

Article VI.—NOTE ON THE WOOD BISON.

By J. A. ALLEN.

The Museum has recently obtained a head (skull and unmounted head skin) of the Wood Bison, taken by Indians near Great Slave Lake. The exact point is not known, but it is evidently a freshly killed specimen, and is in excellent condition. It is a young male, probably about four years old, the second upper molar being wholly unworn, and the third molar not having yet broken through its alveolus. Compared with specimens of the Plains Bison (*Bison bison*) of corresponding age, it is rather above the average size of the latter, with the base of the horn cores relatively thicker. The head skin has the whole pelage darker, softer, and more silky than the Bison of the Plains, this specimen agreeing, in this respect, with several mounted heads of the Wood Bison I have seen in the possession of dealers within the last few years.

The present specimen confirms, as far as it goes, the characters recently assigned to the Wood Bison by Mr. S. N. Rhoads (Proc. Acad. Nat. Sci. Phila., 1897, p. 488), and quite warrant its recognition under the name *Bison bison athabascæ*, applied to it by Mr. Rhoads. Formerly it doubtless completely intergraded with the southern form. Now that it is on the point of extinction, the following summary of its recent decadence may not be without interest.

As is well known, the American Bison formerly ranged continuously from the northern boundary of the United States northward over the Saskatchewan plains to the region about Great Slave Lake, in latitude 60° north, and even, according to Richardson,¹ "to the vicinity of Great Marten Lake, in latitude 63° or 64°." Their range in the north, as well as in the south, gradually became more and more restricted, the last remnants consisting of only a few widely separated bands.

There is abundant historic evidence to show that the Wood Bison formerly ranged from the Liard River, in latitude 60°, eastward to the eastern end of Great Slave Lake, and from the district just northwest of Great Slave Lake southward, including the half-open country on both sides of Great Slave River, to the

¹Fauna Bor.-Am., I, 1829, p. 279.

western end of Lake Athabasca, and westward to the east base of the Rocky Mountains. On my map,¹ intended to show the approximate range of the Bison in 1875, its northern limit is given as not extending much beyond Peace River, while in 1889 Mr. Hornaday gave its supposed area as a very limited district, wholly to the south of Peace River.² It is quite probable that both maps were in this respect erroneous. Mr. Hornaday's plotting of this portion of his map was doubtless based on Prof. John Macoun's statement in his 'Manitoba and the Great North-West,' published in 1883, in which he says (p. 342): "In the winter of 1870 the last buffalo were killed north of Peace River; but in 1875 about one thousand were still in existence between the Athabasca and Peace Rivers, north of Little Slave River."

According to Warburton Pike,³ in 1890 "a few bands of buffalo" were scattered over a considerable area of country between the Liard River and Great Slave Lake, and thence south to Peace River. "Sometimes," he says, "they are heard of at Forts Smith and Vermillion, sometimes at Fort St. John close up to the big mountains on Peace River, and occasionally at Fort Nelson on the south branch of the Liard. It is impossible to say anything about their numbers, as the country they inhabit is so large, and the Indians, who are few in number, usually keep to the same hunting-ground." The site of his own successful hunt for these animals, in February, 1890, was on a tributary of Buffalo River, about fifty miles south of its entrance into Great Slave Lake.

It was near this point that Frank Russell hunted them in 1894, with the same Indian guide, but without success. He says: "At the end of the fourth day [from Fort Resolution] we reached the northern limit of the buffalo range, perhaps fifty miles south of the Great Slave Lake." Owing to stormy weather, Mr. Russell failed to reach the herd, being compelled to turn back without seeing a single bison. Concerning their numbers, haunts, and prospects he writes as follows⁴:

"The herd at present consists of a few hundred only. They are so wary that but one effective shot can be fired when they be-

¹ *The American Bison, Living and Extinct.* Mem. Geol. Surv. Kentucky, Vol. I, Part ii, 1876, and Mem. Mus. Comp. Zool., Vol. IV, No. 10, 1876.

² *The Extirpation of the American Bison.* Report of the U. S. Nat. Mus., 1886-87 (1889), pp. 369-548, pll. i-xxii.

³ *Barren Ground of Northern Canada*, 1893, p. 143.

⁴ *Explorations in the Far North*, 1898, pp. 231, 232.

take themselves to instant flight, and, as with the moose, pursuit is altogether futile. They cannot be hunted in summer as the country which they inhabit is an impenetrable, mosquito-infested, wooded swamp at that season. . . . They can only be killed by stalking in midwinter when their pelage is at its best. . . .

"The Indians along the Peace and Slave Rivers make occasional trips into the buffalo country with dog teams to establish lines of marten traps. When they discover a band of buffaloes they of course kill as many as they can, but they have not made systematic efforts to hunt them for their robes, as they have the musk-ox. Fortunately, the officers of the Company have exerted their influence toward the preservation of the buffalo, not trading for the robes, until the recent advent of rival traders. During the winter of 1892-3 forty buffaloes were killed, the largest number that had been secured for several years. I saw most of these robes which were very dark, the hair thick and curled, making a robe superior to that of either musk-ox or plains buffalo; they were so large that the Indians had cut many of them in halves for convenience in hauling on the sleds.

"From 20 to 100 MB [\$10 to \$50] are paid for the robes. The traders are trying to induce the Indians to preserve them as mountable skins.

"The northern limit of the range of the buffalo, as given by Mackenzie, was the Horn Mountains, north of the Little Lake. Père Ruore, of the Saint Michael Mission at Rae, who has crossed the Rae-Providence traverse several times, assured me that he had seen buffalo skulls on the prairies which lie within fifty miles of Providence, northwest of the western end of the Great Slave Lake. I saw no remains of buffaloes when I crossed these prairies in December, owing to the snow, but the country is similar to that south of the lake where they are still found.

"Black Head, an old Yellow Knife chief, living at the mouth of the Rivière au Jean, told me that he had killed 'plenty of buffaloes' in the delta of the Slave River. About fifteen years ago a few were killed near Liard, but they are seldom seen in that quarter. They formerly frequented the 'Salt Plains,' forty miles northeast of Fort Smith. Franklin's party killed a buffalo in that vicinity at the time of their visit in 1820.¹ Richardson states that

in 1848 there was an abundance of deer and buffalo meat obtainable on the Salt Plains."¹

Still later information is furnished by Thomas Johnson, in a quotation from the report of Game Inspector Jarvis to the Canadian Government, published in 'Forest and Stream' for Oct. 23, 1897 (Vol. XLIX, p. 323). His inspection of the region embracing the present range of the Bison was made in 1897, and in his report he says: "I have taken great pains in making as thorough inquiries as possible in connection with the buffalo, their habits, number, and range. The range of a scattered band of about 300 is from Peace Point to Salt River, and from Salt River to within twenty miles of Fort Resolution, on Great Slave Lake. I met a Mr. Handbury, an English sportsman, who is on a hunting expedition. He had just returned from an unsuccessful buffalo hunt, but he saw fresh tracks and beds of about sixty buffalo. Mr. Handbury returns this year, but the fear of a \$200 fine will hardly prevent his hunt. . . . If it be the intention of the Government to protect these nearly extinct animals, it can only be done by placing officials on the spot. I have in the case of buffalo and other game impressed on all hunters and other interested persons the necessity of obeying the game act, and have left printed notices where practicable."

Mr. Rhoads, in his 'Notes on Living and Extinct Species of North American Bovidae' (Proc. Acad. Nat. Sci. Philadelphia, 1897, p. 497), published a letter from Mr. H. I. Moberly, of the Hudson Bay Company, dated Nov. 9, 1897, in which Mr. Moberly states: "They lived formerly from the beginning of the wooded country north of the Saskatchewan to Great Slave Lake, and further north along the east slope of the Rocky Mountains. At present there are not more than two hundred and fifty to three hundred alive, and they are in two bands, one on the lower Peace River, north of it, and run from close to Great Slave Lake at Peace Point, which is some ninety miles below Fort Vermillion. The other is on the upper Hay River and ranges between Peace River and Liard River, and run down some two hundred and fifty miles east of the Rocky Mountains and up to the foot of the Rocky Mountains."

This brings the history down to Mr. Stone's report, published

¹ Arctic Searching Expedition, p. 149.

in this volume of the Bulletin (*antea*, p. 41), in which he states that he does not think the present number exceeds 50, and that their complete extinction, in spite of the efforts of the Canadian Government to protect them, will be consummated within the next three years.

The number of Wood Bison estimated to exist at different times during the last ten years may be summarized as follows :

Hornaday, 1889.....	550
Russell, 1894.....	a few hundred.
Jarvis, 1897.....	about 300.
Moberly, 1897.....	250-300.
Stone, 1899.....	50.

From the above it appears that the Wood Bison, during the last six years at least, have occupied a portion of country considerably to the north of the region where they were located by Mr. Hornaday in 1889, and by myself in 1876. It is likely, however, that they never wholly forsook the region they now occupy, and that the two maps above cited were in this respect erroneous. It is pretty safe now to assume, however, that they have been entirely exterminated from their former range south of the Peace River, and that a few years more will suffice for their complete extermination.

The extirpation of the Plains Bison (*Bison bison*) has already been practically effected. Mr. E. Hough of Chicago, an excellent authority on this subject, states in a recent number of 'Forest and Stream' (Vol. LIV, No. 12, p. 248, March 31, 1900), that in 1895 there were possibly 20 to 25 wild examples in different parts of Montana, Wyoming, and Colorado, and 100 to 125 in the Yellowstone National Park. Now (March, 1900) he says : "On the face of all discoverable information on this head it is safe to say there are not a dozen live wild buffalo outside the Yellowstone Park in the United States, and if there is a single one I do not know where it is. Inside the Park there may be 20 head or so."

The different domesticated herds he estimates may contain, all told, "between 300 and 500."

Thus the American Bison is already practically exterminated in the wild state, and its perpetuation depends upon the care and skill exercised to preserve the domesticated herds.

