

Moose

The moose, *Alces alces americana*, with its odd physique and awkward shamble, presents a rather ridiculous appearance, and seems to have been equipped by nature with either too little or too much of everything. Small wonder that Josselyn (1672) described it as a "monster of superfluity"

Sometimes adjudged stupid by those who are impressed with grace, beauty and sartorial splendor, the moose is, as a matter of fact, of the intelligentsia. Because of this it has survived longer than most species, but its intelligence has made it easier prey to hunters than the more stupid deer, whose reaction to a given situation can not be predicted.

During the more than a million years that moose have existed, they have developed well-defined patterns of escape or defense, but no new



Young bull moose browsing on aquatic vegetation

plan of action has been worked out to cope with that recent innovation — the man with a gun. Knowing what moose may be expected to do, hunters easily outwit them.

Fanciful are the descriptions which have come to us from the early travellers in the New World, whose imaginations were captured by this great creature. Josselyn was under the impression that it was much larger than is the case, “ in height from the toe of the forefoot, to the pitch of the shoulder twelve foot which hath been taken by some of my *sceptique* Readers to be a monstrous lye.”

It was discovery of moose browse high above their normal reach that led Josselyn and others to the belief that some moose were of extraordinary height. This comes about through the habit of “riding down” trees. A moose will stride a fair sized, but limber, tree and, walking slowly up it, bend the trunk beneath the weight of its body until the branches are within reach.

Morton (1637) — for once on the conservative side — described the moose as “18 handfulls (six feet) high” he hath a bunch of haire under his jawes, he is not swifte, but stronge and large in body, and longe legged, in somuch that hee doeth use to kneele when hee feedeth on grasse”

Wood (1634) thought moose “not much unlike red Deare . as

bigge as an Oxe, slow of foote, headed like a Bucke, with a broade beame, some being two yards wide in the head, their flesh is as good as Beefe, their hides good for cloathing."

Belknap (1812), who devoted considerable space to the fauna of New Hampshire, wrote: "The Moose . . . is the largest animal of our forest. His palmated hornes extend from four to six feet in breadth, and are from thirty to fifty pounds in weight. He has hair on his neck resembling the mane of a horse. His hoof is cloven, and when he trots, the clattering of it is heard at a great distance. He feeds on the wild grass of the meadows, or on the leaves and bark of . . . moose-wood. When vexed by the flies in the summer, he takes to the water, where he feeds on the wild oats or pond lilies. His flesh is of a coarser grain than beef, but sweet and tender His lip, which is broad and cartilaginous, is accounted a 'dish for a sagamore. The hide is thick and firm and is made into soft and durable leather "

Sir Fernando Gorges (Purchas 1625), Wood, and Morton mention plans for domesticating the huge beasts which required no food nor shelter save that provided by the forest. However, nothing seems to have come of these schemes. Merrill (1920) says moose have never done well in captivity, although they are tractable and easily tamed when young. There are a number of records of tame moose in Coos County during the 1800's, but these were not artificially fed.

Where artificial feeding has been resorted to, as in zoos, digestive difficulties soon arise, and moose have never been successfully maintained under such conditions for any length of time.

Some experiments in stocking have resulted in satisfactory increases and establishment of herds. One instance noted in "The Moose Book" (Merrill 1920) is the stocking of Corbin's Park (see Chapt. VI). This, Merrill writes, was abandoned in a few years. As a matter of fact, moose were maintained within the enclosure for nearly half a century, the last of them dying of starvation about 1940. Many were lost, however, soon after they arrived at the Park as a result of the diet on which they were fed.

It is difficult today to imagine the former abundance of moose. They played a large part in the Indian economy, and later in that of the settlers. Wood (1634) provides a rather detailed account of an Indian moose hunt, describing the methods of handling the meat and hides.

North of the lower St. Lawrence, during the early 17th century, the French hunted moose on the crust with dogs, after the manner of the Indians. Many took 30 or 40 apiece in a season. The Sieur d'Aunay, between 1645 and 1650 traded about 3,000 skins annually. Pierre Radisson (to whose efforts, and those of his partner, may be credited the founding

of the Hudson's Bay Co.) told of killing over 600 around 1660 (Merrill 1920).

(Radisson's original base of operations was Three Rivers, near the headquarters of the St. Francis Indians, who made frequent visits to the Cohos, south of their permanent quarters, to hunt moose and bear.)

The Indians did not make serious inroads into moose populations until the hides could be traded for European goods, but moose hides shortly became second in importance to beaver in some sections of the country. By 1705, they were scarce in the St. Francis area, having been driven out or killed to satisfy the demands of the peltry trade. On the opposite side of New Hampshire, at Norridgewock, Maine, Fr Sebastian Rasle wrote in 1723 that there were no longer any moose or deer (Merrill 1920).

Although moose appear to have been nearly extirpated in some of the adjacent areas prior to the settlement of Coos County, they still existed there in large numbers. It may be that some of them had been driven in by the pressure of hunting in southern Canada, what is now the town of Pittsburg, N. H., and Maine. Merrill (1888) records that the pioneers of Coos, arriving after the close of the French and Indian Wars in 1760, found moose plentiful. Men depended on them for food and wore garments of moose hide.

From the time of discovery until some time after settlement, moose were really numerous in northern New Hampshire, being — rather than deer — the characteristic ungulate of this region (Richards unpub.).

The exact limits of the aboriginal moose range are unknown. Byers (1946) says they ranged south from the boreal forests through the coniferous swamps into Pennsylvania and Michigan. Merrill (1920) states that their range, since the coming of white man, has never been recognized as extending as far south as the northern boundary of Massachusetts.

Wood (1634) tells us that there were not many in Massachusetts Bay, but 40 miles to the northeast were "great store of them. Since the northern boundary of Massachusetts was recognized by Wood as lying three miles north of the headwaters of the Merrimack River — or about midway up the present state of New Hampshire — "forty miles to the northeast" falls somewhere in Carroll County, or across the Maine line, depending on the point from which he measured.

Although they were less abundant than in the north, there is evidence in the frequent records for the southern New Hampshire towns, that moose were not uncommon in the south until they had been killed off or driven out by settlement.

An unfortunate family in Stoddard, in Cheshire County, was without food for six days except for one moose (Child 1886-2). In Antrim,

moose often supplied a "winter's meat" (Cochrane 1880). Many were said to have been killed in Weare, in Hillsboro County, and other southern settlements where they were found included. Gilsun, Surry, Keene, Hancock, Dublin, Peterboro, Lyndeboro, Wilton, Milford, Londonderry, Bedford and Hudson.

Further north they were present in Newport and Claremont, in Sullivan County; Caanan, Plymouth, Littleton, Haverhill and Piermont, in Grafton County; and in all of Carroll and Coos Counties (Hoover unpub.).

(Moosilauke (a mountain in Grafton County) is said to be a corruption of "Moose Hillock."

The last moose was killed in Peterboro in 1760, in Antrim, 1790, in Sanbornton, as late as 1815 or 1820; and in Littleton they were absent before 1820. A large moose, which was regarded as choice because it was rare, was taken in Milford in 1779 (Hoover unpub.)

Capt. Powers, in 1754, recorded in his journal the taking of a moose on two successive days on the Baker River. Col. Webster, who settled in Plymouth when the country was a wilderness, had, at one time 15 barrels of moose meat on hand. Not far away, in Warren, moose were so plentiful about 1760 that Joseph Patch often had as many as 25 barrels in his cellar (Child 1886-1).

They were especially abundant in Coos County, where they subsisted largely on lily roots and other aquatic vegetation in summer, and on mountain ash, moose wood, and other browse in winter. Due to the animal's superior ability to survive the cold winters, and in self defense against the wolves, the moose population of this region seems to have been stabilized at a rather high level.

In Conway, settled in 1776 (and by 1783 the most populous inland town of its age) moose were hunted with great success at almost any time. Pinkham Notch was discovered by Timothy Nash when he chased a moose into a deep gorge.

Many of the northern pioneers would have starved except for the abundance of this useful animal. Martin's Meadow, in Lancaster, was a place where a family in need of meat could be sure of finding one. Dalton, Carroll, Whitefield and Jefferson, as well, were favorite resorts of the moose.

Some idea of their numbers may be gained from the record of Nathan Caswell, who killed 99 in one winter near East Lancaster. The "History of Coos County" (Merrill 1888) assures us that others probably took as many. A man by the name of Hilliard — one of a family of noted hunters — destroyed 80 in one season. By 1810 the total score for the year around Lancaster was 90. By 1820 moose were getting scarce in southern Coos.

Ethan Allen Crawford continued to hunt them with great success through the 1830's around Crawford Notch. In the Umbagog region, Brewster (1938) writes that they were not slaughtered for their hides, but killed in moderate numbers for food. Nevertheless, they remained only about 10 years after settlement, and he attributes their disappearance to the blasting of heavy charges during the construction of the Middle and Errol Dams.

In northern Coos, moose held on to a rather late date. James Miner Hilliard, guiding in Pittsburg in 1844, admitted taking 17 the previous year Philip Jordan killed the same number within four miles of Columbia Valley in a single year. Another hunter killed four with five shots fired in quick succession. Around the headwaters of the Connecticut, they continued plentiful through the middle of the 19th century. An increase in hunters, and the practice of hunting them with dogs, and on the crust, soon thereafter practically exterminated them. A few remained in Coos County through the last three decades of the 19th century (Hoover unpub.), and the present population, which has not changed much in the intervening years, still centers in this county.

Curiously enough, no thought was given to legal protection until after the Fish and Game Department had reported moose so rare as to be found only in museums. The first legislation protecting the species, passed in 1875, closed the season except from October 1 to February 1. Three years later the season was moved ahead one month, and the entire state, with the exception of Coos County, closed.

Since, for all practical purposes, Coos County was the only place where there were any moose, closing the other counties was of no benefit. Nor was the opening of these counties in 1881 anything more than a political gesture.

The moose laws were enforced with caution for fear of economic loss which might arise from offending visitors. During July and August of 1885, three moose were illegally shot by a New Yorker. In September he came back and took two more. One of the Fish and Game Commissioners, who complained, was reprimanded lest the visiting sport become displeased with the hospitality of New Hampshire, and fail to return to spend his money here (N. H. Fish and Game Dept., 1885).

Use of dogs for moose hunting was first limited in 1891. The season was open for four full months, but dogs might be used only from September 15 to November 1. The same law also set the first bag limit of one moose of either sex. Sunday hunting was illegal, but practically nobody knew it.

For a few years moose were said to be increasing; this may have been wishful thinking, or the traditional optimism of Department reports in predicting hunting prospects. In 1895, the season was cut to two

months — September 15 to November 15 — and the use of dogs completely forbidden. A number of moose were seen around the Connecticut Lakes and in Dartmouth College Grant. One bull was observed at Stewartstown.

The Legislature then passed a law giving moose complete protection from February 16, 1897 until September 15, 1901. One moose was illegally killed in 1897, 13 wintered in Coos the following winter, and that spring the cows had young with them.

The next session of the Legislature cancelled the law protecting moose, and opened the entire state for two months, with a limit of one bull. In 1901, a completely closed season, which has remained in effect ever since, was finally established.

Legislation did not bring back the moose. Merrill (1920) asserts that, contrary to popular belief, moose are not being exterminated, although in some sections they are losing ground. He writes that the species lost its grip in New Hampshire in 1884, and this is probably true enough, although there still are, 70 years later, some 25 to 30 moose in the state.

After the original small improvement (if such ever existed except in the hopes and optimism of the Commissioners of Fish and Game) no perceptible gains have been made.

The reasons behind the virtual disappearance of moose in New Hampshire were heedless killing, and the disturbance resulting from civilization. Animal enemies of the species have always been few. Less vulnerable than deer, many were, nevertheless, eaten by wolves (Wood 1634). Panthers, never very numerous in this state, were of course capable of killing a few. Up to the time of settlement, moose stood up very well against predation, and later, as the large predators were annihilated, their effect on moose became even less important.

The Indians, prior to the exploitation of their resources by white men, had not endangered the existence of moose, and, at least in northern New Hampshire, seem to have made little impression on them. With the coming of civilization, moose were killed in increasing numbers for food and the value of their hides. The greatest killings took place in March, when the snow was deep. Professional hunters took, often, only the skin, tallow and the nose, which was a tidbit for epicures.

Moose are incompatible with man, and, unlike deer, smart enough to move out when molested. Much more than deer they are creatures of the undisturbed forest, and lumbering and other activities soon made their former habitat unacceptable, although for a time there was just as much, if not more food. The moose which escaped the hunters moved further and further north as man encroached upon their range. The number which escaped was, however, very small, and by the time they

were given protection, only a pitiful remnant of the originally abundant populations was left.

The New Hampshire laws are quite well observed, but they have not noticeably improved the status of moose. Whether or not legislation came too late, after numbers had dropped below the level of safety—whether the disturbance of highways which transect even the remote wilderness is enough to deter their increase — or whether habitat has been reduced almost to the vanishing point, is a matter of conjecture. No survey has been made, and opinions of Department personnel differ as to whether the moose are still decreasing, increasing slightly, or only holding their own.