

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
WIND CAVE NATIONAL PARK

SOUTH DAKOTA

EXCERPTS FROM WARREN, HAYDEN, GRINNELL, DODGE,

EWERS, SETON, AND OTHERS

Compilation and annotation

by

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Wind Cave National Park

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GENERAL INFORMATION

AND

SUMMARIZATION

GENERAL
INFORMATION

The following excerpts contained in this report were compiled for possible use and reference in the interest of the present and contemplated future wildlife interpretive program at Wind Cave National Park and the Custer RDA at the request of the Regional Director. The excerpts quoted deal principally with wildlife, however, some historical data relating to gold discoveries, early roads, and Sioux Indians has been included.

The annotations were supplied by the compiler of this report, and were added in an attempt to clarify moot points, and correlate the data of different authors, and also to stress doubtful points.

Little printed matter is available, or extant, that deals with the natural and primitive conditions of the Black Hills and the status of the wildlife population before the destruction wrought by the white man. There are several publications that deal with conditions from the Custer Expedition in 1874 to the present date, but none for the years preceding 1874 other than the Warren and Hayden Report of 1855-56-57.

From 1794 to 1856 trading posts and forts were established on the Missouri River, only 180 to 250 miles from the Black Hills. In 1855 well established prairie roads led westward from Fort Pierre. Trudeau, Loisel, and Lisa all established trading posts along the Missouri River before the War of 1812. It is logical to assume that the hunters, trappers and traders operating from these posts extended their operations to the very edge of the Black Hills and during that very early period the alteration of the status of native wildlife, by man (white) got under way. To date no diary or journal has come to light that records the adventures experienced by these early day traders and hunters. They were in all probability not men of letters and cared little for posterity, and if their number contained an "Alexander Henry", his records have been lost.

Hayden notes that from 1850 to 1855 the buffalo's outposts were pushed back over 350 miles, or from the junction of the Vermillion and Missouri River to Fort Clark, north of the present city of Bismarck, North Dakota, and that game was very scarce along the edge of the Black Hills. Further, their journal notes contain little regarding buffalo, however, antelope were still common and rather widespread. Grinnell reports that the Custer Expedition saw no buffalo from Fort Abraham Lincoln (near present city of Bismarck) no where, on the way to, in, or on the return, from the Black Hills. Lt. Colonel Dodge escorting the Jenney party in 1875, came into the Black Hills from Fort Laramie and they observed no buffalo.

By 1840 over one hundred trading posts were operating in the Sioux or Dakota Country, and it seems logical to assume that great destruction had been wrought to the once great buffalo herds at this early date.

Other factors that permitted and facilitated the extermination of the buffalo in this area, prior to 1870 were the Oregon Trail, the Union Pacific Railroad, slaughter by the Army to cut off food supply and thus complete conquest of the Sioux, and related factors. The Oregon Trail and the Union Pacific Railroad disrupted normal buffalo movements in the entire region, and hunters operating from the road and the railroad undoubtedly slaughtered buffalo at an unprecedented rate, and there was probably a greater number of hunters than were ever in the buffalo country before. The extent of these disturbances was probably felt within the immediate vicinity of the Black Hills, and with similar operations being carried out on the west side from the vicinity of Fort Laramie, and on the North and east sides from the Missouri River posts it becomes apparent that the entire west half of the present State of South Dakota was the scene of tremendous buffalo hunting and slaughter prior to 1860.

If we are to place credence in the "herd line" as reported by Beede, and quoted in the following pages, it is not strange that no buffalo were found in any quantity in South Dakota after 1864. The herd line bears further research, and it is quite probable that the desperate and embattled Sioux's did establish and maintain such a buffalo line in order to perpetuate their food supply and deprive the hide hunters of their means of livelihood.

Captain Ludlow's (Section 1-A of the following report) suggestion for the ultimate and logical disposition of the Black Hills is worthy of special mention, and is somewhat comparable to Catlin's suggestion that a great park be established for the perpetuation of the Indian and the buffalo. In this connection it is noted that in practically all literature Indians, and in particular the Sioux, are mentioned in practically the breath as the buffalo. Their history is so interwoven that it is practically impossible to interpret the buffalo without interpreting the Plains Indian at the same time.

Mr. Ewers publication (Section 6 of the following report) contains many excellent suggestions for the dual interpretation of both the Indians and the buffalo. Certain of his statements relating to historical events and personages, and center of the buffalo country are questioned, but the other data seems to be an excellent outline for some future interpretive programs and museum exhibits. He mentions Custer State Park as being the ideal site for such interpretation, and we can see no reason why the Service areas in question would not suffice in the stead of Custer State Park, and probably Mr. Ewer's would agree in this respect, today. Enlarging upon his suggestion that all Great Plains Service areas accord some treatment to the Indian and the buffalo in their interpretive program it is assumed that he would include the points listed below, at the designated areas:

- a) Scotts Bluff N.M. - Effect of the Oregon Trail on Indian and buffalo, including disruption of herd movement and consequent slaughter.
- b) Fort Laramie N.M. - Early fur traders and hide traffic, Indian warfare, and conquest of the Indians.
- c) Custer Battlefield - Breakdown of Indian power, end of the herd line leading to the slaughter of the last remnants of the buffalo.
- d) Badlands N.M. - Big Foot's band traversing the area, and the Ghost Dance craze to restore buffalo and throw out the whites.
- e) Wind Cave-Custer RDA - Complete overall interpretation of buffalo

and associated animals and the effect of the Buffalo on Plains Indian culture.

It is, of course, assumed that such are the points Mr. Ewers would stress today, and it seems that a complete integrated interpretation of all phases of the buffalo story would be of the greatest value in the preservation of the nation's lore, traditions and history.

Lt. Colonel Dodge's report is interesting and is the first to contain data on the species of fish and reptiles native to the Black Hills. His report also deals with forest and rain condition. It is also interesting to note that the portion of the Black Hills known as the South Mesa, which contains the greater portion of Wind Cave National Park and the Custer RDA, was particularly devoid of all animal life. Captain Ludlow in his traverse of the South Mesa the preceding years mentions seeing game only when leaving the South Mesa and approaching the Granitic or Central Hills Section. They both agree that most game elk, deer, and bear were fairly plentiful in the Granitic Section and the numbers increased in the North Mesa country.

All quoted authors agree that the antelope were found only on the plains outside the present game reserves, and parks. Buffalo trails were barely mentioned. It is also probable that elk and deer also used and established the so-called buffalo trails in this area. Bailey (North American Fauna No. 49) states that elk on the North Dakota prairies retired to the wooded river bottoms during the winter, and went on a browse diet, the winter feeding grounds being easily ascertained by the great number of antlers. Forest Service stomach analysis records show that elk are for three-fourths of the year on a diet of herbaceous vegetation and about one-fourth of the year on a browse diet, which would correspond to Bailey's data. It therefore seems probable that the elk, in this region, at one time utilized the prairies for summer range, returning to the Hills in the winter.

If buffalo were in the immediate vicinity of the Black Hills in great numbers, it is probable that their numbers corresponded with Seton's definition of Great Bands, rather than Great Herds. The area could not support a great herd for any appreciable period, as much of it is too rocky, and heavily forested to afford buffalo range. The present park buffalo herd seldom enters the forested section, but rather grazes along the edge of the forested section. Assuming that buffalo and antelope utilized the Black Hills as range to an appreciable extent, it is safe to assume that their usage and habits were similar to the buffalo and antelope found in the mountains in Colorado, and in particular the herds which roamed in North, Middle, South and Lost Parks. These areas were open grass and sage lands hemmed in by forested mountains. All authorities have agreed that the antelope and buffalo confined, almost entirely, their usage to the open or park areas, seldom venturing into the forest. Antelope in particular rely so much on vision for preservation that they did not spread eastward into the tall-grass climax country, remaining in the short and mid-grass types where their vision was practically unobstructed. If we assume the animals in this section had similar habits it is safe to assume that buffalo

and antelope utilized the grassy Red Valley, which encircles the Black Hills, and is itself enclosed by the Hog Back Ridge which contains Buffalo Gap. About half of the Custer RDA lies within Red Valley, and most of the east side of Wind Cave National Park could be construed as the upper valley slopes, however the west side is a part of the lifeless South Mesa of Dodge. This conclusion seems the soundest and is based on such occurrences in areas quite similar in character and vegetation.

The fact that Indians made little use of the Black Hills as reported by Dodge is also substantiated by other writers, and also by Army reports covering the movements of the tribes, the hostiles in particular, during the period 1854 to 1874. The complete lack of travois trails seems to be a very conclusive factor in establishing this lack of usage by the Indians. They apparently confined their usage to Red Valley, and occasionally entering the forest along the edge. Hunting difficulties, and superstition evidently combined to keep the Indians out.

Seton's continental estimate still appear to be the only logical basis for predetermination of the big game population on Service areas, and could be adjusted to allow for local influences, and based on usage similar to the Colorado mountain areas previously mentioned.

This limited amount of research has made it apparent that before any enlarged wildlife interpretive program is launched the park will have to acquire certain historical publications regarding the buffalo and the related Indian culture. There are publications other than the ones quoted, which may prove of value in further determination of primitive wildlife conditions in the Black Hills which were not available to the writer. A list of such publication and documents is appended to this report, and it is possible that other parties can furnish the pertinent data contained therein.

Care must be taken in using information contained in the earlier publications, as the Laramie Mountains were, at that time, referred to as the Black Hills, thus extending the limits of this region to a considerable extent.

SECTION 1

EXCERPTS FROM THE REPORT OF

GEORGE B. GRINNELL

CUSTER EXPEDITION

1874

FAUNAL OBSERVATIONS -- BLACK HILLS AND ADJACENT AREAS ----
From Reports of Grinnell - Dodge - and others

GRINNELL, GEORGE BIRD

Mr. Grinnell accompanied the Custer Expedition of 1874, and served in the dual capacity of paleontologist and zoologist. His report was incorporated in the report submitted by Captain William Ludlow, Captain of Engineers, Chief Engineer Department of Dakota. The report entitled "Report of a Reconnaissance of the Black Hills of Dakota" was published by the Government Printing Office in 1875. Mr. Grinnell's report regarding mammals are contained on pages 79 to 84 inclusive, and consists of very brief notes regarding various species. His observations include information on the whole of the route followed by the expedition, that is from Fort Abraham Lincoln (near Bismarck North Dakota) to the Black Hills and return. His observations are reported below:

32. *Antilocapra Americana*, Ord.
Prong-horned Antelope

Until within a short time, antelope were very common about Fort Lincoln, but the Arickaree Indians that are now maintained at that post as scouts have hunted them so persistently that the few that still remain in the vicinity are exceedingly wild, and one may ride ten or fifteen miles from the fort without seeing more than five or six. As we proceed, however, the antelope become more numerous, until finally there is no hour of the day when they are not to be seen either running gracefully off over the prairie, or curiously watching the command from the top of some distant bluff.

34. *Bos Americanus*, Gmelin.
Buffalo

No buffalo were seen during the trip, nor do I know that any exist at present in the region traversed; but one or two circumstances lead me to infer that there may still be found a few individuals in this section of the country.

In Prospect Valley I found the skull of an old bull, with part of the hide still clinging to it. Also, on French Creek, not far from the Big Cheyenne, I noticed the lower jaw of a cow, with the preosteum still on it.

It is but a few years since the country through which we passed was the favorite feeding ground of the buffalo, and their white skulls dot the prairie in all directions. Sometimes these are collected by the Indians, and arranged on the ground in fantastic patterns. In one of these collections which I noticed, the skulls had been painted red and blue in stripes and circles, and were arranged in five parallel rows of twelve each, all skulls facing the east.

(Remarks: No mention made of seeing buffalo, or even buffalo skulls within the Black Hills proper. Prospect Valley is in the Short Pine Hills, in the northwest corner of South Dakota, most of which is in the Custer National Forest. The French Creek site is well outside the Black Hills being east of the outlying Hogback Ridge, which encircles the Hills.)

28. *Cervus Canadensis*, Exxleben.
Elk; Wapiti

Although but few elk were seen during the trip, we found in the Black Hills every indication of their recent presence in large numbers. During a single days march eleven pair of horns, attached to the skull, were picked up by members of the expedition. Horns that had been shed were very abundant, and it was by no means an unusual thing to see fifteen or twenty single antlers in a morning's ride.

On Elkhorn Prairie we came upon a collection of horns gathered together by the Indians. Three lodge-poles had been set up in the ground so as to form a tripod, and supported by these was a pile of horns 8 or 10 feet high. The horns had all been shed and had apparently been collected from the surrounding prairie and heaped up here by the Indians. There is much variation in the horns of this species, which I imagine to be due to injuries to the horns while young and soft. Many of the specimens examined this summer were much flattened near the extremities, so much so in one or two cases as to be from 6 to 7 inches wide. In two instances the basal prong of the horn, instead of projecting forward and downward in the usual manner, turned outward and downward, and then curving inward and upward again, brought the point of the snag immediately under the animal's throat.

29. *Cervus Virginianus*, Boddaert.
Virginia Deer; Red Deer

A few of these deer were seen near the Missouri River, and on the Cannon Ball. In the Black Hills, however, this species is replaced by the following.

30. Cervus Leucurus, Douglas.
White-tailed deer; Cotton-tail.

The difference in size between this and the preceding species is so great, that there exists even among hunters a very general opinion that the red deer of the mountains is different from the red deer of the Missouri River and the Eastern States. This species was very abundant in the Black Hills, and especially so in the vicinity of Castle Creek and Elkhorn Prairie. I imagine that near this point there are some salt "licks"; at least members of the Sioux hunting party which we encountered spoke of places where the deer "eat the ground", and said that they watched for them there. They were also very numerous about the head of Elk Creek, and, indeed, all through the northeastern portion of the hills. It was said that one hundred deer, principally of this species, were killed by the command August 9.

31. Cervus Macrotis, Say.
Mule Deer.

This deer was observed in considerable numbers in the Black Hills, in the neighborhood of Elkhorn Prairie, but were by no means so abundant there as in the rough, broken country through which we passed just before reaching the Hills.

Near our first crossing of the Belle Fourche, and for a day or two while we were skirting the Hills, this was the only species seen. In the Mauvaises Terres of the Little Missouri and on the headwaters of the Heart River, they were quite numerous. We saw but few bucks during the trip, most of the individuals noticed being does, and each one accompanied by two pretty little fawns.

33. Ovis Montana, Cuv.
Bighorn; Mountain Sheep.

A female of this species was seen near the Little Missouri August 23. The first "signs" seen were at Short Pines Buttes, near the Little Missouri, and all along this stream they seemed to be very numerous. So wary were they, however, that it was impossible under the circumstances to secure any specimens.

The report contains brief remarks, similar to the above, regarding other mammals such as the coyote, wolf, black bear, grizzly bear, kit fox, red fox, badger, beaver, mink, otter, skunk, cougar, lynx, and various species of squirrels, gophers and rabbits. There are 108 species of birds listed.

SECTION 1-A

EXCERPTS FROM THE REPORT OF
CAPTAIN WILLIAM LUDLOW

CUSTER EXPEDITION

1874

The following remarks are extracts from Captain Ludlow's narrative report of the findings of the Custer Expedition.

"July 28.-The valley below us was rather too marshy for the wagons, and the easterly course lay up in the hills to the left out upon a high rolling prairie, crossing which the Castle Creek was again encountered, here flowing northward and contracted into a wooded and impassable canon, 500 or 600 feet in depth, with another creek and valley coming in from the westward to join it."

"A huge pile of elkhorns of ancient date, and of which the Indians disclaimed any share in the construction, was found on the northeast part of this prairie, and suggested the name for it."

"August 2.-General Custer determined upon a rapid scout south to the South Fork of the Cheyenne, for the purpose of examining the intervening country, while another party should go south-east, following the creek upon which we were camped to its junction with the same stream. These two explorations would cover considerable country and complete the examination of the south and southeast portion of the hills."

(NOTE: At this time the expedition was encamped on French Creek, two (2) miles east of the present town of Custer, South Dakota.)

"August 3.-The headquarters, with five companies of cavalry and a few pack mules, leaving the balance of the command in camp, started on the reconnaissance, and Lieutenant Godfrey Godfrey, with an escort of two companies, left at the same time to follow down the creek. The headquarters trail led south and southwest through the park country, until the head of a creek flowing southwardly was reached. This was pursued all day, leading us at first into a narrow, rocky valley, hemmed in by high wooded hills. The character of the country changed gradually as we went south. The valley grew broader, the hills lower, grass dryer, and timber more and more scarce. Crossing the red-clay belt which encircles the hills, the creek increased in size and plunged into a canon 500 or 600 feet in depth, containing cottonwood and box-elder, with scattering pine on the hills. Emerging from this into a smoother country, we halted for the night a few miles from the South Fork, having accomplished a march of forty-five miles."

"August 4.-A ride of three miles down the creek brought us to the South Fork. We found it a shallow stream with a flat, stony, and sandy bed about 30 feet wide and a few inches deep, though evidently much broader in wet seasons. The water was alkaline with a metallic gypsum flavor. The bordering hills low, with a few stunted pines. Going downstream two or three miles the course turned abruptly to the left and struck due north, passing over a high, dry prairie with occasional valleys

and ravines. We entered and crossed at right angles the Red Clay Valley, finding as usual a gypsum stream in the middle, and here flowing east. Having crossed another valley tending southeast, deeply cut out of the red clay, we entered pine timber again on the north side, and finally halted near some big pools and streams. The day had been excessively hot. The ride of thirty miles succeeding another of forty-five miles was very fatiguing, and many of the horses gave out. We enjoyed, however, a fine camp, with excellent grass, water, and wood, and rolling ourselves on the ground in our blankets slept "without dreaming".

August 5. -- Course still northerly, through timbered, hilly country which rapidly improved into "Park" with bright little brooks, beautiful grassy valleys, and abundant game. Granite knobs and peaks occasionally emerged from the trees, and at half past 9 we passed a huge rock knob, resembling a turbaned head (1), some 200 feet in height, which we had seen off to the ~~right~~ eastward on the first day of the reconnaissance. About noon the permanent camp was reached, after a march of twenty-five miles that day, and one hundred miles in three days. Lieutenant Godfrey had already returned, but had failed to reach the South Fork on account of the tortuous and canony character of the stream he was pursuing. He had, however, been clear of the hills (2), and mapped the creek so far as he went." (3)

Explanation of Number Code in above text:

- 1) Designated by the Expedition as the "Turk's Head" and located south and east of Sanator.
- 2) Lt. Godfrey's party could not negotiate the French Creek Badlands near the South Fork of the Cheyenne River. They did not attempt to pass down through the French Creek Gorge, within the present Custer State Park, but stayed on the rim above.
- 3) Mr. Grinnell, according to his own paleontological report, accompanied Lt. Godfrey, and therefore did not observe the south mesa and wildlife conditions therein.

REMARKS: Captain Ludlow, and Professor Winchell, geologist, have stated in their reports that game was more plentiful in the northern and northeastern parts of the hills, than any other section. Today this situation is true, at least insofar as the deer population is concerned, and considering only those animals on the open range, eliminating from consideration the managed herds on fenced ranges at Wind Cave National And Custer State Park.

EXCERPT FROM THE REPORT OF CAPTAIN WILLIAM LUDLOW

Whatever may be determined as to the existence of large amounts of precious metals in the Black Hills - and the evidence gathered on the trip I conclude was on the whole discouraging to that supposition - the real wealth and value of the country are, beyond doubt, very great. Utterly dissimilar in character to the remaining portion of the territory in which it lies, its fertility and freshness, its variety of resource and delightful climate, the protection it affords against both the torrid heats and the arctic storms of the neighboring prairies will eventually make it the home of a thronging population. To this, however, the final solution of the Indian question is an indispensable preliminary. The region is cherished both as a hunting ground and asylum, by the owners. The more far-sighted anticipating the time when hunting the buffalo, which is now the main subsistence of the wild tribes, will no longer suffice to that end, have looked ~~ahead~~ forward to settling in and about (1) the Black Hills as their future permanent home, and there awaiting the gradual extinction which is their fate. For these reasons, no occupation of the region by the whites will be tolerated; nor, so long as the majority of the Indians live beyond the control of the United States Government, can any treaty be made with them looking to the relinquishment of their rights of ownership which will command observance by the hostile tribes. Even, if under the authority of reservation Indians, occupation of the Black Hills should become possible, settlements there could only be protected by force and the presence of considerable military power. Hostile incursions would not be infrequent nor an occasional massacre unlikely, and these are conditions unfavorable to a rapid and permanent increase of population. The Indians have no country farther west to which they can migrate, and only the Saskatchewan country north of the United States boundary, and which is still the range of the buffalo (2), offers them a possible home. It is probable that the best use to be made of the Black Hills for the next fifty years would be as a permanent reservation of the Sioux, where they could be taught occupations of a pastoral character, which of all semi-civilized means of subsistence would be most natural and easy for them, and result in relieving the United States Government of the burden of their support.

SECTION 2

EXCERPTS FROM THE REPORT OF
LT. COLONEL RICHARD I. DODGE

JENNEY EXPEDITION

1875

SECTION 2

Dodge, Lt. Colonel Richard Irving, U.S. Army.

Lt. Colonel Dodge commanded the military escort that accompanied the Jenney Expedition of 1875 to and through the Black Hills, Dakota Territory. The Jenney Expedition was sent as a result of the scanty data relating to Gold and other precious minerals by the Custer Expedition was not sufficient to determine the possibilities of large scale mining operations. Lt. Colonel Dodge was evidently a sportsman gifted with a penchant for writing and therefore published a book entitled the "Black Hills" in 1876. The book deals with many aspects of conditions that existed in the Black Hills at that time and pertinent excerpts are quoted below. In passing it may be noted that many of the observations on possible city locations, sawmill areas, farming areas, stock raising areas have come to pass, as predicted many long years ago by the Lt. Colonel.

ANIMALS

"I have already spoken in the most favorable terms of this, country as eminently fitted for stock-raising.

So far as one may judge from appearance, this is so, but there is still one doubt. Some portions of the Black Hills have less game, less animal life, than any wild country I have ever seen, equally suited to the tastes and habits of game, and this scarcity may argue something in climate or conditions unfavorable to its propagation.

Certain portions of the Hills we found teeming with animal life, other portions, equally beautiful and apparently equally well-fitted for game, was almost entirely without it.

Another very curious feature is the extraordinary number of barren does, even in those portions of the country where deer are most plenty. Of sixteen does killed by myself, between August 15th and September 10th, only two had given birth to fawns this season.

I attribute the scarcity of game on French Creek to the presence of miners at the stockade (1) all winter. The game had never been hunted or obliged to protect itself against human enemies. It knew nothing of its danger, and was easily bagged whenever encountered. These men were entirely dependent on game for their fresh meat, and soon killed off the deer in the vicinity of their location.

The presence of these men will not, however, account for the scarcity of animal life in other places

The great south mesa (2), that, to the eye, most perfect portion of the hills, is especially bare, not only of game, but animal life of any kind.

For so wild and beautiful a country, it is the barest of life I have ever traveled through. A hawk silently sailing far above the mountain tops; a few little chipmunks, a pair or two of snow birds, or a diminutive sap-sucker, is all the life to be expected from a six hour's ride through the beautiful parks and forests, hills and glades, south of French Creek.

Animals, birds, fish, and reptiles are in comparatively little variety, and not very great numbers anywhere in the Hills. In a few localities, not differing in any external appearance from the general country, we found great numbers of deer. A very great many, probably a thousand deer, were killed by our party in the Hills, but I think I am safe in asserting that I have seen more deer in Texas, in one day, than I saw in the whole of my three months in this apparently perfect game country.

On Spring Creek we found a great many deer, though the miners were rapidly exterminating them. Castle and the other tributaries of Rapid Creek abounded in deer, while on the main Rapid itself there are very few.

On the heads of the Box-Elder we found deer in very great numbers, and in the broken country on each side of the great northern rim, bear, elk, and black-tailed deer were found in very considerable numbers. Bears are quite numerous throughout the Hills, the country being peculiarly adapted to their tastes and habits. Several varieties (3) are represented, from the huge and dangerous grizzly, to the small and timid black.

Except one fish (which I am told is also found in the Laramie River), I saw no animal, bird, fish, reptile, or insect, which I had not seen before.

The animals of the Black Hills are:

Bears-grizzly, brown, and black; numerous.

Gougar-(mountain lion); a few.

Lynx-a few.

Wolves-large timber; numerous.

Foxes-silver gray; numerous.

Elk-not abundant.

Mountain sheep-a few.

Black-tailed deer-in considerable numbers.

Red deer (4)-more abundant than any other animal.

Beaver-very numerous.

Squirrel-red pine; a few.

Woodchuck-ground hog; a few.

Chipmunk-a very small variety; abundant.

Mouse-numerous.

Some of the hunters reported that they had seen a buffalo. I, however, saw no tracks or other buffalo sign in the Hills. There are many old trails (5), showing that at one time this country was a favorite resort of the buffalo, but I am of the opinion that the animal is now practically extinct in all this region.

BIRDS

Considering the beauty of the country, the purity of the water, the density of the thickets, and the variety and abundance of insect life, there are very few birds in the Hills.

The ruff grouse (the New York partridge) is the only game birds in the Hills proper, though on the high west mesa, at an elevation of six thousand four hundred feet above tide-water, I found a splendid pack of sharp-tailed grouse. This was undoubtedly exceptional, as none were seen elsewhere in the Hills proper. In the Red Valley there are great numbers of the sharp-tailed grouse, and packs of the sage grouse are occasionally encountered.

These and the little blue northern snow-bird are probably the only birds which are indigenous, though a very considerable variety come here to breed.

Note: There follows a list of birds observed by Lt. Col. Dodge. We have not included this list.

In the fall, all the streams and ponds, both inside and outside the Hills are alive with myriads of migratory water-fowl, geese, brandt, duck, etc., in endless variety.

FISH

Cool, pure, and abundant as is the water, there are but two varieties of fish in the Hills proper, the sucker and the dace.

In the Red Water and Spearfish Creeks there is a very curious red sucker, with a snout greatly prolonged, which I have seen nowhere else.

In the Red Water, below its junction with Spearfish, and also in the Belle Fourche, there are great numbers of the "lady", "channel" or spotted cat-fish (6), a delicious fish, the trout of its kind. It is very strong, bites vigorously, and makes an excellent fight. The largest one killed by our party weighed nearly six pounds, and, singular to relate, it was taken without a reel, on a very small trout fly.

In these two streams there are also great numbers of a white fish, very long, very narrow, and very deep through. It is exceedingly voracious, taking any bait offered, and pulling with great force. It is very like a fish commonly called in North Carolina the "hickory shad".

REPTILES

In the higher portions of the Black Hills there are no snakes. A few were seen in the valley of Rapid Creek, and on one or two other streams I saw a very small variety of water moccasin, scarcely a foot in length. Reptiles of any kind are very scarce; a few specimens of only the following were seen; rattlesnake, garter snake, water moccasin, marsh frog, striped-head turtle, and a curious fish lizard (7) common to the plains.

In the Red Valley and the plains skirting the Hills, rattlesnakes were found in considerable numbers.

INSECTS

Are exceedingly numerous, and in very great variety. That pest of the frontier settler, the grasshopper, breeds here in immense numbers. They do no perceptible damage, and leave the Hills as soon as they get their wings.

Horse flies and other biting flies are very numerous and in many varieties, and were excessively annoying to our horses and mules. The common house-fly is abundant, and the buzzing blue-bottle more numerous and persistent than I have elsewhere seen.

The dead pine breeds a curious red-bellied bug, a little like a large ant, which penetrates everywhere, and bites sharply when interfered with.

MISCELLANEOUS EXCERPTS

Just at the north rim, the black tailed deer were found in considerable numbers, and many were bagged. I one day bagged two splendid blacktail bucks with a single rifle ball.

Elk, too, were quite plenty in the country about the northern rim (8).

On the plains to the east of the Hills antelope are very abundant, and many were bagged by the party.

STREAMS

All the streams which rise in the south rim flow to the southward. The rains have cut the surface of the south mesa into long, beautiful, grass-covered slopes, which, gradually deepening, become at last deep, narrow, crooked canons.

The country is covered with pine timber, in which are many irregular "park" openings.

Though there are occasional springs, not one of these canons has continuous running water, and this, to the eye, most perfect portion of the Hills, may turn out to be less valuable than it appears, simply from a lack of sufficiency of that prime necessity.

Only two of these south-flowing streams are worthy of special mention. Many deep and narrow "box" canons (canons with perpendicular rocky sides, permitting no lateral ingress or egress) unite to form a wide deep gorge, perfectly dry until it reaches the foothills. Suddenly a fine stream carrying quite two thousand miner's inches springs from the bottom of the gorge, and after a course of only twelve miles, joins the South Cheyenne. This stream is called by the Indians Minne-catta, or Warm Water Creek, the temperature of the water where it bursts forth from the ground being seventy-four degrees Fahrenheit, entirely too warm for drinking purposes. The Minne-catta (9) is also remarkable for a fine cascade, the water rushing in an almost unbroken sheet over a precipice fifty feet high.

The other curious stream our surveyors named "Amphibious" Creek (10), from the fact that its bed is about half the time dry, and the other half a nice running stream. Bursting from the ground in springs, the water runs for a mile, or two, then sinks as suddenly as it came. After an underground course of a mile

or two, it again springs to the surface. This is continued for the whole length of the stream, and that it is the natural and permanent condition is proven by the fact that, wherever the water is above ground, it contains numerous fish.

MISCELLANEOUS EXCERPTS

Surrounding this mesa on every side, and one of the most marked and peculiar features of the Black Hills, is a depression, which, from the color of the soil, was called the Red Valley (11). This valley, well defined, but more or less broken by hills and ridges, is from one to fifteen miles in width.

On the outside of this valley, and a seeming outer rampart to the "sacred fastnesses" of the Black Hills, is a range of hills from four to eight hundred feet above the valley (12).

Thunderstorms are quite frequent, terrific in force and power, and fearful in the vividness--the nearness of the lightning. They are often accompanied by wind, and sometimes by hail. Scarcely a day occurs in summer, that there is not a thunderstorm in some part of the hills.

At other times the tree will be riven into a thousand pieces, as if with the blows of a giant axe, and the fragments scattered a hundred feet around. The woods are frequently set on fire and vast damage done. There are many broad belts of country covered with tall, straight trunks of what was only a short time before a splendid forest of trees, now charred, dead, and useless.

The "park" country already spoken of is almost wholly due to fire.

The thunderstorms are sometimes preceded or accompanied by a violent gust which, however, is soon over, Old/Polus apparently contenting himself with one vigorous blast. Though we had in the whole summer no practical and unpleasant experiences of their power, we yet had ample proof of how vigorous these blasts can be, in swaths of uprooted trees, in broken branches, and wrenched off tops.

The south mesa is fairly covered by a body of pine of very uniform size and appearance, eight to twelve inches in diameter. The branches grow low, however, and a tree is rarely found which would yield over twenty feet fit for the sawmill (12).

The finest of these forests is in the "bottom" of French Creek, some miles below the stockade (13). For several miles along the creek, a strip of an average of a hundred yards wide is covered with pine trees of great size, two to three feet in diameter, and in many cases forty or fifty feet without a limb. The situation being admirably protected from the winds, the trunks are remarkably straight and free from cracks and flaws.

INDIANS

It is believed by some persons that the Crow Indians, the former owners, actually occupied the Black Hills before being driven out by the Sioux. I do not think so, for two reasons: First, if this country had been used as a residence, even thirty years ago, some marks of its occupation would still be visible. Second, the mountain Crows are known to be determined fighters, in their own fastnesses. Had even a small band occupied and defended the Black Hills, they could have held it to now against the whole Sioux nation, who, though excellent horseback fighters, are worth nothing on foot; and though most dangerous, aggressive enemies on the plains, are timid as hares in woods and mountains.

My opinion is, that the Black Hills have never been a permanent home for any Indians. Even now small parties go a little way into the Hills to cut spruce lodgepoles, but all signs indicate that these are mere sojourns of the most temporary character.

The "teepee" or lodge may be regarded as the Indian's house, the wickiup as his tent. One is his permanent residence, the other a makeshift shelter for the night. Except in one single spot, near Castle Creek, I saw no where any evidence of a lodge having been set up, while old wickiups were not infrequent in the edge of the Hills. There is not a single teepee or lodge-pole trail, from side to side of the Hills, in any direction, and these poles, when dragged in the usual way by ponies, soon make a trail as difficult to obliterate as a wagon road, visible for many years, even though not used.

Several small parties of Indians, overcome by curiosity, and reassured by the presence of soldiers, came into the Hills this summer. The most intelligent of these, an Indian named Robe Raiser, was quite communicative, and informed the interpreter that, though fifty years old, and though he had been around the Hills almost every year of his life, he had never before ventured inside; that when passing north or south in the fall, the squaws come in sometimes to cut lodge-poles, the bucks venturing to hunt a little, but these stops are very short. His reasons for the Indians not coming in were: First, That the Hills are a "bad" medicine, and the abode of spirits. Second, That there is nothing to come for except lodge-poles, the game being scarce and more difficult to kill than that on the plains. Third, that the thickets are so dense that their ponies are soon lost if turned loose, and the flies are so bad that they are tormented and worried if tied up. Fourth, That it rains very frequently, and the Indians do not like rain. Fifth, That it thunders and lightens with terrible force, tearing trees to pieces and setting fire to the woods.

He said, moreover, that the Indians had never lived there, and did not and would not live in the Hills now. These statements are borne out by those of every Indian communicated with, and by the observations of every man in our party. The Indians do not live in, occupy, or use the country in any way, except for the lodge-poles.

Explanation of Number Coded Items in Lt. Col. Dodge Remarks

- 1) Refers to the Gordon Stockade, east of Custer, on Doran Lake. The stockade constructed by miners during the winter of 1874-75. Lt. Col. Dodge's book contains a very detailed description of the stockade.
- 2) The south mesa refers to that portion of the Black Hills from eight (8) miles south of Custer to the Red Valley, and is the portion of the Hills containing the west side, and part of the central portion, of Wind Cave National Park.
- 3) At this time the various color phases of the black bear was considered as separate species.
- 4) Red deer an erroneous identification, and refers to the white-tailed deer. See Grinnell's notes regarding deer in the Black Hills.
- 5) All stories mention trails but carry no reference to substantiate the fact that such trails were dominantly buffalo trails. The elk, which were a prominent plains animal could possibly have had at least equal interest in such trails and accounted for by migration to winter range within the hills.
- 6) The list of fish might and probably should be increased by the addition of catfish, notably bullheads, and occasionally channel cats in the lower portions of Beaver (formerly Amphibious Creek), French, Spring and Rapid Creeks, and also by chubs and top-minnows. No species of trout are native to the Black Hills.
- 7) Probably refers to water puppies, which are common in the shallow foothill streams.
- 8) The northern rim refers to the meeting place of the northern mesa, of sedimentary rocks, and the central hills granitic area, in the general vicinity of Crook's Tower.
- 9) Upper portion now known as Hot Brook, lower portion as Fall River, flows through Hot Springs. A portion of the Cold Brook, drainage traverses the west side of the park, notably Shirttail Canon, and as such is a tributary of Fall River.
- 10) The name Amphibious Creek is the first recorded name applied to the creek which traverses the north end of Wind Cave National Park, said creek now known as Beaver Creek. The appearance, disappearance, and reappearance of the stream, as described by Lt. Col. Dodge are still the prime characteristics of the stream.

- 11) Red Valley is the depression between the Black Hills proper and the outer rampart as described in 12 below, and the valley encircles the entire Black Hills and is nowadays commonly referred to as the "Race Track". Practically all of the Custer RDA and the eastern edge of Wind Cave National Park lay within the Red Valley.
- 12) The outer ramparts, which rise directly from the prairie and are separated from the Black Hills proper, is referred to nowadays as the "Hogback Ridge". A portion of this ridge extends along the east side of the Custer RDA. Buffalo Gap, Fuson Canon, and other possible sites of buffalo trails are cut through this ridge.
- 13) Refers to the ponderosa pine trees in the vicinity of Bluebell, within the present Custer State Park, and which is believed to be the finest existing stand of ponderosa pine within the Black Hills.

SECTION 3

EXCERPTS FROM THE REPORT OF
PROFESSOR WALTER JENNEY

JENNEY EXPEDITION

1875

SECTION 3

Jenney, Walter P. : Mr Jenney was the Geologist in Charge of The United States Geological and Geographical Survey of the Black Hills ,1875.

Very little of Mr. Jenney's report deals with any matters of interest to the present interpretive program on either the park (Wind Cave National Park) or any contemplated program for the Custer RDA. However, the one historical item relating to the original discovery of gold should be kept in mind, in the case a trend toward historical data and interpretation becomes desirable at some time in the future. (Amphibious Creek referred to below was the original name of Beaver Creek which flows through the park.

EXCERPT I

Some prospecting was done on Amphibious, Minnekata, and Red Canon Creeks, small streams draining the southern portion of Custer's Park. On Amphibious, near its headwaters, a few colors of gold were obtained from small gravel-deposits, but the water supply was so small, the stream being dry at the time, that prospecting was very difficult. About five miles below the head of this creek, a number of dry ravines enter it from the east, cutting deep into the schists and slates. In these ravines float-quartz was found, showing, on breaking, visible particles of gold, but the quartz was not traced to the ledge from which it had been originally derived.

EXCERPT II

Similar gravel deposits encircle the foot-hills crossing the valleys of French, Amphibious and Minnekata Creeks, and in this connection it would seem not inappropriate to give a tradition relating to gold deposits in this portion of the Hills.

Toussaint Kensler, a half-breed Indian, who had worked in the gold mines of Alder Gulch, Montana, was confined in prison under sentence of death for murder. Escaping, he was not heard from for a long time; when he appeared at the agencies, having in his possession several goose-quills filled with gold-dust, and a fossil skull which he had found in the Badlands on his way from the diggings he reported he had discovered. Being re-arrested, he was taken back to prison, and hung for the crime for which he was originally sentenced; but before the execution he drew a map of the locality where he claimed to have discovered gold, and the routes travelled in going to and from the agencies, with the distances and the names of the principal streams marked unmistakably in the sketch. He stated that he followed down Hat Creek to the South Fork of the Cheyenne, crossed that stream, and on the second creek of any size entering the Cheyenne from the north below the mouth of Hat Creek, he discovered gold about about ten miles from the Cheyenne, among low hills, but outside the main range of the Black Hills. He described the locality as among hills capped with high and thick gravel bars of large size. Here he found rich gravel, and in a short time obtained

his sample of gold by washing the pay-dirt in a small tin dish. A tracing of the map prepared by Kensler is before me while I am writing. On comparing it with the map drawn by Dr. M'Gillycuddy, topographer of the expedition, I find it agrees very closely with the latter, in regards to distances, directions, and the bends of the Cheyenne, and that the stream on which Kensler discovered gold was either Amphibious Creek or French Creek, probably the former. Quite extensive gravel deposits are known to occur in the vicinity, and it is probable that Kensler was the first discoverer of gold in the Black Hills, obtaining his pay-dirt from the small ravines and gulches among the gravel beds, where the gold had been concentrated by heavy rains.

NOTE: Dr. Jenney's report does not carry the date of Kensler's discovery, however, this could be ascertained by reference to Indian Service files.

SECTION 4

EXCERPTS FROM THE BOOK :
PIONEER DAYS IN THE BLACK HILLS

BY: JOHN McCLINTOCK

Period
1876

SECTION 4

EXCERPTS FROM PIONEER DAYS IN THE BLACK HILLS -----

By : John S. McClintock. 1939

Speaking of the Black Hills, Mr McClintock says: "Up to fifty-three years ago they remained uninhabited except for the occasional visits (1) of Indians. Then came the gold rush of '76, the final and greatest battle of the red men against further encroachment of the white men, and the Black Hills passed forever from the dominion of the Indians."

"The mystery and magic with which the red man imbued these mountains still remains, and the gold fever abating has brought their scenic splendors again into prominence."

" The next afternoon we reached the place known as Buffalo Gap and took the trail to Custer, arriving at a place known as Point Rocks at about 10 o'clock at night and the next day made Custer." (2)

" A few miles from Rapid City he pointed out Jenney's Bar. ----- About four inches of snow fell that night and the next morning, Edson, who, I soon learned, was more of a hunter, proposed to take our party a few miles northward where he said ranged a fine herd of elk."

Leaving me behind, the party set out but not with the intention of annihilating the herd as each man agreed to restrict his limit to one elk. ----- Our parties of hunters returned to camp at dark. They, with but one exception, reported hard luck. However, by having one experienced hunter in the party, they were enabled to bring in one fine elk that Edson had downed. ----- Our next camp was struck on Little Rapid Creek. Here, because of having fresh meat with us, we were surrounded and annoyed the entire night by a numberless pack of howling and threatening wolves and coyotes, or both. (3) They failed, however to muster courage to attack us."

"Several droves of beef cattle were brought into the Hills during the summer of '76, to supply fresh meat."

- REMARKS:
- (1) Note that Mr. McClintock considers that the Indians made comparatively little use of the Hills.
 - (2) This route led directly through the Custer RDA and to Point Rocks on French Creek. This was the usual route for those coming from the Red Cloud Agency.
 - (3) First mention of coyotes in the 70's by any author. Game was evidently scarce as this is the only hunting trip mentioned in 1876.

Mr. McClintock arrived in the Black Hills, April 1876 at the age of 29. He has spent the entire period from that time until his death in 1941 in the Black Hills.

SECTION 5

EXCERPTS FROM THE BOOK :
THE LIVES OF BIG GAME ANIMALS
VOLUME III

ERNEST T. SETON

SECTION 5

EXCERPTS FROM: THE LIVES OF BIG GAME ANIMALS - Volume III
By: Ernest Thompson Seton

INTRODUCTION: Apparently Seton is the only naturalist who attempted to carefully reconstruct the probable population of the Big Game Animals in the Lands North of Mexico. Such estimates, of course, are based on probable population before the advent of the white man and on a continental basis.

Records are too scanty to permit an estimate for any definite area, or portion thereof. (Note Bailey's remarks on the probable number of buffalo in North Dakota, on page 19 - North American Fauna - No. 49.)

Only the factors that are pertinent to buffalo within the Black Hills are quoted below. It is recommended that if further information is desired, his works be referred to, for such.

(The following data from Seton, is data that he quotes from: In The Days Of The Buffalo, by A. McG. Beede - Forest and Stream, June, 1921, p. 248).

"Valuable historic light on Buffalo, Indian and white man is furnished by the Missionary, Father A. McG. Beede in an article on the Buffalo Days. He writes:

"They say that from the year 1864 onward till after the Sitting Bull-Custer battle they - the Western Sioux Indians - kept the Buffalo herded back into Montana or the extreme western part of the present North Dakota. This statement, strange as it may seem, is confirmed by numerous white frontiersmen.....

"Old Indians say, and other evidence shows, that these Sioux Indians extended their herd line as far north only as the Kill - Deer Mountains - never called Killdeer Mountains by the Sioux - and to the point on the Missouri River just north of these mountains. Meanwhile, the Buffalo, now quite safe from ruthless depredation by white men, increased greatly in numbers; and in the summer of 1875, many of these Buffalo crossed the Missouri from the south side to the north side - from the present McKenzie County to the present Williams and Mountrail County - and thus escaping the Indian herd line, they roamed up and down the Missouri, often swimming the river forth and back, and going as far down the river as Painted Woods, 60 miles upstream from Bismarck, N.D.

"All white frontiersmen know well that from 1864 onward till after the Sitting Bull-Custer battle, no Buffalo were to be found on the vast plains west of the Missouri River and east of this Indian herd line, except a very few that occasionally slipped through the herd line and were not followed by the Indians and killed for food. But from 1875 on, large numbers of Buffalo were sometimes found in the north country which was beyond this Indian herd line, and some of them wandered as far east as the Turtle Mountains country.

"The Buffalo herds that crossed the Missouri in the late summer of 1879 or 1880, and those that drifted east from Montana after the Custer fight, mingled together in the territory west of the Missouri River, and for three years after 1879 there were so many Buffalo in that country that only a few thoughtful men supposed that the time should ever come when Buffalo hides could not be had in plenty.

.....
"After the Sitting Bull-Custer battle, which was the end of this careful attention given to the Buffalo by the Western Sioux Indians, the Buffalo that had increased in numbers came freely eastward, and seemed, at times, almost to fill the plains country west of the Missouri River in North Dakota. In old times, Indians never ruthlessly slaughtered Buffalo, or other animals. They used what was necessary and preserved the rest. The Buffalo were the Indian's Cattle.

"The Western Sioux Indians regarded Buffalo stealing about as a Dakota cattle-rancher regards Cattle stealing - as a crime deserving death. This Buffalo stealing by the white men in the Dakotas was many times more the cause of trouble with the Sioux than all the gold in the Black Hills. I know this from hearing old Indians talking freely among themselves. That the trouble was chiefly caused by the Black Hills gold is an erroneous notion of the matter originated by white men. This notion has become fixed in written history, but is incorrect."

"..... On rare occasions, the tribe could unite and form a Buffalo pound. But there was usually a sufficiency of small game to make this great effort not worth the while; and I doubt that before the coming of the Horse and rifle, the Redman did little harm to the great Bison herds. These two principal aids arrived together on the Buffalo range, about the close of the 18th century, and they marked the beginning of the epoch of extirpatory slaughter by man.

"..... G.B. Grinnell has told me personally that he considers that the Antelope exceeded the Buffalo in normal times".

"Another dreaded result of these conditions is indicated in the report on the Antelope herds in the Wind Cave Game Preserve, on the National Bison Range in Montana. In fair weather, thanks to their speed, they could scoff at the various beasts of prey. But "during severe winter storms in two seasons, the 64 Antelope on the Bison Range was completely destroyed by wandering predatory animals, which were able to drive them into snow drifts and kill them without difficulty. More than half the herd on the Wind Cave Refuge also was killed, partly by Coyotes and partly by Bobcats."

NOTE: ABOVE REFERS TO INCIDENTS DURING 1921.

" The Great Bands
(Buffalo)

" It was only during the migrations that the very large herds were seen. Bands of a few thousand were found at all seasons, but the millions came together only on some great general impulse". (Further data Seton-Vol.III p. 693.)

NOTE: It seems more reasonable to assume that great bands rather than great herds occurred in the vicinity of the Black Hills.

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NOTE: SETON'S MAP (-Vol.III, p. 652) PLACES THE CENTER OF BUFFALO POPULATION IN 1880 SOMEWHERE IN EAST CENTRAL MONTANA, AND SHOWS THEM AS OCCURRING IN SOUTH DAKOTA ONLY IN THE VICINITY OF THE SHORT PINE HILLS (NOW A PART OF THE CUSTER NATIONAL FOREST) AND PROSPECT VALLEY (OF GRINNELL). THIS PUTS THE RANGE AT THIS PERIOD SOMEWHAT FARTHER NORTH THAN REPORTED BY JOHN EWER, IN HIS PUBLICATION, TETON DAKOTA ETHNOLOGY AND HISTORY, a resume of which follows in Section 7 of this report.

Antelope

"In the Dakota Badlands, during the early '80's, they were still abundant. Howard Eaton tells me that in 1884, he saw there as many as 8,000 and 9,000 in a day"

Note: The above probably refers to the North Dakota Badlands, as Seton quotes Eaton elsewhere in Vol.III as referring to the North Dakota Badlands. However, it may refer to the South Dakota Badlands.

SECTION 6

EXCERPT FROM THE PUBLICATION
TETON DAKOTA ETHNOLOGY AND HISTORY

BY: JOHN C, EWERS
NATIONAL PARK SERVICE

1937

Excerpts from: TETON DAKOTA ETHNOLOGY AND HISTORY

By: John C. Ewers
National Park Service
1937

Introductory Remarks: This publication contains much information of definite value insofar as an interpretive program based on buffalo, and the effect of the buffalo on Plains Indian culture is concerned, and contains a broad but pertinent suggestion as to the manner in which Service areas within the Great Plains region could integrate certain phases of the buffalo-Indian story, each area having its own small portion, with an overall exhibit and interpretation at a central location. Mr. Ewers suggested that Custer State Park offered the best opportunity for such a program, and as Wind Cave National Park and the Custer RDA are within the same general area many of his suggestions and recommendations could be adopted in the interpretive plan for the two areas.

Items of particular interest are those relating to the various uses of the buffalo for food, shelter, clothing, utensils, bedding and fuel with descriptions of such usage. Buffalo hunting methods are also discussed, but in less detail.

However, certain statements are questioned, although not of major importance at this time, the statements and subjects questioned would undoubtedly be introduced into the interpretive program at some future date. The items questioned are Mr. Ewer's statements regarding, Indian usage of the Black Hills, the extent of the buffalo range from 1800 to 1883, Sioux leadership and the part of the Oglalas in the warfare of the 1870's, and the actual status of the chief status accorded Red Cloud. The items are questioned because of statements, that almost directly contradict Mr. Ewer's statements, in other apparently well authenticated publications. Some of the items will be discussed at the end of this section and touched upon in Section 7, and have been noted in the General Introduction.

" The buffalo range ----- . The town of Kearney in south central Nebraska is considered the center of the bison area at the time of its widest extent, but after 1800 until the virtual extermination of the bison in 1883 the center would be placed in the Black Hills, the very heart of the Teton country (1). "

"Today, there may be found within the old Teton country one National Park (Wind Cave), four National Monuments (Scotts Bluff, Devils Tower, Jewel Cave and Fossil Cycad), several proposed or suggested Monument sites, and two very interesting State Parks situated in locations of peculiar historical significance (Guernsey and Custer)."

"It is fitting that the story of the Teton should be graphically interpreted to an interested public in the museums of these parks and monuments. Although the history of the Teton will constitute but a small chapter in the total story to be interpreted in most of these museums, it would be well to include a series of exhibits on the Teton in at least one museum. The museum at Custer State Park seems to the writer to be the best location for this more detailed museum treatment of the Teton story. The Park is situated in the Black Hills, the very heart of the Teton country (2) in the mid nineteenth century; its name is inseparably linked with the story of the Indian Wars (3) in which the major part of the hostile Indian forces was made up to Teton; and it is in close proximity to the Pine Ridge Reservation, present home of the Oglala, largest band of the Teton Dakota."

"In 1841 the first large immigrant train bound for Oregon passed over the trail (Oregon), beginning the destruction of the buffalo nearby and frightening the herds away from the region (4), and the destruction of wood and grass in the river bottoms. From then on food became increasingly hard for some of the Brule and Oglala bands to procure. And with each year the number of immigrants continued to grow. Talbot heard one of the Oglala chiefs enquire "if there were still any whites remaining there, pointing to the eastward". (Journals of Theodore Talbot, 1843-52. Portland, Oregon, 1931.) That was in 1843. In the twelve year period from 1841 to 1852 fully 157,717 immigrants passed over the trail to Oregon, California or Utah. (Breed; Early Development of Wyoming) True, none of them stopped to settle in the Teton country, but their effect on the buffalo in the region was devastating (5)".

"The Teton heard of the doctrine expounded by Wovoka, the Paviotote, Indian Originator of the Ghost Dance, in 1889. They sent a delegation to Nevada to learn more of his ideas. These men returned to encourage the practice of the dance with its accompanying beliefs among the Sioux. According to doctrine, the Indians by dancing and observing the formalized ritual of the Ghost Dance could cause the Whites to disappear and the Indians to be restored to their old way of life, reunited with their departed friends in a country filled with buffalo.

Among the Tetons the excitement of this new doctrine, aggravated by local grievances, led to an outbreak in the winter of 1890-91 the principal events of which were the killing of Sitting Bull and the massacre of Wounded Knee". (6)

"In winter the temperature drops below 30 degrees. On the whole the extremes of temperature encountered on the plains are not found in the Black Hills. This fact was largely responsible for the gathering of large herds of buffalo in the Black Hills in winter during the years when buffalo roamed the western plains (7)".

"The great period of the fur trade circle, 1820-1840, was the period of greatest prosperity for the Teton. In this period their native culture was augmented by the use of horses, guns, and a variety of metal tools and utensils furnished by the white man. The Tetons were free and independent with a ready market for peltries and a bountiful supply of food". (8).

Numbered Items, Remarks concerning:

- 1) According to Grinnell (Custer Expedition 1874), Dodge (Jenney Expedition 1875) and other there were no buffalo within, or close to the Black Hills as early as 1874 and 1875. Probably, from present day evidence, the closest and largest herd was in Montana, and possibly reached the lower Little Missouri, in what is now North Dakota. In part the scarcity of buffalo may have been due in part to the "herd line" established by the hostile Sioux. However, it seems more probable that the scarcity of buffalo was due to hunting by Agency Indians and soldiers from the Red Cloud Agency, the Spotted Horse Agency and Fort Laramie to the south and southwestward, and from professional hide hunters, and Indians engaged in hunting and selling hides to the trading posts on the Missouri River. In this connection it is noted that Trudeau established a post near Greenwood So. Dak, 280 miles from the Black Hills in 1794. Loisel established a trading post near DeGrey (24 miles east of Pierre), 180 miles from the Black Hills. Manuel Lisa established a fort and trading post on the Missouri River, 250 miles from the Black Hills in 1811. Further numerous other trading posts were established within 150 to 250 miles of the Black Hills during the period 1820 to 1840. Chittenden, in History of the Fur Trade, states that a hundred trading posts were operating in the Teton country during the period mentioned above.

Such posts were within reasonable distance of the Black Hills and it seems reasonable to believe that hunters, both professional and sportsmen, in conjunction with the aforementioned disturbing factors tended to seriously deplete and probably practically exterminate the buffalo within close proximity of the Hills.

During this period the buffalo range adjacent to the Black Hills was undoubtedly visited many times by hunters, trappers and traders, however, the majority probably being unlettered and caring little for posterity left no written record of conditions at that time. If the Black Hills proper had been the normal winter range of large buffalo herds, it would seem reasonable to believe that trading posts would have been established within the immediate vicinity. But none were.

It seems reasonable to believe that the buffalo usage of the Black Hills was confined almost entirely to the grass covered Red Valley, which encircles the Hills. The Wind Cave herd has been observed for a period of years and it is noted that they confine most of their grazing to the open grassy areas, and when occasionally venturing into the forest area they drift principally along the outer edge of the forest. A few old "batchelor" bulls make considerable use of the forest area proper, otherwise its usage is negligible in comparison to the usage accorded the grassland.

2) - The Black Hills were in the center of the Teton country, but were subject to little if any use. The reasons listed by Colonel Dodge relating to the difficulty of hunting, herding horses, superstitious fears and the complete lack of travois trails seem to indicate an almost complete avoidance of the Hills, by the Indians. The movements of the principal bands of hostiles during the period 1866 to 1876 was marked, I believe, by complete avoidance of the Black Hills, however, such bands at times were in areas immediately adjacent to the Hills. Such movements can probably be confirmed by reference to Letter Books and Documents of the Department of the Platte and Missouri Division files of the War Department for the period in question. The Ricker Collection of the Nebraska Historical Society is also another possible source of information in this matter.

3) - The reasons that the Teton Dakota wished to, at least apparently, desired to retain possession of the Black Hills could, in reality, be broken down as the motivating factor influencing the two Indian factions contending for complete tribal dominance and chieftanship.

a- The Agency Indians, led by Red Cloud and Spotted Horse, had lost all semblance of independence and initiative, and became "Loafers" dependent upon Government subsistence. They wanted a considerable sum of money and food for seven generations. This would have afforded this faction ample "social security" and would have attracted sufficient withdrawals from the hostiles to assure the leaders practical dominance of the Teton Dakota.

b- The hostiles, led by Crazy Horse of the Oglalas, Gail of the Hunkpatilas, and Touch-the-Clouds of the Minneconjous, and inspired by Sitting Bull of the Hunkpatilas, desired to retain the Black Hills, as it was the home of the gods, and consequently a sacred place. However, their primary reason was the realization that if the whites became strongly established in the Black Hills they would eventually dispossess the Indian of practically all their domain - which came to pass.

4) The Oregon Trail and the Union Pacific Railroad disrupted the buffalo herds, and allowed access to an unprecedented number of hunters and immigrants, and thus resulted in an unparalleled rate of slaughter for a considerable distance on either side of such routes. This disturbing factor, plus hunting by the Army, Agency Indians, and the possible existence of the northern "herd line" are factors which combined to render the buffalo's number insignificant in the adjacent area surrounding the Black Hills.

5) Expansion of livestock ranching operations, established during and shortly after the construction of the Union Pacific, caused additional pressure on the Indians, and the few remaining buffalo.

6) The Ghost Dance, and the Ghost Vision of the Messiah dates back to 1857 and not 1889, but did not assume a dominant role in Sioux theology until the late 80's and early 90's finally culminating in the death of Sitting Bull, and the Battle of Wounded Knee.

7) There is, apparently, no reason to believe that the Black Hills were the permanent residence of a large number of buffalo. Skeletal remains were very scarce in 1874 and 1875, and should have been numerous if this area had been a permanent winter range of a large herd. The majority of the Black Hills proper is not suitable buffalo range, range being confined to Red Valley and the grassy, thinly forested sections on the outer edges of the Hills. Further, continued heavy usage of the Black Hills by buffalo would have left its mark on the forest stand. In all literature available to the compiler there has been no reference to trees destroyed, or marked, by usage as "rubbing posts". Further no rubbing stones have been mentioned, or known to exist. (For further data see Bailey's remarks-North American Fauna -No. 49 - p.24.)

8) The period 1820 to 1840 marking the high tide of Sioux prosperity, undoubtedly, was marked by extensive slaughter of the buffalo for trading purposes by the Indians, and by hunters either tolerated by the Indians, or who had purchased permission to hunt through the medium of gifts.

Further it is believed that research will show that Red Cloud was not supreme chief of the Sioux (Oglala) but one of the tribal chiefs, who had been designated the chief of the entire tribe by the Army. Also by the Indian Service. In such capacity he was demoted for political reason twice, and ultimately restored. His sovereignty was not accepted by entire tribe. Further data can be found in Ricker & other collections-Nebraska Historical Society.

SECTION 7

EXCERPTS FROM THE REPORT OF
LT. GOUVERNOUR K. WARREN

WITH EXCERPTS FROM APPENDIX "E"
CONTAINING F. V. HAYDEN'S REPORT

1855-56-57

SECTION 7.

Excerpts from:

The Report of Lieutenant Gouverneur K. Warren. Topographical Engineer of the "Sioux Expedition" of Exploration in Dakota Country - 1855 - 1856 - 1857. With notes from F. V. Hayden, who was a member of the party, and who reported on the geology and other scientific features of the areas traversed.

(Remarks are confined to wildlife observations & only such excerpts are recorded below.)

"Where the road passes through the Mauvaises Terres (Badlands) from White River to the head of Bad River, the surface is, in many places covered with chalcedony, and is hard; in others it is clay, and in wet weather very soft. Through this section some of the streams have clayey beds, some of them sandy. The precipitous ridges of the Mauvaises Terres are about two hundred feet high, and are very striking in appearance. Black tailed deer and big horn are to be found here."

"The Sand Hills present their most characteristic appearance just north of Calamus River, spread out in every direction to the verge of the horizon. The sand is
.....
The sand is formed into limited basins, over the rims of which you are constantly passing, up one side and down the other, the feet of the animals frequently sinking so as to make the progress excessively laborious.

The scenery is exceedingly solitary, silent, and desolate, and depressing to one's spirit. Antelope and sometimes buffalo, are numerous."

"Upon the principles I have mentioned, I should recommend that an infantry post be maintained at Fort Pierre. Of all the points yet occupied in the Dakota country this is the most central. Good prairie roads lead from it in all directions and the experienced guides and traders of the American Fur Company have explored them all.

NOTE: The following excerpts are from the Hayden Report accompanying Lt. Warrens Report.

"Between the two forks of the Shyenne (Present Beale Fourche and South Cheyenne Rivers), and the vicinity of Bear Butte, a portion of the Black Hills, is quite a large area, which seems to have been leveled by denudation, and greets the eye of the traveler with joy, who has for some time previously seen nothing but the sterile country.....
..... At that time the grass was springing up quite green and herds of antelope were quietly reposing upon the sunny sides of the streams, like sheep. This is a portion of country similar to White River Valley, well adapted for grazing".....

Note : The following excerpts are from Hayden's daily journal entries, and only the portion covering wildlife conditions are noted. Notations cover a trip from Fort Pierre to White River, past & through the Badlands, thence onward, up White River to Nebraska.

Departed Fort Pierre May 7, 1855.

May 7 - No wildlife entries.

May 8 - No wildlife entries.

May 9 - "..... No game was seen but a few antelope, which were so wild it was impossible to kill them."

May 10 - No wildlife entries.

May 11 - "..... We found plenty of antelope near our camping place,"
(Hayden reports killing one for food, and is the first animal killed since leaving Fort Pierre.)

May 14 - " Our Indian guide led us along an old buffalo track, a very rugged road.....
.....
At the mouth is the most beautiful exhibition of the Bad Lands I have ever seen. "
(Hayden goes into considerable detail about roughness of road and the general good of utilizing buffalo trails as roadways, but does not mention seeing a buffalo.

May 21 - "Antelope were more abundant than other kinds of game, and we were able to supply ourselves with meat. Occasionally a big horn was added"
(The party was still in the vicinity of the White River Badlands at this date.)

Note: The foregoing excerpts are good examples of the wildlife entries in the daily journal, and there are very few consecutive days entries carrying such entry, usually a one to two day gap occurs.

The entries of both Hayden and Warren note several small bunches of buffalo in the Sand Hill Country and along the Niobrara (Running Water) River in Nebraska, and also one or two entries stating that it appeared as though a large band of buffalo had recently occupied, or passed through, certain sections of such areas, but the large band was not seen by the party.

Note: Hayden's summary of wildlife condition in the Dakota Country is probably the most important entry insofar as our present purposes are concerned, and follows below:

"Of the various kinds of animals and their distribution, I might here, say a few words. Many of them are fast passing away, and in a few years those upon which the Indian is now dependent will become extinct. The buffalo, which have been so important an agent in the preservation of the Indian, are now gradually gathering into a smaller area, and although in the valley of the Yellowstone, and along the Upper Missouri, thousands may yet be seen, they are decreasing annually at a very rapid rate."

"In 1850 buffalo were seen as low down the River (Missouri) as Vermillion River, and in 1854 a few were killed near Fort Pierre; but at the present time none, unless it be a stray bull, are seen below Fort Clark."

"Even at the base of the Black Hills it would be difficult for a party of white men to support themselves by hunting. Probably at this time game, such as buffalo, antelope, elk, bighorn, and beaver are more abundant in the Yellowstone Valley than in any other portion of the Upper Missouri."

"The black tailed deer is seldom seen below Fort Pierre. It is found chiefly in the ravines and the more rugged portions in the vicinity of the Black Hills and the mountains. The interminable ravines of the Shyenne and Sage Creek (Sage Creek, or a portion thereof is within the present Badlands National Monument) are noted places for them."

"Antelope are the most abundant animal in the Sioux country and are confined to the open prairie"

"Elk are still abundant in the region of the mountains. Large herds of them are seen along the Yellowstone and Missouri, above Fort Union. Below these points they are seldom seen in herds."

Explanation of Terms:

Mauvaises Terre	-- White River Badlands
Shyenne River	-- Cheyenne River
Bad River	-- Lower Cheyenne River
Fort Pierre	-- Located across Missouri River from Pierre, S.D.
Dakota Country	-- Present North and South Dakota, eastern Wyoming, eastern Wyoming, and north central and northwest Nebraska and eastern Montana.
Two forks of the Shyenne	-- Belle Fourche and the South Cheyenne Rivers.
Sand Hills	-- Sand Hill Country of Nebraska.
Junction of Missouri and Vermillion River	-- At Vermillion S. Dakota.
Fort Clark	-- 40 miles Northwest of Bismark, North Dakota

Remarks:

In view of Mr. Hayden's statement regarding the present condition of big game during the 1850's it is not considered strange or in any way unusual that the Custer and Dodge-Jenney Expeditions failed to note any buffalo, during their explorations. The gradual, or rather rapid, retreat of the buffalo from the Vermillion River to Fort Clark shows an exceptional and rapid decrease in the territory dominated by the buffalo. The distance from Vermillion River to Fort Clark is some 350 plus air line miles, and if the buffalo was pushed back this distance in a five to six year period we may assume that hunting, hide trade and other factors tended to decrease the buffalo at an unprecedented pace, as I have noted under annotated remarks in the preceding sections. The trading posts on the Upper Missouri, in both North and South Dakota no doubt accentuated the rapid slaughter and decrease of the buffalo.

The fact that game was scarce along the Black Hills at that time leads to the belief that the only possible information that might be obtained regarding wildlife in the Black Hills under comparatively natural and undisturbed conditions will be from the discovery of diaries or journals of hunters, frontiersmen, explorers, traders, guides and others who ventured into this area during the period 1800 to 1830. At this date no such data has been found or published, however, some such information may come to light in the future.

Antelope were still comparatively plentiful as were deer, but the elk had diminished in the same manner as the buffalo, and apparently at about the same rate.

LIST OF PUBLICATIONS AND DOCUMENTS
(In addition to those quoted.)

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ON

THE GREAT PLAINS

AND

THE BLACK HILLS

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