## Bear

The black bear, *Euarctos americanus americanus*, originally found in all parts of New Hampshire, now occurs generally only in the Counties of Carroll, Grafton and Coos, infrequently in the western quarter of Merrimack and the northern quarter of Belknap Counties (Preble 1942, Stevens 1943, Hamilton 1943), and rarely in the other counties.

The Indians hunted bear with bow and arrow, and took them with snares and in pits (Merrill 1888). Wood (1634) wrote that bear was esteemed over venison. Pioneer women of New Hampshire used the meat, not only for steaks and roasts, but combined with pumpkins for mincemeat (Wheeler 1879).

In the "History of Coos County," Weeks (1888) says "The bear



Black bear cub

was one of the original proprietors of the soil of this northern country and still holds his own against all odds. I have known him from the little, crawling, blind cub, not larger than a rat, brought fourth in February or the first of March, to the old 'sheep-killer' Each shebear produces two and sometimes three cubs, which in their earliest stages are the most insignificant little things imaginable. They fasten upon the mother, and for two months draw their sustenance from her without her partaking of any food, consequently she comes out of her den the last of April, or the first of May, extremely thin, while the cubs are as large as woodchucks. These cubs follow their mother the first season until it is time to den up in the fall, when they are driven off and den together, and, if they survive, remain near each other the following season. (The latter statement is in contradiction to the accepted belief that cubs run with their mother into their second year, the adult female breeding but once in two years.)

Weeks continues. "If all the cubs and young bears lived, bears would be so numerous that the country would be overrun with them, but I think many perish during their first winter, and many more in the spring, when they first come out. I have known of several instances where they have been found in a famished condition and almost helpless. They are, when a year old, not much larger than a collie dog, but they grow very rapidly after vegetation starts. No animal fights for her young with



Over 125 years of the bounty system and year round hunting have failed to deplete the black bear in New Hampshire

more good will than the bear, and woe to the man, boy or dog that interferes with her cubs

There is no doubt but that the large male bears kill the smaller ones, and each other when they can. The ordinary bear lives mostly on roots, green herbs and berries, seldom killing sheep or doing other mischief

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A good account of the habits of New Hampshire bear, furnished by Viron Lowe, formerly a warden with the New Hampshire Fish and Game Department, appears in "Randolph Old and New" (Cross 1924\*): of all the animals that we have here (the bear) is the most sly He is very hard to hunt and it is only in years when his food is very scarce that he is seen near the openings at all. Unlike the deer, the bear is an animal that follows his feed. If there are nuts he stays home. If not, he goes where there are nuts. Some years there will be a lot of bears shot and other years hardly any It is not because there are fewer bears but because they have moved where there is better feeding ground. Bears live on roots, ants, and the blossoms of the different plants in the spring and summer; in the fall on nuts, apples, and sometimes on sweet corn if planted near the woods. They have never been known to attack man unless in defense of their young. They very seldom kill stock; an old bear will kill young calves or perhaps a sheep, but they get the blame for a great many sheep that are really killed by dogs.

"I have seen but two bears that had any white on them. One I shot a long time ago had a small white spot on his rump. The other I got in the fall of 1923, and had a large white spot in the center of her breast. This one was a female with two cubs but they showed no white. Of the seven bears that I shot in the fall of 1923 this was the largest, weighing about two hundred and fifty pounds. It can readily be seen that they were not very big bears.

"In the spring, when the bears first come out of their den, there is very little for them to eat and if you take the trouble to follow them you will find that they do not go back to the winter den once they have left it. You will also find that wherever they spend a night they take the trouble to build a regular bough bed. They will climb up a small fir or spruce, break off the branches and pile them in a hollow which they have scooped out of the snow. The branches really are arranged in a very systematic way — tips all pointing in. I have seen several of these beds and they are all made the same. If there are two bears there will be two beds.

"Bears are very easy to approach when they are eating. I have driven my car to within three hundred feet of them, then got out and walked near enough to kill them with a shotgun. I have known them to

<sup>&</sup>quot;All quotations from "Randolph Old and New" reproduced by permission of Dr Ernest S. and Harold Cross, copyright owners.

walk between two men who were not over fifty feet apart, but when they are done eating and are on the alert it is almost impossible to still-hunt them. Sometimes on good soft snow you may be able to do it but the chances are against you."

Bear were very destructive to the cornfields, and the flocks and herds of the settlers. At Dover, one of the very earliest towns, the pioneers hired Indians to kill bears and wolves (Leonard & Seward 1920)

Essentially a forest animal, the bear retreated before the destruction of its range. In most of the open, settled country they were pretty well thinned out in the southern half of the state by the opening of the 19th century, but lingered around some of the mountains there until well after this date.

In Rockingham County they were occasionally seen up to 1810, and more than two decades later they were sufficiently numerous in Merrimack County to be quite destructive. Bear were commonly seen around Boscawen and Webster until about 1815, probably ranging in the vicinity of Kearsarge Mountain. They inhabited the Ragged Mountains near Andover, where in 1834 — the last year in which they were troublesome — 20 sheep were killed in one night.

Bear were common in Hillsboro County up to the early part of the 19th century. The last one was reported killed in the town of Weare in 1824. Occasionally one was taken in Cheshire and Sullivan Counties up to 1880.

In the three northern counties — Grafton, Carroll and Coos — bear have always been common. The country around Albany was said to have been particularly good bear country, and these animals were so plentiful in Pittsburg, at time of settlement, that it was practically impossible to keep sheep (Hoover unpub.). In fact, this is still the case according to two old-time hunters of that town. Both in their late eighties, they believe bear to be about as numerous as when they were boys.

The original density of bear is estimated at about one to every five square miles (Stevens 1943). Judging from local history, this seems rather low, but there may have been a good many less bear than the early residents figured. A single bear, if it has a mind to, can do a good deal of damage; the settlers expected to be surrounded by bears, and they saw them even when they weren't there. There is good proof of this in historical instances of farmers blazing away at their own black sheep and cattle by mistake.

A few of the old bear hunters are said to have made good livings from the bounties, but this is difficult to understand unless expenditures for bounties (records have not been preserved) were far greater before 1861 than they were at later dates. If it was really possible to live off the bounties, this argues in favor of a very high bear population, even

considering the low cost of living. Results of a number of big, community hunts, when a ring of men encircling an area produced nothing but small game, or at most a single bear, indicates that density was relatively low

Based on the limited numerical data available on the status of bear in New Hampshire in 1943, Stevens made some interesting calculations. Assuming a population of one bear to every five square miles, and using the reported kill for the years 1934-1942, he calculated the bear population at the end of the period at recruitment of both 10 percent and 20 percent. Some of his results showed bear being killed after they had, in theory, been exterminated. Throwing out these obviously impossible hypotheses, he then chose by elimination, what he considered the most probable figure for the bear population in 1943—837

Pointing out that bear have been exterminated over most of their original range, Stevens predicted the rapid extermination of New Hampshire bear unless radical changes in regulations were made.

New Hampshire's bear population was estimated by both Harper and Seaton in 1929 at 1,000 (Preble 1942). Preble considered it, at the time he wrote, to be about two-thirds of the aboriginal population. If he refers to the density of populated range, this is probably quite correct. However, if he means that the number of bear present in 1942 was two-thirds of the aboriginal population of the state, he must be in error

Since, at time of settlement, all of New Hampshire was bear country, while present bear range is practically limited to half the area, the latter interpretation would mean that 67 percent of the original number of bears occupied, in 1942, 50 percent of the original range — an increase in density of 34 percent.

Considering the low reproductive capacity of bear, and the lack of any regulation on hunting them, it has not been difficult to predict ultimate doom. Nevertheless, it has not worked out that way; the bear lingers on and is apparently more than holding its own.

From 1882, when a break-down of bounty payments first becomes available, to the present, the number annually presented for payment has gone up and down, but without wild fluctuations. Reported bear kills for the years 1882 through 1956 are given in Table X. This table contains many inaccuracies — dates representing the time when towns were reimbursed by the State Treasurer rather than dates of kill, and it is based on fiscal, rather than calendar, years.

Between 1914 and 1917, an undetermined number of grasshoppers got mixed in with the bears. This odd combination arose from the loose classification employed in making legislative appropriations. It may not be so serious as at first appears. By 1914, grasshopper picking

Table X Bear Bounties Paid by State, 1882-1955 (fiscal year)

Year	No.	Year	No.	Year	No.
1882	80	1908	30	1934	310
1883	68	1909	50	1935	258
1884	100	1910	57	1936	$\frac{1}{248}$
1885	132	1911	36	1937	99
1886	91	1912	81	1938	50
1887	58	1913	37	1939	30
1888	100	1914	100 est.	1940	71
1889	116	1915	100 est.	1941	78
1890	102	1916	100 est.	1942	49
1891	110	1917	97	1943	99
1892	200	1918	98	1944	83
1893	179	1919	96	1945	149
1894	129	1920	46	1946	160
1895	105	1921	50	1947	172
1896	121	1922	33	1948	119
1897	83	1923	58	1949	90
1898	29	1924	60	1950	155
1899	36	1925	60	1951	201
1900	51	1926	60	1952	171
1901	29	1927	60	1953	150
1902	55	1928	100	1954	75
1903	114	1929	83	1955	449
1904	. 80	1930	160	1956	119**
1905	74	1931	64		
1906	55	1932	97		
1907	49	1933	13		

\*Sources: 1882-1927, N. H. State Treasurer's Reports

1928-1933, Fish and Game Reports 1934-1942, "The Black Bear in N H.," Stevens, 1943 1943-1956, State Treasurer's Office Files

Fish and Game Dept. Files

\*\*Bountied up to Aug. 5, 1955. (During fiscal year ending June 30, 1956, an additional 76 bears were reported taken after the bounty was removed).

had lost its appeal, and we shall not be too far out of the way if we guess that about 100 bear were bountied annually

The figures for the years 1924 through 1927 are also open to suspicion. Treasurers' Reports for this period give only the sums expended. While it would seem easy to arrive at the number of bear by dividing expenditures by the amount of the bounty, the fact that payments exactly equalled appropriations (for both porcupines and bears) might lead to a conclusion that legislative appropriations have a remarkably stabilizing effect on animal populations. One thing we may be sure of — bounties were not paid on a number greater than shown in the table, and the true kill may have been somewhat less for those years. On the other hand, many hunters in recent years have not bothered to collect the \$5.00

bounty, and actual kills have sometimes been considerably higher than the number bountied.

With all these sources of error, the table gives some indication of fluctuations in bear kill for a period of over 70 years. Harvests for the early 1930's, with which Stevens worked, are seen to be unusually high. The Department, in 1934, reported bear on the increase, and the years 1934-1936 produced the highest kills on record to that date. Coupled with the decrease that naturally followed, these figures were enough to cause alarm — but nothing very spectacular happened. The latest available figures seem to show that there are about as many bears as there ever have been in recent times.

One was killed in Sullivan County in 1940, a second was killed in that county, in the town of Lempster, in December, 1950. There were signs of bear in Corbin's Park in 1953, and Conservation Officer Jesse Scott reported that there were more bear tracks in nearby territory than he could remember

In Cheshire County, Conservation Officer John Martin observed one in the Pitcher Mountain area of Stoddard in 1951. Officers George Stevens and Roger Warren reported bear workings among apples and choke cherries in the same area in 1953. One was seen at the junction of Honey Brook and Cold River in Acworth early the same fall.

The 1954-55 season produced a record kill, attributed not so much to an increase in bear, as to the failure of the mast and blueberry crops. Food shortages brought the bear into the open, to be observed almost anywhere in the state. They annoyed farmers in Rockingham and Merrimack Counties, and one was shot in the town of Boscawen while robbing a bee hive

New Hampshire people have always reckoned the bear an enemy There has never been a closed season, and it has been almost as popular a subject for bounties as the wolf. (For a complete list of State bounty laws see Table XXIX.) Nevertheless, the number of bears seems always to have been in good balance with available habitat. Further destruction of habitat is not imminent, and their position is perhaps as secure as that of any species in the state. Removal of bounties should have small tendency to increase populations, and continuation of bounties, equally little effect in controlling them.

For many years the Department vainly tried to interest the public in declaring the bear a game animal. "A state which has a population of black bear and a habitat suited to bear production is fortunate indeed. The bear is a favorite animal of the big game hunter because of his cunning and agility, and a bear population if handled properly, will bring a high revenue to the state from those who are willing to pay for the privilege of hunting them. Likewise the bear responds well to even a slight amount of protection and may be hunted year after year without depleting the brood stock" (N H. Fish & Game Dept., 1940).

A Department-sponsored bill, closing the season except between September 1 and November 1, passed the House in 1955. It was aimed, not only at protecting bear, but increasing Department income through the sale of special non-resident bear licenses.

No sooner had it received the approval of the House than reports of bear damage began to come in. A number of cattle were killed in the vicinity of Lyman and Monroe, and others were clawed so that they died. All the killings were charged to a single 450-pound male, which was credited with destroying at least 27 cows within 2 years time. After this animal was tracked down and shot on May 23, the killings ceased, but seven male bear were shot or trapped in the same area before the killer was taken. The females and cubs, up to that date, had not come out of their wintering areas.

The Department weighed possible damage settlements against the expected revenue from bear licenses, and reversed its stand. The bill was killed in the Senate, but another, which substituted damage payments for the bounty, was passed. From August 5, when the law became effective, to January 1, 1956 (roughly half the fiscal year) 12 claims amounting to slightly over \$1,300 were paid.