

## THE MYSTERY OF THE IOWA BUFFALO

No other wild animal appeals to the imagination of the typical American as does the buffalo — more properly the American bison. No other wild beast is so clearly associated with the plains Indian. As J. A. Allen has said, the bison was “at once the largest and most important animal to the aboriginal tribes of this continent, as it was also the most numerous over the immense region it frequented”.<sup>1</sup>

That the buffalo was at one time to be found all over Iowa appears no longer to be seriously disputed. In the old lake beds of the State, skulls and various other parts of the skeletons of the American bison have been discovered in large numbers. Of great importance in this connection were the findings of Bohumil Shimek in Harrison and Monona counties, where in miry creeks bison remains were found in large quantities. There were also buffalo wallows.

Stories are told of another prairie oddity for which the bison is said to have been responsible. At certain places a wide stretch of grass was found to contain concentric circles of weeds. Pioneers explained this by saying that a group of buffaloes, standing with their heads together in their attempts to free themselves from the flies, had stamped their feet so constantly that the prairie grass had been worn away, and in its place weeds had grown.<sup>2</sup>

<sup>1</sup> Allen's *The American Bisons, Living and Extinct*, p. 71. The names “buffalo” and “bison” are here used interchangeably.

<sup>2</sup> Osborn's *The Recently Extinct and Vanishing Animals of Iowa* in the *Annals of Iowa* (Third Series), Vol. VI, pp. 563-565; Van Hyning and Pellett's *An Annotated Catalogue of the Recent Mammals of Iowa* in *Proceedings of the Iowa Academy of Science*, 1910, Vol. XVII, p. 216; Shimek's *Geology of Harrison and Monona Counties* in the *Iowa Geological Survey*, Vol. XX, pp. 407-410; *History of Muscatine County* (Western Historical Company Publishers), p. 562.

The region now occupied by Iowa was not by any means the eastern limit of the buffalo: the range of the noble animal extended eastward at least as far as the Alleghany Mountains. Just east of the Mississippi, in the territory now included in Illinois, there is abundant evidence that buffalo were at one time prevalent.<sup>3</sup>

But if the former presence of the buffalo in Iowa is no longer doubted, there are other questions pertaining to it which are of almost equal interest and importance. How numerous were the buffalo in Iowa? Were there large herds of them here comparable to those of the great plains, or were they present on a much smaller scale? When did they disappear? How many were left at the time of Iowa's settlement? Finally, what were the causes of their disappearance?

It is not the purpose of this article to attempt to answer these questions conclusively. With the data available this would be impossible. It is rather the intent of the writer to suggest possible explanations, thereby stimulating further discussion of this unusually interesting and baffling problem.

While there may have been herds of buffalo in Iowa comparable to those farther west, conclusive historical evidence to this is lacking. Marquette said of the buffalo, "They are scattered about the [Iowa] prairie in herds; I have seen one of 400." It must be remembered, however, that the buffalo was essentially a migratory animal, and it is quite possible that the herds encountered by these explorers were simply "on the march". But even if they were native to Iowa, there is no reason for believing that the herds in general were anything like as large as those farther westward.<sup>4</sup>

<sup>3</sup> Allen's *The American Bisons*, pp. 116, 117; Cory's *Mammals of Illinois and Wisconsin*, pp. 90-93.

<sup>4</sup> Thwaites's *The Jesuit Relations and Allied Documents*, Vol. LIX, pp. 111, 113; Gue's *History of Iowa*, Vol. I, p. 119.

Again, if the buffalo had been even moderately numerous in Iowa, it would appear that there would be some record of a trade in buffalo hides between the Indians and the French or other whites. That buffalo hides were bartered by the Indians to those of European extraction is certain,<sup>5</sup> but the writer has searched in vain for specific proof that the Indians who inhabited Iowa carried on a trade in buffalo hides.

Wm. T. Hornaday — second only perhaps to J. A. Allen as an authority with respect to the bison — while modestly disclaiming the ability to cope authoritatively with our puzzling problem, writes as follows in a personal letter: “From the meagre evidence available, it is my opinion that in Iowa the bison never were very numerous. The evidence on this point is of a negative character. So far as I am aware, there are no historic records proving that the state of Iowa ever was inhabited by immense herds running up into the hundreds and thousands of individuals, as was the rule in western Nebraska and Kansas, and further west. I think it reasonable to regard the bison that inhabited the middle states east of Omaha and Kansas City merely as the outposts and straggling advance guards of the great herds.”

It is argued, on the other hand, that the large quantities of the remains of the bison found in this State, to which reference has already been made, point to their former presence here in numbers possibly comparing favorably with those on the great plains. These remains have invariably been found in the beds of creeks and in other places whither the bison had gone to satisfy their thirst or escape the heat. These specimens, moreover, are almost entirely those of the older males, the lighter females and calves hav-

<sup>5</sup> Hunter's *Memoirs of a Captivity Among the Indians of North America*, pp. 277, 287.

ing apparently been more successful in extricating themselves from the mud and mire of the ponds and creeks.<sup>6</sup>

The presence of the remains of so many of the old bulls — animals constituting the minority of the herd — suggests that the whole number of the buffalo which at one time roamed the Iowa prairies must have been large. That remains are not found on the prairies themselves is to be explained by the rapid disintegration of the carcasses of the beasts subjected to the many changes of weather.

But whether or not the buffalo were here at one time in great numbers, it is certain that by the time of Iowa's settlement by the whites, the animals had virtually disappeared. The date of the disappearance of the buffalo from eastern and southern Iowa is placed at about 1825, but it is not improbable that an occasional herd of bison passed through these sections after that time. Indeed, we have the word of Dr. P. J. Farnsworth, who in 1898 was professor emeritus in the medical department of the State University of Iowa, that in 1837 some United States troops journeying from Council Bluffs to Prairie du Chien were delayed for two days just west of the Mississippi River, on account of a great herd of buffalo which was proceeding northward across their line of march. And "a drove of nearly a hundred buffaloes" is reported to have been seen in Franklin County. In this connection, however, it is important to bear in mind the pronounced migratory tendencies of the buffalo, referred to above.<sup>7</sup>

But the virtual disappearance of the buffalo from eastern and southern Iowa by the time of the coming of the white

<sup>6</sup> Shimek's *Geology of Harrison and Monona Counties in the Iowa Geological Survey*, Vol. XX, pp. 407-410.

<sup>7</sup> Allen's *The American Bisons*, pp. 142, 144; Hornaday's *The Extinction of the American Bison in the Report of the United States National Museum*, 1887, map showing distribution of the buffalo opposite p. 548; *Iowa Historical Record*, Vol. XIV, pp. 383, 384; Stuart's *History of Franklin County, Iowa*, Vol. I, pp. 91, 92.

settlers is well attested by the pioneers themselves and by their chroniclers. As early as 1835 Albert Miller Lea, writing of the eastern Iowa territory, observed that the "domestic ox" had taken the place of the "untamed bison", but he added, there were still "some buffalo within reach." John B. Newhall, discussing eastern Iowa in 1841, declared: "The buffalo is no more found in or near the surveyed parts of Iowa. Even the Indians on our border have to go fifteen or twenty days' hunt before they can find this animal."

"The early settlers did not get here in time to find the buffalo", states a history of Marshall County. And two pioneers of Story County declared that the bison "were of the past, when we located here." Nor were buffalo found by the first settlers of Jasper County, though evidences of their former presence were not lacking.<sup>8</sup>

In the southern and southwestern parts of the State the records are similar. In a history of Madison County, for example, is the following statement: "Not one wild buffalo was ever seen in Madison County since the day of its first settlement." According to the records, the last buffalo was seen in Montgomery County in 1856. Joe H. Smith, a local chronicler, believes that only one buffalo was ever seen by white settlers in Harrison County, and that in the year 1863.<sup>9</sup>

But it is agreed that the buffalo lingered later in the northwestern section of Iowa. J. A. Allen believes the bi-

<sup>8</sup> Lea's *Notes on Wisconsin Territory* reprinted in the *Annals of Iowa* (Third Series), Vol. XI, pp. 126, 127; Newhall's *Sketches of Iowa*, p. 28; Battin and Moscrip's *Past and Present of Marshall County Iowa*, Vol. I, p. 109; Payne's *History of Story County Iowa*, Vol. I, p. 172; Weaver's *Past and Present of Jasper County, Iowa*, Vol. I, p. 62.

<sup>9</sup> Mueller's *History of Madison County Iowa and Its People*, Vol. I, p. 176; *History of Montgomery County, Iowa* (Iowa Historical and Biographical Company, Publishers), p. 407; Smith's *History of Harrison County, Iowa*, pp. 123, 124.

son to have been "quite numerous" in this part of Iowa and adjacent Minnesota as late as the forties. In keeping with this opinion is the statement of another Allen — Captain James Allen of the United States Army, in charge of the company of dragoons which passed through what is now Lyon County in 1844 — who wrote: "We might have killed hundreds [of bison] by delaying for the purpose".<sup>10</sup>

Even as late as the early fifties, according to C. W. Irish of Iowa City, "west of the river Des Moines herds of buffalo roamed at will over the green grassy slopes of Iowa". And Mr. N. Levering, writing of the early settlement of northwestern Iowa, includes the buffalo among those animals which "abounded" in Woodbury County in 1848.<sup>11</sup>

J. A. Allen gives 1869 as the date of the final disappearance of the buffalo from northwestern Iowa. There is record, however, of two buffaloes having been seen in Dickinson County in 1870, but no record has been found that any buffalo have been seen or killed anywhere in Iowa after this date. The only buffalo known to have been killed in Kosuth County was shot by William H. Ingham in 1855. This was one of a small herd. In Palo Alto County two buffaloes were seen in 1858. The "last buffalo" in Pocahontas County was killed in 1863. Writing as late as 1869, however, A. R. Fulton tells us that an occasional buffalo was still to be seen in O'Brien, Ida, and Buena Vista counties. The substantial agreement of the county historians of the various sections of Iowa strengthens the value of the records they have left us.<sup>12</sup>

<sup>10</sup> Allen's *The American Bisons*, p. 144; Pelzer's *Marches of the Dragoons in the Mississippi Valley*, p. 113.

<sup>11</sup> Irish's *Some Pioneer Preachers of Iowa* in the *Iowa Historical Record*, Vol. XII, p. 558; Levering's *Recollections of the Early Settlement of N. W. Iowa* in the *Annals of Iowa* (First Series), Vol. VII, p. 301.

<sup>12</sup> Allen's *The American Bisons*, p. 144; Smith's *A History of Dickinson County, Iowa*, pp. 380, 381; Ingham's *Ten Years on the Iowa Frontier*, chap-

In view of the uncertainty respecting the buffalo in early Iowa, it is not surprising that there exists no well-established theory in explanation of the disappearance of the buffalo from Iowa. In attempting to formulate a theory, it will be logical first to examine briefly into the causes of the passing of the buffalo from two other sections of the country they are known to have inhabited — the territory between the Alleghany Mountains and the Mississippi River, on the one hand, and the Great Plains region, east of the Rocky Mountains, on the other.

The usual explanation of the disappearance of the buffalo east of the Mississippi is that the "lord of the plains" had been constantly pressed back farther and farther westward by the advance of civilization. Joseph Leidy, an American naturalist and physiologist, speaks of the buffalo as having "gradually retired westward in advance of the migrating columns of the white race of man". With this view Spencer Fullerton Baird, the Assistant Secretary of the Smithsonian Institution in 1859, was in substantial agreement, as was John Sterling Kingsley, editor of *The Standard Natural History*.<sup>13</sup>

J. A. Allen, however, is of the opinion that the buffalo east of the Mississippi were actually exterminated, for he argues that the buffalo "appears to have existed in West Virginia and in Eastern Kentucky to quite as late, or even to a later period, than on the prairies adjoining the Mississippi." And Wm. T. Hornaday believes that the consistent hunting of the buffalo by the settlers east of the Mississippi was instrumental in bringing about the gradual extermi-

ter on "Hunting Buffalo in Iowa"; McCarty's *History of Palo Alto County, Iowa*, p. 24; Flickinger's *The Pioneer History of Pocahontas County, Iowa*, p. 220; Fulton's *The Free Lands in Iowa*, pp. 24, 25, 33.

<sup>13</sup> Leidy's *Memoir on the Extinct Species of American Ox*, p. 4, in *Smithsonian Contributions to Knowledge*, Vol. V; Baird's *Mammals of North America*, p. 684; Kingsley's *The Standard Natural History*, Vol. V, p. 317.

nation of the animals in this region. In view of the early settlers' dependence upon wild game for food, the buffalo's extermination east of the Mississippi, as Hornaday points out, was "inevitable".<sup>14</sup>

There is, however, more substantial agreement as to the reason for the disappearance of the buffalo from the plains west of the Missouri and east of the Rocky Mountains. The buffalo roamed in vast herds throughout this area long after they had disappeared from other parts of the United States. Scientists do not question that in this region they were exterminated by the hand of man. The Indian and the white hunter were directly responsible. The great demand for the buffalo hides and the buffalo tongues — the latter the choicest part of the meat of the animal — was indirectly responsible.<sup>15</sup>

But these explanations are unsatisfactory in the solution of the problem of the disappearance of the buffalo from Iowa. The "march of civilization" — the coming of the white man — obviously could not have materially affected the situation here, for the buffalo had virtually disappeared from Iowa before the coming of the white settlers. Moreover, the demand for buffalo hides and tongues which resulted, as we have seen, in the systematic slaughter of the buffalo on the plains to the West, did not become a sub-

<sup>14</sup> Allen's *The American Bisons*, pp. 117, 118; Hornaday's *The Extermination of the American Bison* in the *Report of the United States National Museum*, 1887, pp. 484-489. The bison, says Hornaday, served "a good purpose at a critical period. His huge bulk of toothsome flesh fed many a hungry family, and his ample robe did good service in the settler's cabin and sleigh in winter weather."

<sup>15</sup> Allen's *The American Bisons*, pp. 184-186; Hornaday's *The Extermination of the American Bison* in the *Report of the United States National Museum*, 1887, pp. 486-489. Allen estimates the number of bison killed by the the Indians for the hide and tongue trade alone to have been nearly two millions annually during this period. Hornaday describes the extermination of the bison throughout the Great Plains region as "perhaps the most gigantic task ever undertaken on this continent in the line of game-slaughter".



stantial factor in the extermination of the animals until about 1820 — by which time, judging from the reports of settlers who came here not very long after this date, the buffalo must have largely disappeared from Iowa.<sup>16</sup>

It is, then, evident that the white man was responsible neither directly nor indirectly for the disappearance of the bison from Iowa, as was largely the case with respect to other sections of the country inhabited by the bison. For a solution to our problem, then, we must consider other forces or factors.

There were, in the first place, certain elements of nature against which the buffalo was ever contending. Among these were the wolves. Allen regards these animals as having been the greatest natural enemy of the buffalo, yet he points out that the wolves attacked chiefly old and disabled animals. Because of this fact, some naturalists believe that the general effect of the depredations of the wolves was actually to strengthen, rather than to weaken, the buffalo herds, since the younger and more vigorous members of the herd were thereby relieved of the burden of the aged and the weak.<sup>17</sup>

Another natural element with which the buffalo had to contend was the prairie fire. Alexander Henry has left us a graphic description of the plight of the buffalo under such conditions. "Plains burned in every direction and blind buffalo seen every moment wandering about. The poor beasts have all the hair singed off; even the skin in many places is shriveled up and terribly burned, and their eyes are swollen and closed fast. . . . We arrived at the Indian camp, having made an extraordinary day's ride, and

<sup>16</sup> Hornaday's *The Extermination of the American Bison* in the *Report of the United States National Museum*, 1887, p. 487.

<sup>17</sup> Allen's *The American Bisons*, p. 67; Seton's *The American Bison or Buffalo* in *Scribner's Magazine*, Vol. XL, p. 390; Grinnell's *The Last of the Buffalo* in *Scribner's Magazine*, Vol. XII, p. 277.

seen an incredible number of dead and dying, blind, lame, singed, and roasted buffalo."<sup>18</sup>

Another difficulty faced by the buffalo in the Iowa territory was the prolonged snow of the winters and the lack of grass during four or five months of the year. Unlike the grass of the western plains area, the prairie grass when killed by the frost was lacking in nutritive value, while that of the west retained its food value no matter how dry it became. Consequently both the deep snow and the inferior food even where the grass was uncovered tended to discourage the collection of large herds of bison in this region. Usually such herds would have been compelled to go either north or west during the winter to find sustenance.

Probably the most destructive of the natural forces in relation to the buffalo was the treacherous ice of the rivers. As has been already remarked, the buffalo was essentially migratory. His migrations were both periodic and erratic, often necessitating the frequent crossing of rivers. Even in winter the great weight of a herd upon the ice would cause disasters. But in the spring, when the ice though seemingly as strong was in reality much weaker, the destruction from this cause was often appalling, sometimes causing the loss of half the herd.<sup>19</sup>

Other natural enemies of the buffalo were unusually severe winters, treacherous bogs, and quicksand. Epidemic disease seems not to have been prevalent among the animals.<sup>20</sup>

<sup>18</sup> Coues's *The Manuscript Journals of Alexander Henry and of David Thompson*, Vol. I, pp. 253, 254. See also Hunter's *Memoirs of a Captivity Among the Indians of North America*, pp. 279, 280.

<sup>19</sup> Audubon and Bachman's *Quadrupeds of North America*, Vol. II, p. 38; Seton's *The American Bison or Buffalo in Scribner's Magazine*, Vol. XL p. 393; Allen's *The American Bisons*, p. 62.

<sup>20</sup> Seton's *The American Bison or Buffalo in Scribner's Magazine*, Vol. XL, pp. 390, 392; Audubon and Bachman's *Quadrupeds of North America*, Vol. II, p. 36.

Although not all naturalists are fully in accord with Ernest Thompson Seton's statement that "the destruction by nature's own means was so great that the buffalo were barely holding their own in the long fight", still it is readily conceivable that if the buffalo which inhabited Iowa were only stragglers or small herds, these natural forces alone would in time have brought about their extermination.<sup>21</sup>

But aiding and abetting these natural forces was another factor. This was the Indian. If the buffalo did exist in Iowa in herds so large that natural forces alone did not result in their extermination, then by the process of elimination the Indian must have been instrumental in bringing about the bison's disappearance from Iowa.

Traditionally the Indian was not a wanton destroyer of the buffalo. The animal was almost life itself to the red-man. Every part of the animal was valuable to him. He used the hide as clothing and for many other purposes; the horns as spoons; the flesh as food; the sinews for thread and bow-strings; and the shoulder blades as hoes. Even the scrapings from the skins are said to have been boiled with berries, making a jelly which some of the tribes considered good food.<sup>22</sup>

Thus, it is argued, since the buffalo was such an essential factor in the life of the Indian, the latter knew better than to slaughter the animal beyond his needs.<sup>23</sup>

But while the majority of the authorities hold this view, it is not unanimous. One of those who did not agree with

<sup>21</sup> Seton's *The American Bison or Buffalo* in *Scribner's Magazine*, Vol. XL, p. 393.

<sup>22</sup> Audubon and Bachman's *Quadrupeds of North America*, Vol. II, pp. 50, 51.

<sup>23</sup> Kingsley's *The Standard Natural History*, Vol. V, pp. 318, 319; Moorhead's *The American Indian in the United States*, p. 308; Audubon and Bachman's *Quadrupeds of North America*, Vol. II, pp. 50, 51; Seton's *The American Bison or Buffalo* in *Scribner's Magazine*, Vol. XL, p. 392.

the general opinion wrote: "It is commonly supposed that it is the white man only who kills and wastes buffalo. I do not think that this is entirely the case, as an Indian is not always particular about using all the meat that is killed. Buffalo are frequently killed by Indian war-parties, who take what may be needed as food, but the rest of the carcass falls to the lot of the wolves and ravens, that are sure to be ready to take such leavings of the Indians."<sup>24</sup>

Some authorities emphasize the significance of the acquisition of guns and horses by the Indians. "As soon as the Indian acquired firearms and horses", we are told, "he indulged his passion for slaughter, and on his own account killed the animals off more rapidly than their numbers were replenished by natural increase".<sup>25</sup>

Moreover, the methods used by the Indians, in hunting the buffalo, even before the period of systematic extermination, were fraught with dire possibilities. Early French explorers tell how the Indians set fire to all except a small part of a wide stretch of prairie thereby forcing the bison to collect on the unburned section. Thus concentrated, their slaughter would not be difficult. Lewis and Clark observed that in the spring when the ice of the rivers was weakening, the Indians would set fire to the dry grass on one bank. This would lead the buffalo to seek the vegetation on the opposite shore. While crossing the river, however, the ice would invariably give way, the buffaloes then falling an easy prey to their pursuers.

<sup>24</sup> Davis's *The Buffalo Range* in *Harper's New Monthly Magazine*, Vol. XXXVIII, p. 153. Even Hunter admits that the Indians were more likely to slay the calves and fallow cows than the others of the herd.—Hunter's *Memoirs of a Captivity Among the Indians of North America*, p. 279. See also Trexler's *The Buffalo Range of the Northwest* in *The Mississippi Valley Historical Review*, Vol. VII, p. 360.

<sup>25</sup> Cowan's *The Trail of the Hide Hunter* in *The Outing Magazine*, Vol. LIX, p. 156; Seton's *The American Bison or Buffalo* in *Scribner's Magazine*, Vol. XL, p. 392.

Another method of killing buffalo in large numbers often used by the Indians involved a decoy. A young Indian, disguised as a buffalo by the ingenious use of the skin of the latter, would take a position not far from a buffalo herd. Other Indians then aroused the herd which then often rushed in the direction of the decoy who led them to a precipice, himself taking refuge in some previously planned place. The herd — due to the great pressure from behind — was frequently unable to stop and was hurled to destruction on the rocks below. The bison which were not killed outright could soon be despatched by the Indians.<sup>26</sup>

These methods have been briefly described because they were known to have been used by the Indians in general and must have played their part in the extermination of the buffalo in Iowa provided the herds were here in sufficiently large numbers to make the use of such methods practicable.

But perhaps the Indians did not actually exterminate the bison in Iowa. In this case the explanation of the disappearance of the buffalo not infrequently given by the early settlers would appear to be reasonable. "The Buffalo has taken his march for the Rocky Mountains", wrote the Reverend James L. Scott in 1843, "and is not found roaming upon the cultivated prairies. We were informed that they kept their march for the wilderness in advance of the Indians." "There was everything but buffalo", wrote a wild-life enthusiast of Washington County in the pioneer days. "Indians had chased them [the bison] seventy-five to one hundred miles west of us". And S. H. M. Byers, an Iowan of the early forties, wrote that the "Indians had driven the buffaloes away".<sup>27</sup>

<sup>26</sup> Allen's *The American Bisons*, pp. 202, 204, 205.

<sup>27</sup> Scott's *A Journal of a Missionary Tour*, p. 154; Burrell's *History of Washington County Iowa*, p. 98; Byers's *Out West in the Forties* in the *Iowa Historical Record*, Vol. V, p. 369.

Nor is this popular explanation of the buffalo's disappearance entirely without scientific support. Ernest Thompson Seton refers to James Mooney's well-established theory that the Sioux Indians, originating on the Atlantic Coast, migrated westward over the Alleghanies and eventually across the Mississippi. "They were following the Buffalo. . . . They have followed them long and far." The idea that the buffalo of Iowa were frightened by the Indians into going farther west is also suggested by Dr. Hornaday.<sup>28</sup>

Thus, aside from the main fact — now firmly established — that the buffalo did formerly exist in Iowa, but had virtually disappeared by the time of the coming of the white settlers, no other important facts relative to our problem are at present absolutely certain. The following conclusions, however, though not final, may properly be deduced.

First, it is unlikely that the buffalo ever existed in Iowa in herds comparable in size to those of the plains region. On the contrary, it is probable that the buffalo found in Iowa were migratory herds and stragglers.

Second, the white man can not be held directly, or even indirectly, responsible for the disappearance of the bison from Iowa. Natural forces and the Indian are the factors to be held to account for the passing of the buffalo from the region now occupied by the Hawkeye State.<sup>29</sup>

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<sup>28</sup> Seton's *The American Bison or Buffalo* in *Scribner's Magazine*, Vol. XL, p. 405.

<sup>29</sup> [Since this article was submitted to the State Historical Society of Iowa for publication, E. Douglas Branch has published a volume entitled *The Hunting of the Buffalo* (D. Appleton Company, 1929). Although this book does not specifically treat of the presence of the buffalo in what is now Iowa, it has considerable information on the existence of these animals east of the Mississippi River and much interesting material on the methods of hunting buffalo.— The Editor.]