

WHY THERE IS NO BOUNTY ON THE BOBCAT

Distribution and Abundance

The bobcat is generally distributed throughout the swamp and cutover uplands of the Upper Peninsula and the northern one half of the Lower Peninsula in Michigan. But nowhere in these regions does it appear to be numerous, at least not in the sense that deer and rabbits are. Neither does its population appear to remain constant, nor does it appear to increase without limit even though it is not subjected to direct control. Its ranks seem to be ever changing. Those of us who hunt or trap bobcats have noticed that in some years they seem fairly common and in others scarce.

Records of the Hudson's Bay Co. extending over a period of more than one hundred years indicate that the bobcat population reaches a period of peak abundance about every ten years, after which their ranks become temporarily decimated. Just what causes these cycles of periodic swelling and shrinking of the bobcat population or any other wild animal population, no one has yet explained satisfactorily. One explanation which has been advanced for predatory species is that they fluctuate in this manner because the species upon which they depend most for food also fluctuate similarly. And it is true, such a correlation does appear to exist. But then, what causes the food species to vary in number cyclically?

During the two and one half years extending from January 1, 1935 to July 1, 1937 bounty payments were made upon the bobcat. The official records showing the number of predatory species taken and presented for bounty payments indicate that the bobcat population is only about one third the size of the coyote population. (See Table I). These data together with those of Table II show that the bobcat is relatively far less numerous than the coyote. Another

thing these tables indicate is that there was a considerable shrinkage in the bobcat population from one year to the next. Due to the short span of time covered by the data, it is difficult to determine whether this was due to factors causing cycles or to control pressure. Perhaps both of these factors were playing their parts.

Emphasizing the population reductions indicated by Tables I and II were the complaints of the 'cat hunters in the Lower Peninsula, who feared that the bounty on the bobcats was working toward the destruction of their sport. They therefore sought to remove the 'cat from the group of mammals upon which bounties were paid.

It is only during recent years, most notably during the past decade, that the bobcat has attained this new and important recognition from sportsmen as an animal worthy of the chase. They have found that 'cats run fine ahead of hounds, and that usually they run in a circle small enough to give them a fair opportunity to get some good shooting.

Furthermore, since there is always an open season on 'cats, they may be hunted at any time. Those sportsmen who enjoy very much getting out in the woods, and who are likewise very fond of hunting, find in this an advantage much in their favor. Thus they are offered a chance to hunt a gamey animal during the winter months when all other game species are protected by closed seasons.

This sport appeals to archers and gunners alike; and to hunt in Ogemaw County during a single week and hunters have come from as far as Detroit and Kalamazoo.

The only charge made against the bobcat is that it is a predator, and one which takes a great toll of game annually. In order to gain some insight into the predatory activities of the bobcat, the Game Division has been making a study of the food habits of this species, for the degree of predation to which any species is exposed is most readily revealed through a study of the food habits of the predator or predators involved.

Results of Food Habits Work

Unfortunately it has not been possible to make as large a collection of bobcat stomachs and scats as had been hoped, but enough information is at hand to justify some tentative conclusions. As shown in Table III, mammals form the bulk of their food, as remains of this group were found in 82% of the stomachs. Of this group, the small mammals (shrews, squirrels, and mice) were found most often, that is in 38% of the stomachs examined. Next in importance in their diet seem to be the hares and rabbits which occurred in 36% of the stomachs. Remains of deer were found in 24% of the stomachs, but it is likely that some of this was carrion. This opinion is supported by the fact that deer remains were found most often in stomachs collected in the month of December, a time when there would be much offal from deer dressed out by hunters available.

The remains of the birds were found in 13% of the stomachs, and grouse remains were found in only 4% of them. The stomachs containing the grouse were collected in October and November, which suggests that they too may have been found as carrion from birds lost by hunters.

Except for material that was used as trap bait, the remains of no domestic animals were found.

Identifiable carrion was found in 11% of the stomachs. One shortcoming in making food habit analyses is that it is not always possible to determine what is and what is not carrion. In the summer when the flesh of animals decomposes, becomes foul, and swarming with maggots in a relatively short time, carrion is readily identifiable. But in the winter, carrion found in a stomach may appear fresh weeks after the death of the animal from which it was procured.

We realize that there is little point to simply determine what an animal eats if its significance is not understood. Cycles have already been mentioned, but they call for a little more discussion here. The rabbits of the North follow a cycle of approximately eleven years' duration. This fluctuation has been recorded for many years, and it has occurred with remarkable regularity despite hunting and predator pressures.

An identical situation prevails with regard to the grouse. All of us who hunt to any extent at all will remember that the rabbit and the grouse were extremely numerous during the period extending from 1930 to 1932, and that by 1936 they were both mighty scarce. Now they are showing strong indications of again increasing. By 1942 it is expected that a peak of abundance may again be reached, after which these species probably will begin another temporary slump. In view of this, it is apparent that the bobcat in the long run has no adverse effect normally upon either rabbits or grouse.

During the last fifteen to twenty years the deer have consistently become more and more numerous despite hunting and predator pressures. In fact they have increased to the point where they have become their own greatest enemy over a large part of their winter range. Strange though this may sound, it is true none the less. This is because the available food on their winter range

is being so seriously depleted by them that they are being forced to compete fiercely with one another for enough food to sustain their lives through the winters. Because does and fawns are more abundant than bucks, and because of the small size of the fawns, they are eliminated in the greatest number each winter as a result of the starvation brought on by this competition. Happily our winters are not more severe, or this loss would be greater than it is.

Value of Control

Destruction or control of the bobcat simply cannot improve these situations among the rabbits, grouse, or deer. If all the bobcats were destroyed, the rabbits and the grouse would still have their cycles of abundance and scarcity; their populations would still continue to swell and shrink and swell again. Nor would the total destruction of the bobcat improve the plight of the deer. The latter would still be faced with a serious deficiency of available and nourishing food on their winter range. Killing off the bobcat will not stop the cycles, nor will it provide the deer with an abundance of palatable food on the winter range. *Betterment of the plight of these species calls for something other than bobcat control.*

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Table I

SUMMARY OF PREDATORY MAMMAL DATA

Relative Abundance
(As Indicated by Bounty Take)

Species	Section of State	1935	1936	1937	Total
Bobcat	U. P.	632	521	148	1,301
	L. P.	661	373	281	1,315
Total		1,293	897	429	2,619
Coyote	U. P.	2,894	2,626	2,085	7,605
	L. P.	234	294	414	942
Total		3,128	2,920	2,499	8,547
Wolf	U. P.	30	15	34	79
	L. P.	0	2	2	4
Total		30	17	36	83
Grand Total		4,451	3,834	2,964	11,249

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Table II

Bobcats and Coyotes Turned in for Bounty Payments
in the Counties of the Upper Peninsula

County	1935		1936		1937		Total	
	Bobcat	Coyote	Bobcat	Coyote	Bobcat*	Coyote	Bobcat	Coyote
Alcona	20	191	26	186	2	121	48	498
Baraga	54	187	30	329	14	77	98	593
Chippewa	17	205	21	238	6	241	54	684
Delta	87	265	50	224	18	146	155	635
Dickinson	60	136	36	118	10	108	106	362
Gogebic	59	109	35	97	8	163	102	369
Houghton	31	274	46	168	23	131	100	573
Iron	41	218	68	155	18	160	127	533
Keweenaw	4	67	2	45	0	28	6	140
Luce	11	52	13	89	1	92	25	233
MacKinnac	13	162	18	111	2	114	33	387
Marquette	74	321	43	197	23	169	140	687
Menominee	41	111	33	113	10	87	84	311
Ontonagon	92	419	72	356	8	310	172	1085
Schoolcraft	28	177	31	200	5	138	64	515
TOTAL U.P.	632	2894	524	2626	148	2085	1304	7605
TOTAL L.P.	661	234	373	294	281	414	1315	942
TOTAL STATE	1293	3128	897	2920	429	2499	2619	8547

* To July 1, 1937, when bobcats were removed from the list of bountied mammals.

Table III

Classified List of Food Items Found in 52 Bobcat Stomachs
7 of which were empty. (Collected from 1934 to 1937)

Month	Jan.	Feb.	Apr.	Sept.	Oct.	Nov.	Dec.	Total Times Occurred	Percent Occurrence
No. of Specimens	4	3	1	3	9	12	20		
Food Item:									
MAMMALS	3	2	1	3	9	5	14	37	82.2* ●
Shrew					1		1	2	4.4
Skunk				1				1	2.2
Bobcat					1		2	3	6.6
Squirrels	1			1				2	4.4
Woodchuck				1				1	2.2
Flying Squirrel	1							1	2.2
Native Mice			1		2	2	2	7	15.5 ●
Deer Mouse							1	1	2.2
Red-backed Vole							1	1	2.2
Meadow Vole			1		2	2		5	11.1
Porcupine		1	1	1	2		1	6	13.3 ●
Hares and Rabbits	2				6	4	4	16	35.5 ●
Snowshoe Hare	1					1	3	5	11.1
Rabbit (unident.)	1				6	3	1	11	24.4
Deer	2	1				2	6	11	24.4 ●
BIRDS	1			1	2	1	1	6	13.3 ●
Crow					1			1	2.2
Bluejay	1							1	2.2
Grouse					1	1		2	4.4 ●
Sparrow				1				1	2.2
Unidentified							1	1	2.2
ROUND WORMS						1	3	4	8.8
MISCELLANEOUS									
Carion	1					1	3	5	11.1
Debris	2			3	3	6	10	24	53.3
Empty		1	1			3	2	7	

*Read: Remains of mammals occurred in 82.2% of the stomachs.

Prepared from analyses of Michigan material made by the U.S.B.B.S.

No data available for the months not indicated above.

● Notice particularly.