Preface

Late in 1991, it was my good fortune to hire Lee Whittlesey to co-author a paper on the historical record of wolves and key prey species in the Yellowstone area prior to 1882. This paper is being written by us for inclusion in *Wolves for Yellowstone? A Report to the United States Congress, Volume IV*. Lee's exhaustive familiarity with the early literature of Yellowstone has allowed him to produce the definitive work on Yellowstone nomenclature, and over the past fifteen or so years I have occasionally had the pleasure of talking with him about Yellowstone history. This was my first opportunity to work with him.

His assignment was to gather all obtainable contemporary accounts of the presence, absence, distribution, and abundance of large mammals in the park area prior to 1882. We met regularly during the two-month period of his assignment, and I have enough pride as a historian to think that I did contribute some ideas and sources, but virtually all of the rarer material analyzed in this report was found by him. In quite a few cases, it has never been used by any other historian.

This report is not our final document. Early in his work, it became clear that the best course of action was for Lee to assemble all he could find, and submit it to me, so that I could then work from it to write, with his full involvement, our report. This is what he did. But he did it with such energy and thoroughness that his working copy deserves a life of its own.

What you have here, then, is Lee's report to me. It will differ in tone, emphasis, content, and perhaps even in a conclusion or two from the final report that we will co-author. One of the reasons it deserves at least limited distribution to some interested parties is that it contains material that may be beyond the scope of our final report; that material should not be neglected, and may be of use to quite a few people. For the protection of Lee, I will say that this should be seen as a working draft. It has not been subjected to editing, proofreading, or peer review. Because of its significance, however, we feel strongly that it should be made available. Besides giving it to a few people immediately, we will place a copy in the Yellowstone Park Reference Library.

Finally, let me point out just what has been achieved here. Previous investigators of the historical record of Yellowstone fauna have relied on perhaps two dozen accounts from this earliest period. Thanks largely to Lee's work, we now have a vastly expanded historical resource, including about 130 sources. I cannot overstate the significance of this for the historical scholarship of this subject, and I am sure that this report, and the final report by Lee and me, will demonstrate just what the documentary record can do for our understanding of early Yellowstone.

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A History of Large Animals in Yellowstone National Park Before 1882

by

Lee H. Whittlesey

Dr. Charles Kay in his Yellowstone's Northern Elk Herd: A Critical Evaluation of the Natural Regulation Paradigm (1990)[1] has suggested that the wolf is not native to Yellowstone National Park, that it could not be native because its food source the elk is not native, and that neither animal occurred abundantly if at all in early days in Yellowstone. Notwithstanding the fact that wolves can eat things other than elk, and regardless of Yellowstone's archaeological records which show both wolves and elk present in earlier times[2], neither of Dr. Kay's assertions is confirmed by the historic record.

Kay used only nineteen historic sources to conclude that elk, wolves, and several other types of large game were not present in Yellowstone National Park prior to 1877. But a review of around one hundred thirty pre-1882 accounts indicates that not only were elk and other large game present in good numbers (if not abundance) in the Park before 1882, but that wolves were seen, heard, and mentioned in the Greater Yellowstone Ecosystem. Moreover, the historic accounts seem to show that elk, bison, and moose all occurred in greater numbers than Kay believes, if probably in somewhat lesser numbers than today (depending on animal type). And, sheep and deer were mentioned

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1. PhD. dissertation, Utah State University, Logan, Utah, 1990, pp. 285-289.
2. Elizabeth Anne Hadly, "Late Holocene Mammalian Fauna of Lamar Cave and Its Implications for Ecosystem Dynamics in Yellowstone National Park, Wyoming", Master's Thesis, Northern Arizona University, May, 1990, pp. ii-iii, et al.

a great deal in these early accounts, and antelope seem to have led the way in numbers during the period 1830-1881.

Before we examine the individual historic sources, it would be advantageous to understand several important background items.

The Bottler Ranch

Frederick and Phillip Bottler established their important outpost in 1868 at a point about twenty-seven miles by road north of today's town of Gardiner, Montana. It was one of the first permanent settlements of white men in Montana Territory and was occupied by the two brothers, their half brother Henry, and their mother until at least 1893 when Frederick built the white house that occupies the property today.[3]

Bottler Ranch was the key stopover point for virtually every person or party who came up the Yellowstone River toward Mammoth Hot Springs from 1868 until the 1880s. Frederick Bottler was usually "the hunter" and Phillip was "the farmer." Early travelers often mentioned the many animal skins and heads or the planted grain and crops or both.

The point here is: the place had the remnants of hunted animals in it, hundreds of them. This indicates that the surrounding countryside was loaded with game. That the Bottler brothers participated in the 1870s massive slaughter of

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3. Aubrey L. Haines, "The Park Branch Line: Doorway to the Yellowstone", unpublished ms., Yellowstone Park Research Library, 1963, pp. 5-6.

Yellowstone Park game is attested to by P.W. Norris (see page 9).

Dr. A.C. Peale reported in 1871 that "at the [Bottler's] ranche [sic] they have a great many skins--bear, antelope, etc."[4] Dr. S. Weir Mitchell in 1879 called Bottler's ranch "a log house full of game-trophies"[5] while General Strong noted in 1875 that "Fred., is a mighty hunter, and the trophies of his prowess, such as heads and skins of mountain sheep, elk, deer, bear, and mountain lions are abundant here."[6] And traveler H.B. Leckler in 1881 commented on "a large, grizzly-bear skin stretched out on the floor to dry" that had been killed "a mile or two from the house."[7] Indeed, a W.H. Jackson photo[8] from 1871 shows the Bottler ranch with literally hundreds of animal skins hanging, and many of those in the foreground appear to be wolves or coyotes.

Fred Bottler conducted the Earl of Dunraven on hunts in the Yellowstone country and the Earl's book The Great Divide (1876) is full of him. Where game and the Yellowstone country are mentioned in the same breath, the Bottler brothers must also always be mentioned.

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4. A.C. Peale, "1871 Diary", typescript from book 1971, USGS Field Records, Denver, Colorado, in YNP Research Library, July 17, 1871 entry.
5. S. Weir Mitchell, "Through the Yellowstone Park to Fort Custer.", Lippincott's Magazine 25:690, June, 1880.
6. W.E. Strong in Richard A. Bartlett, ed., A Trip to the Yellowstone National Park in July, August, and September, 1875, 1968, p. 33.
7. H. Banard Leckler, "A Camping Trip to the Yellowstone National Park", American Field 2:382, April 19, 1884.
8. Clarence S. Jackson, Picture Maker of the Old West, 1947, p. 119.

The Sometimes-You-See-Them-And-Sometimes-You-Don't Phenomenon

With animals in the Yellowstone country, the general rule is that sometimes you see them and sometimes you do not. One would think that this proposition would be simply intuitive, but apparently for some people it is not so self-evident. Hence, I offer here an explanation of what I call the SYSTASYD phenomenon. It applies to the Yellowstone country today as well as in the 1870s.

Yellowstone tour bus drivers today travel Yellowstone's roads seven days per week, eight to twelve hours per day, all summer long (May through mid-October). In winter they do the same thing in snowcoaches (mid-December through mid-March). Occasional trips are made during shoulder seasons as well.

These people continually see more of the Yellowstone Park road system than anyone else. And these people embrace the SYSTASYD phenomenon as being the general rule. Such park bus drivers as John Rhoades (7 years), Greg Dalling (9 years), Ken Cummings (13 years), Leslie Quinn (11 years), Lori Detweiler (7 years), Leon Brunton (12 years), and Herb Vaughan (14 years) all attest to this being the case in Yellowstone Park 1970-1991. All are college educated and all have lived and worked year round in Yellowstone for many years.

As driver John Rhoades told me, "Saying there are no animals just because you don't see them one day, two days, or a week, is like saying there are no Chevettes in America because

there weren't any parked in the parking lot this morning. Seeing animals is a matter of luck at any time. Seeing them confirms their existence; not seeing them does not mean they are not there. Not seeing them simply means nothing."

Thus one cannot claim that because some parties did not see game that the game was not there?[9] I am attempting to show in this paper that many early parties in fact did see game. But even if one party did not, then that fact is meaningless, especially if the party was a large one.

As the editor of the Bozeman newspaper stated in 1883, after noting his belief that animals were not scarce in the Park:

> "That they are seldom seen by tourists is no conclusive evidence either of their absence or scarcity, as they naturally avoid the low lands in the summer season, and have learned to shun the frequented roads and trails of tourists, who almost invariably shoot at every wild animal that crosses their path."[10]

The SYSTASYD phenomenon can also be attested to by rangers who operate visitor centers in Yellowstone and by law enforcement (patrol) rangers as well. People who do not spend long continuous periods (like months or years) in the Park often seem not to understand the simple fact that animals are not always found in one viewing spot. A common

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9. Kay, op. cit., pp. 263-266.
10. "Game Features of the Yellowstone Park.", Bozeman Avant Courier, January 11, 1883.

question at visitor centers is: "why are all the elk that are 'always' at (insert location) not there right now/all week/the past few days?" The answer seems so simple that it drives rangers crazy to hear the question. The answer is: they are not always there. Every day is different. Animals move around.

Apparently to the short-term visitor it may seem that he "always" sees animals at a given location. Bus drivers and rangers know it is not true. However, not seeing animals does not mean they are not there.

The Sometimes-They-Run-and-Sometimes-They-Don't Phenomenon

This phenomenon is more subtle. It stems from the rule that all animals are unpredictable---one cannot ever know or predict what they will do in a given situation. They may run away in fear, or they may just stand there and stare at you the visitor. I call this the STRASTD phenomenon.

Elk are especially prone to this. For over twenty years I have personally watched them in Yellowstone Park. Often they will exhibit no fear and stand quietly just watching me watch them. But nearly as often, they will turn tail and run in fear. In particular I have seen the latter phenomenon in the backcountry of places like Hayden Valley, where apparently some animals are not "roadside" ones. We can never know the reasons for this, but we can know that it is a fact. The above rangers and bus drivers will also attest to it.

Thus one cannot claim that elk standing quietly on one

occasion are evidence that a party "did not scare all the game out of sight by their presence" on a different occasion.[11]

In my twenty years in Yellowstone, I have seen the STRASTD phenomenon over and over. Note the several accounts in this article where elk stand stupidly near men. Note also Lt. G.C. Doane's account of two thousand elk running from him in fear.

The Massive Slaughter of Animals in Yellowstone 1871-1879

As with the Holocaust, one writer claims that the Yellowstone slaughter never happened, or at least attempts to minimize it by saying that Norris, Ludlow, and Strong had reasons for exaggerating it.[12] However, we have independent confirmations of the slaughter.

The very famous naturalist George Bird Grinnell certainly had no reason to exaggerate in his long (1876) statement about the great Yellowstone Park slaughter of the 1870s:

> "The destruction of big game for the hides, which was taking place in 1876, is hardly to be comprehended by those who did not see what was going on in those early years. Buffalo, elk, mule deer, and antelope were slaughtered by thousands without regard to age or sex or season, and of the vast majority of animals killed, only the hide was taken. During the winter of 1874-75 it was estimated that in the valley of the Yellowstone, between the mouth of Trail Creek and the Mammoth Hot Springs, not less than 3,000 elk were killed for their hides alone. Buffalo, mule deer, and antelope suffered as much or more than the elk. Travelers through Montana Territory in the summer of 1875 constantly came on places where buffalo

11. Kay, op. cit., p. 257.
12. Kay, op. cit., p. 258.

> carcasses were strewn everywhere, and it was common to pass a skin-hunting outfit, whose wagons were piled with the flat, dried hides of deer, elk, antelope and sheep, as high as a load of hay. This went on, as has been said, all through the year, and the females of these hoofed animals were as readily killed in spring or summer as at any other time. Owing to the sparse settlement of the country and the enormous abundance of game animals, the destruction was beyond belief. At certain points near army posts, efforts were made by officers to drive skin hunters away, and often with success, and the general sentiment of the better class of frontiersman was against the butchery. The game laws of the territory existed only on the statute books, and people generally were not sufficiently interested to make any effort to have the laws enforced. They were not supported by public sentiment. The result of this slaughter was that the game passed out of existence."[13]

Of course the game did not completely pass "out of existence", as my chronology will show, but it was reduced so greatly as to make Hiram Chittenden twenty years later feel the need to discuss various animals' returning in numbers to their former heights.[14] As early as 1873, citizens of Bozeman, Montana, recognized that the slaughter was occurring in the Park and called for it to cease.[15]

Historian Aubrey Haines has described the men who carried out the slaughter:

> "Another rough lot were the hide-hunters who had drifted into the mountains around

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13. George B. Grinnell, Hunting at High Altitudes, 1913, p. 268n21. A shortened version of this statement, with its early reference to wolves in the region, appears in "Large Game in the Territories.", Forest and Stream 7:152, October 12, 1876, wherein Grinnell stated that "hides only are taken and the meat left to feed the wolves or to rot."
14. Hiram M. Chittenden, The Yellowstone National Park, 1895, p. 183; 1903, pp. 222-225.
15. "National Park.", Bozeman Avant Courier, December 12, 1873.

> the Yellowstone Plateau prior to 1883, following destruction of the buffalo herds of the northern plains. Many of these had become determined poachers who would have given men of nerve and experience a bad time...Every criminal, poacher, and ruffian knew the park rules and regulations were toothless."[16]

The problem was that the park regulations before 1883, although technically prohibiting hunting, allowed parties to take whatever they needed for food. And certainly that was a wide-open exception that made for a toothless regulation, especially when no one was there to enforce it.

P.W. Norris, before he became superintendent of Yellowstone Park, made trips to the region in 1870 and 1875. He was close friends with the Bottler brothers and was accompanied by Frederick Bottler on portions of both his trips. Note what Norris tells us in this little-known account from 1875, that the Bottler brothers themselves participated in the massive animal slaughter and that the country was loaded with game animals, especially elk:

> "The recent painting[17] called the 'Successful Hunter,' represents my old comrade Frederick Bottler, in the act of skinning one of the five huge antlered bull elk lying around him, that he had just shot standing in [its] tracks amid the mists of the cascade [of Lower/Upper Falls] when hunting for Prof. Hayden in 1872.
>
> "The Bottler Bros. assure me that they alone packed over 2,000 elk skins from the forks of the Yellowstone [mouth of Lamar River], besides vast numbers of other pelts, and other hunters at least as many more, in the spring of 1875. As the only part of most of them saved was the

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16. Aubrey L. Haines, The Yellowstone Story, I, 1977, p. 294.
17. Taken from a photo reproduced in Haines, The Yellowstone Story, I, 1977, p. 206.

> tongue and hide, an opinion can be formed of the wanton, unwise, unlawful slaughter of the beautiful and valuable animals in the Great National Yellowstone Park. Although, as above stated, these animals are still plentiful around the falls and great geysers, which have never yet been seen by white man in winter, they soon will be, and those animals become, extinct, unless protected by a determined resident superintendent and police."[18]

General W.E. Strong, who traveled through Yellowstone that same year (1875) with a large party that included "discoverer" Gustavus C. Doane, certainly saw the conditions he wrote about, irrespective of any motives he may have had for the army to take over Yellowstone. Surely Strong did not just fabricate the facts in this statement:

> "In 1870, when Lieutenant Doane first entered the Yellowstone Basin, it was without doubt a country unsurpassed on this continent for big game. Large herds of elk, mountain sheep, the black and white-tail deer, and the grizzly, cinnamon, and black bears were numerous. The Yellowstone Valley was swarming with antelope, and the mountain lion was frequently killed. During the past five years the large game has been slaughtered here by professional hunters by thousands, and for their hides alone. When the snow falls and the fierce winter storms begin in November and December, the elk, deer, and sheep leave the summits of the snowy ranges and come in great bands to the foot-hills and valleys, where they are met and shot down shamefully by these merciless human vultures. An elk skin is worth from six to eight dollars, and it is said that when the snow is deep, and a herd gets confused, one hunter will frequently kill from twenty-five to fifty of these noble animals in a single day. Over four thousand were killed last winter by professional hunters in the Mammoth Springs Basin alone. Their carcasses and branching antlers can be seen on every hillside and in every valley. Mountain sheep and deer have been hunted and killed in the same manner for their hides. The terrible slaughter which has been going on since the fall of 1871 has thinned out the great bands of big game, until it is a rare thing now to see an elk, deer, or mountain sheep

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18. P.W. Norris, "Meanderings of a Mountaineer...", Ms. prepared from newspaper clippings (1870-75), annotated about 1885, letter number 22, 1875.

> along the regular trail from [Fort] Ellis to Yellowstone Lake. There is undoubtedly considerable game still left on the west side of the Yellowstone [River], which, in the summer months, seeks the highest mountain summits to escape the flies and mosquitoes; and on the eastern side of the Yellowstone [River], commencing at the Lake and following the gigantic mountains northward, large game is probably as plentiful today as it was on the western side when Doane first explored this country."[19]

Strong ended his message by stating that the game would soon all be gone if the slaughter were not stopped and demanding that Congress or someone else take active measures to stop it. Strong seemed also to want the hunters criminally prosecuted in some way if it could be done, saying that "Jack Baronette can point out and name the men who glide up to bands of elk on snowshoes and shoot them down when too poor and weak to run away."[20]

Like Strong, William Ludlow was also in the army in 1875, and he too had the vested interest of wanting the army to take over Yellowstone Park. But there is simply too much information here for us to believe that Strong, Ludlow, or anyone else fabricated the great animal slaughter.

Ludlow stated that "hunters have for years devoted themselves to the slaughter of the game until within the limits of the park it is hardly to be found."[21] Ludlow declared that he was told that in the winter of 1874-75, 1500 to 2000 elk were

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19. Strong in Bartlett, op. cit., pp. 104-105.
20. Strong in Bartlett, op. cit., p. 106.
21. William E. Ludlow, Report of a Reconnaissance from Carroll..., 1876, p. 36. Ludlow apparently had not talked to one of his own party members, George Bird Grinnell, whose 1875 accounts do not agree with Ludlow's assertion of no game in Yellowstone Park.

slaughtered within fifteen miles of Mammoth Hot Springs, "the frozen carcasses being left in the snow to feed the wolves or to decay in the spring."[22]

P.W. Norris in 1877 followed up on his 1875 statements by discussing the slaughter in his first annual "Report on the Yellowstone National Park." His statement tells us not only that game abounded in the Park in 1870, but also gives us more details of the numbers of animals killed 1871-77:

> "...in no other portion of the West or of the world was there such an abundance of elk, moose, deer, mountain sheep, and other beautiful and valuable animals, fish and fowl, nor as ignorant [of], or as fearless of and easily slaughtered by man as in this secluded and unknown [Yellowstone] park but seven years ago. Most of the larger animals would stupidly gaze at man stalking erect... until too often wantonly slaughtered...
>
> From the unquestioned fact that over 2,000 hides of the huge Rocky Mountain elk, nearly as many each of the big-horn deer and antelope, and scores if not hundreds of moose and bison were taken out of the park in the spring of 1875, probably 7,000, or an annual average of 1,000 of them, and hundreds if not thousands of each of these other animals have been thus killed since its [the Park's] discovery in 1870.
>
> As comparatively few of them were slain for food, but mostly for their pelts and tongues, often run down on snow-shoes and tomahawked when their carcasses were least valuable, and merely strychnine-poisoned for wolf or wolverine bait, the amount of most wholesome, nutritious, and delicious food thus wantonly destroyed is simply incalculable."[23]

Norris in 1877 had found the smell of slaughtered and decaying animals at Baronett's cabin (east of Baronett's bridge)

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22. Ludlow, op. cit., p. 36.
23. P.W. Norris, Report Upon the Yellowstone National Park, to the Secretary of the Interior, for the Year 1877, 1877, pp. 842-843.

to be intolerable:

> "As it has been for two years the haunt of all the trappers and hunters of the mountains, many acres of the rocky point [on the east side of Yellowstone River at Baronett's cabin] was [so] strewn with the fragments of the pelts and carcasses of elk, bison, bear, beaver, foxes, wolverines and other animals that the effluvia [stench] even in this climate was...too unpleasant for enjoyment[,] as in the days of yore."[24]

The slaughter seems to have abated at least some in the Park after Norris began appealing directly to the hunters, many of whom he and his friend Jack Baronett knew personally. He appealed to their "honor and genuine pride in their own reputations and that of the matchless wonders of their mountain homes."[25] But he still needed better laws and a police force to help him.[26]

Although some animals were undoubtedly killed in 1879,[27] most of the killing seems to have abated by that year, at least if Norris is to be believed:

> "I have not allowed the killing of bison, and so checked the wanton slaughter of elk, deer, sheep, and antelope, mainly for the pelts and tongues, by the mountaineers, that although [the animals have] grown shy of the usually harmless fusillade

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24. Norris, "Meanderings...", August 5, 1877.
25. Norris, Report...1877, p. 843.
26. Norris, Report Upon the Yellowstone National Park, to the Secretary of the Interior, for the Year 1878, 1879, pp. 984-985.
27. Norris, Report Upon the Yellowstone National Park, to the Secretary of the Interior, for the Year 1879, 1880, p. 8, including a trophy-sized mountain lion. Norris added (p. 21) that he believed the "choice" animals had increased rather than diminished in the Park in 1879. In light of the slaughter, this is puzzling. Perhaps Norris was attempting to minimize the slaughter so as not to discourage future tourists. Or perhaps Norris really had made strides in stopping the slaughter and there had indeed been some recovery by the animals.

> of tourists along the main routes of travel, I have, save near the Mammoth Hot Springs, seldom failed to find in secluded parks near our roads abundance of game for our largest parties."[28]

Hunting in the Park continued, although somewhat lessened, until 1883. Assistant superintendent G.L. Henderson seems to have been at least partially responsible for the changing of the law that year by complaining to the editor of the Bozeman Avant Courier that the park superintendent was unable to stop hunting by "either skin hunters or contractors of the Park Improvement Company." Henderson was complaining that the PI Co. and another group, Eaton and Company of Cooke City, were both engaged in taking thousands of pounds of meat from the Park.[29] The Courier had stated that "between the Mammoth Hot Springs and Cooke City there are at least 5,000 elk."[30]

Less than a month later, Henderson forwarded to the newspaper a copy of Secretary of the Interior H.M. Teller's orders prohibiting all hunting in the park:

> "The regulations heretofore issued by the Secretary of the Interior in regard to killing game in the Yellowstone National Park

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28. Norris, Report...1879, p. 21.
29. Inhotwater [G.L. Henderson], "Mammoth Springs News Notes.", Bozeman Avant Courier, January 25, 1883. Henderson is known to have been frustrated, not only by his negative relationship with park superintendent Patrick Conger, but also because of his lack of power to protect park game as an assistant superintendent. Two complaining letters in Forest and Stream magazine from "Ichthus" were probably authored by Henderson. See Ichthus, "National Park Superintendents.", Forest and Stream 24:102-3, March 5, 1885; and "Notes from Yellowstone Park.", Forest and Stream 24:228, April 16, 1885.
30. "Mr. Eaton's Letter.", Bozeman Avant Courier, February 22, 1883.

> are amended so as to prohibit absolutely the killing, wounding or capturing at any time of any buffalo, bison, moose, elk, black tailed or white tailed deer, mountain sheep, Rocky Mountain goat, antelope, beaver, otter, martin, fisher, grouse, prairie chicken, pheasant, fool hen, partridge, quail, wild goose, duck, robin, meadow lark, thrush, goldfinch, flicker or yellow-hammer, blackbird, oriole, jay, snowbird, or any of the small birds commonly known as singing birds. The regulations in regard to fishing in the waters of the Park are amended so as to prohibit the taking of fish by means of seines, nets, traps, or by the use of drugs, or any explosive substances or compounds, or in any other way than by hook and line...
>
> H.M. Teller
> Secretary" [31]

Chronological Review of the Historic Accounts

Here now is the chronological examination of animals seen or killed, and their tracks, signs, and sounds, all from the Greater Yellowstone Ecosystem 1830-1881. I have omitted animals smaller than members of the weasel family as well as all birds and fish.

1830---In what appears to be the earliest reference to game in the Yellowstone region, Francis F. Victor chronicled what fur trapper Joe Meek told her many years later:

> "The whole country lying upon the Yellowstone and its tributaries, and about the headwaters of the Missouri, at the time of which we are writing [1830], abounded not only in beaver, but in buffalo, bear, elk, antelope, and many smaller kinds of game."[32]

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31. "Game in the Park.", Bozeman Avant Courier, February 22, 1883.
32. Francis Fuller Victor, River of the West, 1870, p. 90.

1835---

Osborne Russell, an educated fur trapper from Maine, made the first of four trips through the Yellowstone Park region this year, passing through today's park from the Shoshone River headwaters to Lamar River to Gallatin River to Madison River.

In Lamar Valley, Russell met around twenty members of the "Snake" (probably Sheepeater) Indian tribe, who were "neatly clothed in dressed deer and Sheep skins of the best quality." Russell reported that their "bows were beautifully wrought from Sheep, Buffaloe and Elk horns secured with Deer and Elk sinews" and stated that "we obtained a large number of Elk Deer and Sheep skins from them of the finest quality."[33]

The Sheepeaters, having no horses, are known to have traveled little if at all from their mountain haunts in the fastnesses of Yellowstone Park.[34] If they did not travel, where did they get the animal skins and other animal paraphernalia? Logically we must answer that today's Park provided them.

On a branch of Gallatin River west of the Gallatin Range within today's Park, Russell reported that he "killed the fattest Elk I ever saw."[35] Russell also reported "thousands of Mountain Sheep", large bands of sheep "near us on

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33. Osborne Russell in Aubrey L. Haines, ed., Journal of a Trapper, 1970, pp. 26-27.
34. Joel C. Janetski, The Indians of Yellowstone Park, 1987, p. 43.
35. Russell, op. cit., p. 29.

either hand", and still more sheep: "for an eye could scarcely be cast in any direction around above or below without seeing the fat sheep gazing at us."[36]

It appears from this that sheep occurred in greater numbers then than currently. But that does not mean that there were no elk or few elk. Indeed, the healthy condition of the elk killed by Russell lends credence to the speculation that the park habitat was a good one for elk, and surely they would have used it.

Russell also saw wolves near Ray's Lake, west of today's Park:

> "About an hour before day[light] I was awakened by the howling of wolves who had formed a complete circle within thirty paces of me and my horse[.] At the flashing of my pistol however they soon disappeared."[37]

If wolves occurred so close to today's Park, it makes little sense (as with elk) to believe that they did not also use the Park. Park gamekeeper Harry Yount noted in 1881, "Much of the game in the Park occasionally ranges over some of the adjacent regions."[38] And as Paul Schullery says, "that is simply how it works."[39]

1836---

Osborne Russell again traversed present Yellowstone Park this year, traveling from Two Ocean Pass to Yellowstone

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36. Russell, op. cit., pp. 21-22, 25.
37. Russell, op. cit., p. 35.
38. Harry Yount in P.W. Norris, Annual Report of the Superintendent of the Yellowstone National Park, to the Secretary of the Interior, for the Year 1880, 1881, p. 50.
39. Paul Schullery, Unpublished response to Troy R. Mader on wolf reintroduction, n.d., YNP Research Division, National Park Service.

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Lake to Lamar Valley. He then spent time on the northern range before descending the Yellowstone River to points north. He noted while near present Fishing Bridge that "this valley is interspersed with scattering groves of tall pines forming shady retreats for the numerous Elk and Deer during the heat of the day."[40]

It is apparent that Russell was seeing elk and deer in Yellowstone, regardless of the fact that he did not mention killing any. If from this we can glean that there were more deer then than now in that area (and I am not sure we can glean that) then that only means perhaps the habitat has changed some and/or that other factors changed the ratio.

On Mirror Plateau Russell followed an "Elk Trail" through a thermal area and then killed "a fat buck Elk."[41] With enough elk traversing the country to form trails and with "fat" elk at hand, one may conclude that there were more elk in the area than one writer would have us believe.[42]

Russell also heard the howling of wolves in Lamar Valley following an elk feast held by him and fellow trappers there:

> "...all is silent except the occasional howling of the solitary wolf on the neighboring mountain whose senses are attracted by the flavors of roasted meat but fearing to approach nearer he

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40. Russell, op. cit., p. 44.
41. Russell, op. cit., p. 45.
42. Kay, op. cit., pp. 255-256.

> sits upon a rock and bewails his calamities in the piteous moans which are re-echoed among the mountains."[43]

1837---

Joe Meek reported through Francis F. Victor that Jim Bridger trapped in today's Park this year and noted that beaver had declined due to trapping.[44] Our inference must be that beaver had been there in fair if not good numbers.

Osborne Russell again entered today's Yellowstone Park, following much the same route as the previous year, but leaving by ascending Hellroaring Creek and descending the Boulder River. In Hoodoo Basin (near the headwaters of Lamar River), Russell found "scattered flocks of Sheep and Elk carelessly feeding or thoughtlessly reposing..."[45]

Returning to camp there, Russell saw that his companions had "killed a fat Buck Elk during my absence."[46] Once again the elk killed was "fat". Can there really have been no elk in the area with habitat this positive?

At the head of Shoshone River (outside Park to the east), Russell fell in with a band of bighorn sheep and killed two ewes.[47] On Middle Creek they killed "a couple of fat Doe Elk."[48] One writer minimizes these animal encounters and then fails

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43. Russell, op. cit., p. 46.
44. Victor, op. cit., p. 237.
45. Russell, op. cit., p. 63.
46. Ibid.
47. Russell, op. cit., p. 65.
48. Ibid.

to mention that Russell then traveled to Yellowstone Lake "where we found the whole country swarming with Elk [and] we killed a fat Buck for supper."[49] While enjoying the country which was "swarming", the party killed a grizzly bear the following day.[50]

All of this seems to negate the idea of a scarcity of elk or other animals in Yellowstone in 1837. It is clear that Russell was experiencing the SYSTASYD phenomenon which still applies today.

1838---

Mrs. Victor reported that Joe Meek this year "started alone for the Gallatin Fork of the Missouri, trapping in a mountain basin called Gardiner's Hole. Beaver were plenty here...On his return, in another basin called the Burnt Hole [present Hebgen Lake area], he found a buffalo skull... and...wrote on it" [a message for Bridger].[51]

Here we have another piece of evidence for the proposition that Yellowstone Park was good beaver country and that bison also traversed it in or before 1838.

1839---

Osborne Russell again traveled through Yellowstone Park this year in July, moving up the Snake River from Jackson Hole to Shoshone Lake, over the divide into the Firehole region, across Mary Mountain to Hayden Valley,

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49. Russell, op. cit., p. 66.
50. Ibid.
51. Victor, op. cit., p. 251.

then to the Lamar Valley (again traversing the northern range), up Gardner River, and thence to Yellowstone Lake.

On the upper Firehole, probably near Old Faithful, Russell noticed that "vast numbers of Black Tailed deer are found in the vicinity of these springs and seem to be very familiar with hot waters and steam[,] the noise of which seems not to disturb their slumbers."[52]

Russell's party trapped for beaver at Yellowstone Lake (again, our inference must be that there were beaver there or that they were expected), and shot at but missed a blacktail deer swimming in Yellowstone Lake at West Thumb Geyser Basin. However they did kill a doe there.[53] And they killed a second doe between West Thumb and Heart Lake.[54]

East of Heart Lake, Russell "fell in with a large band of Elk[. We] Killed two fat does and took some of the meat."[55]

Here, with only Russell as a source, are we really seeing enough to tell us that there was a shortage of deer or elk in Yellowstone Park in 1839, what with "vast numbers" of deer near Old Faithful, a "large band" of elk near Heart Lake, and "the whole country swarming with elk" in 1837? My answer is no.

Also in 1839, a party which included Ducharme and Lou

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52. Russell, op. cit., p. 99.
53. Russell, op. cit., p. 105.
54. Russell, op. cit., p. 106.
55. Ibid.

Anderson passed from Jackson Hole to Yellowstone Lake via Two Ocean Pass, to "Pelican Creek, where they caught large quantities of beaver and otter." That account came from trapper Bill Hamilton[56] who heard the story from men he knew well, and it suggests that those two animals were present near Yellowstone Lake at that time.

1849---

Jim Bridger guided Lt. J.W. Gunnison's party to the Great Salt Lake this year and talked extensively to Gunnison, describing to him Yellowstone Lake, falls, geysers, and the Mammoth Hot Springs which Bridger called the "Great Springs." "Bear, elk, deer, wolf, and fox are among the game" in that Yellowstone country, wrote Gunnison, all according to Jim Bridger.[57]

Although this source is second hand and does not pinpoint a specific Park location, it is still one more piece of evidence in the cumulative picture of animal numbers in the Yellowstone country. Note especially the reference to wolves and foxes.

1860---

The expedition of Captain W.F. Raynolds this year, guided by Jim Bridger, failed to penetrate present Yellowstone Park but did pass south and west of it.

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56. W.T. Hamilton, My Sixty Years on the Plains, 1905, pp. 94-95.
57. J.W. Gunnison, The Mormons, or, Latter-Day Saints, 1852, p. 151.

The party reported when just south of Henry's Lake that "game has been abundant today, and we have seen two large herds of elk. The hunter has also killed two deer and an antelope."[58] When the party reached Henry's Lake they noted that "bands of antelope were scattered about us on all sides, three or four being killed in the course of the march."[59] North of Raynolds' Pass the party even saw "one band of buffalo among the hills."[60]

These animals all lived very close to Yellowstone Park. It simply does not make sense to assume that they would not have also used the Park.

Other animals that the Raynolds party encountered in the Park area were three mule deer near Union Pass and a bear on Henry's Fork.[61]

The Raynolds party consisted of around twenty men, a large party that could easily have scared away game.

1863---

Walter DeLacy and his party of around forty prospectors came up Snake River from Jackson Hole to Shoshone Lake. They then crossed the divide at the head of DeLacy Creek, dropped down White Creek to Lower Geyser Basin and Madison River, crossed to the Gallatin, and followed it

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58. William F. Raynolds, The Report of Brevet Brigadier General W.F. Raynolds on the Exploration of the Yellowstone..., 40th Cong., 1st Sess., Sen. Ex. Doc. No. 77, 1868, p. 98.
59. Ibid.
60. Ibid.
61. Raynolds, op. cit., pp. 89, 91, 97.

down to the settlements.

South of Shoshone Lake they killed two deer "which was [sic] the first large game shot on the trip."[62] This illustrates the SYSTASYD phenomenon, because the party had passed through Jackson Hole and had not killed game.

At the north end of Shoshone Lake, DeLacy noted that "there were many game trails made by the wood buffalo, whose tracks appeared numerous and fresh."[63]

West of Mount Holmes on the Gallatin River in the present Park, DeLacy declared, "several men went out, but found neither gold nor game." However just two paragraphs later, after passing what was probably Taylor's Fork coming from the southeast, the party "saw many elks, and one was killed near camp, so that we all had plenty of meat."[64] Eight miles north of Taylor's Fork, at a place only about twelve miles north of the present Park boundary, DeLacy again found elk: "We encountered many bands of elk today, who...would stand within thirty yards of us without fear."[65]

DeLacy's mentions of game in the region far outnumber his one comment on shortage of game. And irrespective of the fact that "as many as forty men searched the countryside each day,"[66] the problem of large parties scaring away game is still with us. As examples, see the comments made by the Avant Courier

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62. Walter W. DeLacy, "A Trip Up the South Snake River in 1863", Contributions to the Historical Society of Montana 1:129, 1876.
63. DeLacy, op. cit.,p.131.
64. DeLacy, op. cit., p. 135.
65. DeLacy, op. cit., p. 137.
66. Kay, op. cit., p. 257.

(1883), F. Francis (1881), E.J. Stanley (1873), and P.W. Norris (1879).[67] All of these writers reported that large parties of tourists often scared game away from Park roads.

Also in 1863, James Stuart led a party of prospectors from Bannack City, Montana (northwest of the Park) east toward the Park, north into Montana, and southeast into Wyoming before returning to Bannack City. The party came very close to the present Park if they did not actually enter its northwest boundary.

Stuart traveled north between Madison and Gallatin Rivers to Gallatin Valley (present Bozeman, Montana). He noted: "I killed an antelope and two black-tailed deer. Saw plenty of deer and antelope." The next day Stuart "saw about twenty elk at the crossing [of Madison River], and occasionally an antelope in the course of the day's travel; also saw a black bear, and some buffalo tracks about a week old."[68]

In Gallatin Valley (admittedly quite a distance from the Park), Stuart declared, "I was serenaded by a full band of wolves while on guard last night."[69] His party continued east down the Yellowstone River, reporting large numbers of game animals.

1864---

John C. Davis, one of the men who accompanied DeLacy in 1863, returned to the Yellowstone country the following

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67. See pp. 5, 149, 76, 13-14.
68. James Stuart, "The Yellowstone Expedition of 1863", Contributions to the Historical Society of Montana 1:157, 1876.
69. Stuart, op. cit., p. 158.

year. Davis's account was a short one and discussed mostly items other than game, but he did note at Upper Falls that "after camping I took my gun and started out in the hope of finding an elk for dinner." This indicates that Davis probably believed elk were in the area. And in the "region of the geysers", Davis noted that "finally we struck a buffalo track", giving us evidence of bison there.[70]

1866---

Prospector A. Bart Henderson kept five years of journals of his trips through the Yellowstone country. Historian Aubrey Haines believes these are the best accounts available to come out of the 1860s prospecting era.[71] One writer has attempted to discredit the Henderson journals,[72] but it is difficult to believe that Henderson would prevaricate through five years of journals. As Paul Schullery has pointed out, Henderson wrote the journals only for himself and had no intentions of anyone ever reading them. So why would he lie in them?

In 1866, Henderson touched on Yellowstone Park in his travels by visiting the Clark's Fork country to the northeast. On the Clark's Fork, Henderson found the country "alive with game of all kinds."[73] Again, it is hard to be-

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70. John C. Davis, "Yellowstone Park--An Interview With a Man Who Visited That Region as Far Back as 1863." Louisville (Kentucky) Courier Journal, April 13, 1884.
71. Haines, Yellowstone National Park: Its Exploration and Establishment, 1974, pp. 36-37.
72. Kay, op. cit., p. 260.
73. A. Bart Henderson, Typescripts of his diaries in the Yellowstone country, 1866-1872, September 2, 1866 entry, YNP Research Library.

lieve that these animals would not also use the Park.

Also in 1866, David B. Weaver commented on "plentiful" game in the Paradise Valley region. Weaver was one of the discoverers of the gold at Emigrant Gulch and Yellowstone City just north of Yellowstone Park. He stated for the Montana Historical Society:

> "When I left Yellowstone City (for the last time) on October 15th, 1866, the former empty cabins were again occupied, by men who had come there to pass the winter and live largely upon the plentiful wild game."[74]

1867---

This year A. Bart Henderson traveled up Pacific Creek from Jackson Hole, down Yellowstone River to Yellowstone Lake, then down Yellowstone River and out of today's Park. On September 2, 1867, while traversing several parks near the south end of Yellowstone Lake, Henderson reported "elk everywhere." On September 3, Henderson opined that the bear trails were "so fresh that they smoked" and also noted that there were "plenty elk, deer, antelope & bear." On September 4, Henderson again wrote, "elk everywhere."[75] Without getting into a discussion of winter range versus summer range, the point is that the elk were there.

Also in 1867, a surgeon named Dr. James Dunlevy came up Yellowstone River from Montana to Mammoth Hot Springs.

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74. David B. Weaver, "Early Days in Emigrant Gulch.", Contributions to the Historical Society of Montana 7: 96, 1910.
75. Henderson, op. cit., September 2, 3, 4, 1866 entries.

A Montana newspaper reported that the party found "a herd of antelope" at the springs and killed and ate one of them.[76]

That same year, a frontier journalist named Legh Freeman appears to have traveled through at least parts of Yellowstone Park, for he wrote of game and other curiosities there in his newspaper the Frontier Index, a newspaper which followed the construction of the Union Pacific railroad. Freeman stated that he owned a ranch in the Gallatin Valley of Montana and that he had traversed the region thoroughly, talking to a lot of people about it. It is said by historian M.A. Leeson that Freeman heard of the Yellowstone region from prospector Lou Anderson and that he explored it on foot, carrying his supplies on draught cattle.[77]

Legh Freeman's comments were as follows:

> "But none of these volcanic sinks compare with the wonders of the 'Yellowstone Hell,' Wyoming Territory, where seven rivers rise that give source to the 'Father of Rivers' ---the Mississippi---putting into the Gulf of Mexico...For, know you, that the 'Yellowstone Hell' is in the northwestern corner of Wyoming. So your young Territory possesses more wondrous volcanoes; the highest perpendicular falls of any considerable river; the Yellowstone falls 1,500 feet [this must refer to Silver Cord Cascade]; the largest mountain lake, 60 by 30 miles, on top of the Rocky Mountains; more game, from a white buffalo to a white rabbitt [sic] ---waterfowl, from a

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76. B.G., "The Upper Yellowstone", as quoted in Haines, op. cit., 1974, p. 35.
77. Haines, op. cit., 1974, p. 161n118.

> black swan to a mosquito---fish, from the salmon trout to the trout---bear, from the great grizly [sic] to the black---tigers, from a cougar to a catamount---wolves, from the large gray to the half fox, half cayote [sic]. Then deer, moose, elk, antelope and sheep by the thousand, besides fur animals from the $400 pelt of the prized black fox to the diminutive white weasle [sic]. [He then enumerates bird species.][77]

This very early newspaper account is fascinating. Was Freeman stretching the truth? It is hard to say. But he or his informants obviously saw something in the way of game. There is, in my opinion, far too much here for us to simply dismiss it. Here are elk, wolves, mountain lions, and the rest.

1869---

The Cook-Folsom-Peterson party left Diamond City, Montana and traveled through present Yellowstone Park in a "U", leaving via the west entrance. They went south up Yellowstone River to Lamar, up Lamar River to Flint Creek, over Mirror Plateau to the canyon and Yellowstone Lake, around the lake to West Thumb and Shoshone Lake, down White Creek to Lower Basin, and exited via Madison River.

When north of the Park the party saw herds of antelope on Trail Creek and found a pile of antelope and elk hides at Bottler Ranch, even though they found no one at home there![78] At Yankee Jim Canyon they scared up a herd of antelope, killing one. Traveling from Devil's Slide to Rescue

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77. "Legh", "California", Frontier Index, May 5, 1868.

78. David Folsom in Aubrey L. Haines, ed., The Valley of the Upper Yellowstone, 1965, pp. 14-15.

Creek, Folsom noted:

> "This is a hunter's Paradise. We saw the tracks of elk, deer and sheep in great abundance, and for several miles were scarcely out of sight of antelope, but as we have fresh meat enough to supply our present needs, we did not attempt to shoot any."[79]

The three men (for this was a very small party) heard all kinds of animals while camped near the mouth of Calfee Creek:

> "...the wolf scents us afar and the mournful cadence of his howl adds to our sense of solitude. The roar of the mountain lion awakens the sleeping echoes of the adjacent cliffs and we hear elk whistling in every direction..."[80]

At the head of Flint Creek, Folsom declared, "we saw a great many deer today and, judging from their tracks, elk are also very abundant."[81] Folsom killed an elk on Mirror Plateau and the party saw the skeleton of a buffalo in a hot spring in the Lower Geyser Basin.[82]

In the Lower Geyser Basin the party saw no animals, and Folsom stated that the area "seemed to be shunned by all animated nature." Historian Aubrey Haines footnoted his opinion of that comment:

> "The presence of bones in the Buffalo Pool should have been a sufficient hint that their a priori reasoning--or rather that of their prospector informants [who called it the Valley of Death] was not correct. Then, as now, animals frequented the thermal areas at some seasons and avoided them at others."[83]

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79. Folsom in Haines, op. cit., 1965, p. 19.
80. Folsom in Haines, op. cit., 1965, p. 27.
81. Folsom in Haines, op. cit., 1965, p. 28.
82. Folsom in Haines, op. cit., 1965, pp. 31, 44.
83. Folsom in Haines, op. cit., 1965, p. 44n80.

Ms. Julia Haas Emery made notes from Charles Cook's original journal about the 1869 expedition. About the Cook-Folsom party in Yellowstone Park, she has stated:

> "They met moose, elk, and bands of antelope and mountain sheep, while the streams were filled...with large spickled [sic] trout. The land seemed a hunter's paradise...they continued on their way, listening at night to the stealthy steps of the Bear, and almost human wail of the mountain lion, which seemed all about them, so that even their horses would draw near to the camp fire for protection."[84]

All in all, the Folsom-Cook-Peterson party of three experienced no shortage of animals in Yellowstone.

1870---

In addition to the famous Washburn expedition, the parties of P.W. Norris, A. Bart Henderson, and probably E.B. Hendrie visited the Yellowstone region this year.

Norris and Bottler

P.W. Norris, who became superintendent of Yellowstone seven years later, made his first trip into the Yellowstone country in 1870, before the more famous Washburn expedition. Meeting his friend Fred Bottler at Bottler's ranch, Norris started up the Yellowstone River. When near present Cinnabar Mountain, Bottler was suddenly swept away while trying to cross a mountain stream, losing his gun and other valuable equipment and injuring himself. The two men ascended a spur of present Electric Peak and Norris looked south into

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84. Julia Haas Emery, undated untitled letter from her notes on the 1869 Folsom-Cook expedition, YNP Research Library, manuscript file.

the Yellowstone wonderland to see distant clouds of "smoke or spray." This was as far as the men got, owing to the earliness of the season and Bottler's injuries.

About this trip Norris stated, "During our last day's hunt we killed one fine elk, four antelope, and some prairie dogs" [ground squirrels?]. They packed the carcasses onto their horses.[85]

Henderson and Gourley

Eternal prospector A. Bart Henderson spent much of the summer of 1870 in the Hellroaring, Lamar, Tower, and canyon areas of Yellowstone Park:

June 10 (near Yankee Jim Canyon) "Horne [Miller] and myself killed several elk & blacktail."

June 20 (head of Hellroaring Creek) "game plenty, but no gold...We turned to the left, crossed a low divide or gap, & came to a beautiful flat, which we gave the name of Buffalo Flat [Buffalo Plateau], as we found thousands of buffalo quietly grazing. This flat is something like 10 miles by 6, with numerous lakes scattered over it, & the finest range in the world. Here we found all manner of wild game---buffalo, elk, blacktail deer, bear & moose."[86]

June 23 (Party found plenty of game near head of Lamar River)
June 25 (Lamar) "camped on main river at Moose swamp."
June 27 (middle Boulder) "game plenty--buffalo, elk, deer & bear".

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85. Norris, "Meanderings...","The Great West.", page marked "16."

86. Henderson, op. cit., entry of June 20, 1870.

For the next five weeks, Henderson's party traversed the northern Yellowstone Park and adjacent regions, hunting for gold. His diary entries are so loaded with game as to necessitate that I reproduce them fully. Not all parties saw game in the Yellowstone region, and when they did, not all of them wrote it down. Henderson did both, and that fact makes his five years of journals invaluable to any understanding of the history of animals in Yellowstone:

June 26 (Middle Boulder Creek) "Killed fine buffalo cow and cut calf. Game plenty."

June 28 (Buffalo Creek) "Killed several elk, buffalo and deer." (A buffalo runs through their tent and they killed a bear as well.)

June 29 (crossing to Slough Creek) "3 Miles from summit train attacked by buffalo bull." (One moose seen.)

June 30 (on Slough Creek) "Killed a fine elk."

July 1 (up small eastern creek) "Mountain Sheep and wolverines plenty."[87]

July 2 (head of Middle Rosebud Creek) "Thousands of bear, elk, buffalo, and deer."

July 4 (Rosebud Lake) "Killed several deer & 3 bear."

July 6 (same) "I killed a large bear near camp."

July 7 (same) "Killed several fat bull elk."

July 9 (same) "Met an old she bear & 3 cubs. After a severe fight killed the whole outfit, while a short distance further on we was [sic] attacked by an old boar bear. We soon killed him." (Bear weight estimate: 960 pounds)

July 10 (four miles east of Rosebud Lake) "Game everywhere. Killed six bear today."

July 11 (same) (Chased by a sow bear. Henderson climbed a tree and "killed her under the tree.")[88]

July 14 (head of north fork of Clark's Fork) "Several hundred elk near camp."

July 15 (same) "Killed 3 elk."

July 17 (same but downstream 3 miles) "parks, full of buffalo, elk & bear."[88]

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87. Henderson, op. cit., those entries for 1870.
88. Ibid.

July 19 (under Index Peak) "Killed 3 bear."
July 22 (south of Index Peak) "buffalo, elk & bear--all very tame."
July 23 (at Soda Butte) "Here we found thousands of antelope..."
July 24 (15 miles north of Lower Falls) "Buffalo, elk & bear, while deer are more plentiful than we have seen on the trip. Killed several."
July 26 (on north fork of "East Fork") "thousands of elk and deer."
July 27 (head of Middle Fork) "elk & sheep plenty, bear everywhere."
July 28 (same) "Mountains covered with sheep."
Aug. 3 (mouth of Miller Creek) "Camped near East Fork. Soon after camping our camp was attacked by wolves."
Aug. 5 (6 miles downstream from Soda Butte) "Killed 4 antelope."
Aug. 6 (Buffalo Creek) "Killed a deer."

The August 3 entry represents the only "attack" on a party by wolves in the history of the Park, although it is doubtful that it was a real attack. Wolves do not generally attack humans, unless the wolves are rabid.

Henderson's journals are partially corroborated by the journal of James A. Gourley, a prospector who traveled with Henderson some of the time. According to historian Aubrey Haines who wrote the introduction to the Gourley typescript, Gourley's account "checks remarkably well with the Henderson source, supplying some details not available in that diary."[91]

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89. Henderson, op. cit., those entries for 1870.
90. Henderson, op. cit., August 3, 1870. John Weaver places this incident at the mouth of Cache Creek while Aubrey Haines puts it at the mouth of Miller Creek. Haines, op. cit., 1974, p. 40.
91. James A. Gourley, "A Reminisce of James A. Gourley.", typescript, 1929, YNP Research Library, p. 1.

Gourley discussed killing a wolverine near the head of present Wolverine Creek and naming that stream near Lake Abundance for the occurrence. He also mentioned seeing a herd of buffalo on the head of "Buffalo Creek", and about the area between Hellroaring and Mill Creeks, he noted: "The course we followed was a hunter's paradise, bear, chiefly grizzly, sheep, elk, and deer..."[92]

Proceeding west over the divide from Pilot Peak to "a creek that run[s] into Lamar River", Gourley declared that "there was a wide open flat going down where there were hundreds of elk so tame that they only moved a little distance to the side of us."[93]

The following are the rest of the relevant entries from Henderson's diary:

Aug. 7 (on Buffalo Creek) "Killed a fine bull elk--very fat."
Aug. 8 (west fork of Buffalo Creek) "Saw several buffalo... Killed 2 fat bull elk."
Aug. 9 (head of middle Boulder River) "Thousands of buffalo, elk & bear...Killed 3 fat elk."
Aug. 11(on Middle Boulder) "Killed a fine buck."
Aug. 12(on west Boulder) "Killed 2 large bucks on the divide, both very fat."[94]

The Washburn Expedition

The best known 1870 party to Yellowstone Park was, of course, the Washburn expedition, led by Henry D. Washburn. It consisted of nineteen men, forty horses, and a dog.

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92. Gourley, op. cit., p. 1.
93. Gourley, op. cit., p. 2.
94. Henderson, op. cit., those entries for 1870.

Eight of the party members left accounts of the trip, two of them leaving two accounts and one of them leaving three accounts, for a total of twelve accounts.[95]

The Washburn party traveled up Yellowstone River, crossed the northern range, trekked over Mount Washburn, followed Yellowstone River up to the lake, traversed the east and south sides of the lake to West Thumb, crossed to Old Faithful, and left the area via the Firehole and Madison Rivers.

A review of the twelve sources makes it clear that not every account reported everything that happened, including the party's contacts with game, so that one cannot use a single journal to decide that a party did not see any animals.

This is a fundamental truth. Just because an historic account does not mention animals does not necessarily mean that the party did not see any. That writer may have simply elected not to mention game (as clearly happened with the Washburn party), perhaps opting instead for geysers or canyons. Hunting for food was, after all, a daily and routine thing for traveling parties in the West in the 1870s, and geysers were not routine. Thus we see that Lt. Doane mentioned a lot of game and General Washburn did not.

I have already discussed some of the factors that might have influenced the viewing of game. In the case of the Wash-

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95. Accounts were left by Langford (2), Doane, Washburn, Gillette, Hedges (2), Trumbull (3), Everts, and Hauser.

burn party, it is amazing that they saw as much game as they did, considering that Lt. Doane noted, "our party kept up such a racket of yelling and firing as to drive off all game for miles ahead of us."[96]

General Statements on Animals by the Washburn Party

Nevertheless, the party saw quite a bit of game and made general comments to the effect that the region was a great game country. Samuel Hauser wrote that near the mouth of Gardner River there were "plenty of trout and antelope."[97] Warren Gillette noted from the top of Mount Washburn that the grassy areas to the north and west afforded "food for herds of Deer, Elk, Antelope, and Buffalo."[98] N.P. Langford, while describing the scenery around the canyon, stated that "the river is filled with trout, and bear, elk, deer, mountain lions and lesser game roam the plains, forests and mountain fastnesses."[99] While near Mount Washburn, Cornelius Hedges declared: "Didn't go far over divide till we camped in timber, open, plenty of good feed and so of game, bear and elk very plenty."[100] Henry Washburn mentioned that at Tower Fall "game and trout were abundant."[101] Walter Trumbull, also at Tower, commented that "we had plenty of fish and game here."[102]

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96. G.C. Doane in Orrin and Lorraine Bonney, Battle Drums and Geysers, 1970, p. 318.
97. Samuel T. Hauser, "Diary of Samuel T. Hauser...", 1870, Ms. no. 249, Coe Collection, Yale University.
98. Warren Gillette in Brian Cockhill, ed., "The Quest of Warren Gillette", Montana Magazine of Western History 22:19, Summer, 1972.
99. N.P. Langford, The Discovery of Yellowstone Park 1870, 1972, p. 33.
100. Cornelius Hedges, "Journal...", Contributions to the Historical Society of Montana 5:379, 1904.
101. H.D. Washburn in L.C. Cramton, Early History..., 1932, p.92.
102. W. Trumbull, Rocky Mountain Weekly Gazette, Oct. 24, 1870.

Doane, Gillette, and Everts made additional statements. Lt. Doane noted when near the canyon that "on the caps of these dizzy heights, mountain sheep and elk rest during the night."[103] Warren Gillette declared when south of Yellowstone Lake: "Occasionally where the trees are sparse, you see verdure suitable for the game that abound in this region."[104] Doane also stated that Privates Williamson and Moore, who hunted for Mr. Everts at Heart Lake, there "found game plentiful and tame, and had no difficulty in obtaining an abundant game supply."[105] Doane also discussed the ordeal of the lost Truman Everts and stated of it: "Herds of game passed by him during the night on many occasions when he was on the verge of starvation."[106] As we shall see, Everts himself confirmed this.

Any of these statements is enough to cast doubt on an assertion that the Washburn party "did not report an abundance of game."[107] But when we combine them with the actual sightings, tracks, and sounds experienced by the party, the picture that emerges is one of an abundance of animals, not a shortage.

Actual Animal Sightings by the Washburn Party

Lt. Doane noted that north of Bottler ranch "a few antelope were seen during the day, but no other game."[108] Walter

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103. Doane in Bonney and Bonney, op. cit., p. 281.
104. Gillette in Cockhill, op. cit., p. 25.
105. Doane in Bonney and Bonney, op. cit., pp. 384-385.
106. Ibid.
107. Kay, op. cit., p. 261. A newspaper account of the Washburn party's trip stated: "They found abundance of game and trout" near the canyon. See "The Yellowstone Expedition", New York Times, October 14, 1870. And a newspaper account of one of Langford's post-trip lectures noted that the party found that "deer and game roam in the forests and plains and mountain fastnesses." See "Travels in Montana", New York Times, January 22, 1871, p. 8.
108. Doane in Bonney and Bonney, op. cit., p. 224.

Trumbull confirmed this.[109] Doane also mentioned the killing of an antelope between Bottler's and Yankee Jim Canyon.[110] Langford and Trumbull both mentioned small game killed for dinner before the party reached Yankee Jim Canyon. Trumbull noted, "During the day plenty of small game was killed," and Langford stated: "Tonight we have antelope, rabbit, duck, grouse and the finest of large trout for supper."[111]

West of Rescue Creek, Private Williamson killed an antelope, according to Doane, and Trumbull confirmed it.[112]

Near Mount Washburn, Doane saw "two magnificent buck elk" and wounded one of them. He noted that Jake Smith scared up a small bear.[113]

Near the falls, Hauser stated that "I killed a fine 'buck' blacktail." Gillette confirmed this.[114] Also near the falls, Doane reported that the party found a "large flock of mountain sheep, very tame" and one was killed.[115]

In Hayden Valley below Crater Hills, Doane noticed that "elk were feeding in small bands on the other side of the valley."[116]

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109. Walter Trumbull, "Yellowstone Papers.", Rocky Mountain Weekly Gazette, October 24, 1870.
110. Doane in Bonney and Bonney, op. cit., p. 233.
111. Walter Trumbull, "The Washburn Yellowstone Expedition, No. 1", Overland Monthly 6:432, May, 1871. Langford, op. cit., 1972, p. 13. Nathaniel P. Langford, "The Wonders of the Yellowstone", Scribner's Monthly 2:6, May, 1871.
112. Doane in Bonney and Bonney, op. cit., p. 245. Trumbull, op. cit., May, 1871, p. 433.
113. Doane in Bonney and Bonney, op. cit., p. 265.
114. Hauser, op. cit., August 30. Gillette in Cockhill, op. cit., p. 20.
115. Doane in Bonney and Bonney, op. cit., p. 282.
116. Doane in Bonney and Bonney, op. cit., p. 286.

South of Yellowstone Lake, much seems to have happened to the party involving game: sightings, tracks and scat, and sounds.

On September 8, Hedges' horse was frightened by a huge grizzly, according to Langford, and shortly afterward Washburn and Hauser ran into a sow grizzly and her cubs. Doane also mentioned this, and stated: "These animals are very numerous in the basin."[117] Meanwhile, Williamson killed "a fat two year old heifer Elk."[118]

Doane also reported while south of the lake: "After traveling some distance I discovered we were following a band of elk, having missed the trail in the darkness. We then struck out for the lake shore on which our course was regained but presently lost again after more elk."[119] In the same area, Doane stated: "The small lakes are perfectly alive with otter, which may be seen playing upon their surfaces at night fall by hundreds. Beaver, mink, and muskrat are also abundant."[120]

On September 14, Doane reported while still south of Yellowstone Lake, "of animals I saw several species of squirrels and weasels which do not appear in the books."[121]

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117. Langford, op. cit., 1972, pp. 67-68. Langford, "The Wonders of the Yellowstone", Scribner's Monthly 2:118, June, 1871. Doane in Bonney and Bonney, op. cit., pp. 317-318.
118. Gillette in Cockhill, op. cit., p. 27.
119. Doane in Bonney and Bonney, op. cit., p. 310.
120. Doane in Bonney and Bonney, op. cit., p. 318.
121. Doane in Bonney and Bonney, op. cit., p. 333.

Thus, although the Washburn party killed only five large animals, they saw many more than that. And indeed the country south of Yellowstone Lake continues to attract game today. Park Ranger Mark Marschall, who has spent many years hiking and riding that area told me that animals today frequent that region in great numbers in fall and spring. On October 27, 1991, he saw 200 elk at the mouth of Beaverdam Creek.[122]

Tracks and Other Signs Seen by the Washburn Party

Near Mount Washburn, Lt. Doane noted that "the ground was everywhere tracked by the passage of herds of elk and mountain sheep. Bear signs were everywhere visible."[123] Near Lower Falls, Hedges reported, "To all those points [on the canyon] were well-worn paths of the mountain sheep."[124] And about two miles above Upper Falls, the party found a "game trail" along the river.[125]

But it was east and south of Yellowstone Lake that the expedition really saw tracks. On September 6, Doane noted:

> "The ground was trodden by thousands of elk and sheep. Bear tracks and beaver trails were also numerous and occasionally was seen the footsteps of a California lion."[126]

Mr. Langford confirmed this when he reported: "We have today seen an abundance of the tracks of elk and bears, and occa-

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122. Author's conversation with Mark Marschall, October 28, 1991, Gardiner, Montana.
123. Doane in Bonney and Bonney, p. 265.
124. Hedges in Cramton, op. cit., p. 101.
125. Doane in Bonney and Bonney, p. 285.
126. Doane in Bonney and Bonney, p. 307.

sionally the track of a mountain lion."[127]

And at Upper Geyser Basin while the party was camped north of present day lower Hamilton Store on the banks of Frog Pond, Lt. Doane saw more tracks: "...camped in a little grove of pine timber near the margin of a small marshy lake around which were to be seen numerous fresh signs of buffalo driven out by the noise of our hasty intrusion."[128]

It is probably not necessary to point out that these "thousands" of fresh tracks and sign did not just appear by magic. If the Washburn party had not seen thousands of animals, they had indeed seen their tracks and signs.[129]

Animal Sounds Heard by the Washburn Party

Not only did the Washburn expedition see tracks of mountain lions, but they heard mountain lions...not a little, but a lot. These sounds occurred on the nights of September 6-7, 10-11, and numerous times September 12-14.

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127. Langford, op. cit., 1972, p. 57.
128. Doane in Bonney and Bonney, op. cit., p. 342.
129. Dr. Kay attempts to use Doane's sighting of the flock of "very tame" mountain sheep to justify his claim that the expedition could not have scared off all the animals if there had been any (Kay, p. 262), his theory being that if the animals were "tame" and stood there quietly anyway that they would not have been scared away easily. But the STRASTD phenomenon effectively rules out this bit of reasoning.

Kay also claims that the Washburn party was starving and could not find adequate food, bolstering his theory by pointing to Langford's loss of thirty-five pounds of body weight, and a comment by Langford about the country being "barren of resources". The "resources" Langford speaks of do not specifically have to refer to animals; indeed he does not tell us to what he refers. As for

While camped at the mouth of Beaverdam Creek, Lt. Doane noted: "During the night we were several times disturbed by the dismal screaming of California lions, and in the morning found their huge tracks close around camp."[130] Langford confirmed this: "Last night when all but the guards were asleep, we were startled by a mountain lion's shrill scream, sounding so like the human voice that for a moment I was deceived by it into believing that some traveler in distress was hailing our camp."[131]

Langford's earlier magazine account said this:

> "During the night we were startled by the shrill and almost human scream of an amiss or mountain lion, which sounded uncomfortably near. This terrible animal is much larger than the panther of the eastern forests, but greatly resembles it in shape, color, and ferocity. It is the terror of mountaineers, and furnishes them with the staple for many tales full of daring exploits."[132]

On September 11, Lt. Doane was again faced with lion noises while camped south of Flat Mountain Arm: "In the early morning we were serenaded by a couple of lions, their melancholy voices echoing through the heavy forest with a peculiar, wild and mournful sound."[133] Langford reported two cougar screams in early morning and a third that night at the campfire, punctuated by a growl:

Langford's weight loss, I have hiked and backpacked for over twenty years in Yellowstone, and I almost always experience a significant weight loss after being out only 2-7 days, due probably to exercise among other factors. The Washburn party was out nearly thirty days, so Langford could easily have lost weight that way.

130. Doane in Bonney and Bonney, op. cit., p. 307.
131. Langford, op. cit., 1972, p. 57.
132. Langford, op. cit., June, 1871, p. 116.
133. Doane in Bonney and Bonney, op. cit., p. 325.

> "We were roused this morning about 2 o'clock by the shrill howl of a mountain lion, and again while we were at breakfast we heard another yell. As we stood around our campfire tonight, our ears were saluted with a shriek so terribly human, that for a moment we believed it to be a call from [the lost] Mr. Everts, and we hallooed in response, and several of our party started in the direction whence the sounds came, and would have instituted a search for our comrade but for an admonitory growl of a mountain lion."[134]

Cornelius Hedges' journal for September 11 said only that he "Heard mountain lions when I first woke up."[135]

The Washburn party remained in camp at the head of Flat Mountain Arm for several days, not moving to West Thumb until September 16. They heard the noises a number of times more. Langford wrote on September 15:

> "Each night that we have been camped here we have heard the shrill cries of the mountain lions, and under a momentary illusion I have each time been half convinced that it was a human being in distress. Because of the mountain lions we are keeping close watch upon our horses. They are very found of horse flesh, and oftentimes will follow a horseman a long distance, more to make a meal upon the flesh of the horse than for the purpose of attacking the rider."[136]

Lt. Doane, too, was worried about the horses, commenting that a party of three would be safe in the region as long as they kept "close watch upon their horses at night as the lions would make short work with them if an opportunity was afforded, horse flesh being their favorite diet."[137]

With all of this, how can anyone doubt that mountain li-

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134. Langford, op. cit., 1972, p. 80. His article in Scribner's Monthly (p. 119) said essentially the same thing.
135. Hedges, op. cit., 1904, p. 386.
136. Langford, op. cit., 1972, pp. 92-93.
137. Doane in Bonney and Bonney, op. cit., p. 334.

ons and other animals were frequent in Yellowstone Park then? This is especially true when one considers the experiences of Truman Everts.

Truman Everts

Truman Everts accompanied the Washburn party until the group reached the vicinity of Grouse Creek south of Yellowstone Lake, and then was separated there from the party. His account of his adventures is thus essentially a separate story and cannot be used to corroborate the accounts of the others. But it is relevant for the look it gives us at animals in the Yellowstone region, as seen by a party of one.

It is difficult to know exactly where Everts was at most times of his adventure; his locations in the Park can only be approximate. But he was within Park boundaries at all times during his experience.

Somewhere early in his ordeal (probably south of Yellowstone Lake), Everts heard at least one wolf: "The forest seemed alive with the screeching of night birds, the angry barking of coyotes, and the prolonged, dismal howl of the gray wolf."[138]

At Heart Lake, Everts beheld one of the grandest landscapes he had ever seen, a place that had plenty of wildlife:

> "Nor was the life of the scene less noticeable than its other attractions. Large flocks of swans and other water-fowl were sporting on

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138. Truman C. Everts, "Thirty-Seven Days of Peril", Scribner's Monthly 3:3, November, 1871.

> the quiet surface of the lake; otters in great numbers performed the most amusing acquatic evolutions; mink and beaver swam around unscared, in most grotesque confusion. Deer, elk, and mountain sheep stared at me, manifesting more surprise than fear at my presence among them. The adjacent forest was vocal with the songs of birds..."[139]

Later, Everts was treed by a mountain lion, which remained with him for quite some time. The story of this confrontation occupied a full column in Everts' account. The lion howled at him from the base of the tree while Everts thrilled "with horror at the thought of being torn to pieces and devoured by this formidable monster." Holding onto the tree in stunned silence, Everts finally heard the lion leave.[140]

Several days later, Everts again heard both wolves and lions: "...the shrieking of night-birds; the supernaturally human scream of the mountain lion; the prolonged howl of the wolf, made me insensible to all other forms of suffering."[141]

Somewhere south of Tower Fall (probably at a number of locations), the lost Everts saw animals, apparently plenty of them, for he noted:

> "The country was full of game in great variety. I saw large herds of deer, elk, antelope, occasionally a bear, and many smaller animals. Numerous flocks of ducks, geese, swans, and pelicans inhabited the lakes and rivers. But with no means of killing them, their presence was a perpetual aggravation."[142]

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139. Everts, op. cit., p. 3.
140. Everts, op. cit., p. 4-5.
141. Everts, op. cit., p. 8.
142. Everts, op. cit., p. 13.

It makes complete sense that a solitary person would see much more game than a large party. That is the case today; indeed, park rangers sometimes require parties of four or more for entry into areas of high bear concentration for that very reason.

My personal hiking experience of more than twenty years in Yellowstone "bears" this out as well. The only two times I ever saw bears in the backcountry were also the only two times I was hiking with only two people. Hiking in 1991 with a party of six on Mirror Plateau, neither I nor anyone else saw any animals at all for days until we split up. Hiking alone on Wrong Creek, one of our party members saw the only bear of the trip.

Truman Everts was rescued from his ordeal by Jack Baronett and George Pritchett. An encounter with a mountain lion was part of that rescue, as reported by a Helena newspaper:

> "Mr. Barnett [Baronett] says he killed a mountain lion near where he found Mr. Everts, and thinks the beast was on his [Everts'] path."143

The Hendrie Party

Edwin Beard Hendrie claims to have made a trip into Yellowstone Park in 1870. His account is a 1931 reminiscence in which he swears the date of his trip could not have been later than 1870. Information given on Hendrie's page one makes the date uncertain for sure, but it is likely that Hendrie's trip occurred in the early 1870s if not

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143. "The Lost and Found.", Helena Daily Herald, October 28, 1870.

1870 itself.

At Lower Falls Hendrie saw a grizzly bear and a black bear. A separate "band" of black bears was seen in raspberry bushes there.

On the way to Yellowstone Lake, Hendrie stated: "The large birds...were feasting together with the elk, moose and deer, and of course bears were always in evidence wherever we went."[144]

Hendrie offered another possible reason for his party's failure to shoot game: "We had no trouble in catching fish, of course, and hence shot no game, although we saw a number of birds that we could have shot...but were so busy moving about, making our beds, etc. that we did not bother."[145]

Hendrie's account makes it (again) clear that just because a party shot no game does not mean it did not see any. The party here had adequate food and other things to do.

1871---

The very large party of F.V. Hayden's U.S. Geological and Geographical Survey of the Territories and its military escort traveled through the Park this year. Several lesser known parties also passed through: the R.W. Raymond/C.C.

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144. E.B. Hendrie, "My Trip Through the Yellowstone in 1870", typescript (1931) in YNP Research Library, p. 3.
145. Hendrie, op. cit., p. 4.

Clawson party, the H.B. Calfee party, prospector A. Bart Henderson again, and the single Bozeman doctor Howard O'Neill.

Raymond and Clawson

The R.W. Raymond party is little known. It consisted of U.S. Mining Commissioner Rossiter Raymond, journalist Calcium Clawson, photographer A.J. Thrasher, a Mr. Eiler (Assistant Mining Commissioner), J.D. Daugherty (a businessman from Wabash City, Indiana), and Gilman Sawtell (the guide from Henry's Lake). Accounts have come down to us from both Raymond and Clawson; Thrasher's account has no mentions of animals.

The Raymond/Clawson party entered today's Park from the west, traveled to Lower Geyser Basin, and then passed over the divide to Yellowstone Lake. They spent a great deal of time at the lake, apparently traveling to West Thumb, and then visited the canyon and falls before retracing their steps to the west entrance.

The party confronted a bear near Henry's Lake and wrote of it.[146] On the South Fork of the Madison (just west of present West Yellowstone) Clawson noted: "Elk, moose, deer, sheep, and antelope feed upon its green banks or slake their thirst in its pearly waters..." He also mentioned bears there.[147]

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146. C.C. Clawson, "Notes on the Way to Wonderland; or a Ride to the Infernal Regions", New Northwest (Deer Lodge, Montana), September 30, 1871.
147. Clawson, op. cit., October 14, 1871.

Traveling to Red Rocks Lakes before entering today's Park, Clawson declared: "Being out of the usual line of hunters and sportsmen, elk, moose, deer, as well as different kinds of small game abound in this wild, secluded spot."[148]

Entering today's Park and viewing Madison Canyon, Clawson wrote: "Game is abundant in this locality, and we saw many fresh tracks of elk and deer passing to and from the [Madison] valley below."[149]

At Fountain Flats, Clawson saw that "tracks of elk and deer were visible on all sides."[150]

Clawson referred to Yellowstone Lake as "the fishing and hunting grounds, where elk and moose and deer and bear have maintained their rights to this, their Eden[,] since the day they were given possession."[151]

On Yellowstone Lake, probably near West Thumb, the party encountered several wolves, although it is not clear whether or not they actually saw them: "A band of hungry wolves sat upon a point some distance away and howled and yelled a most heart-rending war song, that seemed to terrify even our dog, who was a wolf-hunter by profession."[152]

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148. Clawson, op. cit., November 11, 1871.
149. Clawson, op. cit., November 18, 1871.
150. Clawson, op. cit., December 16, 1871.
151. Clawson, "The Region of the Wonderful Lake", New Northwest (Deer Lodge, Montana), January 27, 1872.
152. Ibid.

Clawson referred to Yellowstone Lake as a place of "fish and game of endless quantity."[153] And during a storm there, Clawson again saw game:

> "Elk in bands flew away in sight of us or stood in groups until the crack of the riffle [sic] admonished them they stood in dangerous places. Then we looked forward to our imagination on venison cutlets and steaks of elk."[154]

R.W. Raymond's accounts of this trip were published in several places: in a book he wrote, in an obscure New York periodical, in Harper's Weekly, and in Montana newspapers. Two separate full accounts exist.

In his "Heart of the Continent" article, Raymond made the following general statement about game in the Park, including a mention of wolves which corroborates Clawson:

> "...most of the country abounds in game. The mountain bison is rarely seen: [but] bears frequent the service-berry thickets and the ravines...troops of antelope course over the grassy uplands and valley benches; moose, elk, and deer haunt the forest glades, and trample the edges of the water-courses; the prairie wolf, or coyote, and his larger cousin, the mountain wolf, howl plaintively o' nights..."[155]

In his "Sketches of Western Travel", Raymond mentioned the Madison Canyon area of the Park: "The forest and the wave [sky? stream?] alike teem with legged and winged game."[156] Raymond also mentioned an encounter with a grizzly[157] and con-

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153. Clawson, op. cit., February 10, 1872.
154. Clawson, op. cit., May 18, 1872.
155. R.W. Raymond, "The Heart of the Continent: The Hot Springs and Geysers.", Harper's Weekly 17:274, April 5, 1873.
156. Raymond, "Sketches of Western Travel. III. March and Camp.", Christian Union (New York), May, 1874, p. 437.
157. Ibid.

ditions on the upper Madison River (near if not in the Park): "[At night] there are deer and elk going down to the water to drink." [158]

Near Henry's Lake, Raymond reported "four footed game of every variety in forest and field." In the vicinity of present Hebgen Lake, Raymond saw numerous beaver dams. And a comment he made tells us that he believed that the region teemed with game:

> "At this camp, we got a taste of the musquitoes [sic] and black flies which taught us that the country did not swarm exclusively with game for us."[159]

On Duck Creek, Sawtell's dog chased a coyote. And in the Park, C.C. Clawson saw a bear on Madison River.[160]

Calfee

Also in 1871, photographer Henry Bird Calfee and his sidekick Macon Josey traveled into the Park-to-be. Calfee stated while the two were camped near Mud Volcano that, although they were almost out of provisions,

> "Meat however was in abundance. It consisted of buffalo, moose, elk, bear, wolverine, black and white tail deer, antelope, mountain sheep, goat or ibex, wolf, lion, fox, coyote, badger, otter, beaver, mink, marten, sable, rabbit, muskrat, porcupine, rock dog, squirrel, chipmunk, grouse, goose, duck, swan, pelican, crane, brant, eagle, owl, hawk, crow, raven, blackbird, blue-jay, snow bird, curlew, sage hen, prairie

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158. Ibid.
159. Raymond, "Sketches of Western Travel...", New Northwest (Deer Lodge, Montana), June 1, 1872.
160. Raymond, "Sketches...", New Northwest, June 15, 1872.

> chicken, and wormy trout, with which the upper Yellowstone and Lake abounded. This bill seems elaborate, but all [of these animals] could be gotten within five miles of our camp and in a very short time."[161]

At Crater Hills, Calfee "killed an elk and a buffalo and fire dried quite a quantity of meat."[162]

On a tributary of Firehole River, Calfee watched a deer fall into a hot spring in attempting to bound away from them, and in trying to extricate it, Calfee's compatriot Macon Josey himself was badly injured in the spring.[163]

On several occasions, Calfee's account mentions that they ate meat from stores they were carrying, presumably shot in the region.

The "Semi-Occasional" Party to Mammoth

A writer known only as "Semi-Occasional" accompanied a party to Mammoth Hot Springs in summer of 1871. They saw antelope south of Bottler's ranch and then traveled to present Boiling River. There they met Colonel Chestnut from Bozeman who treated them to a "feast of calf elk," indicating elk harvest in the northern Park area.[164]

Henderson

A. Bart Henderson returned to Yellowstone Park in 1871, spending much time in the park northeast corner. On May 16,

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161. H.B. Calfee, "Calfee's Adventures...", Ms. from newspaper clippings, about 1896, YNP Research Library, p.2.
162. Ibid.
163. Ibid.
164. Semi-Occasional, "The Mineral Springs of the Yellowstone", Rocky Mountain Weekly Gazette (Helena, Mt.), July 24, 1871.

while camped at Crevice Lake, Henderson saw buffalo sign. On May 26, Henderson wrote: "Horne [Miller], Carter and myself set out before day, for the new El Dorado [Cooke City mining area which they had secretly discovered]. I returned at night to kill suspicion. Killed 2 fine buffalo."[165]

Those are examples; here are all the relevant Henderson entries for 1871:

May 18 (on Hellroaring Creek) "Killed 4 elk."
May 19 (same) "Killed antelope."
May 30 (one mile above Soda Butte) "Killed 2 elk & one blacktail."
May 26 (on Lamar) "Killed 2 fine buffalo."
May 31 (same) "Killed 2 elk."
June 2 (six miles below Cooke) "Killed 4 mountain sheep."
June 24 (East fork of Slough Creek) "Killed [a] fine blacktail."
June 25 (Buffalo Creek) "Killed [a] fine bull elk."
June 27 (between head of middle Boulder and head of middle fork of Mill Creek) "Buffalo, elk, & bear plenty."[166]

Henderson's 1871 entries were consistent with those he made earlier in his journal, the whole picture being one of no shortage of animals.

O'Neill

A Bozeman doctor, Howard O'Neill, traveled to the canyon area this year. His trip is almost completely unknown to historians. O'Neill saw enough tracks and game trails at Lower Falls to merit this statement: "The trail and worn tracks made by countless generations of moose, elk, deer, and other wild animals coming down the mountains in the fall and returning in the spring, are imprinted into the solid shelf, where,

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165. Henderson, op. cit., May 16, 26, 1871 entries.
166. Henderson, op. cit., those entries for 1871.

having left their routes, they come to gaze over at the wonderful waterfall."[167] It is doubtful they came to look, but definite that they had been there.

The Hayden Survey of 1871

This large expedition (around twenty people people plus packers and cooks) ascended the Yellowstone River to Yellowstone Lake, circled the lake, explored the Firehole, probed the southeast corner of the park-to-be, ascended Pelican Creek, crossed Mirror Plateau, and descended the Lamar and Yellowstone Rivers out of the area, spending forty days in the area. Accounts were left by Hayden (1872), Peale (1872), Barlow and Heap (1872), and a separate diary by Peale (1871). W.H. Jackson wrote two published accounts and his personal diary.

One writer[168] uses the facts that Hayden reported killing little game and that his party supposedly ran low on provisions to bolster his claim that there was little game in the Park-to-be. Peale's diary, as we shall see, rebuts both assertions. And if the assertion is true, why did Hayden write the following statement while near the mouth of Lamar River?

> "The finest of mountain water, fish in the greatest abundance, with a good supply of game of all kinds, fully satisfy the wants of the traveler, and render this valley one of the most attractive places of resort for invalids or pleasure-seekers in America."[169]

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167. Howard O'Neill, "Falls of the Yellowstone.", Southern Magazine 9:222, August, 1871.
168. Kay, op. cit., pp. 264-265.
169. F.V. Hayden, Preliminary Report...Fifth Annual Report of Progress, 1872, p. 76.

Surely Hayden would not lie about the Park's game simply to promote Yellowstone as an attraction to tourists. Note that Dr. Peale found a "salt lick" used by animals near Steamboat Point: "This place [near Butte or Beach Springs] is used by the deer and elk as a lick. Our horses recognized the presence of salt at once."[170]

Dr. Peale's personal diary makes it clear that just because Hayden did not mention game does not mean they did not see any. On July 17, 1871, Peale wrote at Bottler's ranch: "Our hunters came in with plenty of antelope today."[171] Recall also what Peale wrote (quoted earlier) about Bottler's ranch.

From August 1 to August 26, Peale made many game entries in his diary. On August 1 in Hayden Valley, Peale wrote: "Jose saw a buffalo and wounded him, but did not get him." On August 9, Peale noted, "We saw an elk on the way" to camp on an arm of Yellowstone Lake, and added, "Jose and Clark came in with a blacktail deer." On August 11, the party saw beaver dams at the south end of the lake and "saw a wolverine" as well. Jose and Jo Clarke killed three elk the following day, and on August 13, Jose came in with six hundred pounds of elk meat. Two beaver dams were found on August 14, and a bear was seen and a blacktail deer shot on August 15. Jose shot yet another deer on August 16, and on August 20, Jim and Cam "saw 2 deer and

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170. Peale in Hayden, op. cit., 1872, p. 190.
171. A.C. Peale, 1871 Diary, typescript from book 1971, U.S.G.S. Field Records, Denver, Colorado, in YNP Research Library, July 17, 1871 entry.

an elk" south of the lake. The tracks of a bear were seen and a deer shot at on August 21, and on August 23 in Pelican Valley the party saw two elk, two deer, and elk tracks fresh in every direction. Additionally, they had two hind quarters of a deer for dinner, Jo Clark killed an elk, Smith killed an elk, and Jose killed a deer. Joe and Jose then killed a deer and an elk on August 24, and the party saw six antelope and three skunks near Baronett Bridge on August 25. On August 26, Jose killed three antelope and Clarke one near present Gardiner.[172]

This diary by Peale effectively destroys arguments that the 1871 Hayden party saw no game. Dr. Hayden was busy with the country's interesting geology, his main interest, and simply elected not to mention animals.

Another member of the 1871 Hayden survey was photographer William Henry Jackson. Jackson accompanied the 1871, 1872, and 1878 Hayden expeditions. Jackson's 1871 account contained only one mention of animals, Jackson being concerned with his photographing of the country. But he did mention his shooting a grizzly bear on the upper Yellowstone River above Yellowstone Lake after following its tracks.[173]

James Stevenson, manager of the survey, made a trip to Stevenson Island. According to Harry Norton, Stevenson made the following statement about that trip:

> "...after about one-and-a-half hours rowing they reached the shore of the island, and

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172. Peale, 1871 Diary, those entries for 1871.
173. William H. Jackson, Time Exposure, 1940, pp. 249-250.

> to their utter astonishment the first thing that met their eyes was the track of a bear, the dimensions of which indicated one of the largest of his kind. On alighting from the boat and looking around, numerous tracks were observed of the same animal; also those of the wolf, elk, deer, rabbits, and evidences of a variety of smaller quadrupeds..."[174]

Barlow and Heap

Captains Barlow and Heap led the military escort for the 1871 Hayden survey. Their route covered much of Yellowstone Park and at times they camped with the actual survey party. Dr. Peale's diary makes it clear that Fred Bottler and other hunters killed many animals, so perhaps Barlow's men ate some meals with the survey members while encamped with them.

At any rate Barlow saw or killed the following: several antelope, a bear and three cubs, three elk, a second bear and cub, "several elk and deer", numerous "bands of antelope", and a single elk and deer. And the party saw signs and tracks everywhere in Yellowstone Park.

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174. Harry J. Norton, Wonderland Illustrated; Or, Horseback Rides..., 1873, p. 37. Norton puts this into his book as a quote. I have been unable to find it in other writings of the survey, but Rev. E.J. Stanley, who toured Yellowstone in 1873, also mentioned Stevenson's trip to Stevenson Island:

> "Mr. Stevenson found them [the islands] covered with large pine-timber, abounding in dense jungles, the safe retreat of bears, mountain-lions, deer, and other game, the signs of which were but too evident."

E.J. Stanley, Rambles in Wonderland: Or, Up the Yellowstone..., 1878, p. 136.

Near Bottler ranch, Barlow stated that "several antelope were seen." At Mammoth the party killed food: "While at this camp one of the men killed a large brown bear and three cubs. The latter were brought in and served our mess with delicious steaks for several meals."[175]

Near Mount Washburn, Barlow noted: "On one occasion I discovered that I was following the trail of a bear to his den." In a glade nearby, Barlow found "three fine elk" which disappeared before he could shoot them.[176] And near Mud Volcano, Barlow heard a mountain lion:

> "Sounds resembling a human voice calling for help were heard at intervals through the night; it is supposed they proceeded from the throat of a species of panther, called the American lion. I saw the skin and claws of one of these animals at Bottler's Ranch, which had belonged to a formidable specimen of this genus. I judged that an encounter with one would not be altogether safe. In size it must have been somewhat under that of the lions usually seen in menageries, though from the appearance of its head and claws it must have nearly equaled them in strength and fierceness."[177]

The party traveled to the lake and then backtracked over Mary Mountain to Lower Basin. At Rush Lake, Barlow declared, "Here tracks of deer, elk, and buffalo in great abundance were seen." Near Kepler Cascade and Scaup Lake, Barlow said, "We found game and Indian trails", but they bore too much westward, so the party headed more south.[178]

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175. J.W. Barlow and D. Heap, "Report of a Reconnaissance...", 42nd Cong., 2nd Sess., Sen. Ex. Doc. 66, SN-1479, vol. 2, 1872, pp. 7, 11.
176. Barlow, op. cit., pp. 13-14.
177. Barlow, op. cit., p. 17.
178. Barlow, op. cit., pp. 21, 31.

On the upper Yellowstone River, just south of the park boundary, Barlow noted: "Signs of game abound, among which were found tracks of the grizzly and the black bear, mountain-sheep, elk, and deer." Near Bridger Lake, the party "encountered a large grizzly bear and cub."[179]

Heading back north, Barlow found that north of Sour Creek "the wood abounded with game trails, several elk and deer being seen just in advance of our train." At the mouth of Soda Butte Creek, "numerous bands of antelope were seen skipping over the prairie while we remained in the [Lamar] valley." And finally, when near Slough Creek, two of Barlow's packers brought in the carcass of one elk and one deer."[180]

In sum, Captain Barlow experienced no shortage of game in Yellowstone Park.

1872---

Parties led by Harry Norton, Seth Bullock, A. Bart Henderson, John Gibbon, and F.V. Hayden entered the Park this summer. Additionally, James Richardson's book Wonders of the Yellowstone Region was published in late 1872, based on information gained from 1870-72 parties.

Richardson

It is not known whether James Richardson made a trip into the Park himself or not. But his book contained some

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179. Barlow, op. cit., pp. 36-37.
180. Barlow, op. cit., pp. 40-41. Dr. Kay (pp. 262-263) either missed or ignored the majority of Barlow's animal signs and sightings as listed above.

statements made independently of his sources, so if he did not make a trip then he must have talked extensively to members of the Washburn, Hayden, Barlow, or other parties.[181]

Richardson noted of Yellowstone Lake: "Its waters teem with trout, and the primeval forests that cover the surrouding country are crowded with game." He also made this comment: "Herds of deer, elk, and mountain sheep, throng the forests and mountain meadows about the [Yellowstone] Lake. Buffalo signs, grizzly bears and California lions are far from uncommon, while the smaller lakes and creek-valleys of the basin are fairly alive with otter, beaver, mink, and muskrat."[181]

Richardson could have gotten his information merely by reading the accounts by Doane and others, but probably he talked to them as well.

Bullock

Seth Bullock, who was later to figure prominentlyinto the affairs of Montana Territory, made a trip into the Park in 1872. His short journal recorded that he saw two bears on Mount Washburn and shot one of them. He also killed an elk on Trail Creek north of the Park.[182]

Henderson

Prospector A. Bart Henderson spent very little time

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181. James Richardson, Wonders of the Yellowstone Region., 1873, pp. 2, 111. My copy of Richardson's book, although marked with the publication date of 1873, is inscribed as a gift with the date of January 2, 1873, so the book had to have been published in late 1872.

182. Seth Bullock, "Diary of a Trip to the Yellowstone in 1872...", typescript sent to Montana Historical Society, 1906, pp. 7, 11.

in the Park in 1872. His journal reveals only a single relevant entry for that year. On August 18, 1872, Henderson killed "several bear, buffalo, elk, black & white tailed deer, & mountain sheep", all in the northern part of the Park.[183]

The Hayden Survey of 1872

This group consisted of two divisions numbering thirty-four and thirty men respectively. With sixty-four men and accompanying stock in the field, it is not surprising that some members reported seeing little game in Yellowstone.

The 1872 reports of F.V. Hayden, A.C. Peale, and Rudolph Hering contained no mentions of animals, concentrating instead on topography of the country. However, Frank Bradley's report contained some references to animals of the region.

In Teton Basin ("Pierre's Hole"), just southwest of the Park, Bradley found a pond with marshy borders "whose surface was covered with tracks of antelope, deer, and elk." In Jackson Hole, east of Grand Teton, elk tracks were "abundant", according to Bradley.[184]

Bradley's party then traveled north to Henry's Lake where they met trappers Sawtell and Wurtz, who reported

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183. Henderson, op. cit., August 18, 1872.
184. Frank Bradley in F.V. Hayden, Sixth Annual Report... for the Year 1872, 1873, pp. 215, 223.

"that game is still abundant in the neighborhood---antelope, deer, elk, moose, bear, and mountain-sheep, as well as smaller animals."[185]

At Lower Falls, Bradley commented: "This is evidently a grazing-ground of deer and elk, whose tracks abounded, even on steepest slopes." Descending into the canyon below the falls, Bradley found trails: "In ascending, I followed the track of an elk, part of the way, and found much less difficulty [than in descending]...On the east slope, regular game trails are numerous," wrote Bradley who attributed it to a game fording spot.[186]

And in the southern park area near Mount Hancock, Bradley declared: "To avoid traveling in the bed of the stream, we followed some of the numerous game trails..." Those game trails owed their existence to animals, and Bradley recognized that by stating: "This is mostly fine grazing ground, and the numerous game trails give evidence that it is frequented by deer and elk; indeed, we found two herds of elk, of about twenty each, among the groves on the top of the ridge."[187]

The party moved west to Bechler River. Bradley saw few game trails there, but nevertheless noted that "a few miles farther east, game is very abundant."[188]

In sum, I do not see Bradley's report as indicating

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185. Bradley in Hayden, op. cit., 1873, p. 226.
186. Bradley in Hayden, op. cit., 1873, pp. 232-233.
187. Bradley in Hayden, op. cit., 1873, pp. 253-254.
188. Bradley in Hayden, op. cit., 1873, p. 244.

a lack of game.[189] In fact, considering the size of his party, it is not remarkable that he saw few animals. But in six different statements, Bradley acknowledged the signs of game everywhere.

Seventeen-year-old Sidford Hamp was a general assistant to the Hayden survey and nephew of guest William Blackmore. A set of his letters to his mother reveals little about animals he saw in the Yellowstone region, but his journals show us a little more. His party traveled up the Madison and Firehole Rivers from the west, over to the falls, down to Mammoth Hot Springs, and out of the Park.

Hamp noted while on Henry's Fork that "Mr. Bechler shot a duck and a fox today." On August 12, Hamp mentioned that Bechler "shot [at] an antelope" but missed and that "West shot an antelope" on August 13.[190]

Joseph Savage was a general assistant to the northern division of the Hayden survey. Along the Firehole River in Lower Geyser Basin, he noted: "We entered and traversed a few miles of sparsely timbered bottom land, the bark of whose trees was often seared by the bite and scratch of the bear, and some are said to be girdled by the elk and moose for food during the long winter of that region."[191] Here is possible evidence of the scarring of trees by browsing ani-

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189. Kay, op. cit., p. 265.
190. Herbert O. Brayer, "Exploring the Yellowstone with Hayden...", Annals of Wyoming 14:277-278, October, 1942.
191. Joseph Savage, "Montana Explorations. Closing Work of Prof. Hayden's Party--Henry's Lake and Its Beauties--An opening for a New Railroad.", September, 1872, series of newspaper articles for The Republican, YNP Research Library.

mals.

William H. Holmes was artist for the 1872 Hayden survey's northern division. His journals record several instances of viewing animals.

Near Bottler's ranch, Holmes saw a "herd of thirty antelope," and mentioned that "Hank Bottler had killed a blacktail deer."[192] At Yankee Jim Canyon, Holmes "shot at an antelope." On Gardner River, Holmes noted that "Bottler killed a she bear and two cubs", and in Gardner Canyon Holmes wounded an antelope.[193]

On his trip to Yellowstone Lake, Holmes took notes. Those notes mention the killing of a wolverine, otter, a bear, and a deer (all by hunter "Lowe" at Mud Geyser), and five elk and a deer killed by Bottler. Three additional elk were killed by "our hunter" near Mud Geyser.[194] And N.P. Langford noted that Holmes himself with William Blackmore chased a large brown bear near Old Faithful.[195]

William Henry Jackson was photographer for the 1872 Hayden survey, southern division. His party spent some of its time in the Grand Teton area before meeting the northern division in the Firehole region. He wrote two books about his life and a journal and also did slide shows about his

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192. W.H. Holmes, "Yellowstone Expedition 1872" (Extracts from the Diary of W.H. Holmes), typescript, YNP Research Library, July 22, 1872 entry.
193. Holmes, op. cit., 1872, July 25, 26, 30 entries.
194. Holmes, op. cit., 1872, pp. 12-13.
195. N.P. Langford, "The Ascent of Mount Hayden", Scribner's Monthly 6:23, June, 1873.

Yellowstone experiences.

In a talk and slide show given at Old Faithful in 1935 Jackson stated: "The same season [1872] we took this first distant view of Jackson Lake and the Tetons. The elk were coming out of the mountains: thousands of them."[196] It does not take a genius to surmise that part of those elk, at least, must have come from the "mountains" that comprise the Yellowstone Plateau.

In the Tetons, Jackson found that "sheep and bears were numerous all over the higher plateau, and elk, deer, and moose lived in the wooded seclusion of the canyons and hillsides."[197] Again, some of those animals must have frequented the Yellowstone Plateau at various times.

Dr. A.C. Peale's diaries give us a good look at animals seen by his party and those killed by hunters. North of Electric Peak Peale's party "saw a deer and an antelope." Peale reported on July 27 that Bottler and Savage brought in a bear skin and two cubs. On Elk Creek, Peale noted that four antelope were killed, and on the Lamar River Peale saw a herd of sheep.[198]

A part of the survey's food supply is revealed by Peale's entry of August 7 wherein Bottler killed five elk near Canyon and brought in a lot of meat. On August 10 near

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196. W.H. Jackson, "W.H. Jackson's Talk at Campfire Program at Old Faithful on Monday, July 29, 1935", YNP Research Library, p. 4.
197. W.H. Jackson, The Pioneer Photographer, 1929, pp.127-28. He also stated that "the Teton region at this time was a game paradise," mentioning deer, moose, sheep, and bears, p. 132. His party killed a moose.
198. Peale, 1872 diary/typescript, July 26, 30, August 3.

Mud Volcano Peale "found them all enjoying roast elk meat...The place looked like a meat market, there was so much meat about."[199]

On August 15, when the northern and southern divisions of the survey were united at Old Faithful, Peale mentioned that Sloan and Bottler came in with two mules loaded with elk meat. In Madison Canyon on August 21, Bottler brought in an antelope. And on September 29, when south of Bottler's ranch, Peale noted that "we saw a herd of antelope."[200]

These diary entries by Peale disintegrate the theory that the Hayden survey in general ran short of food or did not see animals.[201]

William Blackmore accompanied the Hayden survey as English guest of Dr. Hayden. Of all the Hayden survey chroniclers, Blackmore gave the most information on animals seen by the parties. From the animals enumerated in his diary it is clear that there is simply no way the party ran short of food or failed to see or kill game.

Blackmore traveled with Hayden himself, and occasionally the party split up. They followed the Yellowstone River to the Park, visited Mammoth Hot Springs, crossed to Lamar Valley, and then visited the headwaters of the

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199. Peale, 1872 diary/typescript, August 7, 10 entries.
200. Peale, op. cit., 1872, August 15, 21, September 29.
201. Kay, op. cit., pp. 265-267.

Clark's Fork and Rosebud Creek. From there they returned to Lamar Valley, crossed Mount Washburn, passed the falls, trekked to the lake, traversed the Mary Mountain area to Lower and Upper Geyser Basins, and left the Park via the Madison River.

While the party was camped near Bottler's ranch, Blackmore accompanied Bill Hamilton, a famous trapper with twenty-eight years of experience in the West, to the Gallatin Range west of Bottler's, where they found "some deer and antelope." Back at camp they found a "she bear and two cubs" had been killed in their absence.[202]

At Mammoth Hot Springs, Blackmore saw "some trails [of] elk deer antelope and buffalo" and some "buffalo remains" as well.[203]

On Blacktail Deer Creek, Blackmore saw a "herd of antelope--2 shots both missed" and reported a single antelope killed by Hamilton. In the same vicinity, the party found "elk horns in abundance."[204]

On Elk Creek three antelope were killed, and the party moved on to Lamar Valley. There Blackmore declared: "B[ill] H[amilton] informs me that this valley is a favorite winter resort of the mountain buffalo or bison." Blackmore continued that "last spring" Hamilton had captured seven bison calves and seven elk there. Moreover, said Blackmore,

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202. William Blackmore, Diary #6, 1872, copy at YNP Research Library, pp. 32, 62.
203. Blackmore, op. cit., p. 68.
204. Blackmore, op. cit., pp. 71-72.

"Jack Burnet [Baronett] when [he] met us informed me that he had capital sport in the Spring lassoing yearling buffaloes on the plains."[205]

Also in Lamar Valley, Blackmore found "signs of mink", and commented on then current shortages of antelope in the Park: "This last year and previously [Lamar] was a great antelope region but the hard weather last winter killed nearly one half." Sure enough, Blackmore only saw a "few antelope" on this part of his trip, but he did report the "decayed remains of buffalo bones around."[206]

The party moved northeast to the country above Soda Butte, where they "watched for some time a flock of 30 or 40 mountain sheep feeding." And at the head of Rosebud Creek near Index Peak, they were in an area of great reputation: "This valley is the most celebrated in the district for game [.] Elk, Blacktail deer, Bears and Mountain Sheep, being represented to abound--especially (Elk and bear)--"[207]

Ahem. Here is Blackmore telling us that the Yellowstone mountaineers of 1872, men of signal reputations like Hamilton, Baronett, and Bottler, knew the northeastern portion of the Greater Yellowstone Ecosystem as superior for game, that it was exemplary in their esteem.

In the same valley, the party was charged by a cinnamon bear and her two cubs, Baronett killed an elk, and another

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205. Blackmore, op. cit., pp. 73, 75-76.
206. Blackmore, op. cit., pp. 76-78.
207. Blackmore, op. cit., pp. 84, 92, 95.

bear came into their camp.[208]

The party moved southeast to Tower Fall, seeing one antelope and an elk trail, and near Mud Volcano Blackmore killed a wolverine. At Yellowstone Lake they "came upon a band of 11 or 12 elk, [including] one magnificent old buck with splendid horns." Moving to West Thumb, Blackmore "noticed Elk, bear, and deer tracks at [the] side of [the] hot springs." Blackmore commented that elk and deer were "believed to frequent these springs in order to escape from mosquitoes and [a] large and vicious horse fly."[209]

On August 10, the party returned to Mud Volcano and found that "the hunters had been unusually successful[,] Boteler [sic] having killed 5 elk and a black tailed deer and Tom Ticknor...an elk and a cinnamon bear[.] We had thus the meat of 7 elk in camp which we were eating as well as venison." The party further added to its stores by camping near Violet Springs where Hamilton had previously left several killed elk. And an unexpected visitor made his appearance there: "In the afternoon camp [was] excited by news that a panther was prowling around probably attracted by the elk meat."[210]

On the west side of the Park at Lower Geyser Basin, Blackmore observed "bear tracks about a week old in abun-

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208. Blackmore, op. cit., p. 99.
209. Blackmore, Diary #7, 1872, copy at YNP Research Library, pp. 1, 10, 35, 12, 15.
210. Blackmore, #7, pp. 21-24.

dance...we also saw a white tailed deer feeding."[211]

Also in his diary, Blackmore enumerated the animals killed between July 19 and August 10, 1872, by their hunters. The total was eight elk, thirteen antelope, two deer, and four bears, seemingly plenty of game. It is again clear that between animals killed and animals/signs/tracks seen there was no shortage of game experienced by this part of the Hayden survey.[212]

Blackmore's diary carried some other interesting items. One was a list of animals of the Yellowstone country and included in it were "wolves--wolverines, mountain lion." Another was the notation "Indian medicine" with comments about which Indian tribes would not kill which animals, apparently for religious reasons. Snakes and Bannocks, noted Blackmore, "wont kill the wolf."[213]

It remains to mention that scientist C. Hart Merriam also accompanied the Hayden survey of 1872. No long writings by Merriam have been found, but G.B. Grinnell (1876) listed animals seen by Merriam in Yellowstone in 1872.[214] Specifically Grinnell stated that Merriam saw wolverine, two species of skunks, grizzly bear, black bear, moose, mink, pronghorn, and beaver.

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211. Blackmore, #7, p. 28.
212. Blackmore, #7, p. 35.
213. Blackmore, #7, pp. 53, 65.
214. G.B. Grinnell, "Partial List of the Mammals and Birds of the Yellowstone Park.", in Ludlow, op. cit., 1876, pp. 90-91.

Merriams's short report[215] mentioned that a wolverine and a skunk were found by his 1872 party.

Gibbon

The military party of Major-General John Gibbon entered Yellowstone Park this season. Gibbon's party was large and he wrote little about animals he saw. But Gibbon did mention while in Yankee Jim Canyon, just north of the Park, that "wild animals have, however, been here before us, and left the faint record of their footsteps."[216]

In the tangled lodgepole forest between West Thumb and Old Faithful, Gibbon noted: "for although there are plenty of trails, they are old game trails, and run in every possible direction except the right one."[217]

Whatever he may have seen in the way of animals, Gibbon chose to mention only tracks and game trails.

Gray

In the summer of 1872, T.B. Gray attempted to survey a route from Bozeman, Montana, via the Gallatin Canyon to the Park west entrance. His suggestions and route became present U.S. highway 191 many years later.

Gray stated that above the Gallatin Canyon, the river route offered no obstacles greater than fallen timber. He

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215. Merriam in Hayden, op. cit., 1873, p. 662.
216. Maj.-Gen. John Gibbon, "The Wonders of the Yellowstone.", Amer. Geog. Soc. of New York, Bulletin 5:114, 1874.
217. Gibbon, op. cit., p. 130.

noted that: "The few hunters and trappers who have ventured here and there [in] this comparatively unknown region ...[have told us] of beautiful meadows and lakes, [and] abundance of game and fish."[218]

In promoting his route proposal, Gray declared that the Gallatin route "takes the traveler the entire distance through a rolling timbered country, which during the most pleasant traveling season is full of Moose, Elk, Deer, and Bear and other game."[219]

Norton

Harry J. Norton's 1872 party consisted of seven Montana persons, including James Mills, editor of the Deer Lodge New Northwest; a physician named M.H. Raymond; P.A. Largey, the owner of a local telegraph line; Hillhouse Raymond, Frank Woodall, Theodore Freeler, and Norton himself who was also employed at the newspaper.

The party entered the Park from the west, traveled to Lower and Upper Geyser Basins, crossed Mary Mountain to Yellowstone Lake, trekked to the canyon, and crossed to Tower Fall and Mammoth.

In the Park's Madison Canyon, Norton's party saw two wolves: "...we saw no living thing during our ride through [the canyon] save two sour-looking timber wolves, who scam-

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218. T.B. Gray, "The Road to Wonderland.", Bozeman Avant Courier, August 22, 1872.
219. Ibid.

pered affrightedly away at our approach."[220]

Norton's party met Gilman Sawtell, the enterprising trapper and fisherman of the 1870s Henry's Lake region. Like so many before and after him, Norton saw that Sawtell's domain was loaded with game: "His annual 'catch' of trout is nearly forty thousand fish, and the number of elk, deer, antelope, moose, and bear slaughtered [by him] will reach nearly four hundred head yearly."[221]

About nearby Madison Valley in the Park, Norton stated: "The basin is a paradise for fish and water-fowl, and the surrounding valley and forests the home and grazing-place of antelope, deer, elk, and other four-footed game."[222]

Norton's entourage traveled to Yellowstone Lake, and there he declared: "...yet to the sportsman the trip is full of interest and adventure, as the region abounds in elk, deer, moose, cinnamon, black, and grizzly bear, catamounts, and mountain-lion."[223]

In general, Norton found the entire Yellowstone Park to be a grand hunting place, and he advised travelers: "If you have a good spaniel or retriever, he will be useful to bring in game, and a pack of deer or bloodhounds will furnish the sportsman fine amusement among the bear, deer, and elk.... The tourist to the Park will pass through it and admire it;

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220. Harry J. Norton, Wonderland Illustrated; Or, Horseback Rides Through the Yellowstone National Park, 1873, p.8.
221. Norton, op. cit., p. 53.
222. Norton, op. cit., p. 56.
223. Norton, op. cit., p. 71.

hunt the elk, buffalo, moose, bear, deer, and antelope which graze and roam over its mountains, plains, and valleys..."[224] Thus Norton praised Yellowstone's game in four places in his book.

1873---

The parties of E.J. Stanley, Captain W.A. Jones, Taylor Bliven, E.A. Maynard, A. Bart Henderson, and an unknown "H.C." all passed through Yellowstone Park this summer leaving comments about game.

Stanley

In particular, the Rev. E.J. Stanley seems to have seen animals in the Park for he included extended discussions of the various types. Stanley's party came up the Yellowstone River to Mammoth, turned east to Tower Fall, crossed Mount Washburn to the canyon, passed over Mary Mountain to Lower and Upper Geyser Basins, recrossed Mary Mountain to Yellowstone Lake, and then traveled north to Mammoth Hot Springs (route not stated).

At Tower Fall, Stanley commented that "abundance of game--bear, elk, and deer--exists in the surrounding mountains, but we could not stop to hunt," adding that the forest was "alive" with grouse in places.[225]

At Yellowstone Lake, Stanley found "the track of a huge

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224. Norton, op. cit., pp. 81-82.
225. E.J. Stanley, op. cit., p. 67.

bear", and this seemed a fitting introduction to four pages that Stanley devoted to game. He declared: "Besides the myriads of water-fowl, abundance of wild game, such as deer, elk, moose, bear, mountain-lions, etc., is found in woodland, jungle, and park. The game is usually driven from the trail to more secluded regions, and cannot be found without hunting."[226]

Stanley seems to have seen moose in the Park, for he noted: "The most remarkable animal of these regions is the moose" and then proceeded to describe the animal and its habits. Likewise, of bighorn sheep he stated: "Numerous flocks of mountain-sheep roam the 'rugged steeps' and clamber among the rocks." He then described sheep and their habits.[227]

Stanley spoke of elk only in passing, mentioning that grouse often flapped wings wildly as "a note of alarm to the elk or watchful deer."[228]

But Stanley did discuss cougars: "I mention the mountain-lions, whose lairs are found in the jungles and caves of these mountains." He stated that "they are not numerous, and live mostly in the 'secret corners of the earth.' They are seldom seen, and are not considered ferocious, except when followed to their haunts."[229] Here we see a difference of opinion, for some writers did find them ferocious.

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226. Stanley, op. cit., pp. 135, 142.
227. Stanley, op. cit., p. 144.
228. Ibid.
229. Stanley, op. cit., pp. 144-145.

Stanley also discussed bears briefly and then launched into a page-long discussion of the beaver, a species that he found "so numerous along the rivers, swamps, and lakes, of the mountains." The proof of beaver, said Stanley, was found "everywhere." He declared, "they are very numerous on many of the tributaries putting into the Yellowstone Lake."[230]

"H.C."

This party consisted of R.H. Evans, C.J. Tyler, S.W. Hall, Eugene Erwin, and the unknown "H.C." who chronicled the 1873 trip. The party entered and left via the west entrance, making the trip in late September and early October, and traveling around today's lower loop.

H.C.'s only mention of animals seen was a confrontation near Mary Lake "with an old she grizzly and cub." However, his last paragraph emphasizes to us that not every writer felt the need to mention all of the animals his party saw, and that not mentioning them does not mean they did not see any:

> "We arrived safe home again, having been gone 31 days. All enjoyed the trip immensely. We were most bountifully supplied with game, such as bear, antelope, hare, ducks, geese, grouse, and trout. We came down to bacon, for one meal only, on the entire trip."[231]

Some of this game must have been caught in the Park,

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230. Stanley, op. cit., pp. 145-146.
231. H.C., "Autumn Trip to Wonderland", Helena Daily Herald, October 28, 1873.

even though not mentioned, and certainly it was caught in the region. This last paragraph also makes it clear that any traveling party could shoot small animals and birds and/or catch fish for food at times of no large game. Thus not every party was "starving" just because they ran into temporary (or even longer) shortages of large game.

Henderson

Prospector A.Bart Henderson's journals include a very short 1873 section wherein he again entered Yellowstone Park. On May 17, 1873, Henderson encountered animals on Gardner River: "Killed 2 bear at one shot, and was chased by the third. Killed a fine buffalo bull." On May 27 at Soda Butte, Henderson "killed elk & bear."[232]

Maynard

E.A. Maynard was a pioneer resident of Madison Valley, downstream on the Madison River from Yellowstone Park, who made at least six trips to the Park 1872-1885.

Maynard's second trip occurred in 1873 and his party consisted of five people on horseback with five pack horses. Included were Maynard, his brother Charles, a Mrs. Bower, and two other young men. They traveled from west entrance to "the geysers", probably Upper Basin, and back.

Near Henry's Lake the party "saw some deer" and killed

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232. Henderson, op. cit., May 17, 27, 1873 entries.

two of them. Crossing Targhee Pass into Madison Basin, the party reported that "all this Sunday the game was coming to the river for water." Traveling up the Gibbon River, they "killed 2 more deer" and hung them up in a tree. Retracing their steps, they trekked to Fountain Geyser and there "killed an elk before noon."[233]

The party reported "while we were in the lower Geyser Basin we saw a black bear and my brother got a very good shot at it...the same day we killed an elk."[234]

If this account is to be believed, Maynard's party killed seven animals on the trip from Targhee Pass to Old Faithful and back.

Bliven

Taylor Bliven's party killed five bears near Lower Falls in September of 1873. A Bozeman newspaper reported the following:

> "Mr. Taylor Bliven and a fellow mountaineer, whose name we have not been able to get, came on to a gang of six bears, two or three weeks ago, in the vicinity of the Great Falls of the Yellowstone, all of which they succeeded in killing except one. Being armed with needle guns, and having approached unseen within close range, the savage monsters were stretched out in death by the rapid and unerring discharges of their rifles before they knew that they were in the very midst of danger or that there were enemies to defend themselves against."[235]

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233. Leolyn Howard, "Biographical Sketch of Ethel Augustus Maynard...", 1933 typescript, Montana State University, pp. 63-64.
234. Howard, op. cit., p. 66.
235. "Killing Bear by Wholesale.", Bozeman Avant Courier, September 26, 1873.

Jones and Comstock

One of the most important parties of 1873 was that of Captain W.A. Jones of the U.S. Corps of Engineers. His party entered the Park from the east via Jones Pass or one nearby, descended Yellowstone River via Mirror Plateau, traveled down Lamar and Yellowstone Rivers to Mammoth, back-tracked to Tower, crossed Mount Washburn, traversed Mary Mountain to Firehole, ascended Firehole to Old Faithful, crossed to West Thumb, followed the south shore of Yellowstone Lake to Yellowstone River, and ascended the river to Wind River country.

One writer[236] points out that Jones' party was short of food for much of the trip. That is true enough, but it was not because the party failed to note animals. It was because the party was very large.

At the head of Shoshone River east of Yellowstone Park, Jones stated that "elk, deer, and trout are abundant" and the party killed a mule deer.[237]

Just west of Jones Pass (inside the Park), Jones declared, "we found fresh tracks of mountain sheep exceedingly numerous, but there was so much noise that they took the alarm in time to get out of sight. Two bears came down to witness our passage, but the hostile demonstrations of our Nimrods [hunters] scared them away."[238] These passages illus-

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236. Kay, op. cit., p. 267.
237. W.A. Jones, Report Upon the Reconnaissance of..., 1875, p. 19.
238. Jones, op. cit., p. 21.

trate the problems large parties had in scaring away game.

Jones then did not mention game again until his party was about thirteen miles above Yellowstone Lake on Yellowstone River: "All through this basin game-trails have been very abundant but our party from its size makes a good deal of noise, which will account for the fact that we did not see a great deal [of wildlife]. [But] A magnificent elk crossed the valley in advance of us, and in plain sight today."[239] And at Two Ocean Pass, the party killed three elk: "they were extremely large and fat."[240]

From the above passages on noise it is clear that Jones took pains to explain the difficulty the party had in procuring food. One writer[241] dismisses those explanations, claiming that the party split into smaller units which also did not see any game.

However, Theodore Comstock's account of the same trip talks of "droves" of elk and antelope on three different occasions, and mentions plentiful tracks and other animals as well.

Near Steamboat Point, Comstock heard "the doleful howl of a large wolf," and even found the spot in the grass where the wolf had been lying only moments before.[242] Wrote Comstock, "this locality seems to be a favorite resort of many animals."

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239. Jones, op. cit., p. 39.
240. Jones, op. cit., p. 40.
241. Kay, op. cit., p. 268.
242. Comstock in Jones, op. cit., p. 92.

Near Turbid Lake, Comstock reported that he started up "numbers of elk", a badger, and a porcupine.[243]

Above the forks of Pelican Creek, Comstock noted that "plentiful tracks of game were noticed, but we saw very little until near the summit, when we met a large drove of elk and some deer."[244]

At Baronett's Bridge, Comstock stated that "three fair-sized California raccoons crossed our path", and on Hellroaring Creek, he again reported large numbers of animals, this time antelope:

> "...we met several large droves of antelopes feeding upon the fine pasturage here afforded with much security, owing to the irregular topography, which enables them to seek immediate shelter upon the approach of danger. At the time of our visit the great antelope country along the left bank of East Fork [Lamar River] was remarkably free from their presence, which may doubtless be explained by the recent passage of several parties of miners."[245]

Here Comstock affirmed that large parties could prevent the sighting of game by scaring it away with sheer numbers of people or by shooting everything in sight.

Comstock reported a fourth raccoon near Hellroaring Creek and also discussed beaver in this general Park statement:

> "These animals are still common in portions of the Yellowstone Park, and elsewhere, but

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243. Comstock in Jones, op. cit., pp. 92-93.
244. Ibid.
245. Comstock in Jones, op. cit., p. 94.

the hand of man is already turned against them..."[246]

After his trip through the Park, Comstock wrote no less than eight articles about the Yellowstone region promoting various facets of it. In one of these, Comstock put forth the proposition that the Park should be used to preserve from extinction the fauna of the American West.[247] Although one writer would probably argue that Comstock meant stocking a "gameless" Park as a big zoo or preserve, that is hard to believe considering the numbers of animals Comstock saw and the comments he made about the Park as positive habitat. It is more likely that Comstock meant protecting the many animals that were already in the Park, and perhaps adding to those numbers.

1874---

The parties of Mabel C. Osmund, R.C. Wallace, Lt. G.C. Doane, and the Earl of Dunraven all mentioned animals they saw this year in Yellowstone Park.

Osmund

Mabel Osmund visited Yellowstone as a child with her family. The party of six went up the Yellowstone River to

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246. Comstock in Jones, op. cit., pp. 94, 177.
247. Comstock, "The Yellowstone National Park--I. Its Scientific Value.", American Naturalist 8:72, February, 1874. This article has Comstock's list of mammals and birds observed by him in the regions around the Park (p. 75) and the wolf and mountain lion are included. In discussing his plan to use Yellowstone

Mammoth Hot Springs, and visited Old Faithful, Yellowstone Lake, the canyon, and Tower Fall.

Mabel Osmund stated that "crossing Mount Washburn we saw our only bear, a black one. My father took a shot at it but it ran off in[to] the woods. We also saw way off in the valley a large herd of grazing buffalo."[248]

Wallace and Muth

R.C. Wallace's party consisted of five persons: Joe Flick, Charley Jeffries, Joe Stewart, Billy Muth, and Wallace. They traveled up Madison River to west entrance and into the Upper Geyser Basin, then to Yellowstone Lake, the canyon, Tower Fall, Mammoth, and out of the Park. Both Wallace and Muth left accounts of this trip.

Wallace mentioned game only briefly. At Yellowstone Lake, the party found two trappers who had just killed a bear. Wallace also stated: "Portions of the lake were covered with wild geese, ducks and swan and on the shore elk, bear and deer were quite plentiful."[249]

Billy Muth mentioned game indirectly in two other Park locations, without mentioning the game at Yellowstone Lake.

Park as a haven for the animals of the West, Comstock included discussions of individual animals and their 1873 relative numbers. He discussed bison, wolverine, bear, beaver, moose, deer, pronghorn, and bighorn individually, worrying about their survival in light of heavy and continued hunting. About the wolf, wolverine and cougar, Comstock stated that they had no tendency to attack humans, but rather "I have always found them ready to run at my approach." (p. 76)

248. Mabel Cross Osmund, "Memories of a Trip...", typescript, YNP Research Library, p. 6.

249. R.C. Wallace, A Few Memories of a Long Life, 1900, pp. 58-59.

At Sawtell's ranch, Muth stated: "Here we found good shooting and fishing." And at Mammoth Hot Springs, Muth, Wallace, and party dined with hotel keeper James McCartney. Muth noted: "The bill of fare [served us] was trout, deer, and elk."[250]

Doane

Little is known about Lt. G.C. Doane's 1874 trip into the Park because he left no known journal, only mentioning it briefly in an account two years later. While traveling through the difficult canyon country at the headwaters of Tower Creek and onto the west slopes of the Washburn Range, Doane stated: "Late in the afternoon we reached the summit of the mountain [facing] toward Mammoth Hot Springs, coming out in an open space where there were thousands of Elk horns."[251]

Earl of Dunraven

The Earl of Dunraven was on a sporting or hunting trip and so he was mainly interested in killing game, especially elk. His book is loaded with confrontations with animals, and in general he saw and killed more animals outside of the Park than inside it. But his general statements on game in the Park are conflicting, and it is obvious that if the Earl saw/killed fewer elk inside the Park than out, the same was

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250. William Muth, "A Trip to the Yellowstone Park in 1874", Rocky Mountain Magazine 1:295, 298, December, 1900.
251. Doane in Bonney and Bonney, op. cit., p. 473.

certainly not true for antelope.

The Earl approached the Park from the north, stopping to hunt in the vicinity of Bottler's ranch. He traveled from Mammoth to Tower to canyon and over Mary Mountain to Upper Geyser Basin. He then retraced his route and left by the north entrance, stopping again to hunt at Bottler's.

On the way into the Park, Dunraven saw a herd of twenty antelope in the vicinity of Bottler's.[252] He chased three whitetail deer and then saw "some wapiti" and shot three.[253] He also killed a bull elk and was visited by two grizzlies in the night. "Bears were plentiful in the valley," wrote Dunraven.[254]

Dunraven's compatriot Texas Jack killed another grizzly, Dr. Kingsley saw a third one, and Mr. Campbell saw a fourth.[255] Together they chased a herd of "forty or fifty" roaring elk and two separate bands of sheep.[256]

Journeying west to near Madison River, Dunraven commented on that country which was near the Park:

> "The country about there is very pretty, and at some seasons of the year must be full of game, for [its parts] were covered and intersected in all directions with the paths and trails of mountain buffalo, wapiti, and deer. The signs of bear also were very numerous."[257]

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252. Windham T.W. -Q., Fourth Earl of Dunraven, The Great Divide..., 1876, p. 137.
253. Dunraven, op. cit., p. 151.
254. Dunraven, op. cit., p. 153.
255. Dunraven, op. cit., pp. 155, 157.
256. Dunraven, op. cit., pp. 161-162, 164-166.
257. Dunraven, op. cit., p. 167.

Returning to Paradise Valley, Dunraven stated that Mr. Campbell killed two antelope, and that a mountain lion entered their camp at night.[257]

To celebrate the return of a lost member of the party, they composed a song which contained the following lines:

> "Oh, Montana, it is beautiful! the Yellowstone is fine,
> Game it is abundant, leastways the sign."[258]

So at least in Paradise Valley, game seems to have been abundant, and it is hard to believe that some of those animals would not also have utilized the Park.

In the Park, the party saw one elk south of Mount Washburn and Jack killed a second one.[259] South of canyon they killed a bull elk:

> "We were constantly on the lookout for game also, for signs were plentiful enough to keep us on the qui vive...We saw several indications also of deer; and on riding out of a wood...we espied, not half a mile off, a large bull elk."[260]

But then the party's meat grew scarce. Near Mud Volcano Dunraven wrote: "we had killed nothing on the march except wapiti stags, which at this time of year [autumn] are not fit to eat."[261] They split up to hunt, seeing "plenty of old sign, but not a single fresh track, and nothing whatever eatable to be seen...I soon made up my mind that there was no game then

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257. Dunraven, op. cit., p. 170.
258. Dunraven, op.cit., p. 178.
259. Dunraven, op. cit., p. 219.
260. Dunraven, op. cit., p. 229.
261. Dunraven, op. cit.,p. 253.

in the country."[262]

Forced to eat trout, the party saw no game until they returned to Mammoth Hot Springs following their trip to Upper Geyser Basin. Dunraven noted, "the country had produced no game" and "we had grievously miscalculated either our own skill or the resources of the country, for not an atom of fresh meat had we tasted for days."[263]

What is puzzling is that the Earl, in writing "a comprehensive review" of the Yellowstone Park, indicated that game was plentiful:

> "The scenery is beautiful, the climate most healthy; game is abundant...Compared with other districts equally prolific in big game, it enjoys a wonderful immunity [from Indians]..."[264]

In light of the large amount of game the party dealt with north of the Park and did not deal with in the Park,[265] and in light of the Earl's conflicting statements, what are we to make of this? My opinion, based upon the fact that so many other parties did confront game in the Park, is that the Earl simply had bad luck. Or perhaps the great Yellowstone animal slaughter, which began in late 1871, was having an effect. Perhaps both were at work.

1875---

The parties of Norris, Ludlow, Strong, and Maynard all

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262. Dunraven, op. cit., p. 254.
263. Dunraven, op. cit., pp. 296, 336.
264. Dunraven, op. cit., p. 295.
265. Only when the party reached Mammoth on the trip out did they see seven antelope, two or three skunks, and then "a great many" antelope on Gardner River. Dunraven, op. cit., pp. 340-346.

passed through the Park this year and mentioned animals.

Norris

P.W. Norris made his first real trip into the Park this year with a guide named Julius Beltizer and area old-timer Jack Baronett. Norris approached in July from the north, traveling to Mammoth, Lamar Valley, the canyon, and Lower Geyser Basin. At times Norris was also accompanied by George Huston and H.C. Wyman.

Norris found the animal slaughter in full swing in Yellowstone and decried it, but he also saw plenty of animals. He was enamored of the "winding Soda Butte Valley, with its ancient geyser cones, its emerald trout lakelets, [and] its evergreen groves alive with elk and antelope."[266]

Apparently Norris saw wolves and other animals in the Park for he noted that he found "little trace of man; but animals [we did find] as elk, blacktailed deer, bighorn sheep, and several kinds of bear[,] wolves and foxes are anamulously [meaning unknown] plentiful and tame; staring at bearded man walking erect as a recent added wonder, and [they] can be slaughtered almost at will."[267] Norris then added the earlier-mentioned paragraph on the slaughter that was then proceeding and in which the Bottler brothers were playing a

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266. Norris, "Meanderings...", letter number 21, 1875.
267. Norris, "Meanderings...", letter number 22, 1875.

large role.

At Lower Geyser Basin, Norris felt earthquake shocks (so common in Yellowstone) and heard wolves and mountain lions as a result, he believed, of the earthquake:

> "We were startled from a brief sleep by the hollow rumbling [of] a[n] unusual earthquake shock, followed by the wild trumpet notes of the swan, frightened from its rest near our bubble cones, the loud, prolonged howl of the mountain wolf, the fierce scream of the California lion, and the whole valley of geysers and all else in nature seemed aroused to unearthly activity, rendering further sleep impossible. Altogether it was a night of nervous anxiety, unequaled in all my mountain wanderings."[268]

Norris left the Park and returned to Bottler's ranch. At the ranch he made a side trip west into the nearby Gallatin Range, finding a "fine flock of Bighorn"sheep.[269] After recovering from a brief illness at the ranch, Norris headed north carrying "bighorn sheep and elk horns and California lion skins."[270]

Strong

General W.E. Strong and a party of VIPs traveled through Yellowstone Park this summer in a party of at least thirty-two men. Eight were military officers and at least twenty-four were enlisted men who escorted them.

Lt. G.C. Doane of the 1870 Washburn party traveled with Strong's party as more or less guide. From reading the text,

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268. Norris, "Meanderings...", letter number 24, 1875.
269. Norris, "Meanderings...", letter number 25, 1875.
270. Ibid.

one gets the impression that Doane and Strong talked a great deal about the Yellowstone country (Doane had also visited the Park in 1874). Much of what Strong knew and believed about Yellowstone both before and after the trip he undoubtedly got from Doane, and it is apparent, both from Doane's 1870 journal and from Strong's writings, that Doane believed Yellowstone to be a country full of game.[271]

The party entered the Park on the north and soon saw game. In traveling to Blacktail Deer Creek, they saw three blacktail deer and shortly after that two more. There Strong commented that "game was scarce." After traveling to Tower, Strong stated, "I saw no game or forest birds during the entire day."[272]

Apparently Strong mentioned that condition to Doane, for Strong noted that "Lieutenant Doane says the elk and deer at this season [early August] are on the highest mountain ranges, where the snow lies all year, to escape flies and mosquitoes."[273] Notwithstanding that correct explanation by Doane, the slaughter that was then in progress, and the fact that Strong's large party consisted of at least thirty-two men plus animals, one writer persists in believing that the party should have seen game if the country had any.[274]

Regardless of Strong's lack of luck in seeing game, the animals were still there. This is clearly the case from a

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271. Strong in Bartlett, op. cit., p. 104.
272. Strong in Bartlett, op. cit., pp. 42, 44-45.
273. Strong in Bartlett, op. cit., p. 46.
274. Kay, op. cit., pp. 270-271.

most relevant conversation between Strong and Jack Baronett, one which tells us where the game was in Yellowstone in 1875. Baronett had first visited Yellowstone in 1864,[275] and had been continuously in residence there as a hunter and guide since he found Truman Everts in 1870. Of all persons who were then in a position to know the general game scene in the Park, none were more expert than Baronett. Strong stated:

> "I rested here [at Baronett's cabin] for a time, when Baronette [sic] kindly accompanied me back, and put me on the right trail to Tower Falls. He had just returned from our [main] camp, and says he will meet our party seven or eight days hence at Yellowstone Lake; and if General Marcy and I want a hunt such as we have never had, he will give it to us without fail. His plan is, for us to cross the Yellowstone, near the Lake, swimming our horses, and hunt about Pelican Creek, returning to his cabin on the east side of the Yellowstone River, and meeting the party en route for [Fort] Ellis. As this will give us three or four days among the grizzlies, elk, and black-tailed deer, nothing would please me better. Baronette [sic] says there is very little game to the west of the Yellowstone, and that we have a slender prospect of killing anything [there] but grouse."[276]

Here is game expert Baronett telling Strong (and us!) that in August of 1875, game was still in good supply in Pelican Valley and on Mirror Plateau, but that game was in shorter supply west of Yellowstone River. No doubt the slaughter was taking its toll in the more easily accessible western portions of the Park.[277]

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275. Lee H. Whittlesey, Wonderland Nomenclature..., Montana Historical Society microfiche, 1988, p. 57.
276. Strong in Bartlett, op. cit., pp. 46-47.
277. P.W. Norris confirmed this in 1877. See Norris, Report Upon the Yellowstone...1877, 1877, p. 843.

Between Mount Washburn and Tower Fall, Strong described for a page and a half his chase of a wolverine. He stated that Doane had seen one in the Park in 1870, a fact not mentioned in Doane's 1870 journal, and one which reminds us that not every journal necessarily mentions all of any party's animal sightings.[278]

Crossing Mary Mountain to what would later be called Nez Perce Creek, Strong saw and shot at a bull elk.[279] At Upper Geyser Basin, he noted that Baronett's prediction of no game had come true: "this is the most barren country for game at this season of the year I have ever seen, and nothing has been killed by the party but grouse." At Midway Geyser Basin, the party "saw no game or fresh signs", killing only a grouse and a squirrel.[280]

Once again it is apparent that the slaughter had taken some toll on game. But the animals were not completely gone, because Strong's small separate parties twice found them. Near Mary Mountain, their small supply party saw four grizzlies, although the big party saw only one band of elk near Mud Volcano.[281] Another small party of four men traveling from Mammoth to the lake via Baronett's and the east side of the river "killed on the trip a grizzly, an elk, and six deer,

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278. Strong in Bartlett, op. cit., pp. 54-56.
279. Strong in Bartlett, op. cit., pp. 66-67.
280. Strong in Bartlett, op. cit., pp. 81, 87.
281. Ibid.

and they saw a great many more [animals], while on this [west] side of the river we have seen very few."[282]

Owing to General Marcy's illness, Strong was forced to abandon his plans to hunt with Baronett on Pelican Creek, but Baronett proposed an alternate plan. Said Strong, "Baronette [sic] will join our party to-morrow night at the foot of Mount Washburn, and we are to have a day's hunting high up the [Washburn] mountains, where Baronette [sic] thinks he can show me a grizzly."[283] Apparently Baronett believed there were still some bears in the Washburn Range.

Near Hedges Peak, Strong declared that "the fresh tracks of grizzlies were plenty, but those of mountain sheep and elk were scarce." They did manage to scare up one bear, and three deer were shot in the country east of where Everts was found.[284]

Strong then included a long section entitled "The Game and Fish of the National Park", wherein he made his earlier-quoted statement about game being abundant in the Park in 1870 and decrying the slaughter then occurring. It is inconceivable that General Strong, who had talked with Doane, Baronett, and other experts for so long, would write such a long section about game in Yellowstone if there had been no game.[285]

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282. Strong in Bartlett, op. cit., pp. 91-92.
283. Ibid.
284. Strong in Bartlett, op. cit., p. 98.
285. Although Strong did not mention seeing or hearing wolves while in Yellowstone, he saw them twice on

Ludlow and Grinnell

Heading north out of the Park, General Strong's party passed Captain Ludlow in Paradise Valley just on his way into the Park.[286]

Captain William E. Ludlow, the Chief Engineer of the Department of Dakota, spent fifteen days in Yellowstone Park in 1875 with a party that included scientists Henry Dana and George Bird Grinnell. His party followed essentially the same route as the Earl of Dunraven in 1874, but made a trip to Yellowstone Lake as well.

According to Ludlow, the "only game animals we encountered in the park" were two deer near Tower Fall on his return trip.[287] This is strange when it is known that George Bird Grinnell's two reports and his handwritten diary do not agree with Ludlow's assessment.[288] Thus this seems to be one more case where parallel accounts demonstrate that one historic source does not always list all animals the

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other parts of his trip. Heading west from Laramie, Wyoming, Strong stated: "We also saw a large gray wolf running side by side in apparent harmony with an antelope, and not to exceed four hundred yards from us." (p. 8) And in Montana, between the Musselshell River and Judith Gap, Strong reported shooting a wolf. (p.120)

286. Strong in Bartlett, op. cit., p. 103.
287. Ludlow, op. cit., p. 30.
288. George Bird Grinnell, "Zoological Report.", in Ludlow, op. cit., pp. 63-71; Grinnell, "Partial List of the Mammals and Birds of the Yellowstone Park.", in Ludlow, op. cit., pp. 90-91; Grinnell, personal notebook #295, 1875, Southwest Museum, Los Angeles, California.

party saw, just as it does not list every event that occurred on the trip.

Additionally, a note from Grinnell's personally written memoirs does not corroborate Ludlow's statement of no game either:

> "From Ellis we rode over...to Bottler's ranch on the Yellowstone, where we camped. In the [surrounding]...mountains were plenty of bears, deer and sheep. We killed some elk. Near Bottler's we saw young buffalo feeding with the cattle."[289]

Grinnell wrote his information down on an animal-by-animal basis, so for ease and expediency, I am using the same method here. I refer to his three accounts as "Report", "List", and "Diary". The Latin names of animals are those used by Grinnell. For completeness, I include here everything Grinnell wrote which pertains to large animals in Yellowstone National Park.

> "Elk (Cervus Canadensis)
>
> Elk were rather abundant all through the country which we traversed. They were seen in considerable numbers along the Missouri River, among the Bridger Mountains, and in the Yellowstone Park. Those killed early in September, at the commencement of the rutting-season, were fat and well flavored, furnishing us with delicious meat." [Here Grinnell discussed elk rutting habits.][290]

Grinnell's list indicates that he personally saw elk in Yellowstone Park.[291]

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289. Grinnell in John F. Reiger, ed., The Passing of the Great West: Selected Papers of George Bird Grinnell, 1985, p. 117.
290. Grinnell, "Report", p. 69.
291. Grinnell, "Partial List...", p. 91.

"Wolf (Canis occidentalis)

> Although the Gray Wolf is always killed whenever the opportunity offers,[292] it still exists in considerable numbers wherever the Buffalo are abundant."[293]

Grinnell placed the wolf in his list of animals that he had personally seen in Yellowstone Park in 1875.[294] He then mentioned wolves seen at Judith Gap and Judith River, and discussed "wolfing" in Montana, a widespread practice.[295] Grinnell also mentioned possible hybridizing between wolves and the domestic dogs of the Crow, Gros Ventre, and Assiniboine tribes.[296]

"Mountain lion (Felis concolor)

> Although not a common species, a few of these animals are killed in the mountains every winter."

Grinnell then discussed the taking of the skins of the animals and stated that "a single individual of this species was seen by our party on the Yellowstone River, near the mouth of Alum Creek."[297]

"Lynx (Lynx Rufus)

Very abundant in the mountains."[298] Grinnell's list says that he personally saw it in the Park.[299] The reference probably is to the bobcat and is the only such reference found in this research.

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292. Grinnell's diary adds here: "Shot in summer and poisoned in winter." Notebook #295, p. 3, 1875.
293. Grinnell, "Report", p. 63.
294. Grinnell, "Partial List...", p. 90.
295. Edward Curnow, "History of the Eradication...", U. of Mt.
296. Grinnell, "Report", p. 64.
297. Grinnell, "Report", p. 63.
298. Ibid.
299. Grinnell, "Partial List...", p. 90.

"Lynx (Lynx Canadensis)

> Not a common species, though taken occasionally. I saw a few skins at Fort Peck, and was told that it was sometimes killed in the Yellowstone Park."[300]

Grinnell's list says he personally saw it in Yellowstone Park.[301]

"Coyote (Canis Latrans)"

Grinnell gave a long discussion of this animal without mentioning its occurrence in Yellowstone Park.[302] However, his list states that he personally saw it in the Park.[303]

"Fox (Vulpes Alopex Macrurus)

> This is an abundant species throughout the country traversed by our party. It is often found dead near the carcasses poisoned for wolves."[304]

Grinnell's list did not mention this animal.[305]

"Marten (Mustela Americana)

> The Marten is said to be quite abundant in the mountains of the Yellowstone Park, and it doubtless is found some distance down the Missouri River. I saw skins at Fort Peck..."[306]

Grinnell's list says he personally saw it in Yellowstone Park.[307]

"Mink (Putorius Vison)

> This species was quite abundant all through the mountains. Some very fine dark specimens were seen along Bridger Creek near Fort Ellis."[308]

Grinnell's list says that Merriam saw mink in Yellowstone Park but that he did not.[309]

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300. Grinnell, "Report", p. 63.
301. Grinnell, "Partial List...", p. 90.
302. Grinnell, "Report", p. 64.
303. Grinnell, "Partial List...", p. 90.
304. Grinnell, "Report", p. 64.
305. Grinnell, "Partial List...", pp. 90-91.
306. Grinnell, "Report", p. 65.
307. Grinnell, "Partial List...", p. 90.
308. Grinnell, "Report", p. 65.
309. Grinnell, "Partial List...", p. 90.

"Wolverine (Gulo luscus)

> No living individuals of this species were seen by any of the party; but we noticed their tracks quite often while in the park, and saw many skins in Bozeman. Hunters there informed me that they were seldom killed, except in the severest weather of the winter. In this region, they were spoken of as the 'Skunk-bear'; farther south they are called 'Carcajou'. The young, when first born, are said to be snow-shite in color..."[310]

Grinnell's list indicates that both his and Merriam's 1872 party saw wolverine in the Park.[311] In light of his statement probably only Merriam did.

"Otter (Lutra Canadensis)"

Grinnell discussed this animal only with regard to the Missouri River country and not to Yellowstone.[312] His list did not mention the animal.[313]

"Skunk (Mephitis Mephitica)

Grinnell discussed this animal only with regard to the Missouri River and eastern Montana country.[314] His list did not mention the animal.[315]

"Badger (Taxidea Americana)

> The badger was quite common all through the prairie country over which we passed, but was most often seen in the vicinity of prairie dog towns..."[316]

Grinnell's list did not mention the animal.[317]

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310. Grinnell, "Report", p. 65.
311. Grinnell, "Partial List...", p. 90.
312. Grinnell, "Report", p. 65.
313. Grinnell, "Partial List...", pp. 90-91.
314. Grinnell, "Report", p. 65.
315. Grinnell, "Partial List...", pp. 90-91.
316. Grinnell, "Report", p. 66.
317. Grinnell, "Partial List...", pp. 90-91.

"Raccoon (Procyon Lotor)

This species occurs occasionally along the Missouri River."[318]

Grinnell's list did not mention the animal in Yellowstone.[319]

"Grizzly Bear (Ursus Horribilis)

In the Bridger Mountains and in the Yellowstone Park, they were numerous, so much so that we would often see several sets of fresh tracks in a morning's ride..."[320]

Grinnell's list indicates that both he and Merriam saw grizzlies in Yellowstone Park.[321]

"Black Bear (Ursus Americanus)

Not nearly so common as the preceding species. Only one living specimen was seen. At a ranch near the bridge over the Yellowstone River, however, I was shown a single skin of the so called Cinnamon Bear, which, I was told, had been taken in the Park."[322]

Grinnell's list indicated that both he and Merriam saw black bears in Yellowstone Park.[323]

(Squirrels, prairie dogs, and woodchucks omitted)

"Beaver (Castor Canadensis)"

Grinnell discussed this animal only with regard to the Missouri River country and not to Yellowstone Park.[324] His list indicates that both he and Merriam saw beavers in Yellowstone Park.[325]

(Mice, gophers, muskrats, porcupines, and sage rabbits omitted)

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318. Grinnell, "Report", p. 66.
319. Grinnell, "Partial List...", pp. 90-91.
320. Grinnell, "Report", p. 66.
321. Grinnell, "Partial List...", p. 90.
322. Grinnell, "Report", p. 66.
323. Grinnell, "Partial List...", p. 90.
324. Grinnell, "Report", pp. 67-68.
325. Grinnell, "Partial List...", p. 91.

"Prairie Hare (Lepus Campestris)

> This species is very abundant in some localities, while in others, quite as favorable for it, it is not found at all. In fact, the abundance or scarcity of the Prairie Hare in any district depends almost altogether on the number of wolves to be found in the same tract of country. Where all the coyotes and gray wolves have been killed or driven off, the hares exist in great numbers; but where the former are abundant, the latter are seldom seen. We saw none near the Missouri River, where the buffaloes, and consequently the wolves, were numerous; but at Camp Baker, where there were scarcely any wolves, the hares were very common."[325]

Grinnell's list indicates that neither he nor Merriam saw this animal in Yellowstone Park, nor did they see Lepus Artemisia, but both saw Lepus Bairdii.[326] The lack of two of these animals may make a commentary on the presence of wolves, i.e. wolves were in the Park under Grinnell's statement.

"Moose (Alce Americana)

> This species is quite abundant in suitable localities in the Yellowstone Park, although, like all the large game, it has been driven away from the neighborhood of the trail [main road] by the constant passage of travelers..."[327]

Grinnell's list indicates that both he and Merriam saw moose in Yellowstone Park.[328]

"White-Tailed Deer (Cervus Virginianus)

> This species was by no means abundant in the country through which we passed. We saw a few along the Missouri, and I noticed one in the Judith Mountains; but on the whole they were seldom seen."[329]

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325. Grinnell, "Report", p. 69.
326. Grinnell, "Partial List...", p. 91.
327. Grinnell, "Report", p. 69.
328. Grinnell, "Partial List...", p. 91.
329. Grinnell, "Report", p. 70.

Grinnell's list indicates neither he nor Merriam saw the whitetail deer in Yellowstone Park.[330]

"Mule Deer, Black-Tailed Deer (Cervus Macrotis)"

Grinnell stated that this species was being recklessly slaughtered for its hides alone in the Missouri River country, but he did not mention it in Yellowstone Park.[331] But his list says that he personally saw it in Yellowstone Park.[332]

"Prong-horned Antelope (Antilocapra Americana)"

Grinnell gave a long discussion of this animal "everywhere abundant on the plains", but did not mention it in Yellowstone Park.[333] His list indicates that Merriam saw the pronghorn in the Park but that he did not.[334]

"Bighorn Mountain Sheep (Ovis Montana)

> The Bighorn occurs in considerable numbers in the Judith Mountains and in the Yellowstone Park, away from the trail [main road] ; but they are so wary that they are not often seen..."[335]

Grinnell's list indicates that he personally saw bighorn sheep in Yellowstone Park.[336]

"Buffalo, Bison (Bos Americanus)"

Grinnell made a long statement on the relative abundance and locations of bison in the country traversed by his party, and added: "The so-called 'Mountain Buffalo' was abundant in the Yellowstone Park."[337] His list indicates that he personally saw bison in Yellowstone Park.[338]

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330. Grinnell, "Partial List...", pp. 90-91.
331. Grinnell, "Report", p. 70.
332. Grinnell, "Partial List...", p. 91.
333. Grinnell, "Report", p. 70.
334. Grinnell, "Partial List...", p. 91.
335. Grinnell, "Report", p. 70.
336. Grinnell, "Partial List...", p. 91.
337. Grinnell, "Report", p. 71.
338. Grinnell, "Partial List...", p. 91.

(All birds omitted)

In sum, it can be said that according to Grinnell's report, diary, and list of animals that he or Merriam saw in Yellowstone Park, either Grinnell was traveling separately from Ludlow much of the time or else Ludlow saw more animals in the Park than just the two blacktailed deer he mentioned. For Grinnell claims to have seen wolf, mountain lion, lynx, bobcat, coyote, marten, wolverine, grizzly bear, black bear, beaver, moose, elk, whitetail deer, mule deer, bighorn sheep, bison, and numerous small animals all in Yellowstone Park.

Maynard

E.A. Maynard made another trip into the Park this year, entering again from the west. He killed an antelope near Targhee Pass and heard an elk bugling near the mouth of Nez Perce Creek.[339] At Old Faithful he shot a deer.[340] On the return trip through the west entrance, Maynard heard many bull elk bugling near Henry's Lake. He also mentioned seeing a large band of antelope probably in the Hebgen Lake area and shot one of them.[341]

1876---

Because of Indian problems in the region, very little

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339. Howard, op. cit., 1933, p. 67.
340. Ethel August Maynard, "Reminiscences of E.A. Maynard", typescript, 1932, Montana Historical Society, p. 10.
341. Maynard, op. cit., p. 24.

history of Yellowstone Park is available to us from this year. Military parties were needed elsewhere in 1876 (the Custer battle occurred in late June) and many persons were generally afraid to travel to Yellowstone this season. But trips into the Park were made by M.A. Switzer, Ella Edsall, and Lt. G.C. Doane.

Switzer

The party of M.A. Switzer entered the Park from the west and traveled to Old Faithful and then east over Mary Mountain.

They crossed Targhee Pass from west to east, and upon entering "Madison Basin", pronounced it "one of the finest game ranges in the mountains."[342] They saw a number of antelope there, killed a single antelope, and saw four elk. The party stated that they "found game signs plenty." East of Mary Mountain they saw a bear.[343]

Edsall

Ella Aylesworth Edsall and her family, who moved to Chico Hot Springs from Bozeman this year, claims to have entered the Park in August,[344] traveling from north entrance to Mammoth to Mount Washburn. She remembered a snowstorm on August 24, and

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342. M.A. Switzer, "1876 Trip to the Geysers.", typescript, (1876), YNP Research Library, p. 2.
343. Switzer, op. cit., pp. 3, 7.
344. The following year, 1877, members of the Radersburg party found her name "Ella M. Aylesworth" pencilled onto the formation at Great Fountain Geyser. H.D. Guie and L.V. McWhorter, Adventures in Geyserland, 1935, p. 55.

the screams of a mountain lion which seemed to her childish imagination to be calling her name:

> "Wild animal life abounded in these out of the way mountain fastnesses. I well remember one night when a mountain lion, probably lured by the campfire light and scent of horses, suddenly...began a series of hair raising howls in a near human voice, calling el-ah, el-ah, el-ah, -ah, -ah, -ah. It seemed to be calling my name that night in the darkness."[345]

The screams stampeded their horses which resulted in a two-day search and delay.

Doane and Server

Lt. G.C. Doane, Sgt. Fred Server, and four privates traveled through Yellowstone in October, attempting to float a boat down the Snake River from Heart Lake to Fort Hall, Idaho. Both Doane and Server left journals of the trip. Doane's journal is the detailed one, but Server's adds corroboration and one independent account of noises, probably caused by animals in the forest.

Doane's party went up Yellowstone River to Tower, over Mount Washburn to canyon, up the river to Yellowstone Lake, and then sailed their boat on the lake to the southwest side of the lake. From there they carried the boat to Heart Lake and descended Heart and Snake Rivers into Idaho. Their horses were led along the lake shores or river banks.

No animals were mentioned by either Doane or Server until October 23, when the party was two or three miles south of present Canyon Village. There Server noted: "Numerous noises heard in the woods. Lt. Doane and [Pvt.] Applegate went out to

345. Ella M. Edsall, "Autobiography", typescript, 1919, Montana State University, p. 5.

ascertain the cause of it."[346] Doane did not mention the noises, which ultimately went unexplained, but he did see a couple thousand elk, not exactly a shortage of game:

> "I jerked away the [eye] shade and saw that I had ridden close up to a herd of at least two thousand elk. They had been lying in the snow, and had all sprung up together frightening my horse. In a minute the great herd was out of sight, crashing through the forest. The old bulls [were] screaming their strange fog horn cry. It was a magnificent sight..."[347]

Editor Orrin Bonney's footnote about Doane's sighting says that Doane's report refutes some modern notions that Yellowstone Park will not support large game herds that late in the season.

Doane's report also lends weight to the STRASTD phenomenon--all of the elk he saw ran away rather than just standing there curiously, disinterestedly, or stupidly, as they sometimes do. Here <u>one</u> man on a horse frightened two thousand elk into running.

At Crater Hills, **Doane** stated, "there I killed a deer", and near present Lake Junction an old bull moose stampeded the party's stock, making a loud bellowing noise.[348] Doane also declared there that "in the morning I shot and wounded a large wolverine."[349]

On October 25, the party heard "mountain lions screaming

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346. Fred E. Server, "Day by Day Journal of Sgt. Fred Server", typescript, (1876), Montana State University, p. 1.
347. Doane in Bonney and Bonney, <u>op. cit.</u>, p. 476.
348. Doane in Bonney and Bonney, <u>op. cit.</u>, p. 479.
349. <u>Ibid</u>.

and moaning at intervals" along the north shore of Yellowstone Lake.[350] The following day they "killed a deer and two geese" and sailed to Stevenson Island where they "saw fresh bear tracks on the island."[351]

Camped in the vicinity of Bridge Bay, Lt. Doane heard both wolves and mountain lions:

> "Another glorious night. Mountain lions in chorus beyond the river, and a pack of wolves howling far down the lake shore."[352]

The party proceeded to Heart Lake, and on October 29, when near the Continental Divide summit, "we started up a fine large grizzly bear which bounded away..."[353]

Also on October 29, Doane's party prepared to stop at Heart Lake: "Driving out a large herd of Elk resting there, we went into camp." Sgt. Server confirmed the elk herd and the bear.[354]

On November 2, Privates Ward and Osborn left the main party to backtrack north to Fort Ellis. On Mount Washburn, Doane said they "killed two elk."[355] The rest of the party was at Heart Lake where Doane found that "on the east side [of the lake] is an extensive marsh full of Beaver dams."[356] Four days later Doane added, "there has been a great deal of work done along all the water courses by Beaver."[357]

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350. Doane in Bonney and Bonney, op. cit., p. 480.
351. Ibid.
352. Ibid.
353. Doane in Bonney and Bonney, op. cit., p. 490.
354. Doane in Bonney and Bonney, op. cit., p. 491. Server, op. cit., p. 2.
355. Doane in Bonney and Bonney, op. cit., p. 493.
356. Doane in Bonney and Bonney, op. cit., p. 499.
357. Doane in Bonney and Bonney, op. cit., p. 501.

On November 20, when near present south entrance, Doane again reported cougar tracks:

> "During the night a mountain lion prowled around the camp causing the horses to snort occasionally. In the morning we found his tracks in the snow within three feet of a poor old mule. He had gone round and round the mule, packing the snow to a trail and had crouched twice to spring, but had not ventured to do so."[358]

The party floated south down the Snake River. On November 23, when just south of present Flagg Ranch,

> "hundreds of otter were seen. These growled at us in passing from their holes in the bank..."[359]

On November 24, the party saw "extensive Beaver swamps" west of present day Jackson Lake Lodge, and the following day they killed a deer swimming in Jackson Lake.[360] A "large herd of elk" was also seen at the lake's outlet on November 30 and another herd the following day.[361]

All in all, no one can say that Doane's 1876 party did not see animals. Apparently the party had bad luck in shooting, but that was not because of a lack of animals. Animals and their indicators were everywhere, according to the Doane and Server journals.

1877---

Parties of W.T. Sherman, Mrs. George Cowan, W.D. Pick-

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358. Doane in Bonney and Bonney, op. cit., p. 509.
359. Doane in Bonney and Bonney, op. cit., p. 511.
360. Doane in Bonney and Bonney, op. cit., pp. 512, 514. Server confirmed the deer kill.
361. Doane in Bonney and Bonney, op. cit., pp. 520, 522.

ett, and P.W. Norris were in the Park this season and left reports of animals. Robert Strahorn made a general comment about game.

Sherman, Sherman, and Poe

William T. Sherman, his son Thomas, and a large party traveled through Yellowstone Park this summer, entering from the north. The general, his son, and an aide named O.M. Poe all left accounts of the trip.

It is surprising that a party of this large size saw as much game as they did, although the total amount seems to have been small. General Sherman noted, "there is little game in the Park now; we saw two bear, two elk, and about a dozen deer and antelope, but killed none."[362] Thomas Sherman's account did not mention animals at all, but Colonel Poe did in passing. Poe noted "an occasional band of antelope" near Tower and mentioned that they chased a bear there. He cited no other game except for a snake killed in a hot spring, but his statement indicated that he believed game inhabited the Park in good numbers:

> "We saw but little game in the Park, though the grazing appeared to be of the very best, and the mingling of glade and forest, of mountain and prairie, just that which game would be likely to haunt."[363]

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362. P.H. Sheridan and W.T. Sherman, Reports of Inspection Made in the Summer of 1877..., 1878, p. 37.
363. O.M. Poe in Sheridan and Sherman, op. cit., pp. 74, 76, 82.

Cowan, Weikert, and Carpenter

Emma Cowan, Andrew Weikert, and Frank Carpenter of the ill-fated Radersburg and Helena parties all left accounts of their adventures with the Nez Perce Indians in Yellowstone Park this summer. Mrs. Cowan did not mention game, but interspersed with Indian items are a few accounts of game in the Weikert and Carpenter accounts.

Andrew Weikert made this statement when near Tower Fall: "A very fine morning; everything seems to be alive, birds are singing. Can see game skipping around occasionally." And at Mammoth, cook Ben Stone saw a bear.[364]

Frank Carpenter saw antelope in the vicinity of Sawtell's ranch. And he noted that the Cowans went there "in quest of deer or elk on the surrounding mountains", indicating an expectancy of game. Later, Carpenter referred to one of the Nez Perce chiefs killing a deer near Mud Volcano.[365]

Pickett

W.D. Pickett, well known as a hunter of bears and other game, made a number of trips into Yellowstone Park during the 1870s. In 1877, he shot a grizzly bear on Mount Washburn, and in the Madison Canyon he saw a number of antelope. This was apparently something new to Pickett, for he declared

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364. Andrew J. Weikert, "Journal of the Tour...1877", Contributions to the Historical Society of Montana 3:156, 169, 1900.
365. Guie and McWhorter, op. cit., pp. 37-38, 148.

it was the only time he had ever seen antelope in timber in all of his long years of experience.[366] He also saw one antelope at Lower Geyser Basin.[367]

Norris

1877 was P.W. Norris's first year as superintendent of Yellowstone National Park. That year he made the long statement about abundant animals in the Park being wantonly slaughtered that was earlier quoted. He also noted the

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366. Col. William D. Pickett, "The Yellowstone Park in Early Days", Forest and Stream 70:209-210, February 8, 1908.

367. Pickett, op. cit., p. 210. This account by Pickett also appeared in George Bird Grinnell, ed., Hunting at High Altitudes..., 1913, wherein Grinnell, p. 272n30, gave a long commentary on antelope in the Park in 1877. Because of its importance in the early history of animals in YNP, I quote the entire note here:

"In early days the open country in the Yellowstone Park was a great range for the antelope, and, as Colonel Pickett remarks, they were sometimes seen in the timber. We commonly regard the antelope as a frequenter only of open country, yet most people who have traveled much in the mountains have seen them in the timber, or among it, though perhaps never in very thick timber. In old times, if one entered a park in the mountains where antelope were feeding, they would be likely to try to escape through an opening leading from the park, rather than to pass through even a narrow strip of pine woods. On the other hand, I have seen them feeding in a river valley so heavily dotted with large clumps of willows that in fact the tree or shrub covered area exceeded that of the open prairie land.

"Because of its high altitude the Yellowstone Park was only a summer range for antelope, and at the approach of winter the herds migrated to the lower land, great numbers of them passing down the valley of the Yellowstone River, and so out on the plains. In spring again they worked up the valley and reentered the Yellowstone Park, where usually the young

many slaughtered and decaying animals at Baronett's cabin.

Those accounts by Norris indicate an abundance of elk in Yellowstone Park in 1877, and show that the wolf, wolverine, and other predators in the Park were being strychnine poisoned (see pp. 6-7, this manuscript).

Norris has left us a statement as to the general game situation in Yellowstone Park in 1877:

> "With the best informed mountaineers, I deem the game in most of the park, especially along the main routes of travel, as too much decimated to justify extra efforts for its protection west of the Yellowstone Lake, River, and Grand Cañon. But the wild eastern portion between them and the impassable snowy crests of the Shoshone Sierra, or Yellowstone range, from the base [of the mountains], say thirty miles, along the East Fork of the Yellowstone south, say fifty miles, to apex of a triangle at the head of the lake, contains fewer prominent wonders and more large valuable game-animals than other portions of the Park or of the mountains.
>
> "Here is still a herd of three hundred or four hundred of the curly, nearly black bison, or mountain buffalo, with thousands of elk, deer, moose, antelope, bighorn and wooly sheep, beaver, and other beautiful and rare animals valuable for food, pelts and furs, while, inclosed [sic] by impassable natural barriers elsewhere, only during the deep snows of

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were born. As soon as the valley of the Yellowstone River became more or less settled, this annual migration resulted in the slaughter of great numbers of antelope, and a marked decrease in the number of those summering in the Park. A dozen or fifteen years ago [just after the turn of the century] the northern end of the Park was fenced, and by the sowing of alfalfa, efforts were made to keep the antelope in the Park. These efforts have been only moderately successful, and the number of antelope found in the Park has dwindled from thousands to perhaps not more than five hundred. They seem to be steadily decreasing."

winter occasionally visit the deep-sheltered grassy valley of the East Fork--from two to five miles wide."[368]

Norris's statement squares well with those of Strong and Baronett in 1875.

Strahorn

While it is not clear that writer/publisher Robert Strahorn personally visited Yellowstone Park in 1877, he had received enough information on it to include descriptions in his 1878 book The Rockies and Beyond. He stated there: "Fish abound in the lake, [and] game of all kinds inhabit the surrounding forests..."[369]

1878---

The Hayden survey of the U.S. Geological and Geographical Survey of the Territories again visited Yellowstone Park this summer. Additionally, we have information on animals from the W.I. Marshall and Coalgate Hoyt parties, and general statements from Major James Brisbin and John Mortimer Murphy.

Brisbin

In a letter to his superiors, dated June 5, 1878, Major James S. Brisbin decried the animal slaughter occurring in

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368. P.W. Norris, Report Upon the Yellowstone...1877, 1878, p. 843.
369. Robert E. Strahorn, The Rockies and Beyond, 1878, p. 138.

Yellowstone Park, but left us good information on the status of game in the Park at that time:

> "There are now in the park thousands of elk so tame a person can ride or walk about among them...They are not slaughtered for their meat or skins but...simply for the pleasure of killing them...There are many antelope, deer...grizzlies...black bears, and flocks of 15 to 100 mountain sheep are met every day..."[370]

Murphy

John Mortimer Murphy included the following in a chapter on Yellowstone Park from his 1879 book:

> "The land game in the Park is unusually abundant, and embraces bears, panthers, buffaloes, several species of deer, wolves, and kindred animals..."[371]

Note that Murphy mentioned wolves and mountain lions in Yellowstone Park.

Hayden Survey

Accounts by Hayden, Peale, Gannett, and Holmes in Hayden's large volume of the trip did not mention animals, being primarily concerned with the geology of the region. Only an included woodcut, "Return from an Elk Hunt", inferred that animals were even present in the Park. However, separate accounts by Holmes, W.H. Jackson, and J.E. Mushbach have more to say on the subject.

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370. Letter 347, June 5, 1878 to AAG, St. Paul, Minn., in Fort Ellis Records, National Archives, as quoted in Bonney and Bonney, op. cit., p. 127.
371. John Mortimer Murphy, Rambles in North-Western America, 1879, p. 222.

W.H. Holmes was geologist on the 1878 Hayden survey trip. One of his accounts has been preserved in the long (15 vols) set of his life entitled Random Records at Washington, D.C. and thus has not been thoroughly examined. But a portion of that material is available to us, and in it Holmes declared:

> "Up to 1869 this [Yellowstone Park] region was scarcely known at all, altho it contained some of the greatest wonders in the world. It was an extremely wild country, with no trails save those made by bear, elk, deer, and a multitude of small game."[372]

While in the Park's Gallatin Range in 1878, Holmes noted, "As we went along we saw much small game and frequently tracks of mountain lion, bear, deer, and elk." Holmes also mentioned seeing a bear in the Park.[373]

A separate account by Holmes is in his actual 1878 diary wherein he specified that there were eighteen persons in his party of the survey party.[374] That is a large party, and if he saw little game, it is probably small wonder.

But near Shoshone Lake, their hunter Jack shot "two fawns" [elk calves?] on August 16 and Holmes himself chased and shot a bull elk on August 24. At Violet Springs, Holmes mentioned that this was where hunter Bottler "killed the fine elk."[375] However that reference may have been to their 1872 trip.

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372. W.H. Holmes, "Naming the Rocky Mountains", undated newspaper clipping in Random Records, vol. 3, pt. 2, p. 188, National Collection of Fine Arts, Washington, D.C.
373. Ibid.
374. Holmes, "Extracts from the Diary of...", typescript, 1878, p. 5.
375. Holmes, op. cit., 1878, August 16, 24, September 2, 1878.

A fragmentary diary of 1878 photographer William H. Jackson has come down to us, as well as his two books on his Hayden survey trips. His diary mentioned a bear on the trail between Mammoth and Tower on September 20 and a number of elk near Buffalo Fork (south of Park) on October 4.[376]

Jackson's autobiography did not mention animals in the Park, but his other book did indicate some encounters by his party with animals. Elk, particularly, were seen by Jackson. At Heart Lake, he stated:

> "The isolation of this remote corner of Yellowstone Park was shown by the frequent appearance of the wild denizens of the mountains---elk, particularly, coming out into the open and gazing curiously at our encampment."[377]

And traveling south from Two Ocean Pass to Buffalo Fork in present Teton National Forest, Jackson found this:

> "When we got over to the headwaters of Buffalo Fork and away from the elevated Two-Ocean Plateau, we were out of the snow for awhile. It was a fine grassy country, and there we saw great troops of elk forsaking those high feeding grounds for lower altitudes in Jackson's Hole."[378]

Those elk had no doubt been on the Yellowstone Plateau earlier.

Jackson also detailed how he and Dr. Hayden killed a

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376. W.H. Jackson, "Portion of Diary July 22, 1878 to October 19, 1878", typescript, YNP Research Library, those dates.
377. W.H. Jackson, The Pioneer Photographer, 1929, p. 296.
378. Jackson, op. cit., 1929, p. 303.

grizzly bear on Yellowstone River above Yellowstone Lake.[379]

J.E. Mushbach served as an assistant topographer to the Hayden survey of 1878. His accounts have been preserved in a diary, portions of which were reproduced in newspapers. Mushbach corroborated the accounts of numerous elk given by W.H. Jackson. He also mentioned moose and a fox.

On August 10, Mushbach's party saw five cow elk on Falls River and on August 12, they saw five more. On August 21, Mushbach himself killed a moose at Shoshone Lake, and on August 25, the party killed elk. On September 2, Mushbach reported at Shoshone Lake that "bear and elk sign very plentiful." And on September 4, two elk were killed near Mount Sheridan.[380]

At Heart Lake on September 7, Mushbach made it clear that there was no shortage of elk meat or live elk:

> "With our overload of elk meat we were more slow in getting started this morning...We traveled with our usual elk escort as we could see elk through the trees following us and could hear their whistles as they called to each other."[381]

Mushbach was not through yet. On September 29, the party saw a fox and five elk at Lower Geyser Basin, and they killed an elk there October 2. Another elk was seen on October 12 at Lake of the Woods.[382]

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379. Jackson, op. cit., 1929, pp. 299-300.
380. J.E. Mushbach, "Diary", 1878, typescript, YNP Research Library, those entry dates.
381. Mushbach diary reproduced in Montana Record Herald, December 1, 1929, entry for September 7.
382. Mushbach, op. cit., 1878, entries for September 29, October 2, October 12, 1878.

Mushbach's entry for September 7 illustrates the SYSTASYD phenomenon. Here his large party was followed by elk. Moreover, his words "our usual elk escort" depict the occurrence as being one that had happened before to them.

Hoyt

A party consisting of ministers Coalgate Hoyt and his brother, the Rev. Wayland Hoyt, also passed through the Park in 1878, entering from the north. The party appears to have been more interested in congratulating the Creator on Yellowstone than in mentioning animals they saw, but Coalgate Hoyt did note when leaving the park that "we moved homeward enjoying the hunting and fishing exceedingly."[383] This indicates that Hoyt saw some animals and reminds us again that just because a party did not mention game did not necessarily mean it did not see any.

Marshall

W.I. Marshall, a lecturer from the East, made several trips to Yellowstone Park in the 1870s and 1880s. The date of his first trip is not known, but it had occurred by 1878, because Robert Strahorn's 1879 book[384] quoted Marshall extensively, even though Strahorn did not publish the bulk of

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383. Coalgate Hoyt, "Roughing It Up the Yellowstone to Wonderland Jan. 1879", handwritten diary, [1878], University of Wyoming American Heritage Center Archives, p. 102.

384. Robert E. Strahorn, To the Rockies and Beyond, 1879, pp. 211-212.

Marshall's comments until 1880.[385]

Marshall wrote of Yellowstone Lake: "Its waters... furnish coverts and feeding grounds for elk, antelope, black and white-tailed deer, bears and mountain sheep."[386] And of the Park in general, Marshall declared: "Those fond of hunting will find abundance of water fowl...and for the rifle, elk, antelope, deer, big-horn or mountain sheep, bears and occasionally a band of mountain-buffalo." He also mentioned that the beaver "still builds his dam" in Yellowstone Park.[387]

1879---

At least nine parties traveled through the Park this summer leaving mentions of game. In addition, superintendent Norris left left writings on the subject. The accounts were those of Augustin Seguin, R.B. Hassell, G.O. Shields, Archibald Geikie, Charles Blackburn, S. Weir Mitchell, Henry Drummond, W.B. Pickett (accompanied by Joseph Cochran), and "Texas Jack" Omohondro.

Norris

Park superintendent P.W. Norris and his men opened trails and improved roads in the Park for thirty-eight days

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385. Marshall's accounts were reproduced in Robert E. Strahorn, New West Illustrated, vol. 2#1, January, 1880 (newspaper published at Omaha, Nebraska); in L.P. Brockett, Our Western Empire, 1881, pp. 1229-1245; and in William I. Marshall, "An Evening in Wonderland.", National Education Association, Proceedings 1881: 132-143.
386. Marshall in Strahorn, New West Illustrated 2#1, p. 2.
387. Ibid.

during 1879. Norris wrote that other than for trout and bacon, "the flesh of deer, elk, antelope, bear and other animals...were [sic] our only, but excellent and ample, supply of animal food."[388]

Of course Norris killed animals for food during 1879, and, as usual, predators were killed just because they were predators, including a trophy-sized mountain lion:

> "But, of the animals killed during the past season, [there] were some very large and fine elk, deer, sheep, and antelope, and a mountain lion, shot in the night to prevent his molesting our animals [horses], which measured nearly 9 feet in length from lip whiskers to tip of tail, and the last of the six grizzlies killed by myself during the past season was a remarkably large and fine one."[389]

As noted previously, Norris discussed in 1879 his curtailing of the slaughter of animals in Yellowstone, mentioned that his listed types of game were relatively abundant in the Park, and stated that mountain lions and wolverines both existed within the Park.[390]

Norris by Rideing

Little is known about William H. Rideing except that he appears to have interviewed P.W. Norris or otherwise researched Norris's exploits with game in Yellowstone Park,

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388. P.W. Norris, Report Upon the Yellowstone...1879, 1880, p. 7.
389. Norris, op. cit., 1880, p. 8. This last grizzly was mentioned by W.H. Rideing (see next pages following).
390. This paper, pp. 13-14, and Norris, op. cit., 1880, p. 21.

for Rideing wrote an 1882 article about the park superintendent based on 1879-80 information?[391]

In the article, Rideing discussed various types of game in the Park and referred to Norris as "The Keeper of the Yellowstone." Rideing declared:

> "Here are to be found vast flocks of wild geese and swans, herds of sharp-eyed, fleet-footed antelope, the 'blacktail', the 'big-horn', the superbly antlered elk, the crouching mountain-lion, and the ferocious grizzley [sic]. The game is so abundant, indeed, that it is a common thing for a hunter to bag one of each of these in the morning of a single day."[392]

In addition to painting the Park as a wonderland of game, Rideing painted the Mammoth area as a miniature cornucopia:

> "Almost within a stone's-throw of headquarters they fell in with flocks of geese, swans, pelicans, and grouse, and herds of antelope and 'black-tail' deer; but in the teeming Yellowstone a hunter can choose his own game, and they left these unmolested, to persue [sic] the elk and grizzlies, which they particularly desired...
>
> "Before long they found the trail of a herd of elk, evidently numbering more than a hundred, of all ages and sizes..."[393]

Rideing described how Norris and his assistant Clarence Stephens chased the herd, Stephens killing one bull elk.

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391. Dating the article is possible because Rideing discussed a winter "two winters ago" and put Norris's exploration in October. That would be October of 1879.
392. William H. Rideing, "The Keeper of the Yellowstone.", Golden Days for Boys and Girls 3:417-418, June 10, 1882.
393. Ibid.

While Stephens dressed the elk, Norris pressed onward and killed three more elk. Then, after resting, Norris spied a flock of bighorn sheep, but in attempting to follow them he was blown and dazed by an October snow squall in the high country and nearly died trying to cross dangerous precipices covered with ice. Norris imagined

> "daylight breaking and discovering his own dead body lying at the foot of the mountain, a prey to vulture, wolf and grizzley [sic]."[394]

Norris managed to survive this ordeal, and the following day killed a grizzly nine and three-quarters feet long.[395]

Seguin

French traveler Augustin Seguin passed through Yellowstone in 1879, entering the Park from the north and noticing many beaver dams and lodges in the present Swan Lake Flat area.[396] Seguin was convinced that Yellowstone Park was wonderful game country, as evidenced by this, written in the Park's Madison Canyon:

> "At dusk we try in vain to hunt; it is impossible to see anything, despite the countless signs of wild animals, which pass by in all directions; these valleys are full of bears, buffalo, superb elk, an infinite variety of deer, wild sheep and antelope; and one also frequently meets the California lion and the panther."[397]

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394. Ibid. Note the reference to wolf.
395. Ibid. See also F.M. Wilcox, "Colonel Norris and the Grizzly of the Yellowstone.", American Field 24:269, September 19, 1885; and Norris, op. cit., 1880, pp.8-9.
396. Augustin Seguin, "Dix Jours...", Bulletin De La Societe De Geographie De Lyon 4:72, 1881, translated from the French by Christina MacIntosh.
397. Seguin, op. cit., 1881, p. 78.

Hassell

Richard B. Hassell, accompanied by three other men, entered Yellowstone Park from the west in 1879, and traveled to Upper Geyser Basin, Mud Volcano, Yellowstone Lake, and the canyon before leaving by the west entrance.

Hassell saw and shot at his share of game. In the area of present West Yellowstone, he found "one of the earth's most beautiful valleys, forested like a park, with plenty of running water and full of game."[398] Hassell here chased a "great antlered" bull elk with no success, but his friend "Doc" was luckier in shooting two elk.[399]

In the same area, Hassell's party also "discovered an open part of the valley that was alive with antelope." He wrote:

> "We took our horses and had great sport chasing the graceful creatures. They would run up one canyon, cross over a hog-back and come down another canyon on to the same plain. We were often close upom their heels but had no camera. There must have been a thousand antelope in this herd."[400]

On the return trip from Lower Geyser Basin to west entrance, Hassell's party had no shortage of food:

> "We hunted and fished along the trail and lived on grouse, fool hens, ducks, elk, venison, and trout."[401]

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398. Richard Burton Hassell, "A Trip Into the Yellowstone...", typescript, 1928, YNP Research Library, p. 4.
399. Hassell, op. cit., pp. 5-6.
400. Ibid.
401. Hassell, op. cit., p. 9.

Shields

George Oliver Shields (1846-1925) was a well known hunter, writer, and conservationist. In an 1888 account, he discussed a party of three men who entered the Park in the fall of 1879 to do hunting and sightseeing.

Sheilds did not name the men nor did he tell much about their route. But he did discuss a herd of thirty-seven elk that they saw somewhere in the northern part of the Park. And Shields decried the slaughter of elk that was continuing in areas around the Park.[402]

Geikie and Drummond

Geologist Archibald Geikie passed through Yellowstone Park this year accompanied by the Rev. Henry Drummond. They entered from the north, traveled to Mammoth, Tower, the canyon, Mary Mountain, Firehole River, Old Faithful, and out via the Madison River.

Along the Firehole River enroute to Old Faithful, Geikie heard wolves and saw other animals:

> "Here and there...we noticed footprints of bears, and some of the trees had their bark plentifully scratched at a height of three or four feet from the ground, where, as Jack [Bean, our guide] said, 'the bears had been sharpening their claws.' Deer of different kinds were not uncommon, and we shot enough to supply our diminishing larder. Now and then we came upon a skunk or

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402. G.O. Shields, "Elk Hunting in the Rocky Mountains", Harper's 77:257-258, November, 1888.

badger, and at night we could hear the mingled bark and howl of the wolves."[403]

Henry Drummond mentioned all kinds of game not mentioned by Geikie, even though the two were on the same trip. On September 3, Drummond found killed "deer hanging between willows" at Yankee Jim's place north of the Park and "buffalo robes" as well. Heading south from Yankee Jim's, Drummond passed a wagon with a "magnificent head of [an] elk" in it.[404]

On September 5, Drummond noted the remnants of the massive Park slaughter in the "elk heads and horns of deer and buffalo scattered everywhere" between Tower and Mammoth.[405]

Strangely, Drummond's party reported smelling a skunk on Mount Washburn on September 6, and they shot an elk between Washburn and the canyon.[406]

After seeing a bear in Lower Geyser Basin, Drummond's party moved on to Madison Canyon and the area around present West Yellowstone. In Madison Canyon there were "abundant sign [of antelope] everywhere." They shot four doe antelope, saw a herd of six more, and then saw a larger antelope herd "two hundred yards away."[407] Finally, Drummond's party, when

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403. Archibald Geikie, Geological Sketches at Home and Abroad, 1882, pp. 227-228.
404. Drummond in George Adam Smith, The Life of Henry Drummond, 1901, pp. 170-171.
405. Drummond in Smith, op. cit., p. 173.
406. Drummond in Smith, op. cit., pp. 173-174.
407. Drummond in Smith, op. cit., pp. 175, 184. Here Drummond's party discussed the habits of antelope. As we have seen, numerous early parties saw many antelope in the Park's Madison Canyon and in the area just west of the Park. Drummond's discussion of the animal follows: "The antelope is a prairie animal. Witness in the

west of present West Yellowstone, saw "abundant game, antelope everywhere" and a huge beaver dam near Henry's Lake.[408]

Blackburn

Charles F. Blackburn spent nearly two years prospecting "in the country lying about the headwaters of the Yellowstone and the other great rivers that have their sources in the Wind River Mountains."[409] The dates are uncertain, but he probably began in the region in 1877, and his article was published July 5, 1879. In a section entitled "Zoology", Blackburn stated:

> "Elk and mountain sheep are very plentiful through all the ranges of the Yellowstone

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first place its splendid speed. It is the fleetest of all animals, and to see a herd of six or eight dashing along the prairie is a sight to keep the keenest sportsman from touching his trigger. Powers of speed like the antelope's would be useless in Switzerland. Nevertheless, they do inhabit some districts which are essentially timber lands, but they make their home in the long grassy glades with which nearly every forest in the West is studded, or in the small rich prairies of rising ground, interspersed among the woods. For another thing, their fur is altogether inappropriate to forest life. If you put your fingers into it and pull gently you can pull the whole hair out by handfuls. A forest animal requires a fur which is well rooted in the skin to resist the rough friction of the trees, brush, and especially the sharp prongs and spines of fallen timber.
Tenacity of Life.--Jack's first shot entered at the breast, and ploughed clean through the body, coming out within an inch of the tail. The animal, however, bounded off as if nothing unusual had happened; ran down hill at full speed along with its companions for one hundred and fifty yards, and then dropped stone dead. Another, which was shot through both legs, hobbled along a considerable distance like a kangaroo, using the hind legs and the breast, until I shot her dead through the neck with my revolver. The effect of the cry, 'Hoo, hoo,' in making

> country, being generally found near the snow in the summer, where the grass is new and tender. The mountain goat (Aplocerus montanus) was not observed in any of the ranges, but has been reported by Indians to exist in the mountains farther north. Only two specimens of the moose were seen. Deer are very plentiful, antelope being generally found around the foothills and on the plains in large herds, also in the National Park...Bear are very abundant in this region. [He gives examples in Big Horn and Absaroka Ranges.][409]

About the greater Yellowstone ecosystem in general, Blackburn stated:

> "The mountain lion, wolf, coyote, lynx, and a great variety of the minor carnivorous genera inhabit this region."[410]

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them turn round even when scared. On the plains they feed with buffalo in countless herds. Their fur is almost useless, for the reason mentioned, but their skin is valuable for gloves, gauntlets, etc. The bucks are the most difficult to stalk. They always manage to get into a place in the herd where no stalk is possible." About the antelope he saw in the Madison Canyon, Drummond stated: "Sign of antelope in timber is unique." Pickett had stated the same two years earlier.

408. Drummond in Smith, op. cit., p. 186.
409. Charles F. Blackburn, "The Wilderness at the Head of the Missouri, Columbia, and Colorado Rivers.", Scientific American Supplement 8:2904, July 5, 1879.
410. Blackburn, op. cit., p. 2904.

Mitchell

Dr. S. Weir Mitchell, traveling with a military party headed by a Major Gregg and consisting of twenty-five troopers and the guides Billy Jump, Jack Baronett, and George Houston, entered Yellowstone Park from the north. They trekked east to Tower, climbed Mount Washburn, passed the falls and canyon, and visited Mud Volcano. Crossing Mary Mountain, the party went to Old Faithful, and then returned via the same route to the canyon. They then proceeded to Yellowstone Lake, forded the river, and crossed to Pelican Creek (it is apparent that Baronett and the other guides were taking them through P.W. Norris's "wild eastern" part of the Park where the hunting was better). After camping on upper Pelican Creek ("where...the shooting was said to be good"), the party crossed Mirror Plateau and Specimen Ridge and followed Soda Butte Creek out of the Park to the northeast.

The party killed two blacktail deer in Pelican Valley and four elk just north of there "so that we were well supplied."[411] The party also apparently killed one or more mountain sheep, because they were eating of it, and one or more antelope somewhere on the trail, because Mitchell spoke of a mule falling down a slope "laden with fresh antelope and deer meat."[412]

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411. S. Weir Mitchell, "Through the Yellowstone Park to Fort Custer.", Lippincott's Magazine 26:30-31, July, 1880.
412. Mitchell, op. cit., pp. 31-32.

South of Specimen Ridge, Mitchell remarked upon the "scared doe and dappled fawn which fled through the coverts near us." And on Clark's Fork, the party saw a deer and a fawn and killed seven bears ("Hold up! That valley's full of bears.").[413]

Mitchell's large party appears to have seen little game in the Park. But the slaughter had taken its toll by 1879, and such parties were becoming used to not seeing as many animals along the main routes in Yellowstone. Indeed, note the several accounts that mentioned game not being seen along Park roads.[414] Those same accounts, however, generally stated that the Park still contained good game away from main routes and especially east of Yellowstone River.

Pickett and Cochran

Bear hunter W.D. Pickett was again in Yellowstone Park in 1879, traveling with Joseph M.V. Cochran. They trekked from the head of Gallatin River to Madison River to Old Faithful, then across to Lamar River and up Soda Butte Creek to Clark's Fork.

The men camped on the head of Gallatin River "in order to secure a supply of elk meat." This indicates an expectation of elk being there, and apparently the two were success-

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413. Mitchell, op. cit., pp. 32, 37-38.
414. Examples are the 1881 comments by F. Francis on tourists scaring away game, G.B. Grinnell's similar 1875 comments on game (note 327), and W.D. Pickett's 1880 statement about game along Park roads.

ful for Pickett declared that he "took pleasure in visiting" the Park without worrying about Nez Perce Indians, as he had in 1877: "now...there was plenty of food, no known dangers, and...pleasant companions."[415] This comment about plenty of food meant, apparently, abundance of game.

Pickett killed a bear at Trout Lake and another at Lake Abundance. At Elk Lake on the head of Clark's Fork, the men found "game here...very abundant especially elk in the pine timber country north of this famous salt lick." And on east fork of Boulder River on September 28, "elk were fairly abundant, but deer were not seen."[416]

An account about, and partially by, Pickett's companion Joseph Cochran confirmed that game was in no shortage on the trip: "Colonel Pickett was out for bear trophies on this hunt and they killed only enough other game for camp use... Game was plentiful and there was no trouble to find elk, deer and mountain sheep. They only saw three buffalo on the entire trip. Colonel Pickett killed one of them."[417]

Texas Jack

"Texas Jack" Omohondro is known to have visited Yellowstone Park in 1874, with the Earl of Dunraven, in 1877, and apparently in 1879. Although the date of his bighorn sheep

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415. Pickett in G.B. Grinnell, ed., Hunting at High Altitudes,.., 1913, pp. 139-140.
416. Pickett in Grinnell, op. cit., p. 143.
417. "Billings Pioneer, Joseph Cochran...", Billings Gazette, November 29, 1931.

hunt near Bottler's ranch is uncertain, his account of it was published in late November of 1879.

On this hunt, as reported by Forest and Stream magazine, Texas Jack chased a herd of bighorn sheep "eighteen miles" from "Bartler's [sic] Ranche on the Yellow Stone."[418] Thus these animals lived within the greater Yellowstone ecosystem.

1880---

Superintendent P.W. Norris, Harry Yount, W.D. Pickett, E.A. Maynard, Wilbur Sanders, and Carrie and Robert Strahorn all have left us information on Yellowstone Park animals from this year.

Norris

P.W. Norris's information as superintendent is arguably the most important of the 1880 accounts. That year he hired Harry Yount to serve as Yellowstone's first gamekeeper, an attempt to protect the Park's animals in what has been called the first game management plan in the nation on any federal land. Norris built a cabin for Mr. Yount on Soda Butte Creek because that area was "a favorite winter haunt of elk and bison."[419]

During the winter of 1879-80, Norris hunted in the Park for food and actually collected wolf, wolverine, and other

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418. Texas Jack [Omohondro], "Hunting the Big Horn.", Forest and Stream 13:852, November 27, 1879.
419. P.W. Norris, Annual Report...1880, 1881, p. 6.

animal skins. Encountering what was apparently an ample game supply, he wrote:

> "Elk, deer, and other game being driven by storms into the sheltered glens and [Mammoth] valley, we were enabled to secure an abundant winter's supply of fresh meat, and also fine hides of the bear, wolf, and wolverine. Although severe and dangerous, hunting in the Park was excellent sport..."[420]

Norris noted that Natural Bridge on Yellowstone Lake had been used as a crossing by many game animals and that he had killed a grizzly bear there.[421] He also praised the Gallatin Range west of Mammoth Hot Springs as a laudable game area:

> "It [the Gallatin Range] is also an excellent as well as an accessible region for game, the presence of big-horn upon its crests, grizzlies in its deep timber-bordered gulches, countless water-fowl in the emerald lakes of its terraced foothills, elk, deer, antelope, and occasionally bison, in its charming parks..."[422]

Norris's general statement about Park game was this one: "there are now in the Park abundance of bison, moose, elk, deer, antelope, and bighorn sheep."[423]

Also in his 1880 report, Norris, for the first time by anyone, offered a rundown on the status of individual animals in Yellowstone Park. He acknowledged great numbers of elk and the fact that wolves had been greatly reduced in numbers because of poisoned elk carcasses and the sale value of their hides. Because of its importance to the history of mammals in Yellowstone Park, the entire relevant

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420. P.W. Norris, Annual Report...1880, 1881, p. 6.
421. Norris, op. cit., 1881, p. 23.
422. Norris, op. cit., 1881, p. 9.
423. Norris, op. cit., 1881, p. 26.

text of Norris's 1880 report is reproduced here.

"Animals of the Park."

"Bison or Mountain Buffalo.

Bison, so called, in the Park, are somewhat smaller, of lighter color, less curly, and with horns smaller and less spreading than those of the bison that formerly inhabited the great parks of Colorado. They have also smaller shoulder humps, and larger, darker brisket wattles. They differ materially from the buffalo of the Great Plains, being more hardy, fleet, and intelligent; their hides also are more valuable for robes, as they are darker, finer, and more curly; and these animals are, in all probability, a cross between the two varieties just mentioned.

"There are about three distinct or separate herds of bison within or adjacent to the Park.

"The first, numbering about two hundred, pasture in summer in the valleys of the Crevice, Hellroaring, and Slough Creeks, and the mountain spurs between them, descending, with the increasing snows, to winter in the deep, sheltered grassy valleys of the East Fork of the Yellowstone and Soda Butte, and as the snows melt, accompanied by their young, returning to their old haunts.

"The second, numbering over one hundred, summer in the elevated and abruptly broken, little-known section of the Park, extending from the Hoodoo region to the Grand Cañon, and from Amethyst Mountain to Pelican Creek, near the foot of Yellowstone Lake, and winter occasionally upon the East Fork of the Yellowstone and on Pelican Creek. Their other winter haunts are unknown.

"The third herd, numbering about three hundred, roams in scattering bands. This season they were discovered upon the Madison Plateau and Little Madison River [probably Little Firehole River]. Their winter haunts are unknown, though it is probable they are on the Pacific side of the Continental Divide, and, if so, they are not permanent occupants of the Park, and are therefore likely to be slaughtered by advancing settlers.

"These animals, but little smaller than our common cattle, and with flesh quite as palatable, are easily domesticated. I have always carefully protected them from wanton slaughter during the deep snows of winter and when with their young in the spring, at which times alone they require such protection, being at other seasons the most keen of scent and difficult of approach of all mountain animals."

"Moose.

Three of these animals were seen during the past sea-

son near the Lake of the Woods, and a few others in the various Fire Hole Basins. Their main haunts are in the densely timbered, swampy region around the various fingers and the thumb of the Yellowstone Lake. They also frequent the boggy inlets of Shoshone, Lewis, and Heart Lakes and the Snake River regions to the Tetons without the Park, but nowhere are they numerous. The boggy and inaccessible nature of their haunts renders these large and majestic animals difficult of capture, and on account of its scarcity their flesh is the more highly prized. Any attempt at their domestication must begin with inclosing [sic] them in some secure place."

"Elk.

This animal is one of the largest, most beautiful, interesting, and valuable of those that inhabit this continent, and, so far as I have any knowledge, in no part of the United States were they ever found in greater size, symmetry of form, stateliness of antlers, or in greater numbers than in the great National Park at the period of its discovery in 1870.

"As stated in my first report [1872], at least 7,000 of these valuable animals were slaughtered between 1875 and 1877 for their hides, or perhaps for their carcasses [use in killing predators], which were stripped and poisoned for bear, wolf, or wolverine bait. Since the first appropriation, however, for protection of the Park in 1878, notwithstanding the numbers since killed by our laborers, as well as by tourists and raiding Indians, they have not seriously diminished, and but for the unprecedented severity of the past winter would have greatly increased; their increase hereafter, however, is assured if properly protected. They are inoffensive and harmless, and frequent all portions of the Park, often high up amid the mountain snows in summer, and in the most sheltered valleys in winter, in herds of a hundred or more. While the horns of these animals in the Park are, as elsewhere, unusually long, spreading, and symmetrically branched, there are many and remarkable exceptions. Some have lobed branches extending downwards, caribou-like, in front of the face; the horns of others are short, flat, and lobed, similar to those of the moose, while still others have horns both lobed and branched.

"A specimen pair of horns, which I brought from the Park in 1878, is doubtless the heaviest ever seen in Washington. They are not only lobed and branched, but otherwise so notably peculiar in form as to lead me to inquire 1) are the animals to which this characteristic belongs a cross between the moose and the elk, though there is nothing else in the appearance of the animal to indicate this?

2) is this phenomenon only a freak of nature? or 3) are the animals producing these wide horns really a subspecies of the elk? The careful consideration of naturalists is invited to this subject."

"White-Tailed Deer.

These animals do not differ essentially from those of the Atlantic States in size, color, horns, or habits. They usually frequent the densely timbered valleys and foothills, [and] are more shy, sharp-eyed, and fleet, and less migratory than the black-tailed variety."

"Black-Tailed Deer.

This is essentially a mountain animal, choosing the broken foot-hills or terraced slopes for pasturage and rest, and is difficult of approach excepting from above. It is frequently called mule-deer by tourists, and is so named in museums, though incorrectly [not so], I think, since, while there are no two varieties of the deer family, in my opinion, more dissimilar, none of the latter inhabit the Park."

"Prong-Horned Antelope.

The National Park is, as a rule, too moist and thickly timbered to be a favorite resort of antelope, but they were once numerous in the open valleys of the Upper Gardiner River[,] the open grassy region thence to the Forks of the Yellowstone, and up its East Fork to the Soda Butte, as well as on the main stream between the Great Falls, around the Sulphur Mountain westward to Mary's Lake, and in the Madison Valley. No other animal has suffered such severe slaughter, not alone within the Park, but upon the great plains, below the Gate of the Mountains [present Livingston, Montana], and upon the Yellowstone, where in their migrations they were wont to winter."

"Big-Horn Sheep.

Although the web-footed, snow-loving white sheep, or Rocky Mountain goats are numerous in many of the adjacent snowy regions, I have never seen one within the Park, but the true big-horn sheep are abundant on all the mountain crests, as well as on their craggy spurs and foot-hills throughout the Park, which they never leave. Their habits and habitats tend to their preservation, which can, however, be better assured by a little effort and a small outlay."

"Bears.

The mountain men of this region believe that in the Park there are at least six varieties of the bear tribe, besides the long-tailed mud bear, or wolverine."

"Grizzly bear.---The hog-back, or real California grizzly, with a mane upon the shoulders [hump], is one of the largest, most powerful, ferocious, and dangerous animals upon the continent, but is less numerous than some other varieties within the Park. Specimens often occur of incredible size. At times one is met with which, when erect on its haunches --the customary position when looking for an enemy--will overtop in height a man on horseback. With one blow of its fearful fore paw and claws this animal is able to disembowel and kill any other animal of this region. One which I shot near Beaver Lake in the fall of 1879, after he had killed a valuable horse, was certainly heavier than any one of the more than fifty horses in our band. From his carcass thirty-five gallons of oil were obtained, and his skin, now in Washington, after being trimmed and dressed is still 8 feet 6 inches long (exclusive of the tail) and 6 feet 6 inches wide. Though but few larger than this have been taken, many but little inferior in size have been killed by different members of our parties. They seldom fail to cover with decaying logs, rubbish, or stones an elk or other animal they may kill, remaining near the body or returning nightly to it, as though a tempting dessert to their meal of grasshoppers, roots, and berries; for, human-like, they enjoy a mixed diet, though not so dainty as man in regard to its kind of quality. Although, save in defense of these carcasses or of its young, this bear seldom provokes attack upon man, it invariably resists one, and if wounded usually charges furiously, either to its own death or that of its foe, and not infrequently both. Indeed, it may truly be said to be the mountaineer's most dreaded foe."

"Silver-tipped bear.---This animal is nearly destitute of a mane, and is somewhat smaller, less powerful and ferocious than the true grizzly; moreover its coat of hair is much longer than the latter's and is tipped at the ends with a glistening, silvery white; hence the name."

"Cinnamon bear.---This is so called from its reddish-brown color. It is somewhat longer and more slender than the smut-faced bear, and nearly his equal in audacious ferocity."

"Smut-faced bear.---This is a still smaller animal, with a brockled, impish-looking face--a true indicator of the character of the beast. It is the most meddlesome and pugnacious of the bear family."

"Black bear.--This animal in the Park only differs from those of the East in his greater size and the greater length and fineness of his fur, and is as elsewhere, either wild or domesticated, uniformly a less ferocious animal than any of the above-described species."

" 'Silk bear.'---This provincialism is the only designation I have heard applied to this smallest and rarest variety of the bear family. The few of which I have personal knowledge were found near the upper limit of timber, engaged in biting, in order to more easily break off for food, the cone-laden boughs of the pinon pines [whitebark pines]. They were all very fat, and had a coat of glistening black fur, fine and of extra length, rendering them more valuable than any of the [other] species of the bear family."

"All of these short-tailed varieties of bear hibernate in hollow trees, in caves, or more frequently in rude wicke-ups [sic], amid the dense evergreen declivities of the mountains, to which they retire early in winter, and remain until the accumulated snows thaw in spring, when they scramble out, often very lean, and always tender-footed, but soon recruiting strength by devouring roots and mountain moles at the nearest slopes clear of snow. Few mountain scenes are more ludicrously interesting than that of half a dozen bears, of assorted colors and sizes, engaged in the sport of catching the burrowing mole just below some melting snow-drift upon the steep and slippery mountain side. In ignorance of their mode of making details for duty, I can only say that it seems to be the especial task of one of each party to pull up the sage-brush, thereby unearthing the moles; the rest of them, in their efforts to catch and eat them, often falling pell-mell over each other, like Chippewa Indians engaged in a game of Lacrosse. A variation of this sport is occasionally caused by a shower of explosive bullets from the repeating rifle of a grim mountaineer, perched unseen upon some overlooking snow-field, cliff, or tree-top."

"Wolverine, or long-tailed mud bear.---This animal, although considered a variety of the bear family, does not hibernate. It has a long tail, differing in this and other marked characteristics from other varieties [of bears]; in fact this audacious trap and camp plunderer seems in size and form, as well as in color, a strange blending of the black bear, the badger, and the coyote. In character, also, it combines the rapacious greed and pugnacity of all these animals with the Asiatic jackal's craving for carrion. His chosen haunts are the most densely timbered foot-hills of the mountains, where he is ever ready to steal what the bear, wolf, or lion [emphasis mine, not Norris's] slaughters. His extremely heavy fur, long outer hair, and thick, firm, and badger-like skin seemingly much too large for him, allow him to squirm his body out of the jaws of nearly every other animal; and to these peculiar advantages for defense are added teeth and claws unrivaled for attack. Unlike other carnivora, their teeth do not puncture but lacerate, and, chisel-like in their powerful jaws, smoothly sever skin, bone, and tendon, inflicting such fearful wounds that most animals prefer relinquishing their game to hazarding combat."

"Mountain Lion or Cougar.

These animals are much larger, coarser-haired, and more ferocious than the animal known as the eastern panther, and during my first explorations in the Park [1875] were exceedingly numerous and troublesome, less, however, from actual attacks upon our men or animals [horses] than by their sudden terribly sharp and prolonged screams, which reverberated in frightful intensity around our evening camp-fires in the deep and crag-hidden mountain defiles. This tantalizing tendency to start false Indian alarms and stampede the animals has led to persistent efforts of the mountaineers, with rifle, trap, and poison, to exterminate them, and so successful have their efforts proved that now the comparatively few survivors usually content themselves with the slaughter of deer, antelope, and perhaps elk, at a respectful distance from camp."

"Wolves.

The large, ferocious gray or buffalo wolf, the sneaking, snarling coyote, and a species apparently between the two, of a dark-brown or black color, were once exceedingly numerous in all portions of the Park, but the value of their hides and their easy slaughter with strychnine-poisoned carcasses of animals have nearly led to their extermination."

"Foxes.

Foxes are numerous and of various colors, the red, grey, black and the cross varieties (most valuable of all) predominating in the order named."

"Skunk.

In no region have I found these animals more numerous, audacious, or odiferous than in the Park, and though I have no proof of their tendency to rabies, as is the case with those of Kansas and the Indian Territory [Oklahoma], I have an instinctive dread of them. Hundreds of them were slaughtered before we could sleep peacefully at the Mammoth Hot Springs, and they are such an intolerable nuisance around old camping-places that tourists often slaughter several of them, and thoroughly permeate the atmosphere with their abominable stench, before [tourists] are able to secure repose."

"Badger.

These animals are similar, if not, indeed, identical, with those of the East in appearance and habits, and are numerous in most of the valleys and terraces of the Park, but are less abundant than is indicated by their countless burrows, which are annoyingly evident to horsemen long after their abandonment."

("Rock Dog" and Porcupine omitted)

"Rabbits.

The jack-rabbit of the sage-brush plains is only found in the limited areas of that pestiferous shrub, but the large, web-footed, slit-lipped hare, gray in summer and white in winter, is simply numberless in the tangled thickets throughout the Park. Another variety, similar to the cotton-tail, or common rabbit of the East, is also but only occasionally seen; while the plaintive notes of a smaller variety, called the cony, are often heard amid the debris of snow-slides or avalanches around the elevated timbered foothills of the mountains."

(Rats, Mice, Burrowing Moles, Squirrels, and Chipmunks omitted)

"Beaver.

Few regions, even less elevated, are so favorable as a haunt for the sagacious beaver or are so fully occupied by it as the National Park, which is one of the largest, as well as one of the most densely timbered regions of North America. Well supplied with rivulets invariably bordered with willows, and having numerous creeks of cold water, it also has countless geyser and other hot-spring outlets with a flow of tepid water as well as a surface elevation alike remarkably uniform. These outlets, relatively clear of ice, afford unusual advantages for burrow habitations in their banks, or for the construction in their sloughs, of the ordinary two-story brush-and-turf houses of these animals; the sloughs and streams being used as canals for floating their winter food supplies of brush and small timber, dams being far fewer and smaller here than are usually necessary elsewhere. Unmolested by man, who is ever their most dangerous enemy, the conditions here mentioned are so favorable to their safety that soon they would construct dams upon so many of the cold-water streams as literally to flood the narrow valleys, terraced slopes, and passes, and thus render the Park uninhabitable for men as well as for many of the animals now within its confines. In consideration of this I have not seriously interfered with the trappers who have annually taken from the Park hundreds, if not thousands, of the valuable skins of these animals, without payment for the same---a custom, however, which should not be permitted to continue, since some revenue should be derived by the government from these furs. A law should therefore be enacted or some regulation prescribed with a view to this end; but without a small police force it would be difficult to enforce any restriction in this respect."

"Otter, Mink, Muskrat, etc.

Neither otter, mink, nor muskrat are numerous in the Park; nor are marten, sable, or ermine plentiful. The skins, however, of these animals, as well as those of the beaver and other animals that are obtained, are generally among the most valuable of their kinds, and, owing to the isolation and rigorous climate of the Park, are never out of season."

(End of Norris's 1880 report on animals)

Yount

Harry Yount ("Rocky Mountain Harry") was appointed the Park's first gamekeeper in 1880. Because of that appointment, he has been called the first national park "ranger", even though the National Park Service was not created for another thirty-six years. The relevant portions of Yount's 1880 report are included here:

> "November 25, 1880..."
> "My previous experience in the Park proved materially beneficial, as I knew the haunts and habits of the various animals and how to protect them from wanton slaughter by the numerous tourists...Returning to Mammoth Hot Springs I outfitted and proceeded, via the Great Falls, to the foot and thumb of the Yellowstone Lake, and thence in a nearly direct route past Lake Riddle and a flat, open country, to Heart Lake at the foot of Mount Sheridan, some twenty-five miles from the Shoshone trail at the thumb of the Yellowstone Lake. From Heart Lake I crossed over to Barlow Valley [near mouth of present Heart River] at the foot of the Red Mountain range near the southern border of the Park, finding deer and elk in abundance, and some moose..."
>
> "Returning via the Yellowstone Lake and Falls to the Mammoth Hot Springs, I proceeded with men and animals to construct a cabin for my winter quarters at a good spring on the terrace commanding a fine view of both the East Fork and the Soda Butte Valleys. Here I propose wintering so as to protect the game, especially elk and bison, in their sheltered chosen winter haunts, from the Clark's Fork and other miners."
>
> "I have, during the season, found elk, deer, and bear in all portions of the Park, antelope in most of the open regions, and moose in the willow beaver-swamps of the southern portion..."
>
> "Much of the game in the Park occasionally ranges over some of the adjacent regions, endangering their slaughter in the constantly advancing border settlements."[424]

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424. Harry Yount in P.W. Norris, Annual Report...1880, 1881, p. 50.

Pickett

W.D. Pickett returned to Yellowstone Park in 1880, traveling with George Herendeen and Isaac Lionberger. He spent about a month sailing a boat on Yellowstone Lake with area guide Billy Hofer, and then traveled east over Jones (or a nearby) Pass to descend the Shoshone River. Pickett entered the Park from the west by ascending Thirsty Fork from Henry's Fork and then descending to Old Faithful.

Pickett said he killed eight bears in the greater Yellowstone ecosystem with at least two elk and one deer, and he saw much other game. At Turbid Lake, Pickett shot a sow grizzly. Between the lake and Jones Pass, an incident occurred that lent itself to a statement by Pickett that wolves and foxes were a normal part of the scene in Yellowstone Park:

> "As we were out of meat, I had killed a fat black-tail, brought it near the trail we should probably follow, and hung it up in a tree out of reach of wolves and foxes."[425]

Returning to the carcass, Pickett found a wolverine up in the tree eating the deer, and he noted that "this was [only] the third time during my travels in the mountains that I had seen this animal in life."[426]

Pickett and Herendeen continued east and crossed a pass near Jones Pass, camping September 30 on a tributary

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425. Pickett in G.B. Grinnell, Hunting at High Altitudes ..., 1913, p. 160.

426. Ibid.

of Shoshone River. Pickett noted, "The reason we made camp...was that the woods appeared to be full of elk, whistling."[427]

The men remained on Shoshone River for six weeks, until November 14. "Game of all kinds," said Pickett, "especially elk and mountain trout, were found in great abundance."[428] Pickett described his killing of two bears and two elk, and at one place the men found so many shed elk antlers that they named the stream "Elk Horn Creek."[429]

Near present Wapiti, Wyoming (thirty-two miles east of the Park boundary), the men had their horses stampeded by a band of one hundred fifty elk.[430]

Despite all of those animals seen or killed, Pickett made this statement when near Yellowstone Lake:

> "Game was difficult to obtain at that season along Park roads, August-September because the flies were such a pest as to keep game to the depths of the forest during the daylight hours."[431]

This again illustrates the SYSTASYD phenomenon. Pickett saw game sometimes and sometimes he did not.

Maynard

E.A. Maynard again visited the Park this year, but his reminiscences are brief and indicate only that he

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427. Pickett in Grinnell, op. cit., 1913, pp. 161-162.
428. Col. W.D. Pickett, "Sailing on the Yellowstone Lake", Forest and Stream 70:368, March 7, 1908.
429. Pickett in Grinnell, op. cit., 1913, pp. 163, 167-168.
430. Pickett in Grinnell, op. cit., 1913, p. 178. Pickett, op. cit., 1908, p. 368.
431. Pickett, op. cit., 1908, p. 370.

killed a deer at Castle Geyser in the Old Faithful area.[432]

Sanders

Wilbur E. Sanders, so noteworthy in the early history of Montana Territory, passed through Yellowstone Park in 1880 with two other men. They entered from the west along Madison River, visited Old Faithful, backtracked over Mary Mountain to Yellowstone Lake, and trekked down Yellowstone River to Mammoth Hot Springs. Sanders' journal unaccountably ended after he reached Yellowstone Lake.

On August 1, when near Henry's Lake, Sanders "saw from 25 to 50 head of Antelope," and they shot one on August 3, between Henry's Lake and Riverside. When almost to Old Faithful, the party shot a deer. And the final memtion of animals by Sanders was on August 11 at Yellowstone Lake where one of the party killed a wolverine.[433]

Carrie and Robert Strahorn

Carrie and Robert Strahorn, who claimed to be the first commercial travelers into Yellowstone Park, visited it in 1880 in a wagon driven by hired-guide George Marshall. They entered from the west in October and traveled around the entire Park. Both of them wrote accounts of the trip.

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432. Howard, op. cit., 1933, p. 70.
433. Wilbur E. Sanders, "Trip to Yellowstone Nat. Park", handwritten diary, 1880, Montana Historical Society, entries for August 1, 3, 4, 11, 1880.

Robert was a newspaper publisher at Omaha, Nebraska, who had also written two other books with sections on Yellowstone.

Robert noted deer at Sentinel Meadow, while Carrie saw fresh bear tracks at Old Faithful "as large as a man's hat." She also mentioned whistling (bugling) elk at Gibbon Meadows.[434]

Robert and Carrie both cited signs at Yellowstone Lake as evidence of animals. Robert declared that the "trails of wild animals betrayed their presence in large numbers." Carrie stated that "tracks of wild animals were too many for comfort."[435] Additionally, Robert noted that beavers were in evidence at the lake and that of animals in the Park there were "for the rifle, elk, antelope, deer, bighorn or mountain sheep, bears and occasionally a band of mountain buffalo."[436]

1881---

Accounts of animals in the Park have been left to us from this year by P.W. Norris, Harry Yount, L.P. Brockett, George Marshall, H.B. Leckler, W.E. Sanders, John Sherman, Francis Francis, and Lt. James Gregory.

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434. Robert E. Strahorn, The Enchanted Land..., 1881, p. 8. Carrie Adell Strahorn, Fifteen Thousand Miles by Stage, 1915, pp. 268, 270.
435. R. Strahorn, The Enchanted Land..., 1881, p. 25. C. Strahorn, Fifteen Thousand Miles by Stage, 1915, p. 277.
436. R. Strahorn, The Enchanted Land..., 1881, p. 32.

Norris

Superintendent P.W. Norris mentioned game briefly and only once in his 1881 report, but it tells us that animals were still present in the Park:

> "Here in the [Blacktail Deer Creek valley], beneath cloudless skies, the stately bighorn, the ferocious grizzly, and the royal eagle watched us from the cliffs, while grouse, deer, and elk were ever in sight..."[437]

A wolf's howl in Hayden Valley reported by Weaver to be in Norris's 1881 report could not be found.

Yount

Gamekeeper Harry Yount had found protecting animals all by himself to be a difficult task. His short report, included here in its entirety, not only gave a summary of the game scene in the Park, but also stressed the need for a police force of some kind:

> "September 30, 1881..."
> "I there [in my cabin at mouth of Soda Butte Creek] remained...often alone, during the entire winter...The snowfall was unusually great, and remained very deep high in the mountains, but the winds and hot vapors from the Fire Hole Basin at the foot of Mount Norris [a thermal area, now gone, but also mentioned by A. Bart Henderson] kept the snow pretty clear along its western slopes, where there were abundance of mountain sheep, and some elk, all winter. Elk to the number of about 400 wintered in small bands in the valleys of the East Fork and Soda Butte, where the snow was about knee-deep. The Slough Creek and Hellroaring bands of bison did not venture near the cabin until February, nor did those of Amethyst Mountain at all; and the most of the deer and antelope descended into the lower Yellowstone Valley early in the winter. The most of the Clarke's Fork miners seemed disposed to kill

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437. P.W..Norris, Fifth Annual Report..., 1881, p. 6.

> only what game they needed for food, and preserve the rest from slaughter for their hides only...This allowed me to visit many other portions of the park...I found that very few of the deer or antelope wintered anywhere in the park; that a small band of bison wintered on Alum Creek, and another on the South Fork of the Madison [west of the Park]; that there were elk in nearly all of the warm valleys, and moose around the Shoshone and the fingers of the Yellowstone lakes; big-horn sheep on all the mountain slopes; wolverine, marten, and various kinds of foxes, who do not leave the park in winter, nor do the bears of all kinds, as they hibernate. During the remainder of the season I have been active in the various duties of killing what game was necessary for our various parties of laborers, and protecting the rest from wanton slaughter by some of the tourists and a band of Bannock Indians on the North Madison..."[438]

The rest of Yount's report contained his resignation and his reasons therefor.

Marshall

George W. Marshall, his wife Sarah, and their four children spent the winter of 1880-81 at his hotel at Lower Geyser Basin, becoming, according to a local newspaper editor, "the first persons to spend the winter among the geysers" of Yellowstone Park.

In January, Marshall wrote a letter to his friend Robert Strahorn who had visited them several months earlier. Marshall mentioned animals near his establishment at the point where Nez Perce Creek joins Firehole River:

> "The bison, elk, and deer are all around in large bands, and I have no doubt this is the regular wintering ground for all the game of the mountain region for hundreds of miles around...You should be

438. Yount in Norris, Fifth Annual Report..., 1881, pp.62-63.

> here to hunt or fish with us. Seven elk, four antelope and one bear was [sic] the result of a day's hunt over on the Madison last week."[439]

In the spring of 1881, while George Marshall was away, Sarah Marshall discovered two bears attempting to break into the storehouse behind the hotel. She followed one of them up the hill and shot it.[440]

Brockett

L.P. Brockett's large book Our Western Empire was published in 1882, probably based partly on 1881 information. Brockett's section on Yellowstone Park included the following comment about the "wild eastern portion" of the Park discussed earlier by Norris and Strong. Brockett's comment indicated a knowledge of wolves in the Park:

> "The elevated plateau enclosed between this mountain range [Absarokas] and the Yellowstone Lake and river affords a fine pasture-ground for the elk, black buffalo, deer, bighorns, and moose, which on the other [western] side of the Park, are so ruthlessly slaughtered by wanton tourists...and...are left to be the prey of wolves, panthers, and coyotes."[441]

Sanders

Wilbur E. Sanders of Montana Territory returned in

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439. Marshall in Robert E. Strahorn, The Enchanted Land..., 1881, p. 41.
440. Lee H. Whittlesey, "Marshall's Hotel in the National Park", Montana Magazine of Western History 30:45, Autumn, 1980. For an interesting postscript to this story, see note 451 under Mr. Leckler's account.
441. L.P. Brockett, Our Western Empire, 1881, p. 1231.

1881 to the Park after his 1880 trip. His only mention of animal indicators was on August 22 when he found fresh deer tracks in the Mount Washburn area.[442]

Sherman

U.S. Senator John Sherman visited the Park in 1881 with a party which included artist Albert Bierstadt, Chief Justice Strong, and Alfred Hoyt. They entered the Park from the west, traveling to Upper Geyser Basin, across Mary Mountain to Crater Hills and the canyon, over Mount Washburn, and down the Yellowstone River.

Sherman's general statement on game in the Park was as follows:

> "When we were there the park was truly a wilderness. Game was very abundant. Elk, deer, antelope and bear were plentiful, and we had no difficulty getting all the fresh meat we wanted."[443]

Sheridan and Gregory

Colonel Philip Sheridan's large military party passed through the Park this year entering from the northeast and exiting at the west. The general said nothing about animals in the Park, but his aide Lt. James Gregory mentioned elk northeast of the Park at Deep Lake: "Colonel Sheridan and party...report having seen late in the evening a band

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442. W.E. Sanders, "Journal of Wilbur Edgarton Sanders...", handwritten diary, 1881, Montana Historical Society, August 22, 1881.
443. John Sherman, John Sherman's Recollections..., II, 1895, p. 826.

of at least 150 elks...of these they killed seven..."[444]

Francis

Traveler Francis Francis entered the Park from the west this year and trekked to Old Faithful. Not much else is known of his route or his biography.

Francis mentioned "regiments of antelope" at Henry's Lake.[445] But his only other mention of animals came in this statement about how tourists scared them all away:

> "As a game country the Yellowstone Park is a mistake. You may kill a few antelope, an occasional elk or deer; it would not be utterly impossible to happen on a stray bear or bison; but to go there merely for game is to court certain disappointment. Besides which, hunting is restricted in the park. Beyond its boundaries good game countries are easy of access; within them summer tourists have scared away all the game. Nevertheless it is always possible to kill enough birds and antelope to vary the camp fare."[446]

While Francis gives us a good reason that some parties did not see game (tourists frightened animals away), his account stands in stark contrast to the many others included in this paper. Far too many other accounts tell us that there was game in the Park, even if Francis did not see it.

Leckler

Perhaps the best early account of game in Yellowstone

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444. Gregory in P.H. Sheridan, Report of Gen. P.H. Sheridan dated Sept. 20, 1881..., 1882, p. 17.
445. Francis Francis, "The Yellowstone Geysers.", Nineteenth Century 11:371, April, 1882.
446. Francis, op. cit., pp. 376-377.

Park is that of H. Banard Leckler, the leader of the "New York Geyser Party." From the east they reached Montana Territory and then traveled from Dillon to Henry's Lake and through the west entrance. From there they visited Old Faithful, crossed Mary Mountain to the canyon, traversed Mount Washburn to Mammoth Hot Springs, and descended the Yellowstone River to Bozeman.

Leckler's party contacted numerous important people in the Park, including superintendent Norris, gamekeeper Harry Yount, hotel keeper George Marshall, and the Bierstadt/Sherman party mentioned earlier. Some of Leckler's information on game came no doubt from those persons.

At Marshall's Hotel, the party decided to hunt for elk "which were said to be in the neighborhood."[447] That expectancy probably came from hotel keeper George Marshall. Having no luck, they traveled on.

In the Old Faithful area on September 9, Leckler's party saw the unusual---a fisher:

> "After entering the woods we did not speak for perhaps a mile, when an animal about the size of a wild cat, but as dark as a beaver, ran from almost beneath our feet like lightning, and disappeared in the distance. George [Graham our guide] whispered that it was a fisher, and that it was very seldom they were seen alive, as it was almost impossible to get anywhere near them without making sufficient noise to warn them of your approach. They are a carnivorous animal of the weasel order [sic], and grow from

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447. H. Banard Leckler, "A Camping Trip to the Yellowstone National Park", American Field 2:141, February 9, 1884.

> three to four feet in length, and have a very pretty skin, bearing a resemblance to that of an otter and about as valuable."[448]

In a chapter called "Capturing a Bull Elk", Leckler detailed how his party chased and shot a large bull elk in the Old Faithful area and then packed the meat and head with them.[449]

On September 10, the party again found a "fresh elk track", but did not follow it.[450]

After returning to Marshall's hotel,[451] the party moved

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448. Leckler, "A Camping Trip...", American Field 2:214, March 1, 1884.
449. Ibid.
450. Leckler, op. cit., p. 237, March 8, 1884.
451. At Marshall's hotel, the party met Harry Yount, the Park's official gamekeeper, whom Leckler described as "a German, some fifty-five years of age [who] is acquainted with every inch of the Park." Yount "seemed much subdued and in the dumps," said Leckler, who attributed it to having his heart broken by a woman. The woman, it turns out, may have been George Marshall's wife Sarah. Yount had fallen in love with the woman "as soon as he heard the story" of her having killed a bear single-handedly. Leckler stated: "Mr. Marshall and family remained in the Park last Winter [1880-81], and toward Spring Mr. Marshall was compelled to go to Virginia City for a few days, and to leave the ladies and children alone. The morning after his departure, during breakfast, a fearful growl was heard coming from the direction of the storehouse--a dirt house in the side of the hill a hundred yards back of the hotel, in which was kept their stock of provisions for fear the hotel would burn down. Looking through the window they saw an immense bear on the top of the storehouse, tearing up the snow and dirt in a terrible rage. The young lady quickly grabbed Mr. Marshall's rifle, and, stepping outside the door, took deliberate aim and fired. The bear tumbled in a heap, and, when about to rise, received another ball, which was all he wanted, and he beat a hasty retreat up the hill. When Mr. Marshall returned, the bear was found dead within five hundred yards of the house." Leckler, "A Camping Trip...", American Field 2:117, February 2, 1884.

According to George Marshall's biographical statement

to the head of Nez Perce Creek, and there a bear wandered into their camp, frightening their horses. Leckler declared that the area was a favorite one for bears:

> "There were several small swamps about us, which, with the rocky ridge nearby, made the little valley we were in a favorite haunt for bears, and George said that, although many had been killed, the place was still full of them."[452]

On September 14, the party began the arduous trek up the hill that would later be called Devil's Stairway to Mary Lake:

> "The woods were very dense...and seemed to cover miles of country to the southward. They looked to be full of game--a few tracks were seen in the road; and, if we had been in want of meat, we should have given them a trial. It was hard to resist the temptation and go on, but George promised that we should

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(at YNP Research Library), which also tells this bear story, the woman was Sarah Marshall herself. Only the word ladies in the first sentence above allows for the possibility that the woman was someone other than Sarah. But in neither his letter to Robert Strahorn (Strahorn, The Enchanted Land..., 1881, p. 41) nor in his biographical statement does George Marshall mention that any woman other than Sarah was present. In his letter, Marshall says only that he and Sarah are staying there with their "four small children" and "several men".

So it appears that Harry Yount, chief of the Park's game, lost his heart to a woman, possibly married, who handled bears as well as he did. See also Lee H. Whittlesey, "Marshall's Hotel in the National Park", Montana Magazine of Western History 30:45, Autumn, 1980.

452. Leckler, op. cit., p. 261, March 15, 1884.

> pass through a country within a few days where game was much more abundant and the chances of deer almost certain. I had shot an antelope and an elk, and to get a black-tail deer was now my great desire."[453]

In a chapter called "Hunting on Mt. Washburn", Leckler detailed chasing bighorn sheep, elk, deer, and fox all east and north of that mountain. Their guide spotted two bighorns on the southwest slopes of Mount Washburn and "several fresh elk tracks" were seen as well. The guide encouraged Leckler to continue traveling to the northeast slopes of the mountain in case of a snowstorm that seemed to be approaching from the southwest:

> "...it required some little persuasion from the ladies to induce us to postpone the hunt; but George greatly assisted them by saying he would guarantee us game below, and that he had this [past] Spring, while making the trail along there [east of Mt. Washburn, with P.W. Norris's crew], killed in a morning's tramp two deer and an elk to supply meat for the men."[454]

While camped east of Washburn, the party was awakened in the middle of the night by the "call of a bull elk."[455]

The following day the party saw "several fresh tracks" and then "many fresh tracks", and took shots at two black-tail deer without success. Leckler then noted:

> "The ground was completely covered with deer and elk tracks, in many places cut up like a barn-yard, and most of the tracks were fresh, Game trails were all about, generally running with the stream along the hill at every thirty to fifty feet of elevation."[456]

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453. Ibid.
454. Leckler, op. cit., p. 310, March 29, 1884.
455. Ibid.
456. Leckler, op. cit., p. 311, March 29, 1884.

Leckler saw a buck and killed a doe deer, both east of Mount Washburn. A third deer eluded him.

Two other party members, Bob and Ellis, hunted separately. They struck "a fresh trail of a band of eleven elks" and saw them run away. Ellis "heard several deer jump" but did not see them. Setting down his rifle, Ellis saw "an elk with immense antlers" which ran away before the gun could be retrieved. This all occurred near the top of the Washburn Range, and while enjoying the scenery, Ellis saw "a flock of mountain sheep" but they abruptly disappeared.[457]

On September 19, the party bade adieu to what Leckler called "probably one of the finest hunting camps in the country." Still east of Mount Washburn and about eight miles south of Tower, Leckler declared:

> "A few hundred yards from camp, we came upon a large and beautiful red fox, but he made away so rapidly that we could notpick him off with our rifles."[458]

Three more red foxes were to be seen. West of the canyon called the Cut, the party had dinner and:

> "We had been seated at the table but a moment or two, when, upon glancing out of the door, two large red foxes were seen romping and playing not two hundred yards distant. I ran for my rifle, Mr. Ellis for his gun, and we both fired, but the foxes got away without a hair being

457. Ibid.
458. Leckler, op. cit., p. 335, April 5, 1884.

disturbed."[459]

And the following morning, September 20, at a point about thirteen miles southeast of Mammoth, Leckler saw another red fox:

> "Half a mile out from camp, I came close upon a beautiful red fox with a magnificent tail sweeping the ground. I saw him before he noticed us, and he was a sure shot, but unfortunately Mr. and Mrs. Ellis...were about in line, and I was afraid to venture a shot. Along the Grand Canon trail, red foxes abounded. They soon find out where a camp is set up, and hang around till it departs, in order to capture the leavings."[460]

From all of this, we have to believe that red foxes, known to still live in the Canyon-Washburn-Tower areas today, were much more numerous in 1881 than they are today. The chances of a party's seeing four foxes that quickly if the animals were not much more common than today seem very low.

In the Tower area, Leckler found that "the track of a large bear was plainly seen along the bank" of the Yellowstone River.[461]

At Mammoth Hot Springs, Leckler's party rested and received news from one of George Graham's fellow guides of a party who had walked the entire distance to headquarters from Yellowstone Lake because their horses were driven away by a skulking bear. The leader of that party was "an English general",

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459. Ibid.
460. Ibid. Note also the mindset of the day: all animals were targets for the gun, whether food or not.
461. Ibid.

> "who was so pleased with the account of our trip and the success we had in getting game, that he purchased another horse, and started back for our hunting ground to try to capture an elk."[462]

Thus this Englishman was convinced that game still existed in Yellowstone Park.

Also at Mammoth, Leckler met and talked with park superintendent P.W. Norris, who showed Leckler his 1873 rifle, the one with which Norris claimed to have killed nineteen bears.

On September 21, the party discharged its guide George Graham, and George presented each of the ladies "with a pup beaver skin", indicating availability of that animal in the Park.[463] Leckler's group then traveled down the Yellowstone River via Trail Creek to Bozeman.

At Bottler's ranch, they encountered Fred Bottler:

> "We spoke with him about the hunting roundabouts, and he said that there was plenty of game in the Gallatin Mountains, twenty or thirty miles back [west] of him, and that he would guarantee to take a party within that distance to where they could find plenty of elks and bighorn mountain sheep..."[464]

One more animal sighting awaited the Leckler party. Near the head of Trail Creek, at the "summit saloon" some forty miles north of Yellowstone Park, they saw a wolf:

> "...as we turned the point, quite a stretch of canon came into view. In a moment I noticed, two hundred yards ahead and standing in the center of a small meadow, what I took

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462. Leckler, op. cit., p. 359, April 12, 1884.
463. Ibid.
464. Leckler, op. cit., p. 382, April 19, 1884.

> to be a large dog. It soon saw us, and with a dozen jumps and a last look disappeared in the bushes. I had missed the opportunity for a fair shot at an immense wolf."[465]

Leckler's account, certainly one of the most important of the early visits to Yellowstone Park, gives us a keen look at the Park's animals of that time. His summation of the Park game scene is important too. It tells us that animals in 1881 did indeed seek out the Park during the hotter summer months, as is logical to believe, but that there was no shortage of animals in areas around the Park either. Nor were the animals "driven" up into the Park by advancing civilization, for there was simply not enough of that civilization in 1881 to do it.[466] And there were plenty of animals for both the Park and the regions around it. Leckler declared in summation:

> "If our Eastern people only knew of the glorious, bracing, health-restoring air of the high mountainous country surrounding our National Park, not to mention the magnificent scenery, wonderful sights, and bona fide hunting, they would flock to it by the thousand...Hunting and fishing in the Adirondacks, Maine, or Florida, is child's play compared to what one has in and around the National Park; and, if some of our dandy sportsmen would make one trip out there, they would never more waste their time in our damp, hunted-out eastern woods. Nearly all the game on the plains and mountains of the Far West go to the high region about the Park during the Summer, and you obtain better

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465. Leckler, op. cit., p. 383, April 19, 1884.
466. For examples, Livingston, Montana, did not exist until 1883; Jackson, Wyoming, was founded about the same time; Cody, Wyoming, was born in 1895; and West Yellowstone, Montana, came into being in 1907.

> hunting there in the Summer time than almost anywhere else in the middle of Winter. Game of all kinds, and plenty of it, is in the Park; but it will not be there many years; only very few I am afraid, as it is being slaughtered by the thousands in the surrounding country."[467]

A Milestone is Passed

Although Leckler noted that the animal slaughter was continuing in 1881 in areas around Yellowstone Park, events were transpiring which were greatly reducing it in the Park proper. Happenings in 1882 set in motion events which culminated in the hiring of ten assistant park superintendents to serve as a police force and in the changing of the law itself to prevent all hunting in the Park. Both of these events occurred in January, 1883, and this was a milestone. Thus, although occasional poaching continued in Yellowstone Park (indeed continues today), 1883 marked the end of the large scale killings. A new law and new police were changing things.

CONCLUSIONS

A look back at around one hundred thirty accounts of visits to the Yellowstone Park region 1830-1881, with most occurring 1870-81, reveals that many early visitors saw animals but that some did not. Those failures to see animals did not mean animals were not there; large parties sometimes drove them away, or at times, like today, luck was simply against the visitor.

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467. Leckler, op. cit., p. 456, May 10, 1884.

A major slaughter of Yellowstone Park game animals and predators began in late 1871 and lasted until at least 1879, with massive poisonings of elk, deer, and other carcasses to kill predators. Wherever a carcass laid, it was poisoned, and there were hundreds if not thousands of carcasses, both purposefully killed and winter-killed for at least eight years. Thus I am convinced that the continued poisonings of carcasses, along with large scale shootings and trappings, killed predators by the hundreds in the Park. Wolves, mountain lions, foxes, wolverines, bears, and probably lynxes, bobcats, coyotes, and fishers were affected. In my opinion only the wolf and eventually the coyote recovered after the 1870s, and bears seem either not to have been terribly reduced or else they recovered somewhat by the 1890s.

No animal populations can be safely estimated from the historic accounts, but general trends are apparent. The full picture that emerges cumulatively is one of a Greater Yellowstone Ecosystem with abundant game[468] and predators, 1830-1881.

Two rules about animals yesterday and today in Yellowstone Park which seem intuitive but which apparently require explanations for some people are: 1) sometimes you see animals and sometimes you do not; and 2) sometimes they run a-

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468. Like it or not, the word game is correct usage for the time period we are discussing; animals were considered game.

way and sometimes they just stand there.

Not seeing animals does not mean they are not present, as evidenced by historic journals that corroborate each other and by current observers. A single journal account cannot be used to conclude that a given party did not see animals just because a writer did not mention them, because writers sometimes elected not to mention animals for various reasons.

Seeing animals standing quietly on one occasion cannot be used as evidence that a party did not scare game away by its presence on a different occasion or by extension that game were not present.

Large parties did sometimes scare game away from Park roads and trails.

Parentheses refer to the real years of my earlier chronology rather than to publication dates.

Elk

Elk were a part of nearly all the accounts examined. They were numerous all over the Yellowstone Plateau and in the regions around the Park, if in somewhat smaller numbers than today, due probably (at least partially) to the existence of the above-mentioned predators. Russell (1837) found the country near Yellowstone Lake "swarming with elk." That they existed in the thousands is attested to by the Bottler brothers (p. 9), Strong (p. 10), Ludlow (p. 11), Brisbin (p. 114), Jackson (p. 66), and Norris (pp. 12, 112, 134), while the Bozeman newspaper gave an 1883 estimate of 5000 elk between Mammoth and Cooke City (p. 14). Grinnell (1875) found them in "considerable numbers" in the Park.

"Fat" elk were reported by Russell (1835, 1836, 1837, 1839), Henderson (1870), Gillette (1870), Jones (1873), and Grinnell (1875), indicating, in my opinion, positive habitat.

At least 164 individual sightings/killings are known from the examined period with 47 references to "herds" seen, 7 to bugles/whistles heard, 27 to tracks, and 4 to abundant antlers found. General statements about elk being in the region number 94, and even one statement about winter browsing of trees by elk is known (Savage, 1872).

Wolves

Wolves were a part of the natural scene in the Greater Yellowstone Ecosystem before 1882. Six possibly seven individual sightings are known in the GYE with one being a pair of wolves (Norton, 1872) and one being a mention of skins gathered (Norris, 1880). Additionally, Russell (1835) and Leckler (1881) saw wolves in the GYE, and Henderson (1870), Grinnell (1875), and possibly Clawson (1871) all saw wolves in the Park. Gunnison (1849) stated that wolves were in the region that year. Moreover, there are 9 accounts of howls heard, one of tracks, and 16 general statements about wolves inhabiting the region, for a total of historic evidences of wolves in GYE of 33. A photo of Bottler's ranch shows numerous skins hanging, many of which could be wolf skins.

Norris and others acknowledged the wolf's slaughter

in the Park by carcass poisonings and hide/bounty hunters. He referred to them alternately as "buffalo wolf" (a reference to their tendency to hang around bison herds), noted that some wolves were totally black in color (a different species, he thought), collected their skins, and stated that wolves occurred throughout the Park rather than in any one location.

Mountain lion

This animal was called "California lion" by several writers. Some writers saw panthers, catamounts, and cougars as all being different animals even though all those words today refer to the same animal.

The accounts make it clear that mountain lions occurred in much greater numbers before 1882 than today. Lion screams are mentioned over and over (witness the Washburn party's extensive discussion of the sounds). Everts (1870) was treed by a lion, heard a second one, and was tracked by a third one. Strong (1875) stated that lions were "frequently killed" before 1875 in the Park, and Norris carried cougar skins away in 1875, then killed a nine-foot-long lion in 1879. Stanley (1873) gave an extended discussion of the animal. Barlow (1871) saw a skin from one at Bottler's.

Some writers referred to lions as "ferocious", while others said they tended to run away at confrontation. Many writers attested to their attractions to horses and other

stock animals.

Seven sightings/killings are known from the period, with 11-14 references to cougar screams, 4 references to tracks, and 18 general statements about lions inhabiting the region. Locations seem to be all over the Park.

Moose

Moose lived in the Park before 1882, but probably in smaller numbers than in the 1970s, when typically the numbers were placed at 1000-1200 in National Park Service counts. They apparently were subject to the 1870s slaughter; Norris (1877) stated that "scores if not hundreds" of moose were taken out of the Park in the spring of 1875. Blackburn (1879) saw only two moose in his trips all over the region.

Moose seem to have lived largely, but not totally, in the south end of the Park. Hendrie (1870), Norris (1880), and Yount (1881) all reported moose around Yellowstone Lake, and Doane (1876) saw one near present Lake Junction. Norris (1880) and Yount (1881) both reported moose around Shoshone Lake, and Mushbach (1878) killed one there on August 21, 1878. Norris (1880) also found them around Heart and Lewis Lakes and on Snake River, and Yount (1880) found "some moose" near the south boundary in the "willow beaver-swamps" of that vicinity. Jackson (1872) found moose in the Tetons. Grinnell (1875) went so far as to state that moose were "quite abundant in suitable localities in the Yellowstone

Park", so apparently he saw a number of them or talked to someone who did. Stanley (1873) described the moose and its habits, making one wonder if he too did not see quite a few of them or at least several.

It is not correct to state that moose did not occur in the northern Park in early days. Henderson (June, 1870) saw a moose on Slough Creek and saw a number of them on Buffalo Plateau. That moose lived in the Lamar River area on the northern range is clearly evident from Henderson's entry of June 25, 1870, wherein he "camped on main river at Moose swamp" (emphasis mine). This reference, which virtually creates or uses an early place name, probably indicates that moose were there in that marshy area on Lamar River. After all, this is one way that place names develop. Moreover, Norris saw three moose at Lake of the Woods in 1880.

Moose may also have early occurred in the northwest corner of the Park, if Gray (1872) is to be believed. And Clawson (1871) and Bradley (1872) mentioned moose west of the Park, on South Fork of Madison and near Sawtell's.

Eleven sightings/killings of moose are known from the period examined, with one report of a "bellow", one report of tracks, and 26 general statements about moose living in the region.

Pronghorn

Pronghorn seem to have led the way in numbers in

the historic accounts, as most mentioned the animal. The area near Sawtell's (west of the Park), Paradise Valley, Lamar Valley, the Hebgen Lake area, and the area from present Gardiner, Montana to Yankee Jim Canyon all are mentioned in early accounts as containing great numbers of antelope (and antelope is the operative historic word). The Blacktail, Sulphur Mountain, and Mary's Lake areas are cited by Norris (1880) as containing antelope.

Meek (Victor 1870) stated that antelope abounded in the Yellowstone country in 1830. Folsom (1869) said his party was not out of sight of them for miles when north of the Park. Paradise Valley was "swarming" with them in 1875 (Strong, 1875) and Richard Hassell (1879) saw a herd of one thousand near present Hebgen Lake four years later. Sanders (1880) and Francis (1881) saw herds near Henry's Lake, while Pickett (1877) and Drummond (1879) were amazed to find them in the timber of the Park's Madison Canyon, and both wrote long passages about this. The Lamar Valley was "a great antelope region" according to Blackmore (1872), Barlow (1871), and Henderson (1870).

According to Norris (1880), no other animal suffered so terribly during the massive Park animal slaughter as the antelope. He reported that 1500-2000 were slaughtered in 1875 alone, and Grinnell (1876) agreed that antelope were slaughtered by the thousands. Nevertheless, by 1880, game-

keeper Yount stated that he still found antelope in "most of the open regions" of the Park, although no doubt in fewer numbers.

No population count is possible for those early days but antelope numbers must have been in excess of 5000 in the GYE, and perhaps more than 10,000. I leave it to others to account for today's comparatively low numbers, but the great slaughter was no doubt a factor.

At least 79 individual sightings/killings are known from the period, with 43 references to "herds" seen, and 3 to tracks or other signs. General statements about antelope inhabiting the region number 39.

Blacktail deer

This animal, too, appears to have existed in somewhat greater numbers in the GYE during the period 1830-1881 than it does today. Russell (1839) found them everywhere he looked, including "vast numbers" near Old Faithful and around Yellowstone Lake. Everts (1870) saw "herds" of them while lost, Peale (1871) saw their many skins at Bottler's ranch, and they were numerous in Henderson's journals.

Blacktail deer were slaughtered "by thousands" according to Grinnell (1876) and Strong (1875). Norris (1877) stated that 1500-2000 were slaughtered in 1875. Yount (1880) found them "in all portions of the Park."

At least 106 individual sightings/killings are known from the period, with only 5 references to "herds" seen, 16 to tracks, and one to the sound of a deer "jump." Gen-

eral statements about blacktail deer inhabiting the region number 79.

Bighorn sheep

If the accounts are correct, sheep occurred in more locations around the Park and in greater numbers than today during the period 1830-1881. Russell (1835) obtained a "large number" of sheep skins from Indians in Lamar Valley, and saw "thousands" of sheep near Gallatin River with "large bands" in other places. Henderson (1870) mentioned "mountains covered with sheep" near Lamar River and "sheep plenty" (twice) near Slough Creek. Doane (1870) saw a "large flock" near the falls, Jones (1873) found many tracks near Jones Pass, and Dunraven (1874) chased two bands of sheep in Paradise Valley.

Sheep, too, died in fair if not great numbers in the 1870s slaughter. Grinnell (1876) saw their skins on wagons leaving the Park, and Norris (1875) and Strong (1875) both confirmed bighorn losses, Norris estimating 1500-2000 in 1875 alone. But Grinnell (1875) found them in "considerable numbers" in the Park, and Brisbin (1878) stated that "flocks of 15 to 100 mountain sheep" were met "every day" in the Park. Norris (1880) stated that bighorn were found "throughout the Park" and "on all the mountain crests", and Yount (1881) agreed with Norris, stating "on all the mountain slopes."

Nine individual sightings/killings were found from the period, with six reports of tracks, and 13 mentions of

"herds" or "flocks" of sheep. General statements about bighorn sheep inhabiting the region number 43.

Bison

The historic accounts 1830-1881 about this animal, while numerous, are confusing and somewhat conflicting. I tentatively attribute this to varying numbers of bison as the slaughter progressed.

Meek (Victor 1870) said that the Yellowstone country "abounded" with buffalo in 1830 and he found a buffalo skull in 1838 near present Hebgen Lake. DeLacy (1863) found bison tracks "numerous and fresh" north of Shoshone Lake, Stuart (1863) found tracks just northwest of the Park, and Davis (1864) saw tracks in the "geyser region."

Henderson mentioned buffalo no less than seven times in his 1870 journal and used the term "thousands of buffalo" three times while in the Buffalo Plateau area (he probably talked that way and the reference is closer to hundreds). His compatriot James Gourley (1870) also saw herds of buffalo in the northern Park area.

Raymond (1871) stated that the "mountain bison [is] rarely seen" in the Park, but Hamilton (Blackmore 1872) said that Lamar Valley was a great winter resort of bison and Grinnell (1875) opined that the mountain buffalo was "abundant" in the Park.

The slaughter of buffalo was documented by Grinnell (1876) and Norris (1875) who placed the numbers killed at

"thousands" and "scores if not hundreds" respectively. Grinnell was probably referring to the GYE while Norris likely referred to just the Park. In 1877, Norris noted that there were still 300-400 bison east of Yellowstone River. In 1880, Norris reported that three herds existed in the Park: a northern range herd of 200, a Mirror Plateau herd of over 100, and a Firehole herd of around 300. George Marshall (1881) confirmed bison wintering near the mouth of Nez Perce Creek.

Yount (1881) found sub-herds of bison living in the Slough Creek, Hellroaring, and Amethyst areas, and smaller herds on Alum Creek and west of the Park (South Fork of Madison).

At least 25 individual sightings/killings were found from the period, with 9 reports of tracks, and 11 mentions of "herds" of bison. General statements about buffalo inhabiting the region number 32.

Whitetail Deer

These animals seem not to have been numerous in the GYE during the period, but small numbers were present. Henderson (1872) killed several in the northern Park and Blackmore (1872) saw one feeding at Lower Geyser Basin. Strong (1875) implied that Doane told him "herds" of whitetail deer were in the Park in 1870, for Strong so stated that there were. Norris (1880) listed and discussed the animal as present in the Park.

Four sightings/killings are known from the period with four general statements that whitetail inhabited the region.

Coyote

I was surprised to find that this animal did not turn up very much in the historic accounts, until informed by the biologists that where wolves and foxes exist in larger numbers, coyotes often do not. Thus, it makes apparent sense that only two sightings of coyotes were found from the period (Raymond, 1871; Grinnell, 1875), one report of barking (Everts, 1870), and four general statements that the animal existed in the region.

It appears from the history that coyotes did not occur in as large of numbers in the Park 1830-1881, as compared with today. It is hard to believe if their numbers had then been as great as today, that we would not have seen them more in the one hundred thirty or so historic accounts. Perhaps they lived on the plains around the Park and moved in after wolves and foxes were reduced.

Marten

Only one sighting of marten was found from the period and two general statements that it lived in the region. But Grinnell (1875) stated that marten was "quite abundant in the mountains of Yellowstone Park." By 1880, Norris stated that marten was not plentiful.

Fisher

Only one sighting of this animal was found from the period (Leckler, 1881).

Badger

Only one sighting of badger was found from the period

(Comstock, 1873) and three general statements that the animal inhabited the region. Norris (1880) stated that badgers were less abundant than their burrows indicated.

Mink

Two sightings (Everts, 1870; Merriam, 1872) of mink were found from the period, with one instance of tracks or signs (Blackmore, 1872), and five general statements that the animal lived in the region. Doane (1870) stated that mink were "abundant" south of Yellowstone Lake. By 1880, Norris reported that they were "not numerous."

Muskrat

Three general statements were found that muskrat inhabited the region. Doane (1870) stated that they were "abundant" south of Yellowstone Lake. By 1880, Norris reported that they were "not numerous."

Skunk

Eight sightings/killings of individual animals were found from the period, one report of scent, and two general statements that skunks inhabited the region.

The most interesting statement was that of Norris (1880) who declared that he killed "hundreds" of skunks at Mammoth Hot Springs in order to be able to sleep peacefully.

Raccoon

Four sightings of this animal were found from the period. Comstock (1873) saw three of them at Baronett's bridge and

then one a little later at Hellroaring Creek. No other references were found. In light of the rarity of the animal today and Comstock seeing four, one has to wonder if there were more raccoons in the Park in 1873 than today.

Beaver

As might be expected, more evidence of beaver dams and lodges was found than actual sightings of the animal.

Meek (Victor 1870) stated that the Yellowstone country "abounded in beaver" in 1830, but declined by 1837 due to trapping. Russell (1839) hunted for them at Yellowstone Lake and Hamilton (1839) caught "large quantities" of beaver on Pelican Creek.

Doane (1870) found beaver "abundant" south of Yellowstone Lake and Everts (1870) apparently saw them swimming "unscared" at Heart Lake. Peale (1871) and Raymond (1871) found numerous dams south of Yellowstone Lake and at Burnt Hole. Stanley (1873) found evidence of beaver "everywhere" in the Park, especially on tributaries of Yellowstone Lake, and Comstock (1873) stated that they were "still common in portions" of the Park but were in trouble from trapping.

Large scale trapping of beaver in the Park appears to have occurred at the time of the massive slaughter of other animals. Superintendent Norris (1880) stated that the Park region was favorable for beaver, but that he had allowed trapping of beaver to proceed unfettered through fear the animals would flood the Park with their dams.

Seguin (1879) found dams and lodges at Swan Lake Flat, Drummond (1879) at Henry's Lake, Strahorn (1880) at Yellowstone Lake, and Doane (1876) at Heart Lake.

Norris's permitting of beaver trapping was no doubt a major factor in the animal's decline by 1883. Thus the beaver, too, suffered from the 1870s slaughter, albeit in a slightly different way--perhaps a more severe way, as no restraints were imposed on the slaughter of beaver. While there was regret about, outcry over, and finally prohibition of the 1870s slaughter of many large mammals, no restraints surfaced to slow the killings of predators and beaver.

Six individual sightings of beaver were found from the period, with nine reports of tracks, dams, or lodges, and fourteen general statements that the animal lived in the region.

Bears

Bears were seen in great numbers in the Greater Yellowstone Ecosystem before 1882. Schullery[469] documented a lack of sightings during the 1880s until about 1890. From that we can tentatively conclude that bears either did not suffer a great deal from the 1870s slaughter, or else they slowly recovered by the 1890s. Meek (1830) said that bears were one of the types of animal with which the Yellowstone country abounded in 1830. Henderson (1867) found many bear "trails" in the Park that were "so fresh they smoked." His 1870 journal included twenty-five different mentions of

469. Paul Schullery, The Bears of Yellowstone, 1980, p. 52.

bears seen, including one "bear everywhere" reference. Doane (1870) found bears "very numerous" near Yellowstone Lake and his Washburn party saw at least five bears. Barlow saw or killed at least six bears. Raymond (1871) and Clawson (1871) encountered grizzly bears on the Madison River just west of the Park. Jackson (1871) shot a grizzly above Yellowstone Lake, Blackmore (1872) saw or killed five bears, and Henderson (1873) reported three bears on Gardner River. Bliven (1873) saw six bears at the falls and killed five of them. Dunraven (1874) found bears "plentiful" in Paradise Valley, and Strong (1875) reported four grizzlies near Mary Mountain and a fifth east of Yellowstone River. Grinnell (1875) stated that grizzlies in the Park were "numerous" and the black bear present. Norris (1881) claimed to have killed nineteen bears, most if not all of them in the GYE. Mitchell (1879) found the Clark's Fork area "full of bears." And these are only a summary of the references.

Many of the bear references made no distinction between black and grizzly bears, but where the distinction is known I have shown it. Where the reference says only "bear", the type is unknown.

Yount (1880) stated that bears were found "in all portions of the Park." Norris (1880) classified the animals into six types, all of which were black bears or grizzlies.

At least 131 sightings/killings of bears are known from the period, with 21 references to tracks or signs, and 68 general statements that bears inhabited the region.

Wolverine

One of the surprises of this research was finding more evidence of wolverines than I expected. The animal was certainly present in the Park in greater numbers than currently.

Twelve different sightings/killings of individual animals were found from the period, including a page-long discussion of a chase of a wolverine (Strong, 1875) and the scavenging of a carcass in a tree by a wolverine (Pickett, 1880). Norris (1880) gave a long description of the animal and its habits, and from this it is apparent that the animal's presence in good numbers was well accepted. Today wolverines are virtually never seen in the Park.

One mention of tracks was found from the period and three general statements that wolverines lived in the region.

Fox

Another pleasant surprise of this research was the apparent greater numbers of fox 1830-1881 than currently.

Gunnison (1849) stated that fox inhabited the Yellowstone country then, getting his information from Jim Bridger. Freeman (1867) received information from somewhere that the "prized black fox" lived in the Yellowstone country (could this have been wolf?). And at least five sight-

ings of fox were found from the period (Leckler, 1881; Mushbach, 1878).

Norris (1880) stated that "foxes are numerous" in the Park, in four colors, making us wonder again if some of those were not wolves or coyotes.

Seven general statements were found from the period that foxes inhabited the region.

Lynx and Bobcat

A disappointment of this research was the essential failure of the lynx to appear in the historic records. The bobcat was expected not to appear.

Only one sighting of a lynx was found from the period (Grinnell, 1875) and only two general statements that the animal occurred in the region (Calfee, 1871; Blackburn, 1879). Grinnell (1875) stated that lynx were "sometimes killed in the Yellowstone Park."

Only one mention of a possible bobcat sighting was found from the period (Grinnell, 1875).

Mountain Goat

Only one sighting of a mountain goat was found in the GYE during the period (Vaughan, 1864). Only one general statement was found that the mountain goat existed in the Park (Calfee, 1871). Two statements were found that the goat did not live in the Park but inhabited areas nearby (Blackburn, 1879) or north of (Norris, 1880) the Park.

Otter

Only one sighting of otter was found from the period but Doane (1876(saw a group ("hundreds of otter") south of present Flagg Ranch. He also found the small lakes "alive" with them south of Yellowstone Lake. Everts (1870) saw many at Heart Lake. Hamilton (1839) caught "large quantities" of them on Pelican Creek.

General Statements that Yellowstone Park Was a Game Region

These number 62. Many said things like "hunter's Paradise", "alive with game", or "plentiful game." The Washburn party of 1870 made so many of these that I made that a separate, labeled portion of the paper.

SUMMARY OF CONCLUSIONS

The cumulative evidence presented here shows that Yellowstone Park and surrounding areas before 1882 were regions rich in game and predators, including elk, wolves, and mountain lions. Although a large scale slaughter of most large animals occurred in the Park 1871-1879, most of them survived in good to fair numbers, but the predators (except for bears) did not. The ranks of some game animals like antelope, bison, blacktail deer, bighorn sheep, and beaver were considerably reduced by 1883.

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Gardiner, Montana
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