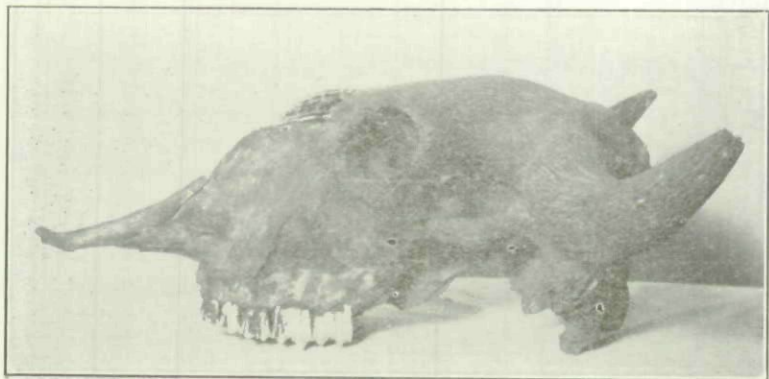


Front view of buffalo skull found by M. C. Youngblood in Greene County in 1926 and given Iowa State College at Ames by F. H. Osborn.



Side view of the above.

ANNALS OF IOWA

VOL. XVII, No. 6 DES MOINES, IOWA, OCTOBER, 1930 THIRD SERIES

BUFFALO IN IOWA

BY L. H. PAMMEL

Edgar R. Harlan, knowing my interest in the buffalo has repeatedly asked me to prepare an article on the buffalo in Iowa. My studies of the buffalo have made it necessary to consult many historical documents. I am bringing the Iowa material together to correct the opinions that buffalo never occurred in this state. My thanks are due to Mr. Harlan for giving me access to old documents and records and assisting me in many ways.

Some years ago in a talk I had with Charles Aldrich, then curator of the Historical, Memorial and Art Department of Iowa, on the subject of the buffalo, he mentioned to me having seen a large number of buffalo bones in a bog near the college. I thought possibly these might have been found on the campus in what was known as the college spring near which, in the early days, there was a little bog with the fringed gentian (*Gentiana crinita*). Professor F. E. L. Beal actually did find some buffalo bones in this bog. Possibly these might have been found on the college farm a mile due north of the college barns to the north of Squaw Creek where there was a small bog surrounded by the beaked willow (*Salix rostrata*) with a few scattered orchids in the low grounds, namely, the *Habenaria bracteata*. This bog did not however reveal any of the buffalo bones. This marsh has since been drained.

The following letter which fixes the locality was written by Professor Beal to Hon. Charles Aldrich in 1903:

"With regard to that bone bed I will give you as nearly as I can the exact locality and then if the college folks do not succeed in finding it, tell them to wait a year or so and I will come and show them where it is.

"In telling you how to go to the place, I must assume that the roads leading out of Ames are just as they were when I was there. If they are changed, that must be taken into consideration. Take the main road north and south street of Ames. I do not remember the name, but it is the street on which I used to live, also John Stevens, Mr. Greely (banker), W. D. Lucas (banker), Mr. Paxton, Mr. Tilden and Mr. Turner, lawyer. Follow this street north to the road that leads due east. Follow this till you get down into the bottom of Skunk River, then take the road that leads due north. This road crosses the river and then bears to the east and skirts the bottom land on the east side. The bog where I found the bones lies, I should say, about half a mile from the bridge over the Skunk on the right (east) side of the road, and is between the road and some gravelly ridges and knolls that bound it on the east and more or less surround it. When I was there a small stream of water had cut a passage through the bog and crossed the road under a small bridge. By following up this stream I came to an almost entire skeleton embedded in the bank on the right side of the ditch which was here of considerable depth. Fragments of other skeletons were numerous. (This is the Pettinger bog.—L. H. P.)

"Buffalo bones were numerous about Ames. Some were found in a small boggy place near the college spring house and windmill. Others, and the antlers of an elk, were found in the woods on the bottom land of the college farm when excavating to straighten the channel of Squaw Creek. If all the bogs of the state contain these remains as plentifully as those around Ames do, it would indicate that the number of these creatures that formerly roamed over the Iowa prairies was beyond all calculation or even imagination."

(Letter to L. H. Pammel from Charles Aldrich, April 8, 1903.)

"When Beal was professor of natural history in the college, I visited him one spring, and we went across the bottom land east and northeast of the college, to a bone bed over near the bluffs on the eastern side of the valley. This bone bed contained immense quantities of the bones of buffaloes. I think one could have gathered several wagon loads. The animals had evidently been mired down and perished in the muck. Have you ever seen

this place? My reason for writing you at this time is that I would like very much to procure two of the buffalo skulls, a bull and a cow. I saw some exceedingly fine ones on the occasion of my visit, but I was doing nothing then in the way of collecting. I would like a pair of them now for our museum. If you know anything about it, please tell me, and if you do not, suppose you cross over there and investigate it and let me know the result. I have an article by Professor Beal which I shall print in the next ANNALS, giving his views on the bones bed."

A few years later I made a study of this bog some two miles northeast of Ames which has since become known as the Pettinger bog. This is the bog referred to by Dr. Beal.

I have found several skeletons in this same Pettinger peat bog northeast of Ames. A fine picture of one of these I found was published in the *Des Moines Register* on April 9, 1922.

The letter and talks with Mr. Aldrich led me to gather material from all sources to study buffalo wallows, trails, and the near extinction of the buffalo for the purpose of bringing the material together. There are many persons in Iowa who believe that the buffalo never occurred in the state. Through the kindness of the Historical Department of Iowa I am able to bring this material together as a historical contribution.

There was published in the ANNALS in its edition of July, 1903, Volume VI, pages 122-23, a letter written by Professor Beal in February, 1903, from the Department of Agriculture, Washington, D. C., in which he describes at more length the Pettinger bog and the way he came to find. This is followed on page 124 of the same issue by a note signed by Charles Aldrich telling of a visit he made to the Pettinger bog with Professor Beal about the year 1882, studying birds and trees, as well as the bog where so many buffalo bones had been found. A note from the geologist, Charles A. White, to Mr. Aldrich also appears on the same page.

PART II

BUFFALO SKELETONS IN BOGS

Buffalo skeletons have been found in many places in Iowa, generally in peat bogs. Sometimes only the skull, but in some cases complete or nearly complete skeletons are found. Many

persons have interested themselves in a study of the areas and the skeletons. Professor J. E. Guthrie has found an almost complete skeleton in a bog which has yielded a number of fine skulls. Professor Guthrie has furnished me the following splendid account:

"Dear Doctor Pammel:

"I am writing to you in regard to the bones found imbedded in the Pettinger peat bog a few miles northeast of Ames. Several members of the Department of Zoology and Entomology have collected occasionally in this bog for a number of years and have brought in isolated bones. So far as I know the nearest to a complete skeleton that has been found was that of a bison, which I procured there in the spring of 1923. This was without the head, but the vertebral column was almost complete and the limbs of one side of the body. I have this material mounted in a laboratory room in the Department of Zoology.

"Besides this, I found a good many other bones widely separated from this and of course belonging to different skeletons. Part of one skull and parts of two jaws were found. These had been washed down stream and were at some distance from the bog. The color of the bones differed depending upon the depth they occupied in the peat and upon whether they had weathered long or not. With the exception of such thin pieces as ribs, they have mostly been kept in pretty fair condition.

"I have understood that several boys, one of whom was Max Herman, and another, one of Professor Levine's boys, found a skull and some other bones of the bison and have presented them to the Timberhitch Boy Scout Lodge in Ames.

"In the spring of 1923 I also found the antler of the Virginia deer, and Mr. Philip Spong found a fairly well preserved elk antler, both in the same bog. Men who knew this bog years ago have told me that it was formerly in a very soft condition and that there was then no outlet from it so that it remained so soft as to be very dangerous to domestic animals. Horses sometimes were mired and had to be drawn out of this bog by ox teams. Undoubtedly there are many bones of various kinds that it would be worth while to unearth and preserve, if the tract is ever to

be farmed. It would be wise, however, in view of the fact that some trees of rather rare species occur there, to keep this bog in its natural condition, if this can be done."

Yours very truly,

J. E. GUTHRIE, Professor of Zoology.



Pettinger bog near Ames, covered with willows of several species, mainly beaked willow. Peat in the foreground, this peat being present back of ditch. Oaks, maples and elms in the background. Several buffalo horns and skeletons were found here from 1880 to 1923. (Photograph by M. E. Loder in 1925.)



Pettinger bog near Ames, looking northeast, with side hill covered with oak, elm and hickory. (Photograph by M. E. Loder in 1925.)

A description of the Pettinger bog may be given as it resembles many others. The basis of the formation of these bogs is much alike. The Iowa peat bogs owe their formation to an impervious clay, which does not permit the water to seep into the ground. In some cases where the water could not drain a lake was formed, and through the accumulation of slowly disintegrating organic matter peat is formed. In some cases no doubt beavers were responsible for making these artificial lakes. The Pettinger bog no doubt was made by beaver. Growing near this bog on the slopes of the hill were growing the necessary soft wood so often used by the beaver like the large toothed aspen (*Populus grandidentata*) and aspen. This pond was no doubt located near the lower end of the ravine. Here the ravine opened into a large expanse which, when I first knew it forty years ago, was a bottom prairie with its sunflowers, asters, goldenrods, lilies, gentians and orchids (*Habenaria bracteata*). In other words, moisture reached this prairie through slow seepage of water. The slope of the hills to the south contained on its edges the bur oak, slippery elm, large toothed aspen, basswood, hazel, and in the open glacial material a small prairie, and abundance of pasque flower, black gamma grasses (*Boutelona hirsuta* and *B. curtipendula*), small blue stem, wild crab, plum, blackberry, and choke cherry. Carolina anemone, blue eyed grass, pluerisy root and other prairie plants were also found. The woods to the north consisted of the same species of trees and some others like the red oak, ironwood or hop-hornbeam, butternut, shagbark hickory, white oak, and where the windblown sand occurs the quercitron oak was and still is one of the dominant trees.

The bog itself when I first became acquainted with it was partially drained by a ditch which started at the lower end of the bog. The following plants were common: dogwood (*Cornus amomum*), the beaked willow (*Salix rostrata*), pussy willow (*S. discolor*), sandbar willow (*S. longifolia*), black willow (*S. nigra*), almond leaved willow (*S. amygdaloides*), marsh marigold (*Caltha palustris*), lousewort (*Pedicularis lanceolata*), gerardia (*Gerardia aspera*), turtle head (*Chelone glabra*), monkey flower (*Mimulus ringens*), greater lobelia (*Lobelia siphilitica*), Reed grass (*Phragmites communis*), rice cut grass (*Leer-*

sia oryzoides), sedge (*Scirpus atrovireus*), rush (*Scirpus validus*), ditch stone crop (*Penthorum sedoides*), iris (*Iris versicolor*), and orchid (*Habenaria bracteata*).

A full discussion of bogs and the floras will be found in a paper by the author on a comparative study of the vegetation of swamps, clay and sandstone areas in western Wisconsin, southeastern Minnesota, northeastern, central, and southeastern Iowa,¹ "Flora of the Iowa Peat Bogs,"² and "Old Lake Vegetation of Hamilton County."³

Dr. B. Shimek reports on the bison in a peat bog, and in alluvial deposits.⁴ The article is well illustrated. His article follows:

"The most remarkable feature of the alluvial deposits bordering the smaller creeks, however, is the presence in them of large numbers of skulls and bones of the bison, or buffalo, together with less common remains of the elk and the Virginia deer.

"The existence of the bison in considerable numbers in Iowa has long been disputed. The question was again precipitated in recent years by Professor Herbert Osborn⁵ who accepted the evidence as conclusively proving the existence of the bison in Iowa. This conclusion was challenged by Robert L. Garden, who later published his objections in book form⁶ and the discussion brought out the fact that isolated skulls and bones of the bison had been frequently found in Iowa. The writer has personal knowledge of such discoveries in Woodbury, Mills, Lyon and Cerro Gordo counties besides a number of cases in Harrison and Monona counties.

"Mrs. Charles I. Whiting presented a skull of a bison which was taken from the creek alluvium in section 10 of Center Township, Monona County; Edwin Quick reported the discovery of two bison skulls in the southeast quarter of section 30 in Cooper Township, Monona County, and the antlers of a Virginia deer

¹*Proc. Davenport Acad. of Science*, Vol. X, p. 32.

²*Rep. Ia. Geol. Survey*, Vol. XIX, p. 739.

³*Plant World*, Vol. II, p. 42.

⁴*Iowa Geol. Survey*, Vol. XX, p. 407-10, pl. 32.

⁵ANNALS OF IOWA, Vol. VI, pp. 561-701, January, 1905.

⁶This paper is entitled "Did the Buffalo Ever Exist in Iowa?" and was published in 1907 by Robert L. Garden in a volume containing in addition a history of Scott Township, Mahaska County, Iowa, and war reminiscences.

in a well in the southeast quarter of section 16 in the same township; C. G. Kiefer found a part of a bison's skeleton in section 24, township 80 north, range 42 west in Harrison County, and *Smith's History of Harrison County* contains an account of such discoveries and of a killing of a bison in that county (pp. 123-126).

"It is also worthy of note that the report of the Long Expedition states that on February 22, 1820, several buffaloes were killed near the Sioux River. This was probably the Little Sioux and within our territory.⁷ While the foregoing cases and many others like them, demonstrated the occasional occurrence of the bison in Iowa at a time not very remote, they did not conclusively prove that the animals were numerous. It remained for Harrison and Monona counties to furnish the conclusive evidence that the bison did occur in Iowa in large numbers. This evidence was furnished by two localities, one in each county, and consists of a large number of skulls and various parts of skeletons of the bison, associated with a few antlers and bones of the elk and the Virginia deer. The collection from Monona County locality along Beaver Creek is represented here.

"The Monona County bone beds are located on the farm of G. F. Struble in Jordan Township. They extend along Beaver Creek for some distance, the best exposures being located in the northwest quarter of section 17, township 83 north, range 43 west, and in the southeast quarter of section 8 in the same township.

"Large numbers of bones had previously been taken from this deposit by Messrs. Struble, Mathiasen and Babcock, and these gentlemen also assisted Professor Calvin and the writer in making further collections and investigations.

"In the best part of the exposure, the bones were buried to an average depth of about fifteen feet, and were exposed in the deep gully cut by Beaver Creek. This gully is here about eighteen feet deep, and its greatest width is about thirty-five feet. The

⁷In the same report Major Long describes the journey across southwestern Iowa, and records (in volume II, p. 108) the following statement May 24, 1820: "Remains of bison, as bones, horns, hoofs, and the like are often seen in these plains, and in one instance . . . we discovered the recent track of a bull; but all the herds of these animals have deserted the country on this side of Council Bluffs. The bones of the elk and deer are very numerous. . . . the living animals are still to be found in plenty." This paper is by Edwin James on Long's Exploring Expedition.

lowest four feet of the exposure consists of a tough blue-black alluvial layer containing in some places, especially near the base, a large number of nearly vertical ferruginous root-tubes. Upward the material becomes somewhat lighter in both color and texture. Streaks of sand and fine gravel occur throughout. Bones were found in both the upper part of the lowest tough stratum and in the lower part of the upper layer. They were found projecting from the banks, such as the one shown to the left in figure 1, for a considerable distance, and evidently represent the remains of many animals.

"An old beaver dam, buried to a depth of about twelve feet, was found here. Some of the sticks plainly showed the marks of beavers' teeth. Numerous shells (listed in the alluvial column of the mollusk table) and bits of carbonized wood were associated with the bones.

"Mr. Struble reports that thirty years ago there was no gully at this point and that it was possible to drive across the creek. He says that the creek has done most of its cutting in the past ten years.

"The Harrison County exposure is located along Hog Creek chiefly on the farm of Lester Adams in the northeast quarter of the southeast quarter of section 14, township 79 north, range 42 west, near Logan, and extends to the adjoining southeast quarter of the same section.

"The gully is here cut into alluvium to a depth of from eight to twelve feet. The alluvium presents the same structure as in the Struble section, but the exposed part of the stratum containing the iron root-tubes is at least six feet deep. There are streaks of sand and gravel, ferruginous lines and cloudings, scattered irregular calcareous nodules, and many shells, besides the numerous bones of the bison and elk, which appeared chiefly about half way up the bank.

"The alluvium which forms the banks and bed of Beaver and Hog creeks makes a very deep, soft mire when wet, and it is evident that during the period of aggradation by the creek the animals which came down to drink were mired and finally buried in the ooze of the creek bed.

"This explains the excellent state of preservation of the bones

for exposure to the air would have long since caused them to crumble. It also explains the great preponderance of the skulls and bones of males, which is striking wherever bison remains are found in Iowa. Very few skulls of females were found among those examined. The greater number of remains of males is evidently due to the fact that the heavier males had greater difficulty in extricating themselves from the mire and were overwhelmed. This would be especially true of old animals, and it is evident that these skulls belonged chiefly to such individuals.

"The abundance of these bones in the alluvial beds warrants the conclusion that the bison was once common in Iowa, for the buried skeletons undoubtedly represent only a small part of the fauna of their time since only those which were buried in mire were preserved, all others disappearing completely.

"In addition to the two great exposures here discussed there are numerous alluvial exposures which have yielded shells of mollusks only. These present the usual mixture of land and fresh-water forms found in alluvium, and are included in the mollusk table. The best of these exposures were observed at the following points in Harrison County:

"1. In the deep and narrow gully, cut by Stowe Creek in the southeast quarter of section 6, township 81 north, range 43 west.

"2. North of the county line exposure in section 5, township 81 north, range 44 west. At the base of the bluff along the road shell-bearing alluvium is exposed to a height of ten feet. It contains bivalve shells also.

"3. A deep gully on the southwest quarter of section 7, township 79 north, range 43 west. This is the greatest of these gullies reaching a depth in some places of more than forty feet.

"4. A low exposure east of the manganese dioxide bed in Snyder's Hollow.

"5. The first road cut south of the Peyton sand pit south of Pisgah also shows an alluvial deposit with some calcareous nodules, numerous large land shells and a few Unios. The terrestrial shells are *Polygyra profunda*, *Pyramidula alternata* and *Succinea ovalis*.

"6. Several sections along the road north of the Harrison County line, in Monona County, in section 34, north of exposure (2) and similar to it.

"7. Along Mucky Creek southeast of Mapleton.

"8. Along Rock Creek south of Ute. The section is eight to ten feet deep."

Dr. H. Osborn in a most interesting article, "The Recently Extinct and Vanishing Animals of Iowa,"⁸ lists the panther (*Felis concolor*), the lynx (*Lynx canadensis*), elk or wapiti (*Cervus canadensis*), the Virginia deer (*Odocoileus americanus*), the wild turkey (*Meleagris gallapavo*), Carolina parakeet (*Coccyzus carolinensis*) and passenger pigeon (*Ectopistes migratorius*).

Dr. Osborn gives 1868 or 1869 as the years of the last great flight of the passenger pigeon for Iowa.⁸ The Mastodon, "recently extinct," is mentioned because of the numerous skeletons which have been found. The buffalo is mentioned, and what is said about the buffalo is reprinted here to add to the material here presented:

"Of the former residents of the state the buffalo (*Bison bison* L.) was undoubtedly the most magnificent and one whose departure from the plains region has caused the most regret. If records were wanting as to its actual occurrence within the borders of Iowa, there is abundant evidence in the finding of skulls and other portions of the skeleton to prove its former distribution over this region. These have been discovered at so many different points that it is useless to attempt the record of them all, but instances of their existing in the central part of the state are known to the writer personally.

"Just when the last member of the species took its departure across the boundary line of the state for the region further west, or perished in some bog or swamp in the state area, it is impossible to say. In all probability the species was practically extinct within the state some time within the fifties or sixties, but I have been unable to find any record of sufficient definiteness to locate the time within the decade. We know of course that they occurred in large numbers further west in Kansas, Nebraska and in the Dakotas as late as in the eighties, but they

⁸See ANNALS OF IOWA, Vol. VI, pp. 561-69, January, 1905.

kept well beyond the bounds of permanent settlement. The buffalo represents a family of animals in which it is unique in this country, its nearest relative being the European buffalo or water buffalo of the old world. It is one of the largest of its family, and our species is one of the most magnificent of the group. Some fine specimens are preserved in the National Museum at Washington, and in other large collections. A good example of the cow may be seen in the Museum of the State Agricultural College at Ames, Iowa, and numerous heads are exhibited at different places over the state. The species is preserved in a few instances in captivity and it is possible that they may be kept in this condition so as to be available for study in the future. A fine herd may be seen at the New York Zoological Park. A few are still to be seen in their wild state in the National Park and it is to be hoped that their present numbers will be maintained so that the species in the wild state may not be entirely lost. The effort toward crossing this species with the domestic ox has been in some degree successful, and it is possible that it may be preserved to some extent in this manner as a domestic species."

At an old settlers' meeting of Jefferson County people E. R. Smith, in referring to buffalo in that county, spoke as follows: "For many years I have made inquiries of our old settlers to see if they or their parents ever saw any buffalo in Jefferson County. Hon. H. B. Mitchell told me that when he came here in 1840 that there were skulls, bones and horns of buffalo about two miles west of Fairfield and that his brother killed buffalo near Des Moines until about 1850.

"Cranmore Gage told me that buffalo horns and skulls were found in the buffalo wallow on his farm about one-half mile west of the Dexter factory and that oldtime settlers told his father and himself that big herds of buffalo came to this wallow and would paw up the dirt and tear it up with their horns and roll in the dust and mud to coat their hides with dirt to keep off the flies. I visited this buffalo wallow a few years ago; it is about 100 feet long and 3 feet deep and has never been plowed, and I believe that whenever it is plowed buffalo horns and bones will be found. This buffalo wallow was last used about 1835.

"I have found only one man that ever saw buffaloes in Jefferson County and that was William H. Coop, the first white child born in Jefferson County. He remembers seeing 30 or 40 head of buffalo near the present town of Packwood about 1842 when he was six years old and saw them about ten years later in the center of the state.

"In Walnut Township lived two regular buffalo hunters, Ike Turner and Joe Small. It was hard work to hunt buffalo and took a very hardy pioneer to keep up the chase. Sometimes the chase would take the hunters a long distance from home and they would not kill any buffalo and would be tired and hungry. Ike Turner knew every root, bug or animal that was fit to eat and would eat things that the Indians would not eat, such as bugs, polecats, snakes, lily roots, and bark of trees. Ike Turner and Joe Small drove some milk cows about 100 miles southwest of Fairfield, near Humeston, and caught four buffalo calves and raised them with cows. These buffalo and their descendants were kept near Merrimac^{8a} for about forty years and the herd was sold to William Davis of Rome in Henry County and he kept them for many years and a mounted head is now under the eaves of his barn on the main road between Fairfield and Mount Pleasant.

"There was other game in Jefferson County. Hon. George Duffield of Keosauqua told me that he killed four black bears about four miles south of Fairfield on Cedar Creek. The bears were small and weighed about eighty or a hundred pounds each. Elk were reported in Jefferson County and deer were very numerous and a few antelope were reported on the prairies by hunters and trappers who were here about ten years before the first settlers. Wild turkeys were very plentiful and the last ones were killed in Gilmer timber south of Lockridge about thirty-five years ago. Vic and Ralph Lamson were great hunters of wild turkey and reported killing one weighing twenty-six pounds. Prairie chickens and wild pigeons were very plentiful and easy to kill. Quail and pheasants were found in the brushy places. Jack rabbits⁹ were very scarce and a few were found around Glasgow and Beckwith until a few years ago.

^{8a}Merrimac was a hamlet and post office in the northeastern part of Jefferson County, section 36, Walnut Township, on the east bank of the Skunk River. It is now abandoned.—Editor.

⁹Jack rabbits are recent migrants from the west in Story County since 1895.—L. H. Pammel,

John C. Hartman who has been much interested in pioneer history of Black Hawk County has given a very interesting account of the finding of a buffalo skeleton in Waterloo. The article in the *Waterloo Courier* of September 9, 1922, states:

"The horns, skull and other portions of the skeleton of a buffalo which was probably mired centuries ago in the prairie pond which in early days occupied the site were unearthed yesterday by workmen while excavating for the foundation walls of the press room in the new Courier building, facing on Park Avenue west.

"The surface of the pond was sixteen or eighteen feet below the commercial street level. The skeleton of the monarch of the prairies was found eight feet lower, or at a total of twenty-four or twenty-eight feet below the street level.

"Just what caused this animal to meet its death here is purely speculative. The stratum where the bones were uncovered is composed of quicksand, ordinary sand and other soil elements. The depth indicates the animal was mired there centuries ago—possibly before Columbus discovered America. The male buffaloes many times fought each other to the death, or to the point of serious injury to one of the combatants, and the animals whose bones remain as evidence of his early existence may have been injured so badly that it wallowed in the pond to die.

"Herds of buffaloes roamed this section of the country up to seventy or eighty years ago.

"The skeleton of a bison was found while workmen were digging for the foundation of the electric light plant, eighty rods upstream from the Courier building at the mouth of Virden's Creek. Workmen yesterday carried fragments of the skeleton home as souvenirs, but an attempt will be made to assemble the bones of the head at least."

Mr. Hartman amplifies the article in a letter to me dated September 30, 1922, as follows:

"The portions of bison skeleton found here a few weeks ago were uncovered while excavating in a bed of sand that was at the bottom of what was in other days a bayou of the Cedar River. This sand bed is of considerable depth, as has been found in excavating for basement of annex to the new Courier building.

There were no materials or vestiges of plant life in formation in which the bones were found."

In 1921, October 25, Mr. Hartman wrote me as follows:

"Several buffalo skulls have been unearthed in this vicinity. I gave one that came into my possession to the Teachers College at Cedar Falls, which contains my former private collection, which included quite a number of flint arrow heads and stone implements that I picked up in my tramps over the county. One of the finest buffalo skulls that I ever saw was dug out of a bog a few blocks from our office several years ago with some other buffalo bones. These are in the office of the superintendent of gas and electric company across the street from our office, and when you are in town again please call on me and I will take you over, that you may have a look at them. Two early settlers whom I knew well, who are now gone, told me of buffalo hunts within ten miles of Waterloo. Each killed buffalo, one, James Virden, making his kill in 1847, and Hiram Luddington in 1852. An old market hunter and trapper still living in Waterloo shot deer within six miles of this city in the middle fifties."

Mr. Hartman sent me much more fine material. In a letter dated August 9, 1928, he states:

"I send you herewith additional data on the buffalo in Iowa I promised you in May. This includes America Mullan's reminiscence of the Benton County buffalo hunters and captive buffalo calves and descriptions of buffalo skulls found in Franklin County and Waterloo. Both are fine specimens. The photograph of Franklin County skull will make a good cut if you care to use it for an illustration. (See cut on page 419.)

"About twenty-five years ago I was presented with a large buffalo skull taken from the Shell Rock River at Shell Rock or Clarksville, I have forgotten which. I was under the impression when I first wrote you that this was the skull I gave the Teachers College museum but the photograph taken of the latter skull, which I took along when I went over there recently to measure the skull for you, when comparison was made, showed clearly that it was the Franklin.

"I presume you have gathered much material by this time and find yourself confronted with the task of sorting and select-

ing that of most value and interest. You are welcome to my contributions but please don't feel obligated to use any of it on my account.

"Mrs. Charles Mullan,¹⁰ who with her husband arrived at the future townsite of Waterloo, Black Hawk County, June 24, 1846, in relating some of her early experiences in after years, told of an adventure of a party of buffalo hunters from Benton County.

"One day early in the summer of 1847 or 1848 the outfit consisting of a number of men astride horses, several wagons loaded with crates, and milk cows being led, stopped at their cabin, the first dwelling erected in Waterloo to be. They were informed by the leader of this strange caravan that they were headed for northern Iowa where they hoped to capture some buffalo calves and that the cows would be their foster mothers if the hunt was successful.

"Late one afternoon a few weeks afterward the returning hunters again halted near the Mullan home and camped for the night. The wagons bore several small buffalo calves which were unloaded and given an opportunity to suck the cows which they did with avidity. In response to inquiry, description of the locality in which the young buffalo were captured led the Mullans to believe that it was in Cerro Gordo County near where Mason City was later laid out. The captive animals were kept in a corral at or near Benton City¹¹ and Mrs. Mullan said that her husband later saw them on a number of occasions while on his way to Cedar Rapids and Marion for mail and supplies. Some grew to maturity, she believed, but of their ultimate disposition she was uninformed."

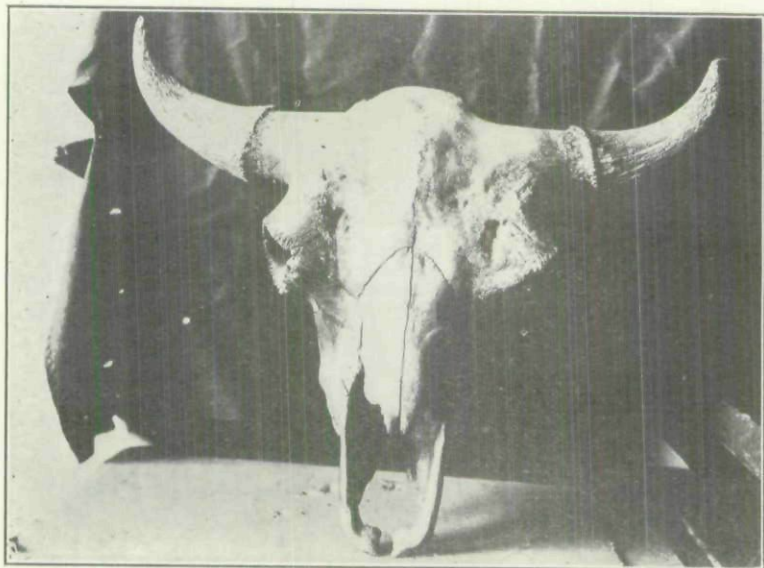
Mr. Hartman further writes:

"In the summer of 1910 while excavating a drainage ditch seven miles east of Dows, Franklin County, a buffalo skull was found among other animal bones at a depth of ten feet. The surface of the ground, which at this point was near the edge of

¹⁰Mrs. Charles Mullan's maiden name was America Virden and she was a sister of John, William and James Virden mentioned in stories of buffalo hunts in Black Hawk County by Hiram Luddington and James Virden. She was born in Tompkinsville, Ky., October 24, 1817, and died November 26, 1902. It was a year or two previous to her death that she gave the story of the Benton County buffalo hunters to John C. Hartman.

¹¹Benton City was four miles east of where the city of Vinton now stands.—Editor.

a slough, was mound shaped and supposed to contain a spring at a remote period. Some animals that came there to drink evidently mired down and lost their lives; many bones were in evidence. A. O. Tabor, in charge of construction, gave this skull and other buffalo bones to John C. Hartman, Waterloo, who, in 1917, placed them in the museum of State Teachers College, Cedar Falls. Measurements are, length, $21\frac{5}{8}$ inches; width fore-



Photograph of buffalo skull taken from slough 7 miles east of Dows, 1910, while excavating drainage ditch. Found at depth of 10 feet. A. A. Tabor, Waterloo, in charge of construction, gave it to John C. Hartman, who placed it in Teachers College Museum, Cedar Falls, Iowa. Length $21\frac{5}{8}$ inches; width, forehead $11\frac{1}{4}$ inches; eyesockets (outside) $13\frac{1}{2}$ inches; horns spread (core) $26\frac{1}{2}$ inches; length lower jaw $17\frac{1}{4}$ inches. One scapula, $19\frac{1}{2}$ inches long; another scapula, $10\frac{3}{8}$ inches, were found.

head, $11\frac{1}{4}$ inches; width at eyesockets (outside), $13\frac{1}{2}$ inches; horn spread (cores), $26\frac{1}{2}$ inches.

"A buffalo skull was unearthed in 1917 by workmen while excavating for foundation of Iowa Public Service Corporation's power plant, Waterloo, in marshy soil at mouth of Virden Creek, about twenty rods above east end of Mullan Avenue bridge. It was found five or six feet below the surface. A stone axe lay near it. The skull was given to Henry W. Grout, Waterloo, and by him placed in a case with other specimens in Black Hawk

County Court House, Waterloo. Measurements are, length, $21\frac{1}{4}$ inches; width forehead, 11 inches; width at eyesockets (outside), $13\frac{1}{4}$ inches; horn spread (cores), 24 inches."

Dr. George Mogridge who has a keen interest in such matters and knowing of my interest in buffalo, on February 1, 1923, sent me the following communication from Glenwood:

"Since my return home I have been trying to find something in regard to the finding of the two buffalo skulls which are at the institution. Dr. F. M. Shriver of our city tells me that between twenty and twenty-five years ago these two skulls were found in a gulch after a heavy rain. The place they were found is south and a little west of Glenwood, in what is known as the Wabaunsee hills, and a gulch is near the Wabaunsee Church. The Doctor tells me that these skulls were probably about fifteen or twenty feet below the surface in drift soil. He also tells me that in the same locality there were some mastodon bones found, and also a tusk, probably a mastodon tusk. This was about six inches in diameter and about two feet long. It was, however, broken, so that the exact length of the entire tusk is not known. He tells me there was also found in the same vicinity a bear's skull, but as to this last named, he does not know who got it or where it is now.

"The bones and tusk mentioned were in Dr. Shriver's possession at one time, but were destroyed in a fire which occurred a few years ago.

"This is about all the information I can get in regard to the skulls of the buffalo of which I spoke to you when I was in Des Moines a couple of weeks ago."

F. H. Osborn of Farlin, Iowa, on November 8, 1926, sent me an interesting affidavit of a buffalo skull found near Farlin. He said: "I am enclosing affidavit of M. C. Youngblood regarding the finding of the buffalo head left for you at the A. T. O. House. If there are any further details you want let me know."

AFFIDAVIT

State of Iowa }
 County of Greene }^{ss.}

I, M. C. Youngblood, being first duly sworn, depose and say that for several years I have rented and farmed part of the former bed of Goose Lake located largely in section one, Bristol Township, Greene County;

That, on or about April 15, 1926, while plowing in the northeast quarter of said section, I uncovered the head of a buffalo with horns attached, preserved same and have requested that same be forwarded to the Iowa State College at Ames;

That, said buffalo head was plowed up in peat land about thirty rods west of the east edge of the old lake.

Dated at Jefferson, Iowa, this 6th day of November, 1926.

M. C. Youngblood.

Subscribed and sworn to by M. C. Youngblood this 6th day of November, 1926.

F. H. Osborn, Notary Public.

John R. Sage on November 10, 1926, writes as follows:

"Last Thursday evening I met F. H. Osborn of Farlin. I was interested in talking to Mr. Osborn. He seemed to know a great deal about the region where this buffalo head was found. He states that he is planning to secure affidavits from people who know the region. He may be able to secure statements from people who have actually seen buffaloes grazing in that neighborhood.—J. R. Sage, Registrar."

Professor Guthrie on November 26, 1926, acknowledged receipt of the skull as follows:

"The department wishes to thank you for the bison skull, which you received from M. C. Youngblood of Greene County, and for the affidavit which accompanies the specimen. I find that it is not quite so large as the one which you found and gave us from the Joe Pettinger bog near Ames.

"It is more complete, however, in that it has most of the teeth—five cheek teeth on each side—and also one of the nasal bones. The measurement from tip to tip of horn cores is 24 inches. The circumference of the bur at the base of the horn core is 10½ inches. The frontal measurement between the tops of the bony orbits of the eyes is 13 inches. The measurement between horn tips is about one inch less than the one mentioned above."

The following item from the *Ames Tribune* of December 20, 1927, gives an account of the finding of a buffalo skull northeast of Ames in the Pettinger peat bog:

"Evidence that the now nearly extinct buffalo roamed at will through central Iowa, came to light here last week when Dr. L. H. Pammel, head of the botany department of Iowa State College, unearthed the skull of a huge buffalo bull while on a field trip with a dendrology class.

"The skull, which was in a well preserved condition, was found about two miles northeast of Ames in a peat bog. The students under Dr. Pammel were examining tree species of the vicinity when the Doctor unearthed the skull.

"Examination and measurements by Professor J. E. Guthrie of the Zoology Department revealed that the skull very nearly equaled in size the one on exhibition in the Smithsonian Institution at Washington.

"According to Drs. Pammel and Guthrie, buffalo remains have been found near the college before. Dr. Beal, former professor of zoology, found buffalo bones here more than forty years ago. Elk antlers were also found on the college farm lands. However, the present find is exceptional in that the skull is of unusual size."

In 1927 I found another nearly complete skeleton. Professor J. E. Guthrie writes me under date of December 15, 1921:

"I have just made a comparative measurement of the skull and radius which you sent us and have placed these measurements in a comparative table with those given by Dr. Hay taken from a specimen in the United States National Museum. The radius is quite possibly that of a larger animal than that which bore the skull, as I find that it is somewhat longer than that given by Dr. Hay and yet that the skull is not so large. Dr. Hay does not state where this specimen No. 12456 was taken.

"Comparative measurements of skull and left radius of bison found by Dr. L. H. Pammel at the Pettinger bog with same measurements on a mounted skeleton No. 12456 in the U. S. National Museum:"

SKULL

	U. S. Nat. Mus. No. 12456	Pettinger Skull
Width at rear of orbits.....	345 mm.	340 mm.
Width at mastoid region.....	272	270
From occipital protuberance to line joining rear of orbits.....	210	190
Length of horn core along upper curve.....	222	220
Length of horn core along lower curve.....	275	267
Circumference of horn core at base.....	275	245
Diameter of horn core in plane of face.....	93	78
Diameter of horn core right angles to plane of face	83	99
Breadth between tips of horn cores.....	610	635
LEFT RADIUS		
Length	335	350
Diameter from side to side at middle of length..	57	60
Diameter from front to back at middle of length	36	35

The *Atlanta (Georgia) Journal* of March 2, 1930, said: "There is on exhibition in the Museum of Parsons College a fine buffalo skull found near the head waters of the Shoshone. The horns from tip to tip measure $26\frac{1}{2}$ inches. Each measures from the tip to the base at the top of the head $7\frac{1}{2}$ inches. Measurements of a buffalo head are given of "Old Tex," one of the buffaloes obtained originally from the Goodnight herd of Texas: Horns, tip to tip, $20\frac{1}{2}$ inches; left horn, 16 inches; right horn, $15\frac{1}{4}$ inches; widest inside spread, $30\frac{1}{2}$ inches."

These measurements may be compared with those of the skulls found in Ames.

Mrs. F. W. Knight writes me concerning buffalo skulls from Spencer, November 5, 1926: "On our old ranch, sold over twenty years ago, we had those ditches I mentioned made with a capstan ditching machine that made ditches about three feet wide as I remember it. Large quantities of bones were brought out. Also a material that when spread on a board dried just like cement or plaster, and chunks of ice as large as a wash tub—and this was in July.

"This was a very treacherous slough. If you would take hold of a hummock and shake it, what looked like fairly solid ground

would quiver for ten to fifteen feet around, according to the strength of the shake. Streams of water ran into the Sioux from these ditches.

"I was at Graettinger Sunday, and E. S. George whose family I went to see, told me that he had three skulls, if they were not lost, that he had picked out of a spring on one of his places. He lays the crowding into the sloughs and water holes to prairie fires. If you can get in correspondence with him he can tell you quite a bit as he went to Graettinger when the country was very raw and new.

"I think the articles that have been printed about the buffalo will bring out comment that will be useful to you, and give you the names of people who can tell you quite a bit more than is printed. I hope so, anyway. We have a number of buffalo horns if we can find them. I wish you success in your interesting work."

N. L. Stiles of Cherokee write me on April 8, 1930, as follows:

"Getting down to modern buffalo, the first settlers in our county came in 1855, and while elk and deer were very plentiful there were no buffalo just here then and no skeletal remains on the prairie, although the trails and wallows were still easily recognized and could not have been abandoned for very long.

"Albert Phipps, who came here in 1855 and was one of the first settlers and a leader in the Milford colony, killed the last buffalo of which there is any record, but that was over near Ruthven on Lost Island Lake, I think in 1858. He there ran on to a herd of seven and brought back to Cherokee what meat he could carry. In 1868 the cattle herders tell me there were no buffalo bones on top of the sod, but they found them frequently washing out of draws. We still find good skulls washed out in this way nearly every year.

"Another way of approach is from the refuse heaps of the Indian villages, and I believe Dr. Charles R. Keyes of Cornell College, Mount Vernon, could be helpful there. For instance, we find that the shoulder blade of a buffalo was a favorite implement used as a spade or hoe. The shin bone was used by some arrow makers in their work, and this and other bones for handles to scrapers and other tools.

"To fix the dates is the hard thing. The Mill Creek culture, as named by Dr. Keyes, centers in Cherokee County and has some wonderful refuse heaps. In them I cannot recall ever having found buffalo bones just at the top. The uppermost bones are usually elk, perhaps also bear and deer, but just below the surface the cracked marrow bones of the buffalo are soon met with. These facts would help if we knew when the Mill Creek people left, but we do not know this. However, Keyes may have a fair idea of the age of the buffalo strata.

"My personal guess would be that the buffalo only existed here as a summer feeder, within the last two hundred years. You might be very much interested in some of the buffalo pictographs that we have found in the mounds, but the dates are impossible to give. For instance, I have found these pictures of buffalo carved on Catlinite (pipestone) while following the breaking plow in true prairie sod. One in particular, of a wounded buffalo heifer, I found was covered by four inches of strong sod. I could *guess* that it had been buried two hundred years, but that would not prove that there were not large herds of buffalo here after that."

A letter from Mrs. George follows: "At the Palo Alto fair this fall there was a buffalo skull on exhibition by William Reuhle of Emmetsburg, a blacksmith. The card on it stated that it was found in one of the Emmet County lakes I believe. It was a very fine specimen, nearly perfect. It is much better than any of mine. If you would write him you might get it. I have a few bones that were found with the skulls."

Mrs. Stella M. Case, one of the highly respected pioneers of Boone County, writes me under date of October 21, 1926, as follows: "I was very much interested in your article about buffaloes in *The Des Moines Register*, October 19, 1926. While we were on our farm three miles north of Madrid, Boone County, about 1913 or 1914 my husband, while plowing up the pond that we had tilled out, plowed up quite a large number of bones of a large buffalo. It was imbedded in the peat, head to southeast, tail to northwest. I have saved and shellacked the bones and

have them in my geology collection. Have several vertebra, horns, face bones, both lower jaws and teeth, leg bones and several other. The man at the other end of the bog found good elk horns, and I believe he gave them to Mr. Lucas, father of Guy Lucas, editor of the *Madrid News*. I believe he also has the mastodon tooth that was found in the gravel pit near our farm. The man that we bought the farm of said that he had lived there fifty years, but had never seen a buffalo, but one of the neighbors said that her folks saw one there during that time. So we know there were buffaloes in Iowa at one time”

Professor A. O. Thomas found a lot of interesting buffalo material near Cherokee. The following from a press dispatch in the *Ames Evening Tribune* of October 29, 1925:

“The life of thousands of prehistoric buffalo has been disclosed by the investigation of remains on the bank of the Little Sioux River near Cherokee, where great herds lived and fought thousands of years ago. Professor A. O. Thomas of the University of Iowa has just returned to Iowa City after making an examination of the deposits with Dr. W. D. Mathew of the American Museum of New York City.

“The relics of a once powerful race of animals were found in the mud and dirt of the left bank of the stream by a Cherokee man, Dr. F. J. Cable. The deposit, four miles north of Cherokee, extends about 100 feet along the bank and has been examined to a depth of twenty feet.

“‘We found evidence of thousands of almost perfect skeletons of prehistoric buffalo,’ Professor Thomas said here today. ‘The river apparently served as their watering place ages ago, as the bones are doubtless thousands of years old. These herds of animals, crowding each other on the banks of the stream, forced one another down into the muck, their successors trampling their bodies further down as they went on. The river after thousands of years, has now eaten back into the dirt and laid bare this episode of prehistoric life.’

“The bones will be recovered by Professor Thomas and Dr. Mathew next summer when the weather is more favorable, according to plans. The bones, although in an almost perfect state

of preservation, are very brittle and cannot be taken out at this season of the year, Professor Thomas stated."

A further article on this discovery appeared in the *Des Moines Register*, October 27, 1925: "Dr. W. D. Matthew, curator of the American Museum of Natural History, after a preliminary examination of the fossil bone deposit near Cherokee, pronounces the bones bison and postglacial. Until he has more carefully examined specimens, Dr. Matthew will render no opinion as to whether these bones are to be identified with buffalo of the present. He regards the find as important and believes the deposit may be extensive. The skeletons are articulated and Dr. Matthew believes that with proper care exhibits may be recovered and restored in their entirety."

(In another place I shall refer to a note on buffalo skeletons near Cherokee.)

The *Marshalltown Times-Republican* for November 27, 1924, published an interesting item about the buffalo near Alden in Hardin County: "J. J. Nachaze, living seven miles north of Alden, has in his possession a well preserved buffalo skull which was dug up about a mile north of his place when the dredge ditch went through a swamp. The skull is in a fair state of preservation and mute evidence that the herds once roamed the plains of Iowa. Early settlers have told the story of a herd of buffalo which, driven before a storm, plunged into the swamp and were driven farther on by masses behind them. This skull is one of a dozen or more unearthed by the dredge and some were found seven feet underground together with many other bones."

In 1921 the writer made a study of an interesting peat bog on the farm of Wilkes Williams near Postville in the Iowan drift sheet. Mr. Williams pointed out to me where he found some interesting bison skulls. I think this the most northeasterly section where they have been found in Iowa. The letter of Mr. Williams of December 3, 1921, follows:

"In regard to the buffalo skulls you mention, both from male animals, as it is some years since they were found I cannot re-

member whether they were found 'in place' or had been washed out and carried down the stream.

"The peat marsh where they were found is located in section 21, township 95 north, range 6 west, in Grand Meadow Township, Clayton County. The stream that flows out of the marsh has cut a ditch about twelve feet deep some distance back into the marsh. The sides of the ditch show at the bottom about 2 feet, 6 inches of clay, then 8 feet of peat, on top of that 2 feet of soil washed onto the marsh since the surrounding fields have been under the plow.

"I made a trip to the marsh this afternoon. Examining the sides of the ditch I found at two places about a hundred feet apart, at about the middle of the peat layer, a number of bones still fast in the peat. I am not enough of an anatomist to be able to say positively that they were buffalo bones, but judging by the size it seems very likely that they were. Probably the skulls came from the same horizon.

"If the occurrence of buffalo in Iowa since there have been settlements in the state is of any interest to you I can cite you one instance. Early in the 1850's my father, E. H. Williams, drove from his home in Clayton County out to what is now Hancock County. There had been a small herd of buffalo in the neighborhood, of which the Indians had killed five. My father saw one of them, a cow, lying dead on the prairie.

"In regard to the skulls, my brother gave them to Charles Larrabee, Jr., and William Larrabee, III. I will suggest to the boys that Mr. Harlan would be a very safe custodian for their collection."

The peat bog referred to by Mr. Williams is one of the typical peat bogs of northern Iowa. One of the most interesting plants in the bog is the bog white willow, also known as the sage or hoary willow (*Salix candida*) which is fairly common over the entire bog. There was also present in this bog some of the glaucous willow (*S. discolor*) and (*S. pellita*), and along with them *Cornus stolonifera*, and an abundance of *Carex filiformis* and *Spiraea salicifolia*, *Carex grayii*, *Aster novae-angliae*, and *A. novae-belgii*, *Gentiana crinita*, *Eupatorium purpureum*, *E. perfoliatum*, and *Lobelia siphilitica*.

Frank A. Warnke of Emmetsburg sent me a fine skull with the following letter: "This buffalo head was found by Frank Warnke of Emmetsburg, in 1900, on the west shore of Swan Lake in Emmet County. It was covered with mud and water, and was discovered by him while wading in a swamp hunting ducks, when he happened to step on it."

Professor Guthrie comments as follows: "I have been examining and measuring the buffalo skull, which you obtained from F. A. Warnke of Emmetsburg. If I remember correctly you said that the skull had been obtained at Swan Lake. I noticed that there are two Swan Lakes in that part of the state and I assume that you refer to the one in Emmet County, north of Emmetsburg. The other, I believe, is in Palo Alto County farther south.

"The skull is in excellent condition and is the best one that we have received or that we have in the museum, as well as the largest. The measurements of this one are 27 inches in greatest width across the horn cores; $25\frac{1}{2}$ inches from tip to tip of the horn cores (the curvature brings the tips a little closer together than the cores, slightly nearer to the head). The horn cores measure each about 12 inches in circumference at the burr, which is the largest place on them. The length of the skull is $21\frac{1}{4}$ inches.

"I am writing to Mr. Warnke acknowledging this specimen and we wish to thank you very much for your interest in the museum and for this particular evidence of it. It means much to a museum to be able to secure specimens of a kind that for this state at least will soon be utterly unobtainable."

In Dolliver Memorial Park there is an interesting hollow known as Boneyard Hollow. I have found this one of the interesting places. Some legendary stories are connected with it. This hollow or canyon is flanked by sandstone ledges, and the narrow valley during part of the year has flowing water which empties into the Des Moines. The terrace, geologists think, belongs to the Wisconsin glacial age. Bones of human beings, Indian arrowheads, some implements made of copper, and bones of elk, deer and buffalo have been found there. The bones are

not of recent origin, because mature trees are growing over the terrace. It is supposed by some that it is one of the Indian dump piles. Of course there is no reason to doubt that they belong to the Indian. In this hollow I found a fine buffalo skull.

In the *Des Moines Register* appeared this article, October 29, 1927:

"Ida Grove. The Ida County Historical Society has been presented with a fine specimen of a petrified buffalo head which was found in Douglas Township by County Supervisor Will A. Love while doing road work in that portion of the county. Matt Knudsen has also presented a stone axe, which he found on his farm several years ago."

An item about a buffalo skull found in Ida Grove is written by Dr. G. C. Moorehead as follows: "Your letter addressed to our historical society just received. The buffalo head we have was found in the northern part of our county about six feet under ground in a ravine. It is in excellent state of preservation. I also have a head found five years ago 25 feet under ground but not so perfect. The measurements of the last one found are as follows: Between tips of horns (bony structure only remains), 24 inches; between orbits, 13 inches; from back of head to tip of jaw, 23 inches; diameter of orbits, 3 inches; weight, 19 pounds.

"A few of the teeth remain and are in good state of preservation. The color of the head is a reddish brown approaching maroon. This and the weight has made me feel that petrification was going on, replacing the bony structure. Some of our draws contain enough iron to give color to the water where it stands in pools. I am collecting specimens that may be of interest and have some pieces of elephant teeth, a number of shark teeth and am getting some good Indian relics."

H. L. Taylor records the occurrence of a buffalo skull near Forest City. Mr. Taylor has long been interested in relics and fossils. On August 24, 1927, Mr. Taylor writes:

"When you were here to visit the Pilot Knob State Park re-

cently I promised you something on buffalo. I have four skulls that were taken from Lime Creek, a short distance south and east of Forest City. One was found by S. E. Stieff, three miles south and west of Forest City, who plowed it up in the field. This happened on September 13, 1922. Another was found about twelve miles north and west of Forest City. This one is a perfect specimen, the best I have ever seen. It was given to us by H. H. Burman of Forest City. One of the other ones was given by E. J. Olson, the other by Bert W. Chamber of Forest City."

The *Des Moines Register*, October 28, 1928, published an account of the finding of bison horns near Clarion: "A set of buffalo horns found on the John Kirstein farm south of Clarion has been presented to the public library here by Mr. Kirstein. The horns are in a remarkable state of preservation, notwithstanding their long burial in the ground."

A. J. Barkley wrote an interesting letter on December 21, 1921: "I noticed an item from your pen this morning, and suspecting the discovery of a buffalo skull found in a bog as proof that buffalo once grazed on the Iowa prairies years ago, I told Charles Aldrich that in 1856 I had found a fairly well preserved buffalo skull in a sidehill sand bank in our pasture. Mr. Aldrich then fished out a copy of an old 'Ioway' newspaper report showing that an officer who had been ordered to go across the country from Fort Des Moines to Dubuque and send a topographic report of the country as to whether the land was tillable or desert, whether or not it was well watered, timbered, etc., in that report the officer in charge of the squadron said they were detained half a day at a ford on the Iowa River for the crossing of a great herd of buffalo at latitude so and so, longitude so and so, which made it near Marietta, Marshall County.

"Having been born in Linn County, Iowa, about eighty years ago I have always taken a great interest in the early history and settlement of the state. The 'Big Sixth' district covered, as I remember, about twenty-six counties in northwest Iowa. In that district in the early fifties thousands and thousands of elk horns covered every section of the prairie land. Upton Sinclair once

said that the 'Elk never inhabited Iowa but haunted the tall timber of the far North.' Well, then they must have come a long, long way every year to shed their horns."

The following is an interesting item about buffalo or bison appearing in the vicinity of the Ledges by Carl Fritz Henning,¹² he having found some buffalo bones near Iowa Center:

"I wish that I were a writer so that I could give to you an idea of my feelings at finding these positive proofs of the early existence of the American bison in Iowa. But more than all, would that my pen could truthfully describe the picture that came up before us as we stood in that lonely boggy place in the stillness of the night. The soft moonlight threw shadows across the prairie from the fleeting clouds. As cloud after cloud floated to the northward it seemed that once more the vast army of buffalo, the grandest, noblest animal that ever roamed the American plains, was passing in review before us. If it were in my power to describe to you the feeling of sadness as I realized that the same utter disregard for life that had exterminated the buffalo has already caused the prairie chicken to vanish from our stubble fields and meadow lands, and would ere long hush the bobwhite's note along the roadside—if I could paint this to you in colors true to the real conditions, then never again would one of these noble game birds be destroyed by the hand of man without a just cause."¹³

"Joseph Shultz brought us quite a curiosity in the shape of a petrified head of a bison or American buffalo. [None of the buffalo skulls are petrified.—L. H. P.] The head was found by Mr. Smith and his force while dredging in a marsh on the Nels Nelson farm north of town. The head is in perfect state of

¹²*Ledges State Park Booklet*, p. 11. Second Edition.

¹³Buffalo skeletons were not uncommon as late as 1895. The writer found a particularly good one near Fort Morgan, Colorado, some three or four miles to the north, which is part of the zoological collection of Iowa State College.

The writer found a fine buffalo skull in the Arapahoe Mountains on the west slope of the Rockies in Colorado not far from Fraser on Beaver Creek at an altitude of 9,500 feet. It was embedded in peat in an old beaver bog. It was in a good state of preservation. This skull is now in the zoological museum, Iowa State College. Pike in his "Journal" mentions the less frequency of the buffalo at higher altitudes. In a letter to me Dr. A. O. Weese of Norman, Oklahoma, reports the finding of a fine skull near Hutchinson, Minnesota.

The writer also found a fine buffalo skull in northern Michigan imbedded in sandy soil on the shores of Lake Superior near Ontonagon, Michigan.

preservation, the horn being intact. It was found five feet below the surface of the ground. A lordly monarch of the boundless prairie in prehistoric, bygone years sunk to his death in this marsh while his flock stood looking on in wonderment. It was a tragedy of the prairies in which this gigantic bison was the central figure. There was a time in bygone years when the bison traversed the wide prairies in countless numbers. We do not know how many years the buffalo has been extinct in this locality. The writer settled on the old homestead in Douglas Township with his parents in the spring of 1867 when he was a very small boy. At that time there were plenty of deer and elk but no buffalo. We have seen a number of buffaloes in captivity but none in the wild state. The buffalo head is a reminder of the early years when this country was the hunting domain of the Sacs, the Foxes and the Winnebagos, before the advent of the white man."—*Newell Mirror*.¹⁴

Miss Miriam Standing of Earlham calls my attention to an interesting buffalo skeleton found in Dallas County north of Earlham on a bend of Bear Creek. This creek winds around and has in it quicksand. Charles Standing was removing some of the sand from the bank when he found this skeleton.

Walt W. Slocum of Massena, Cass County, recently called my attention to an interesting buffalo skull which he found near Menlo. The find is interesting as we do not have many buffalo skulls from that section of Iowa. His letter follows:

"In times past it was a much mooted idea whether the habitat of the American bison extended east of the Missouri River. In all likelihood no man now living ever witnessed these shaggy animals in this territory. However there are indisputable facts that prove that they were here.

"For instance in Adair County on the road between Orient and Greenfield is located a country school always known as Buffalo Wallow School. The lands surrounding this point are rough and show a condition that may easily be recognized as an old time 'wallow.' The soil is loose and sandy and no doubt many a shaggy buffalo bull has polished his ebony horns in this locality.

¹⁴From *Sac City Bulletin*, Dec. 27, 1919.

"In June, 1930, while G. W. Ball, and George Chambers of Howe, Adair County, were repairing fences after a freshet, on the farm of the latter, the frontal and horns of a large bison were found in the bed of Middle River. These men brought the water logged specimen to the bank and allowed it to dry, and later it was shellacked and is in the private Slocum collection in Massena, Iowa.

"The horns measure twenty-seven inches in a straight line, from tip to tip, and are in very good state of preservation.

"The place where they were found is about eleven miles south of Menlo, and approximately a hundred miles east of the Missouri River. The horns were deeply imbedded in the bank soil and heavy rains caused the river bank to cave and allow the horns to loosen and fall into the river. It was a rare find as few bones or other remains of the bison are to be found in western Iowa. This would seem conclusive evidence that there were bison to be found east of the river as it is not reasonable to suppose that same would be transported that distance.

"In the same vicinity Mr. Ball has located a number of very interesting archaeological specimens, including two splendid spear heads over ten inches in length, as well as many tomahawks, arrows, scrapers, knives, etc. The sandstone formations are also rich in fossils, and many students as well as private collectors enjoy collecting and studying in that vicinity."

(To be continued)

THE BICYCLE ERA

That grand old conservator of culture and thought, Bro. Johnson, of the *Journal*, is considerably exercised because, he says, the *Express* claims the credit of originating the bicycle courier idea of bringing in the election returns. Well, well, too bad!—*The Knoxville Express*, November 4, 1896. (In the Newspaper Department of the Historical, Memorial and Art Department of Iowa.)

Copyright of Annals of Iowa is the property of State of Iowa, by & through the State Historical Society of Iowa and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.