffalo.

One of the Bison Range's most famous residents was Big Medicine, a white (but not albino) buffalo bull that was born on the Range in 1933 and died at the age of twenty-six in 1959. Big Medicine was white except for a brown neck and topknot. He had normal-colored hooves and horns and blue eyes. He bred back to his mother, and that mating produced a true albino calf that was blind at birth. The blind calf lived out its life at the National Zoo in Washington, D.C. Animals from the Bison Range were transferred to Alaska, and white calves have been seen from time to time in Alaska's free-roaming herds.

The Fort Niobrara Wildlife Refuge near Valentine, Nebraska, started as the Niobrara Bird Reservation, created by Executive Order in early 1912. Around the same time, John W. Gilbert, an elderly man from Friend, Nebraska, was negotiating with the American Bison Society in an effort to find a permanent home for his small herd of buffalo. Niobrara looked promising, but there were no fences and no funding to build fences. Through a public effort, money was raised to fence an enclosure for Gilbert's buffalo. The vacant Fort Niobrara Military Post was annexed, and Fort Niobrara Game Preserve was created by Executive Order in 1913. Gilbert's gift of six buffalo was then accepted by the Secretary of Agriculture. Gilbert had eight buffalo at the time, two bulls and six females. It can be assumed it was the six females, ranging in age from yearlings to nine years old, that were turned loose in their new pasture in 1913; two bulls were transferred in from Yellowstone Park later that same year.

In 1935 four bulls were introduced from Custer State Park. In 1937 four more bulls from Custer were brought in, and in 1952 four bulls from the National Wildlife Refuge were introduced.

Buffalo from Fort Niobrara, many of them bulls, have gone out to Wichita Mountains Wildlife Refuge, Sully's Hill National Game Preserve, National Bison Range, Walnut Creek National Wildlife Refuge in Iowa, Badlands National Park (which received twenty-five head in 1964), Theodore Roosevelt National Park (which received twenty-nine head in 1956), Custer State Park, and, maybe, Antelope Island State Park in Utah.

Wind Cave National Park was established with 10,500 acres, primarily to preserve Wind Cave, in 1903. In 1912 an area adjoining the original park was established as a national game preserve. Fourteen head of buffalo, seven bulls and seven females, were introduced in 1913 with the help of the American Bison Society from the New York Zoological Gardens. In 1916, six head came in from Yellowstone National Park. These animals were probably from the Pablo-Allard and Goodnight herds brought in to restock Yellowstone.

In 1935, the game preserve became part of the national park. A state/federal sanctuary between Custer State Park and Wind Cave National Park was divided up and dissolved. Since the 1930s the two parks have shared a common fence.

Although no outside animals have been intentionally introduced to Wind Cave since 1916, the genetics of the Custer and Wind Cave herds are very similar, and it is known that there has been comingling of the two herds through the years. In 1940 buffalo from Wind Cave National Park went to the Pine Ridge Indian Reservation in South Dakota. In the 1950s, approximately eight hundred buffalo from Wind Cave were sold to Custer State Park. The herd is presently maintained at about 350 head, with excess animals allocated out, primarily to Indian tribes.

Thirty-six buffalo were purchased from the sons of the late Scotty Philip in 1914 to start the Custer State Park herd. Those animals were direct descendants of the nine calves captured by Fred Dupree in 1882. By the 1920s the herd had grown in number and a few were sold to people wanting to establish herds.

Eight bulls from Custer were transferred to Fort Niobrara in the mid-1930s. It is reported that Custer State Park also received some buffalo from Fort Niobrara; perhaps the transaction was a trade. In the 1950s, approximately eight hundred head were purchased from Wind Cave National Park, which borders Custer State Park to the south.

Custer's herd swelled to around three thousand head in the 1960s, and in the 1970s a plan was implemented to maintain the herd at a maximum of fourteen hundred with a core breeding herd of about nine hundred. The least desirable animals were butchered, and the herd was certified brucellosis free. Excess animals from this culled-down, disease-free herd were in demand as breeding stock, so the slaughterhouse was phased out, and an annual live buffalo auction was implemented.

The Custer State Park herd is one of the most manipulated public herds in the nation, with ten-year-old animals removed from the herd either through auction or hunting. Calves are weaned in October to improve production, a strict number of animals are maintained of each age and sex, from calves to ten year olds, and undesirable animals are culled each year. Since the early 1980s, Custer State Park personnel have been surveying the blood types in the herd and have been selecting animals with the objective of maintaining and increasing the park's genetic diversity.

The South Unit of Theodore Roosevelt National Park near Medora, North Dakota, was started with twenty-nine head of buffalo from Fort Niobrara Wildlife Refuge in 1956. In 1963 and 1964, fifty buffalo from Theodore Roosevelt National Park were released into two separate areas of Grand Teton National Park. Twenty-five cows went to Badlands National Park in 1964. Twenty animals were taken from the South Unit in 1962 to form the North Unit, which is maintained today at about 120 head. The South Unit herd is maintained at about 250 head, and excess animals are donated to the BIA, national park areas, and zoos.

Badlands National Park was originally established as a national monument in 1939. In 1964 twenty-five buffalo were introduced from Theodore Roosevelt National Park in North Dakota, and three unrelated bulls from Fort Niobrara in Nebraska. It is also likely that two or three Yellowstone bulls were introduced in 1965. By 1966 the population had doubled and continued to increase at more than 10 percent a year until 1972, when roundups to control the numbers began.

For many years the assumption was that buffalo lacked genetic diversity and therefore could be safely inbred. An example of how untrue that myth is can be found in the Badlands. The majority of the park's herd has adequate genetic diversity, but a small group of buffalo was introduced from Genesee Park in Colorado in the last twenty years. These bison were derived from two individuals from Yellowstone in 1913. No new blood had been introduced prior to the transfer to Badlands, and it can be assumed that they were inbred.

The Colorado buffalo look quite different from the established herd. The bulls are much smaller, are darker in color, and have reddish hair on the shoulders and neck. The females are smaller and lighter boned than their counterparts in the main herd. A number of animals have been born with congenital abnormalities. In the worst cases, the ankle and hoof are entirely absent. In less severe cases, one leg is contracted and may not touch the ground. This is often associated with "slipper" hoof, which might result from lack of wear. Some of the bulls have kinked tails.

The Colorado animals comeingle and interbreed with the main herd and there hasn't been any indication that the abnormalities are being passed on. Tribes should be alert to that potential, however, when receiving excess stock from the Badlands herd, which is currently maintained at about 450 head.

Under the management of the Utah Division of Wildlife Resources, the Henry Mountains herd, located in southern Utah, is one of only a few free-ranging buffalo herds left on this continent. Eighteen buffalo were obtained from Yellowstone in 1941, fifteen two-year-old heifers and three bulls. In 1942, two of the bulls were last seen near the Utah-Wyoming border, several hundred miles from where they were released. The other bull and a heifer went west and were last seen in western Wayne County, Utah. In 1945, five more bulls were introduced from Yellowstone. Originally, the herd spent their summers in the Henry Mountains and wintered on the Burr Desert, but after being rounded up and tested and vaccinated for brucellosis in 1963, they stopped coming to the Burr Desert altogether. The herd is maintained at about four hundred head by hunting, both legal and illegal. In the rough terrain of the Henry Mountains, this is a true hunt.

The Grand Teton herd started when the Wyoming Game and Fish Commission purchased twenty-two buffalo in 1948 from Yellowstone

National Park and maintained them in a fenced preserve near Jackson Hole, Wyoming. These animals were destroyed in 1963 due to an outbreak of brucellosis. In 1963 twenty-five buffalo were secured from Theodore Roosevelt National Park in North Dakota and three (probably bulls) from Fort Niobrara in Nebraska. These animals were released in the Sage Creek Basin. In 1964 another twenty-five buffalo came from Theodore Roosevelt National Park and were released in the Dillon Pass area. Since then, the two herds have merged and are all in the Sage Creek Basin. In 1968 they escaped from their enclosure and nine of them were permitted to roam freely. They spend most of their time in Teton National Park. The small herd winters at the National Elk Refuge adjacent to Teton, and in 1975 fifteen buffalo were counted. They continue to use the mountains for their summer range and to forage at the Elk Refuge in the winter. The herd grew to about 150 head in 1992.

Bison management in the Teton area is a cloudy issue because the animals roam in and out of the park and use land managed by four agencies: the National Park Service, the Wyoming Game and Fish Department, the U.S. Forest Service, and the U.S. Fish and Wildlife Service. Further complicating the matter is the issue of brucellosis. The buffalo carry the disease, as do the elk in the area of the Elk Refuge. Currently, a small number of buffalo are hunted on the Elk Refuge and other public lands in an effort to keep the buffalo numbers stable and not compete unfavorably with the elk that are fed over the winter by the U.S. Fish and Wildlife Service. Hunting permits have been issued primarily to Wyoming residents.

The Maxwell Game Refuge, near Canton, Kansas, began in 1951 with seven cows and three bulls brought in from the Wichita Mountains Wildlife Refuge. The present-day herd is maintained at about two hundred head. Although Maxwell periodically introduces bulls from outside sources, the herd is managed similar to Custer's herd, with the objective of building on and monitoring the existing genetics to preserve their strains.

Kansas maintains a second herd near Garden City, which started from one bull and two cows brought in from Wichita Mountains. That herd numbers around fifty head, and excess animals from both herds are sold at public auction annually.

The Antelope Island herd was established in 1893 with about twelve buffalo isolated on an island in the Great Salt Lake near Ogden, Utah. This herd was managed as a private herd until 1981 when the animals were purchased by the state of Utah. In 1987 the herd numbered about five hundred. One source says that the herd has had no new blood lines introduced since 1893, but another report states that animals from Fort Niobrara were added. I found nothing to verify the transfer but that doesn't mean it didn't happen. The herd is currently maintained at about 550, with about 150 sold at auction each year. The older bulls are hunted.

The state of Utah, since taking over the herd's management, has improved the overall appearance and size of the herd by selective breeding and culling practices. In blood testing done by Stormont Laboratories in the late 1980s, it was found that the Antelope Island herd contained animals that carry a rare genetic factor, a double allele. Through annual monitoring of the herd, Utah is assuring that this rare factor is not lost.

Bison were extinct when the first explorers of European descent visited Alaska, but they are believed to have roamed the state as recently as five hundred years ago. Twenty-three buffalo from the National Bison Range were introduced into Alaska in 1928, and four free-roaming populations currently exist: Farewell with 180 buffalo, Chitna with 50, Copper River with 100, and Delta with 375. The Delta herd has been rather troublesome to the local human population through the years due to its migratory habits and subsequent invasion of barley and other grain fields spread out over thousands of acres. Various hazing tactics have been tried over the years by the Delta Agricultural Project, but most of them have had little success.

By 1888 the buffalo population in Canada had declined to about five hundred head, primarily Wood bison isolated in northern Alberta and the Northwest Territories. The Dominion of Canada purchased Michel Pablo's herd in 1906. Over the next three to five years, Pablo delivered seven hundred Plains buffalo to the Buffalo National Park at Wainwright, Alberta. By 1921 the herd had increased to 4,609 head and continued to increase at about 25 percent a year. They were overgrazing their range, and between 1922 and 1924, 2,409 buffalo were slaughtered.

In 1922 Wood Buffalo National Park was established to preserve and protect the 1,500 to 2,000 remaining Wood bison. To protect the four free-roaming populations, 17,300 acres were set aside.

In 1925 the Canadian Department of the Interior came up with a new plan to dispose of the overflow at Wainwright. Maxwell Graham of the department proposed the annual shipment of one to two thousand buffalo north into Wood Buffalo National Park. At the time, biologists had differing opinions regarding Wood bison as a subspecies. Some believed the differences were due to environmental factors, and if Plains bison were subjected to the same environment, they would soon evolve into animals that looked like Wood bison. Others believed the Wood bison to be a distinct subspecies that could be lost if interbred with the Plains bison.

Graham justified his proposal to introduce the Wainwright animals into Wood Buffalo National Park by maintaining that some of the Wood bison would remain isolated on the northern part of the range, separated by swampland from the area where the Plains bison would be released. He further justified the massive importation of buffalo by

maintaining that these animals would multiply and provide a future source of food for the native populations.

Under loud protest from a variety of sources, Graham went forward with his plan, and in the late 1920s, seven thousand Plains bison were transplanted to the north. Within twenty years the Wood bison subspecies was overtaken by the dominant Plains strain. In addition to causing what appeared at the time to be the extinction of the Wood bison, the transplanted buffalo also brought in disease: tuberculosis, brucellosis, and anthrax. In the 1940s the numbers peaked at between twelve and fifteen thousand head of Plains bison.

In 1957 an isolated population of Wood bison was discovered near Great Slave Lake in the Northwest Territories, and they were moved to Fort Smith. In 1963 they were split up; twenty-three Wood bison went to Elk Island near Edmonton, and eighteen went to the Mackenzie Bison Sanctuary. By 1988 the population had grown to 1,630 at Mackenzie, and in 1994 Wood bison began to be made available to private herd owners, primarily in Canada.

CONCLUSION

Blood typing and careful selection of breeding animals is occasionally cited as a method of preserving the genetic diversity within a herd, but private and public management plans are often not concerned with maintaining the wild character of bison. Many feel it is a worthy goal, but question the feasibility because humans exert most of the selective pressures on the herds.

With private herds moving in the direction of increased manipulation for economic gain, public and tribal herds represent the best opportunity to maintain the wild character of buffalo over the long term. Historically, the buffalo supported the Indian. In many cases this has been turned around, and the Indian is now supporting the buffalo in an effort to maintain the integrity and wild character of the animal. I'd like to believe that a compromise is possible and that tribal herds can be both self-supporting and wild. I'd also like to see public herd managers adopt the maintenance of the wild character of buffalo as a priority in their management plans. This goal would be easier to achieve if the areas available to public herds were increased and public herds were established in more representative sites throughout the historic range of bison.

NOTES

This narrative is not intended to be the last word on the subject. I found many contradictions in my research, and in

some cases I chose what seemed the most plausible story.

N O T E S

This essay was written as a short course for the Northern Plains Bison Education Network and was presented at the InterTribal Bison Cooperative's first annual conference in Denver, Colorado, in September 1998. "Herd Origins" was also presented at the

University of Nebraska's Center for Great Plains Studies 2000 Symposium, "Bison: The Past, Present, and Future of the Great Plains." The symposium was held in April 2000 in Lincoln, Nebraska.