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REPORT
OF THE
AMERICAN BISON
SOCIETY

1917-18







EARLIEST KNOWN PICTURE OF AMERICAN BUFFALO
FROM GOMARA'S HISTORIA DE LAS INDIA'S SARAGOSSA. 1552-1553 FOLIO, CXVI

REPORT
OF THE
AMERICAN BISON
SOCIETY

OBJECTS
THE OBJECTS OF THIS SOCIETY SHALL BE THE PERMANENT
PRESERVATION AND INCREASE OF THE AMERICAN BISON
AND THE PROTECTION OF NORTH AMERICAN BIG GAME

1917-18

PUBLISHED BY THE SOCIETY
1918

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OFFICERS OF THE AMERICAN BISON SOCIETY

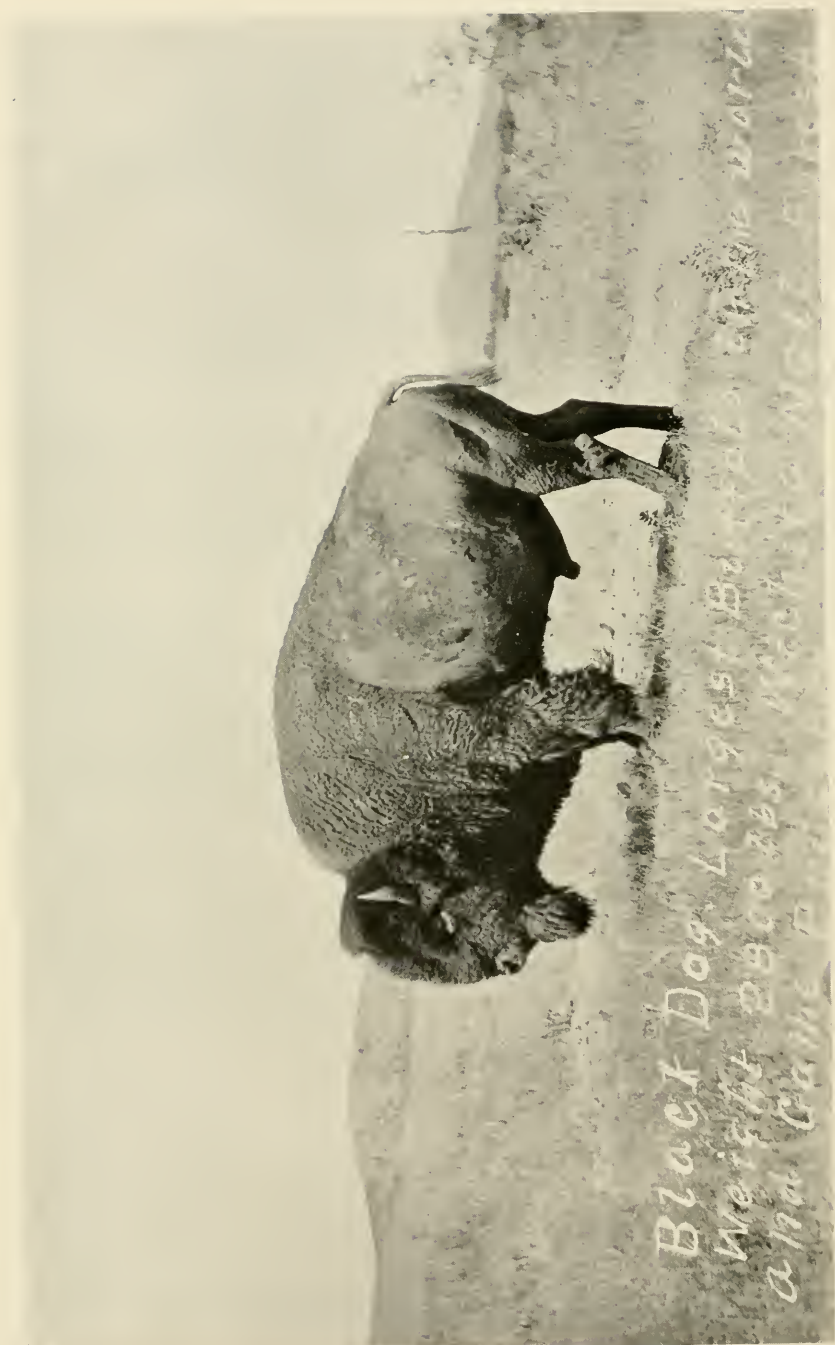
1918

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"BLACK DOG," WICHITA NATIONAL BISON RANGE, OKLAHOMA. 1917
THE "SMALL CALF" WHICH IN 1917 WAS A MEMBER OF THE FIRST NUCLEUS HERD ESTABLISHED BY THE NEW YORK ZOOLOGICAL SOCIETY.

REPORT OF THE SECRETARY

CLOSELY associated with our great war organizations, is the conservation in every way, not only of all our material and energies that go toward placing the United States with all its power and resources behind its men at the front, but also of such things and material that are invaluable in the support and upbuilding of those intellectual forces which endow the patriot with a strong and never-ending love for his country. It is necessary now, more than ever before, to strengthen and support the organizations that have been created to preserve our National Monuments, Parks, Reservations and wild life, for war is such a busy period that men and women who are sacrificing much to make the world a safe place to live in, are apt to forget that it is not only necessary, but within their power, to make it a most desirable and attractive place.

The American Bison Society is not only doing its part in this good work, but a number of its members have gone to the front, while others are identified with the various war organizations throughout the country, and are also doing good work. At the Annual Meeting of the Society a resolution was passed, that all members of the American Bison Society while engaged in the service of the United States in the present war—at their request—be placed on the “furlough list” and all Annual dues be remitted during their term of service. Our Treasurer, Clark Williams, who is also a member of the Board of Managers, is now at the front, a volunteer in the service of his country. His Secretary, W. C. Robertson, has been elected Acting Treasurer to serve during the absence of Mr. Williams.

The President announced the sudden death of Edgar Beecher Bronson, and the following resolution was unanimously passed:

“*Whereas*, Edgar Beecher Bronson, Secretary and member of the Board of Governors of this Society, suddenly, on Feb. 3, 1917, passed over the Great Divide, and

Whereas, Mr. Bronson was devoted to the objects of this Society, and a man worthy to be remembered for his accomplishments and fine character; therefore

Be It Resolved, That in the passing away of our member, Edgar Beecher Bronson, the American Bison Society feels it has suffered an irreparable loss, and the Society hereby pays high tribute to the memory of an upright, able and true man. He did his work well, and shall be held in kindly remembrance.

Be It Further Resolved, That there be published in the next annual report a photograph of Mr. Bronson with a short description of his life.

Martin S. Garretson was then elected Secretary of the Society.

At the Twelfth Annual Meeting of the Society held January 10th, 1918, the following nominees were elected to the Board of Governors for the class of 1920: Madison Grant, Prof. Morton J. Elrod, Col. C. J. Jones, Dr. John C. Phillips, C. H. Stonebridge, Col. Charles Goodnight, Mrs. Ethel R. Thayer, Wm L. Underwood, and Clark Williams. At a special meeting held in October 1917, C. K. McFadden was elected a member of the Board to fill the vacancy caused by the resignation of Judge Job Barnard. The Twelfth Annual Meeting of the Board of Managers was held immediately succeeding that of the Society. The following Officers were elected for the ensuing year:

Hon. President, Col. Theodore Roosevelt.

Hon. Vice-President, Prof. Henry F. Osborn.

President, Edmund Seymour.

Vice-President, Dr. W. T. Hornaday.

Vice-President, William P. Wharton.

Secretary, Martin S. Garretson.

Treasurer, Clark Williams.

Dr. T. S. Palmer made an interesting report covering the National Parks and various herds now maintained by the Government, and particularly called the meeting's attention to the fact, that the number of visitors had greatly increased from year to year. This was particularly true of Sully Hill and Wind Cave Parks.

He recommended that the Sully Hill Park be stocked with Bison as soon as practicable.

The Tenth Census of Pure Blood American Bison shows a gratifying increase in the number of these animals, particularly so in the last few years, throughout the United States and Canada.

The present condition in European countries do not permit any accurate count of the few specimens that may still exist, therefore are not included in the tenth census, except those in England and Australia.

The American people have shown a healthy awakening along the line of conservation of all wild life. The valuable assistance and co-operation of the U. S. Government in the protection and propagation of the bison is most encouraging. The economic value of this animal is becoming more fully understood and appreciated.

The herds under the U. S. Government supervision show, not only a satisfactory increase, but a noticeable improvement in quality and appearance over the original stock. This is due to the excellent judgment displayed in the selection of their ranges, also to the careful and intelligent supervision of the wardens in charge.

Among these herds will be found some of the largest and most magnificent specimens of this noble and historical animal. Col. Charles Goodnight—the well known breeder of buffalo and catalo—after a recent inspection of the Wichita herd, proclaimed them to be the largest and finest buffalo he had ever seen. This is a valuable endorsement, as Col. Goodnight was brought up in the buffalo country, he laid out the Goodnight trail in 1866, and is known as the “Father of the Panhandle of Texas.”

The Bison Society is justly proud of this herd, in fact, of all the herds which have been established, but the Wichita being the first, was looked upon by some people, at that time, as somewhat of an experiment, principally on account of the great risk in placing buffalo in a tick infested country, with the chance of infection from Texas fever. However, the Society placed much faith and confidence in the good judgment

of its then President, Dr. W. T. Hornaday and his plans for the care of the herd. The result is, after ten years, the small group of fifteen bison—donated for this purpose by the New York Zoological Society—survived the danger, and has increased, without any outside additions, to ninety-two fine healthy animals. The other herds have done equally well, the six herds now under U. S. Government supervision totaling seven hundred and fifty-eight head.

While these figures tend to show that the danger of extermination has in a measure been overcome by good management, any relaxation in the care and the protection of these herds would be fatal to the work already accomplished.

Early in 1918 the great demand for American beef and mutton and the instantly created shortage in the supply, led cattle and sheep raisers to look in every direction for ways and means by which to procure more stock. Longing eyes were fixed upon the Rainier National Park, and a campaign was set going for the purpose of securing from the Government the privilege of grazing stock in that area. A personal appeal was made to the American Bison Society to assist in counteracting the influence of certain large sheep owners in the West who were making a strong effort to influence the Secretary of the Interior, to allow the grazing of sheep in the Public Parks and Reservations as a "war measure."

The President of the Society immediately communicated with various game protection organizations throughout the country and with certain influential men in the West, and a counter-agitation was at once started to prevent the sheepmen from grazing their sheep in the National Parks, on the ground "that such grazing would ruin the scenic value, and destroy vegetation." These men were profiteers who paid practically no taxes and were only grazing their sheep on the public domain in competition with the farmers and sheepmen who owned their land, and paid taxes. The few herds of sheep that might be herded in the National Parks and Reservations were but a "drop in the bucket" as af-

fecting the supply of wool and mutton, and would in no manner whatever affect the prices of those commodities. The Society was successful in overcoming this drive of the sheepmen, and reports with much satisfaction the good work it accomplished toward preserving the Rainier National Park from ruination, and incidentally discouraging the western sheepmen from encroaching upon other parks and reservations.

The Society received telegrams that influences were being brought to bear upon the Park Commissioners of San Francisco to induce them to kill nine of their buffalo, to feed the bears in the Zoological Park of that city. Investigation by the Society revealed the fact that the Commissioners were really desirous of preserving the buffalo, and would willingly give them to other cities or parks where they could be exhibited. It seems that the Golden Gate herd had increased in size, and had been carefully preserved, and was a source of great interest, not only to the citizens of San Francisco, but to many tourists who saw them. Whether due to the efforts of the Society or not, we believe these buffalo have been saved from such an ignoble purpose, and hope that the friends of the Society, in co-operation with the Park Commissioners, have assured the complete preservation of the San Francisco herd.

The Society is now endeavoring to establish two more herds, one in the Pisgah National Forest and Game Preserve in North Carolina, the other in Sully Hill Park, North Dakota. These ranges are ready to receive the bison. The Society has received the generous donation of six head for the Pisgah National Park, but owing to war conditions, and the congested railway traffic, it has not been possible to obtain transportation from New Hampshire. The donor—who is greatly interested in the preservation of the bison—will hold the animals until they can be transported. The Society expects to purchase the nucleus herd for the Sully Hill Park, but the same difficulty of transportation must first be overcome. The owners of bison who are willing to donate bison for this herd are requested to write to the

Secretary. Such gifts would be greatly appreciated by the Society.

The Society is collecting for its permanent records all historical data that can be obtained, so that hereafter any student of American Bison history may find everything at hand in the Society records that he may wish relating to that species. During the year we have received some valuable donations of old buffalo guns, bows, arrows and other implements and weapons used in the extermination of the great herds of bison; also donations of clippings, old prints, photographs and other interesting matter relating to the buffalo, and all members are requested to assist in making this collection as complete as possible.

Nothing further has been done towards the securing of a permanent home for the Society. The building committee of the New York Zoological Society owing to the high cost of material, and other reasons, has decided to hold back their Heads and Horns building until some future date. The subscriptions received have been invested in United States Liberty Loan Bonds.

MARTIN S. GARRETSON,
Secretary.

October 28, 1918.

This Society has just received information from France, that its Treasurer, Clark Williams, has been honored with the rank of Major, and has been ordered to take supervision of the Division Representatives of all the Divisions of the American Expeditionary Force in France, for the American Red Cross. The Society congratulates Mr. Williams and is proud of the honor conferred upon one of its executive officers.



W. F. Cody
"Buffalo Bill."

TELEGRAM SENT TO THE GOVERNOR OF
COLORADO

NEW YORK, N. Y., January 12, 1917.

To His Excellency,
THE GOVERNOR OF COLORADO,
Denver, Colorado.

At the annual meeting of the American Bison Society, organized for the preservation of the American Bison, held here yesterday, the following resolution was passed and ordered recorded in the minutes of the society. Will the Governor kindly transmit this resolution to the custody of either the Denver Masonic or Denver Elks Lodge, whichever is in charge of Colonel Cody's funeral.

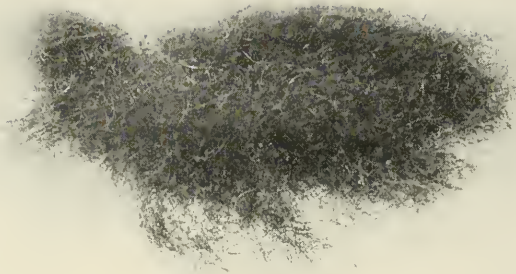
"RESOLVED, That in the recent death of Colonel William F. Cody, familiarly known throughout his life as "Buffalo Bill," the country has suffered the loss of one of the last and by far the most distinguished survivors of the early Pathfinders, Pioneers, and Army Scouts of the late sixties and early seventies. Col. Cody needs no eulogy from this Society. His early history is a part of American history dealing with the pacification of the hostile Indians and the settlement of the trans-Missouri plains, while his later history will persist indelibly from the sheer credit due him of having through forty years done more than any other one individual to make known to the younger generation of his own country and of Europe the types of individuals and of incidents most highly characteristic of the period that has been designated "The Heroic Days of the Far West."

This Society mourns his loss and begs to extend its condolence to all to whom he was near and dear.

THE AMERICAN BISON SOCIETY,

EDMUND SEYMOUR, *President*.

EDGAR BEECHER BRONSON, *Secretary*.



*Fig. 1 Hind Quarters
Average Length $2\frac{1}{2}$ in.*



*Fig. 2 Fore Quarters,
Average Length $5\frac{1}{2}$ in.*

BUFFALO WOOL

BUFFALO WOOL BLANKET

COL. CHARLES GOODNIGHT, of Goodnight, Texas, one of the best known breeders of buffalo and catalo in the United States, had collected from time to time a quantity of buffalo wool which he reported of fine quality, but rather a short staple. This wool was sent to the Reed City Woolen Mills of Reed City, Mich., and they reported that the wool was very fine and fluffy and somewhat difficult to handle, but this was readily overcome by mixing in a small amount of Karakule wool which did not affect the color and put just enough fibre in it to hold it up for spinning.

The cloth woven from this yarn has a fine appearance, and the strong quality of the wool makes it very desirable. Several blankets were woven for Col. Goodnight, and one was presented to the President of the Bison Society. As far as known, these are the only blankets of this character in existence. They are seven feet long and six feet wide and weigh 4 lbs., 5 oz. It is claimed that there is more warmth in buffalo wool than any other kind, and certainly soldiers stationed at the frontier forts, and any one who has lived in the northern climate and used buffalo overcoats, know that no other fur so successfully withstood the rigors of winter, and it is claimed, the early settlers affirm, that one buffalo robe was warmer than four ordinary woollen blankets.

The wool used was that shed by the animals in the springtime covering a period of several years. The question of how to obtain the wool from the living buffalo has not been clearly solved. It has been suggested by some that the buffalo be sheared the same as sheep, but this method does not seem very practical owing to the great strength and fighting ability of the animal. Col. Goodnight is of the opinion that the best and safest method would be to run the buffalo in an ordinary cattle squeezer, the same as used for branding cattle. In this the buffalo would be held securely without danger to itself or any one else, and the loose hair could be

pulled off or a portion of it sheared. There are many pounds of this valuable wool going to waste every year, and there is no question but what, if it could be collected and made into blankets or into cloth, these would command very fancy prices and would make appropriate gifts.

GOVERNMENT REPORT ON BUFFALO WOOL BLANKET
Department of Commerce

BUREAU OF STANDARDS

Report on
Blanket of Buffalo Wool
Submitted by
Mr. C. Goodnight, Goodnight, Texas

Reference: Letter of March 1, 1918. In reply refer to: Test No. B76

Sample Mark	Heat Transmission	Permeability	Weight oz. per sq. yd.	Thickness Ins.	Rating
B76	1.715	20.1	14.1	.163	100
B9	1.715	6.0	20.6	.136	100

The rating refers to a comparison of the heating qualities with reference to the old U. S. Army Standard Blanket which is given here as B-9. The Heat Transmission is the number of calories transmitted per sq. cm. per hour per degree C difference in temperature. The permeability may be considered as an index to the amount of air passing through it and is the tangent of the curve obtained by plotting velocity of air passing through against the pressure resulting therefrom. To secure the most advantageous warmth qualities it is desirable to have the heat transmission and permeability as close to zero as possible.

BUREAU OF STANDARDS.

March 23, 1918.
Washington, D. C.



EDGAR BEECHER BRONSON

EDGAR BEECHER BRONSON

MR. BRONSON started his business career when about twenty years of age as a reporter. He was remarkable for his resolute and daring spirit. To get his copy to the office of the New York *Tribune* while reporting the Beecher-Tilden trial he crossed the East River by jumping from one floating cake of ice to another.

On July 24th, 1874, in company with Washington Donaldson he made a 26-hour balloon voyage that remained the world's endurance record in ballooning for over 30 years. Later in life he became one of the founders of the Aero Club and the Dean of its aviators, and at the time of his death, was taking great interest in aviation and would have been of valuable service to his country.

Associated with men like Abram S. Hewitt, he was attracted to the romantic west, and engaged in the cattle business for some fifteen years, owning at one time over 22,000 head of cattle. His experiences as a cattle man were embodied in his book—"Reminiscences of a Ranchman"—one of the truest stories depicting the real Indian and cowboy life and the history of that period of the west. He fought cattle thieves with Clark B. Stocking, "the Old Guard," and later embodied Stocking's experiences in a book entitled "The Vanguard." He also wrote "The Red-Blooded" largely covering his adventures in the southwest and Mexico. As a cattleman in 1877 he drove the first herd of cattle into the hostile Sioux country north of the Platte river, and established the "3-Crow Ranch" on Ghost creek, a tributary of Running Water. He knew and appreciated the spirit of the west. His books are true to life and fact, and will have great historical value in the future and are real Americana.

After selling out his cattle business, he engaged in banking in El Paso for several years, and then became associated with Clarence E. King, a truly great American, in charge of the Geological Survey along the 40th Parallel. This gave Bronson a great knowledge of his country and of many pioneers and prominent men of the west.

Preceding ex-President Roosevelt, he hunted three years in Africa. His adventures are entertainingly told in his book, entitled "In Closed Territory." He was the guest of Wm. N. McMillan, owner of Juja Farm, some 30 miles from Nairobi, and he hunted with Geo. H. Outram and Will Judd. He secured the third largest elephant on record, and his collection of game trophies is considered one of the finest ever taken from Africa. He was known in Africa as Bwana Kimerije, "The Master Who Smiles."

In the years 1910-1912 he made two trips into South America, exploring in Colombia, Ecuador and Peru, crossing the Andes and down the Amazon river alone, with only native guides. He did not live to record these adventures in book form.

Bronson was strongly built, of medium height, a forceful and brave man. His principal characteristic may be said to be his blunt,

open and honest nature. He had a great sense of humor and despised insincerity and sham. His mind was remarkable in judging men and motives, with an intimate knowledge of nature, coupled with keen power of observation.

As a companion and conversationalist he had few equals as his large and devoted circle of friends amply testify.

The loss is a real one to the Society. His extensive knowledge of the west, personal acquaintance with many of the leading pioneers, soldiers and Indians and his own experiences in hunting buffalo and other large game, and his literary ability, made him a particularly valuable Secretary and member of the Board.

TENTH CENSUS OF LIVING AMERICAN BISON AS OF JANUARY 1, 1918

Compiled by MARTIN S. GARRETSON

The first census, made in 1889 by Dr. W. T. Hornaday, appeared in his "Extirmination of the American Bison," page 525.

(Total number of bison, 1091.)

The second, made in 1903 by Dr. Frank Baker, appeared as a circular of the National Zoological Park.

(Total number of bison, 1753.)

The counts of 1908, 1910, 1911, 1912, 1913, 1914, and 1916, were published in the Annual Reports of the American Bison Society.

UNITED STATES

Owner and Location	Males	Fe- males	Young born in 1917	Total	Grand Total
CALIFORNIA:					
Pasadena—J. H. Henry . .	1	3		4	
San Francisco—Golden Gate Park	10	15	5	30	34
COLORADO:					
Denver—City Park	10	11	2	23	
La Veta Pass— The Trinchera Co. . .	About 150 head			150	173
DISTRICT OF COLUMBIA:					
Washington—National Zoo- logical Park	5	8	5	18	18
GEORGIA:					
Atlanta—Dep't of Parks . .	1	1		2	2
ILLINOIS:					
Chicago—Lincoln Park . .	4	9	3	16	
Granville—A. W. Hopkins .	1	2	1	4	
Rushville—Warren R. Leach	1	3	2	6	26
INDIANA:					
Fort Wayne—J. H. Bass . .	1	2		3	
Nappanee—J. S. Walters . .	1			1	4
IOWA:					
Davenport—City Park . . .	1	5	2	8	
Iowa Falls—City Park . . .	1	2	1	4	
Keokuk—Rand Park		1		1	
Keota—J. O. Singmaster . .	2	8	2	12	
Keota—C. A. Singmaster . .	1	6	3	10	
Spirit Lake—John Reinhart	4	10		14	49
KANSAS:					
Topeka—Park Department .	2	3	1	6	
Wichita—City Park	1	1		2	
Wichita—Park Salters . . .	1			1	9
KENTUCKY:					
Junction City—Joe E. Wright		2		2	2
MARYLAND:					
Baltimore—Druid Hill Park .	4	2		6	6

CENSUS—Continued

Owner and Location	Males	Females	Young born in 1917	Total	Grand Total
MASSACHUSETTS:					
Auburndale—Norumbega Park Co.	1	1		2	
Boston—Zoological Park . .	1			1	
Springfield—Forest Park .	1	3	1	5	
West Brookfield—Indian Rock Farm	3	3	1	7	
West Brookfield—H. E. Richardson . . .	4	3		7	22
MICHIGAN:					
Detroit—Belle Isle Park . .	1	3	1	5	
Oscoda—Carl E. Schmidt .	1	1	1	3	8
MINNESOTA:					
Fairmount—Fairmount Park	1			1	
St. Paul—Department of Parks	2	1		3	4
MISSOURI:					
Kansas City—Horne's Zoological Arena	15	23		38	
Middletown—H. A. Stone .	1			1	
St. Louis—Forest Park . .	2	2	1	5	44
MONTANA:					
Butte—Electric Railway Co., Columbia Gardens . .	3	2		5	
Dixon—Montana National Bison Range	79	85	36	200	
Kalispell—Mrs. C. E. Conrad	17	42	14	73	278
NEBRASKA:					
Crete—Anton Vavra	1	3		4	
Lincoln—Antelope Park . .	1	1		2	
Omaha—Board of Park Commissioners	3	8		11	
Valentine—Niobrara Reservation	4	6	4	14	31
NEW HAMPSHIRE:					
Newport—Blue Mountain Forest Association . .	46	40	10	96	
Tilton—William H. Moses .	1	2	1	4	100
NEW YORK:					
Brooklyn—Prospect Park .	2			2	
Chazy—W. H. Miner	4	8	1	13	
New York City—Central Park	1	3	1	5	
New York City—Zoological Park	15	12	2	29	
Rochester—Seneca, Durand—Eastman Parks	4	2		6	55
NORTH CAROLINA:					
Andrews—Geo. G. Moore .	3	4		7	7

CENSUS—Continued

Owner and Location	Males	Females	Young born in 1917	Total	Grand Total.
OHIO:					
Cincinnati—Zoological Gardens	7	5	2	14	
Cleveland—City Park	1			1	
Toledo—City Park	1	1		2	17
OKLAHOMA:					
Bliss—Miller Bros. (101 Ranch)	2	19	5	26	
Cache—Wichita National Game Preserve	37	39	16	92	
Lawton—John A. Liberman	1			1	
Oklahoma City—Wheeler Park	1			1	
Pawnee—Major G. W. Lillie	20	34	9	63	
Sand Springs—City Park .	2	1		3	186
OREGON:					
Pendleton—The Roundup .		1		1	1
PENNSYLVANIA:					
Allentown—Harry C. Trexler	12	13	6	31	
Philadelphia—Zoological Garden	6	9		15	
Pittsburgh—Highland Park	1	2		3	49
SOUTH DAKOTA:					
Ashton—James Norwood .	1	3		4	
Custer County—State Game Preserve	20	26	3	49	
Hot Springs—Wind Cave National Game Preserve	11	15	8	34	
Pierre—Estate of James Philip	200	400	100	700	787
TENNESSEE:					
Memphis—Zoological Park .	2			2	2
TEXAS:					
Goodnight—Charles Goodnight	24	136	32	192	192
UTAH:					
Salt Lake City—John E. Dooley	About 300 head			300	200
WASHINGTON:					
Seattle—Woodland Park Zoo	3	3		6	
Tacoma—Park Commissioners	4	3	2	9	15
WISCONSIN:					
Milwaukee—City Park . .	2	3		5	5
WYOMING:					
Thermopolis—Big Horn Hot Springs—State Reserve	2	14	1	17	
Yellowstone National Park, Tame Herd	139	131	60	330	
Yellowstone National Park, Wild Herd	Estimate 70			70	417
Total in the United States					2843

CENSUS—Continued

CANADA

Owner and Location	Males	Females	Young born in 1917	Total	Grand Total
ALBERTA:					
Banff—Banff National Park	8			8	
Lamont—Elk Island Park .	60	74	27	161	
Wainwright—Buffalo Park .	1192	1197	532	2921	3090
ATHABASCA:					
Wood Bison	Estimated 500			500	500
BRITISH COLUMBIA:					
Vancouver—Park Commis- sioners	1	2		3	3
MANITOBA:					
Brandon — Inter Provincial Fair	1	1		2	
Winnipeg—Assinaboine Park	3	3		6	8
ONTARIO:					
Hamilton — Park Commis- sioners	5	5		10	
St. Thomas—Robert J. Miller	1	1		2	
Toronto—Riverdale Park .	2	2		4	16
QUEBEC:					
Holt Renfrew & Co., Ltd. .	1	4	1	6	6
Total in Canada					3623

ENGLAND

BEDFORDSHIRE:					
Woburn Abbey — Duke of Bedford	22	24	7	53	
London—Zoological Society .		1		1	54
Total in England					54

AUSTRALIA

NEW SOUTH WALES:					
Sydney—Zoological Park . .	1	1		2	
SOUTH AUSTRALIA:					
Adelaide—Zoological Gardens		1		1	3
Total in Australia					3

CENSUS—Continued

SUMMARY OF BISON CENSUS FOR JANUARY 1, 1918

Captive in United States	2,773	
Wild in United States	70	
Captive in Canada	3,123	
Wild in Canada	500	
Captive in North America	5,896	
Wild in North America	570	
Total Pure Blood Bison in North America		6,466
Captive in England and Australia	57	
Total Pure Blood Bison in Foreign Countries . . .		57 ?
Calves Born in 1917		Over 900

SUMMARY OF UNITED STATES GOVERNMENT HERDS

Number of United States Government Herds . . .		6
Montana National Bison Range, Montana	200	
National Zoological Park, Washington, D. C . . .	18	
Niobrara Reservation, Nebraska	14	
Wichita National Forest and Game Preserve, Okla.	92	
Wind Cave National Game Preserve, South Dakota	34	
Yellowstone National Park, Wyoming	400	
Total number of Bison in U. S. Government Herds		758

COMPARATIVE INCREASE FROM 1908 TO 1918

UNITED STATES

State	1908	1913	1918	State	1908	1913	1918
Arizona	14	11		Montana	320	154	278
Arkansas	2			Nebraska	7	29	31
California	18	30	34	New Hampshire	136	80	100
Colorado	16	98	173	New York	47	57	55
Dist. of Columbia	8	13	18	North Carolina			7
Georgia		2	2	Ohio	30	20	17
Illinois	13	18	26	Oklahoma	70	155	186
Indiana		3	4	Oregon			1
Iowa	28	40	49	Pennsylvania	9	21	49
Kansas	27	73	9	South Dakota	158	345	787
Kentucky			2	Tennessee			2
Maryland		3	6	Texas	70	142	192
Maine		4		Utah	35	70	300
Massachusetts . .	6	13	22	Washington		4	15
Michigan	9	5	8	Wisconsin	2	4	5
Minnesota	9		4	Wyoming	79	192	417
Missouri	3	24	44				
Total	1908				1,116		
	1913				1,610		
	1918				2,843		

CENSUS—Continued

CANADA

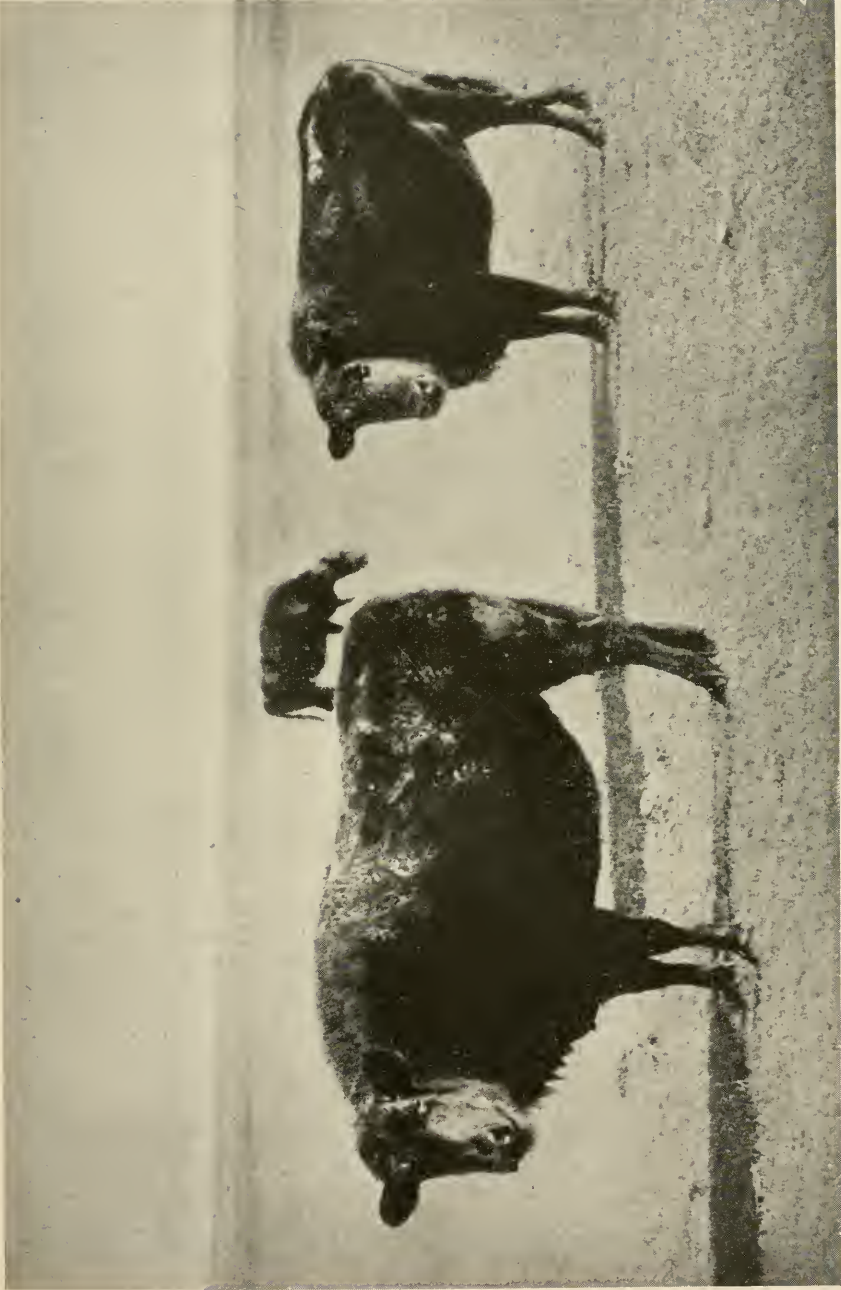
Province	1908	1913	1918	Province	1908	1913	1918
Alberta . . .	398	1287	3090	Manitoba . . .	10	9	8
Athabaska . .	300	450	500	Ontario . . .	1	8	16
British Columbia		2	3	Quebec . . .			6
Total				1908	709		
				1913	1,756		
				1918	3,623		

FOREIGN COUNTRIES

Country	1908	1913	1918	Country	1908	1913	1918
Austria . . .	25			Germany . . .	49		
Australia . . .			3	Netherlands . .	13		
Belgium . . .	4			Russia . . .	4		
England . . .	37		54				
Total				1908	132		
				1913 No figures			
				1918	57 ?		

SUMMARY OF CENSUS FROM 1889 TO 1918

1889	1,091
1903	1,753
1908	1,957
1913	3,366
1918	6,523
Total increase from 1889 to 1918	5,432



CATALO COWS
BRED AND OWNED BY COL. CHARLES GOODNIGHT, OF GOODNIGHT, TEXAS

THE CATALO

By MARTIN S. GARRETSON

EXPERIMENTS in breeding and producing the Catalo (a cross between the American Buffalo and domestic cow) have been indulged in by numerous individuals with more or less success for a great number of years. The earliest account we have is that of Peter Kalm,* who states that in 1750 the calves of the wild cows and oxen which are to be met with in Carolina and other provinces south of Pennsylvania, had been obtained by several people of distinction, who brought them up among the tame cattle. When grown up, he adds, they were perfectly tame, but at the same time, very unruly. They likewise copulated with tame cattle.

Gallatin† also says that they were not only domesticated, in Virginia, but were bred to domestic cattle, and that the mixed breed was fertile. As some doubts were raised on that point, he further states, writing some years later, "I must say that the mixed breed was quite common in 1784 in some of the northern counties of Virginia, and that the cows, the issue of that mixture, propagated like all others. No attempt that I know of was ever made to tame a buffalo of full growth, but calves were occasionally caught by the dogs and brought alive to the settlements. A bull thus raised, was for a number of years owned in my immediate vicinity by a farmer living on the Monongabela adjoining Mason and Dixon's line. He was permitted to roam at large, and was more dangerous to man than any bull of the common species, but to these bulls, he was most formidable, and would not suffer any to approach within two or three miles of his range. Most of the cows I knew were descended from him. From a want of fresh supply of the wild animal, they have merged into the common kind. They were no favorites as they yielded less milk. The superior size and strength of the buffalo might have improved the breed of oxen for draft, but this was not attended to, horses being almost exclusively employed in that quarter for agricultural pursuits."

There is but little in these two accounts that would tend to show with what buffalo these crosses were made, but it is not at all unlikely that they were the buffalo that ranged over the Eastern States from Georgia to Northern New York, and were quite numerous in Pennsylvania, Maryland, and Virginia at the period mentioned in these accounts. These buffalo were said to be of a different type, and much larger than the western plains bison. A good description of this animal is given in that interesting little book, "A Pennsylvania Bison Hunt,"‡ and is as follows:

"The Pennsylvania bison was a tremendous animal. He exceeded in size the buffalo met with west of Ohio, Kentucky and Tennessee.

* Peter Kalm's Travels in North America. Vol. I, page 162.

† Albert Gallatin. A Synopsis of Indian Tribes of America Antiquarian Soc., Vol. II, page 139.

‡ A Pennsylvania Bison Hunt, pages 16-17, by Henry W. Shoemaker. Published by the Middleburg Press, 1915

This bison was very dark in color, many of the old bulls being coal black, with grizzly white hairs around the nose and eyes. The hair was very short with a tendency to crispness or curliness, especially at the joints. The hump, so conspicuous on the western bison was noticeable by its absence. The legs were long, and fore and back legs evenly placed. The heavy front and meager hind quarters of the western bison were not present—in other words the Pennsylvania bison was a beautifully proportioned animal. The hair on the neck and shoulders were no longer than on other parts of the body except with mature bulls, who carried a sort of mane or crest which reached its maximum length where the hump grows on the prairie buffalo. Both males and females wore beards, but they were not heavy, and consisted of straight, stiff black hair. The horns which in many specimens were very long, grew upward like the horns of Ayrshire cattle, and were much like the horns of the European bison.”

As it is recorded that the early settlers of Virginia obtained their first crosses from the wild calves brought in by their dogs, it would indicate that these calves were from this type of buffalo, as the herds from which these calves were obtained, must have been ranging at no great distance from the settlements.

A description of a descendant from one of these early crosses is given in a letter from Mr. William E. Connelly, Secretary of the Kansas State Historical Society, dated February 18, 1918, in which he said, “I want to mention a breed of cattle that formerly existed in eastern Kentucky. I was born and brought up in Johnson County, Kentucky. My great-grandfather, Henry Connelly, was a Captain of Cavalry in the Revolution in North Carolina.

He moved from North Carolina to Montgomery County, Virginia, and from that place to the Big Sandy Valley, arriving in Johnson County in 1810. There came with him Peter Mankins, who settled at the mouth of Miller’s Creek on the Big Sandy River, about three miles above Paintsville. Mankins died in Washington County, Arkansas in 1882, age 112 years. He was born on the site of Washington City, D. C., before there was any Washington City there. He was a most remarkable man. He was fond of horses and cattle and had the best breeds of any one in the country. He had a breed of cattle which he claimed, and which the old settlers claimed, were from buffalo. He brought these cattle from Montgomery County, Virginia, as I have heard the old people say. My grandfather had some of these cattle. I remember only one, a cow, but it had something of the form of the Goodnight catalo. I think it had not so marked a hump or elevation at the shoulders. In the winter there developed long hair on the front part of the body. They had curved horns and the horns were almost solid black, and they always had black hoofs. The one that I remember as belonging to my grandfather was a white cow but she had spots of black and brown through her hair, which was mottled like black through white marble. This of course, is from my own recollections and no evidence that they were from buffalo, but the old people always said so.”

There is no reason to doubt that this cow descended from one of the early crosses which were quite common in Virginia prior to the date mentioned, and there is reason to believe that her antecedents were the buffalo of the Eastern type, they being quite numerous at that time in that locality. The long hair that appeared on her fore-quarters in winter, would indicate that on the domestic side, there was a strain of the West Highland or Galloway blood, as these cattle were the ones most frequently met with in the early settlements of Virginia.

Another early account that contains a lot of interesting matter is found in the letter sent to Audubon by Robert Wickliffe, of Lexington, Kentucky, dated November 6, 1843, in which he has quite fully recorded the results of his efforts in domesticating the buffalo, and the results obtained in crossing them with common cows. He states that in 1813 he purchased one or two buffalo cows from a man who brought them from the country called the Upper Missouri. He further states that on getting possession of the tame buffalo he crossed them with his common cows, and found the buffalo bull was willing to mate with common cows, but the domestic bull was always shy of the buffalo cow. From one of the domestic cows he raised a half-blooded heifer, putting her to a domestic bull and from this union, obtained a heifer, which, as he states, in order that the experiment might be perfect, put to a buffalo bull and she brought me a bull calf which I raised to be a very fine large animal, perhaps the only one in the world of this blood, namely, a three-quarter, half-quarter, and a half-quarter of the common blood. This seems to have concluded his experiments which had been carried on for quite a number of years, as after this he left them to propagate their breed themselves.

He has recorded many interesting facts obtained during the years of his experimenting. He notes that the half-bloods were larger than either the buffalo or common cow, and that the mixed breeds are of various colors, having had them striped with black on a gray ground like the zebra, some of them brindled red, some pure red with white faces, and others red without any markings of white. He also says that "my experiments have not satisfied me that the half-buffalo bull will reproduce again, but the half-breed heifers will be productive from either race, and I have been informed that at the first settlement of the country, cows that were considered best for milking, were from half-bloods down to the quarter and seven-eighths of buffalo blood."

As the milk of the buffalo cow, while small in quantity, is extremely rich, it is evident that a strain of buffalo blood in the domestic stock would greatly improve the quality of the milk over that of the common cow.

Mr. James P. Swain of Bronxville, New York, who in 1868 made a number of experiments in crossing the buffalo with Jersey cattle, records some interesting observations in regard to the milk of his cross-breeds. These animals were much larger than the Jersey,

almost black in color, with a somewhat woolly coat. They were quite tame and exceedingly domestic, allowing a boy to handle them, and stood to be milked as well as any cow in the herd of Jerseys.

Mr. Swain made some careful tests of the milk, in comparison with that of his choicest Jerseys, and found that though the quantity was small—being about ten quarts a day when fresh—it was however astonishingly rich, yielding fully twenty-seven per cent of cream, while the best of the Jerseys only marked twenty-five per cent. One of the striking peculiarities that he noticed in the cream was, though perfectly distinct, it was almost colorless, that is, white like the milk. The milk was much sweeter than that of the common cows, and contained but little water, and when curdled made a remarkably tenacious curd, having not more than half the usual amount of whey.

From this time forward there appears to have been a much wider interest taken in the production of catalo. The Western country was being opened up and the cattlemen who were pasturing their herds on the buffalo range had an opportunity to observe the hardiness of this animal, who thrived under all sorts of climatic conditions. A number of these Western cattlemen conceived the idea that it would be a good plan to incorporate some of the good qualities of the buffalo in their own herds by crossing the buffalo with their common cows, and by so doing produce a superior breed of range cattle that could stand the high altitudes and severe winters on the plains. Prominent among these men who made successful experiments was, Colonel Charles Goodnight, of Goodnight, Texas; Major Sam I. Bedson of Winnipeg, Manitoba, Canada; Colonel C. J. Jones (Buffalo Jones) of Garden City, Kansas; John E. Dooley of Salt Lake City, Utah; James Philip (Scotty Philip) of Fort Pierre, South Dakota, and Mossom M. Boyd of Bobcaygon, Ontario, Canada. There was also quite a number of individuals owning small herds of buffalo who experimented in cross breeding, for no particular purpose.

There seems to have been quite a wide difference in the percentage of loss encountered by breeders in obtaining the first cross. Major Bedson who crossed mostly with the grade Shorthorns claims to have met with little or no loss whatever, while Buffalo Jones states that in 1888 he bred eighty or ninety cows to six buffalo bulls, and the following year they produced four calves, and he lost thirty cows, but after that, he selected the type of cows that gave birth to catalo with the least percentage of loss, and claims to have had no further trouble. Jones crossed with a small number of different breeds of cattle, but principally with the Galloways. Charles Allard in 1893 purchased a herd of buffalo and catalo from Buffalo Jones, and after two years of effort, with no results whatever, gave it up, claiming that the loss in cows did not warrant his continuing the business.

As the buffalo have been successfully crossed with most all the different breeds of domestic cattle, it would appear that the minimum of loss was obtained by selecting cows having certain physical points.

Colonel Goodnight has observed that compact, well formed cows when bred to a buffalo bull died at a much greater pro rata than a big roomy cow with a large belly, and that no two year old heifer ever delivered a buffalo calf; they all died. Colonel Goodnight has crossed with success on the Durham, Jersey, Galloway, and Polled Angus, principally the latter. He states, "I have confined myself to the Polled Angus, as they are hardier, and produce more beef than any other cattle, and the crosses favor them largely in this particular."

It seems to be the general opinion of a number of writers on the subject, that it is impossible for a domestic cow to deliver a male half-blood buffalo calf, on account of its hump. Some authorities claim that this is a mistake, and assert that no half-blood buffalo calf, or full-blood buffalo calf, was ever born with a hump; this does not develop until quite some time afterwards. A close observation of the buffalo and domestic cow will reveal reasons for difference of opinion. In the first place, the reproductive organs of the domestic cow are larger than those of the buffalo, including the opening in the pelvis. The argument is if a buffalo cow with smaller organs than a domestic cow, can deliver a buffalo calf, there is no reason whatever for a domestic cow with larger organs not being able to deliver a half-blood calf, who, even after it is fully matured, has less hump than the buffalo. The domestic cow brings forth her kind with less difficulty than does the buffalo, also both buffalo and catalo calves are smaller when born than the domestic calf, and if so these facts tend to show that the trouble is not on account of the hump, nor as a rule at the time of delivery, but prior to it. The difficulty and loss encountered in obtaining the first cross is said to be due to abortion, and that most all cows carrying a bull calf either abort or die, and many abort with heifer calves, and some die. When a cow carries her calf to maturity there is no trouble in giving birth. The trouble is in their coming too soon, or that the cow in carriage with bull calf that does not abort, dies. It is an exceedingly rare occurrence for a bull calf to be born alive. In all cases they are fully haired and seem to lack from fifteen to thirty days of the proper time.*

Another very noticeable condition is, that the placenta is filled with an unusual amount of water.

It is a well known fact that the domestic cow is more subject to abortion than any other animal, but not as a rule to such an extent as when crossed with the buffalo. A cow will slink her calf for a number of reasons, and at no particular time, but when carrying a buffalo calf the abortion usually occurs at or during the month prior to the established time for delivery. The uniformity of this among all cows carrying buffalo calves shows that the trouble begins at a certain flexible period from causes or conditions not as yet fully understood. It would appear that nature through countless centuries has established a perfect organism in the different species of mammals for the reproduction of its kind, while similar, yet a trifle different in the various branches of the same family. There is, apparently,

* From Observations by Col. Charles Goodnight.

no difference between the reproductive organs of the buffalo and domestic cow, yet, when they combine to reproduce, the result must necessarily be somewhat different from what nature had intended, and discloses itself in this seemingly unexplainable manner. As abortions of this character do not occur in the crosses, it appears as if nature had placed her seal of approval on this new creation, and quickly adjusted itself to the new order of things, and more so than usual, in that it bestowed upon the female the power of reproduction which is not the case in all hybrids. Whether this is true in the male catalo is hard to determine, as the records show that only three male calves of the first cross have ever been born alive. One was in the Bedson herd which unfortunately was made a steer of when a calf. One occurred in the Dooley herd, and one in the Jones herd that was accidentally killed when three days old.

The most of these experiments, reveal the fact, that they were indulged in for no other purpose than a desire to satisfy personal ambition, or to carry out a cherished idea, which in the majority of cases after having reached a certain point, was then abandoned, either from lack of interest, or the necessary funds to continue the work. Another noticeable fact, in studying the history of these early pioneers in cross breeding, is that success was largely due to their own individual efforts, as there seems to have been no rule whatever governing their experiments, other than a determination to succeed, and where failures have occurred, it was, in most cases due to the lack of means to continue the work. These early experiments proved somewhat expensive, owing to the fact that each and all were independently conducted along practically the same lines. No one it seems was fortunate enough to profit by the mistakes of others, but each depended entirely upon his own knowledge, theories and observations, and apparently was totally unaware that experiments along this line had ever before been attempted, consequently each suffered the same loss, in the same manner, and their successes were about equal. These independent ventures while costly to others, will be of great value to those desiring to enter the business, as a close study of them will show that in each case where failures or success occurred, they were due primarily to the same course of action, so by taking advantage of the experiences of others, the beginner can, in a measure avoid the costly mistakes of his predecessors. One very important feature is, that in order to have the buffalo bull mate successfully with the common cow, it is necessary that he be brought up when a calf with domestic cattle, otherwise he is not at all likely to mate with the common cows, and likewise the domestic bull, for, as a rule, they are afraid of the buffalo cow. The most desirable cross, producing the best results, is obtained by crossing the buffalo bull with the domestic cow. It would therefore seem a good plan for owners of buffalo herds, each year, to place one or more of their bull calves on domestic cows, and in this way increase their value, as they could then be sold for either exhibition purposes, or for cross breeding.

The principal source of information on the subject of cross-breeding, can be found in the experiments independently conducted by Col. Charles Goodnight, and Col. C. J. Jones, (Buffalo Jones). The latter, whose experiments covered a number of years, has left a record containing some valuable information. Col. Jones produced his first half-breeds—two helpers—in the spring of 1888, and it is a singular fact that up to this time, the buffalo cross had not been given a distinctive name. They were identified and recorded as half-buffalo, half-bloods, half-breeds and cross-breeds. Col. Jones at this time created and gave them the name, Catalo. The origin of this name, which is now universally accepted and applied to all buffalo crosses, is recorded by Jones as follows: "To these cross-breeds I have given the name "Catalo" from the first syllable of cattle—cat—and the last three letters of buffalo—alo—(Cat-alo) thus forming a suggestive nomenclature for these new animals."*

As some writers differ in the spelling of this word Catalo, it will be well to notice that in creating this name, Jones combined three letters from cattle, and three from buffalo—six letters—which allows of but one "t" in the spelling of it, and not two as is frequently the custom with some writers which also alters the pronunciation of it. The original pronunciation is, "Cat-a-lo" whereas if two "t's" are used it changes it to "Cat-ta-lo" which is not as originally constructed, or intended.

The many years of continuous experimenting in the production of catalo places Col. Charles Goodnight—known throughout Texas as the father of the Panhandle—at the head of the list. Col. Goodnight is a broadminded man, a deep thinker and one not easily discouraged. With him it is no longer an experiment but an accomplished fact. For forty years he has given his time and means without stint, first to create, then to improve. The result is he has established a breed that will not only reproduce its kind, but one far superior in many ways to any other breed of cattle. In this new breed, Col. Goodnight has succeeded in incorporating all the good qualities and hardiness of the buffalo, also the extra or fourteenth rib, the same as in the buffalo. In regard to this feature, he states that it varies greatly. A few of the higher grades have the extra rib. Time and patience alone can add this perfectly, and only as the blood becomes purer will it become thoroughly established. The advantage of this extra rib is not only evidence of greater hardihood, but lengthens the carcass, fills out the flank and gives more and better meat. Col. Goodnight has demonstrated beyond doubt that the catalo is a valuable animal and one that will continue to breed much longer than domestic cows. These facts and many others obtained by continuous and close observation has created a standard by which others can hope to succeed and avoid the costly mistakes of their predecessors. Col. Goodnight has the largest herd of catalo in the world, and as he is well advanced in years and unable to continue or make further

* Buffalo Jones' Forty Years of Adventure. By Col. Henry Inman, page 243, Published by Crane & Co., Topeka, Kansas, 1899.

investigations, it would seem like a calamity for this herd to be broken up and dispersed. Should some individual, or better, the U. S. Government, take advantage of the opportunity and acquire the herd, they would not only have the result of forty years of experience, but also avoid the difficulties and loss to be encountered in securing the first cross. This herd of fifty catalo is past the experimental stage, and only lacks the means for further improvement.

The only other herd in which any experiments of a progressive nature are being conducted, is that of the Dominion Government at Wainwright, Alberta, Canada. This herd of twenty catalo was acquired by the Dominion Government in 1915 from the late Mossom Boyd.

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