THE

AMERICAN NATURALIST.

Vol. V.-SEPTEMBER, 1871.-No. 7.

NOTES ON THE RANGE OF SOME OF THE ANIMALS IN AMERICA AT THE TIME OF THE AR-RIVAL OF THE WHITE MEN.*

BY W. J. HAYS.

In the present condition of this country, since civilization has reached half way across the continent, few persons think of the prodigious changes that have taken place in the animal life in the comparatively short time since the discovery of the country. At that time the whole country was an unbroken wilderness, through which roamed the Indians and countless numbers of animals, many of which are now so rare as to be unknown to many and objects of curiosity to all. The moose which has now been driven almost entirely out of the United States, was then found as far south as New Amsterdam, now New York City.

In Sir Martin Frobisher's account of his second voyage to Newfoundland and adjacent land, 1577, he says "There is no wood at all, there is a great quantity of deer, their skins like unto asses, their heads or horns do far exceed any, both in length and breadth, their feet are great as oxen, which measured were seven or eight inches in breadth; there are also hares, wolves, etc."

Anthonie Parkhurst in 1578, says of the Island of Newfoundland, "I saw mighty beasts, like to camels in greatness, and their

* Recently read before the New York Lyceum of Natural History	* Recently read	before the New	York Lyceum	of Natural History
---	-----------------	----------------	-------------	--------------------

Entered according to Act of Congress, in SCIENCE, in the Office of the Librarian of Con	the year 1871, by the ngress, at Washington.	PEABODY ACADEMY	OF
	05	(0.07)	

AMER. NATURALIST, VOL. V. 25 (387)

This content downloaded from 075.121.145.133 on March 21, 2018 21:06:34 PM All use subject to University of Chicago Press Terms and Conditions (http://www.journals.uchicago.edu/tfeet cloven." Vanderdonck in his "History of the New Netherlands," 1642, says, "There are also white bucks and does, and others of a black color; the Indians aver that the haunts of the white deer are much frequented by the common deer, and that those of the black species are not much frequented by the common deer." The same peculiarity is noticed now, the moose and common deer are rarely found near each other.

James Hall, in his fourth voyage, July 22d, 1563, saw "in lat. 65, the tracks of some great deer as big as an ox." This shows the extent of the range of the moose at this period. They are not found now in Newfoundland, although they are still abundant in some parts of Canada, Nova Scotia, New Brunswick, and Alaska. The reindeer still exists in large numbers from the Arctic regions to the south end of Hudson's Bay, an average of five thousand horns being annually shipped from Greenland to Europe.

The carraboo abounds now south of Hudson's Bay to the United States, and from Newfoundland to the Pacific; and although fossil remains have been found as far south as the Ohio, its range at the time of the arrival of the white men was no more extensive than at present; the settlers of New Amsterdam knew of it only from the Indians, and from their description of it wrote back to their friends in Europe that the fabled Unicorn had been found.

The musk ox is not mentioned by the early travellers, but some of them mention having seen in Greenland the track of some big beast like an ox. The musk ox is not found now in Greenland.

The common deer (*Cervus Virginianus*) was everywhere represented as existing in incredible numbers; this animal is still found, although in greatly diminished numbers, all over the unsettled portions of the United States, a portion of Mexico, Central America, and South America to the Orinoco. It exists in immense numbers on the savannas of the northern part of South America, although there it is known by another name (*Cervus campestris*). As many as two hundred and fifty thousand have been shipped from Angostura in one year, and one hundred and seventy-five thousand from Para.

The Wapiti deer (*Cervus Canadensis*) was found all along the coast from Canada to the Gulf of Mexico. Vanderdonck mentions them as being plenty around New Netherlands in 1642. In 1654 Father LeMoine made a journey to the western part of New York, and speaks of the astonishing number of the deer, and of the great

numbers of elk, many of which were killed while crossing the rivers. Brickell says that the elk were plenty in the Carolinas as late as 1737. As late as 1826 a few elk were killed on the Saranac, in New York; a few were in the mountains of Virginia in 1847; several were seen in the mountains of Pennsylvania in 1864; now it is probable that not one could be found east of the Great Lakes.

The Bison (improperly called buffalo by the early settlers on account of its fancied resemblance to the European buffalo) also ranged along the coast from the valley of the Connecticut to Florida. When Hendrick Hudson landed on the island of Manhattan, he found some of the Indians clothed in bison robes; they had also moccasins made of these skins.

When he sailed up the river which now bears his name, he landed at what is now the entrance to Newburg Bay; he was well received by the Indians, and one of the sailors happening to show some of the Indians an almanac in which were the signs of the Zodiac, they knew how to explain that it was the head of an animal with which they were acquainted, and gave the whites to understand that it could be found in what is now known as the valley of the Ramapo; the Indians also explained that the animal had already begun to retire from the coast before the white men came here. The river Titicus, in Connecticut, formerly bore the name of Mutighticos, which Indian tradition signified to mean bison creek.

Vanderdonck, in "History of New Netherlands," 1642, says "Buffaloes are also tolerably plenty; these animals keep towards the southwest where few people go. These animals are not very wild, and some persons are of opinion that they may be domesticated. Persons who have got them when young, say they become very tame as they grow older." It is remarked that the half of those animals have disappeared and left the country. The settlers of James River in Virginia also found them, and made an attempt to domesticate them.

Father Simon LeMoine in his journey to the Iroquois in 1654, in which he discovered the Onondaga salt springs, says "that they saw immense herds of cows and bulls." On a map of the Frontiers of the Northern Colonies with the boundary line established between them and the Indians at the treaty held by Sir William Johnson at Fort Stanwix in November, 1768, the west branch of the Susquehanna, and Toby's Creek, a branch of the Ohio, are represented as arising in a swamp called buffalo swamp.

This content downloaded from 075.121.145.133 on March 21, 2018 21:06:34 PM All use subject to University of Chicago Press Terms and Conditions (http://www.journals.uchicago.edu/tLawson says that "great plenty of buffaloes, elk, etc., existed near Cape Fear River;" and Purchas says that "in 1613, the adventurers in Virginia discovered a slow kind of cattle as big as kine, which were good meat."

Brickell says that two were taken alive in 1730, near where Newbern now stands; and those who settled the Abbeville district in South Carolina in 1756 found the buffalo there.

Bernard Romans, who wrote in 1774, speaks of the buffalo as a "benefit of nature bestowed upon Florida."

Alvar Nunez, about the year 1535, saw them not far from the coast, and Ioutel in 1685 saw them at the Bay of St Bernard.

De Soto, who traversed the coast of the Gulf of Mexico from Florida to the Mississippi, from 1539 to 1543, saw no buffalo, but frequently saw the skins, and was told that the animal was to the north of them.

Gomara says, that in 1591, they were in great numbers in what is now New Mexico.

Herrera states, that they roamed as far south as the river Yaquinie (supposed to be the Rio Gila).

The buffalo is not found now west of the Rocky Mountains, except a few on the head waters of the Columbia river, but the Indians have a tradition that shortly before the visit of the first explorers destructive fires drove the bison east of the mountains.

Thus, it would seem that the bison once roamed over the entire country, now known as the United States, and extending as far north as the sixtieth parallel in British America. They are not found now east of the Missouri river, nor south of Colorado; at the rate at which they have been driven back and destroyed, it is probable that they are soon to be known only in history.

For many years, the annual number of robes brought to market has been about fifty-five thousand, and when it is known that the skin of the cow only is preserved, and that only in the winter season, and that the cows are generally with calf at this season, and that the skin is not taken from more than one in ten of those animals that are killed, some estimate may be formed of the rapid destruction of these animals at the hand of man; and without taking into consideration the deaths from natural causes, accidents, etc., it is a low estimate to place the number of bison destroyed by man each year at not less than half a million.

It is a little strange that, while the harmless animals have been driven so far back from the Atlantic coast, the carnivorous still

This content downloaded from 075.121.145.133 on March 21, 2018 21:06:34 PM All use subject to University of Chicago Press Terms and Conditions (http://www.journals.uchicago.edu/t-

390

remain, although scarce; the black bear, the cougar, the lynx, wolf, fox, and the smaller animals are still found occasionally. The jaguar is not now found east of Texas. Brickell states that they were found in the mountains of North Carolina as late as 1737.

It has been asserted that the red fox was an importation from Europe, and not a native; it is a fact that the European red fox has been imported and turned loose at different times, by English gentlemen for sporting purposes, but the red fox existed here before the arrival of the white men. Capt. James Hall, in the account of his fourth voyage 1563, says, "there are store of foxes in the main and islands, of sundry colors." Capt. Luke Fox found an island near the mouth of Hudson's Bay, where he killed several dun colored foxes, and on this account called the island "Dunne Foxe Island."

Carver 1763, says, "there two sorts of foxes in North America, one being of a reddish brown and the other of a gray."

Bartram 1761, says, "The foxes of Carolina and Florida are of the smaller red species."

Wolves are everywhere mentioned, and as late as 1820, the State of New York alone had expended thirty-eight thousand two hundred and sixty dollars in bounties for killing these animals during the preceding five years.

Stevens, 1708, says, "some years ago there were killed five hundred bears in two counties of Virginia."

The beaver was very abundant. Vanderdonck 1642, says, "That in the New Netherlands, and in the adjacent country, about eighty thousand beavers have been killed annually during my residence of nine years in the country."

The dog was found in all parts of the country, and from the description must have been the same as those now found with the Indians of the plains.

Columbus, in his second voyage, 1494, says, "no four-footed animal has ever been seen in this (Hispaniola) island or any other islands except some dogs of various colors, as in our own country, but in shape like large house dogs." These semi wild dogs have followed the Indians, and are only to be found with them in the far west. The wild animals having been removed in the march of civilization to make room for the domestic varieties that are more useful to man, it will, perhaps, be in place to say a word about their introduction to this country.

This content downloaded from 075.121.145.133 on March 21, 2018 21:06:34 PM All use subject to University of Chicago Press Terms and Conditions (http://www.journals.uchicago.edu/tThe first known to have been brought here, was by a colony of Northmen, in 1023, who settled in a portion of New England which they called Vineland; they brought with them a variety of stock, but as the colony afterwards broke up and returned to Iceland, and none of the subsequent settlers have ever seen anything like our domestic animals, it is to be presumed that they were destroyed. Columbus, in his second voyage 1493, brought to the islands horses and other domestic animals. The first horses brought to the mainland, were those brought to Florida in 1527, by Cabeca de Vaca, forty-two in number, but these all perished. The next were three hundred and fifty horses landed by De Soto on the 25th of May, 1539, on the coast of Florida, at the bay of Spiritu Sancto.

In 1604 L'Escarbot, a French lawyer, brought horses and other domestic cattle into Acadia; they were the Norman and Breton breeds.

In 1609 six mares and a horse were brought to Jamestown.

In 1629 horses were brought to Massachusetts from England.

In 1625 New Amsterdam received some Dutch horses.

The animals thus imported increased very rapidly, for Gent, who wrote in 1655, says "In the island of Hispaniola and ('tis likewise the same in many parts of the Continent, and other islands beside), there are many thousands of cattle that live wild in herds upon the mountains having no certain owners, so that it is free for any one to kill them that will, and thousands of them are every year killed only for their hides and tallow, and yet it is strange to consider what great multitudes of them are in private men's possession. The Bishop of Venezuela only is said to have had at one time sixteen thousand head of cattle feeding upon his own pastures."

In the year 1587 there came from St. Dominique thirty-five thousand four hundred and forty-four hides, and from New Spain sixtyfour thousand three hundred and fifty. At this time it was said that in the islands of Hispaniola, Jamaica, Marguerita and Dominica "there were so great troops of horses, oxen, kine, dogs, and hoggs which have increased to such an extent that any one may kill them, the dogs have so increased that they travel in troops and kill many cattle."

These few facts from history will show how entire races of animals can be swept from the earth to be replaced by others.