

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
WILDLIFE DIVISION
LANSING, MICHIGAN 48909

Report No. 3071
October 1987

BOBCAT SURVEY - 1986-87

by

Thomas M. Cooley, Stephen M. Schmitt, and Paul D. Friedrich

Introduction

Pressure by concerned organizations and the Convention on International Trade in Endangered Species (CITES) has caused the Fish and Wildlife Service to compile comprehensive data on some furbearers. This documentation is necessary to verify the stability of populations and to justify continued harvesting and exportation of pelts. This is the seventh consecutive year of the bobcat survey in Michigan (Cooley et al. 1981; 1982; 1983; 1984; 1985; 1986).

During the winter of 1986-87, the Wildlife Division required trappers and hunters to submit bobcat (*Felis rufus*) skulls to the Department of Natural Resources for examination. This allowed Division personnel to age and sex the harvested bobcats by canine tooth examination. This information is summarized for bobcats harvested in the 2 northern Regions (Appendices I and II) and bobcats harvested from unspecified areas (Appendix III).

Materials and Methods

The lower jaw was removed from each skull and a lower canine was extracted for examination. Measuring the maximum root width and thickness of the canine allowed for sex determination (Friedrich et al. 1983) and age was estimated by cementum layer counts (Crowe 1975).

Results and Discussion

Region I

The number of samples collected this year was over 4 times higher than last year. This can be attributed to better compliance with the mandatory submission of skulls and a larger number of harvested animals. The sex ratio of bobcats examined from Region I (Table 1) was 111:100 (216:194) males to females. This is the fifth time in the 7 years of data collection that the ratio favored males (Cooley et al. 1981, 1982, 1983, 1986) and also agrees with the data of Erickson (1955) and Hoppe (1980). The percentage of young-of-the-year was near the average for all the years bobcats have been examined. The age groups 0-3 years made up 78.8% of the total animals submitted, slightly up from last year's total of 72.5%, and comparable with previous data. The young-of-the-year and yearling age classes occurred most frequently in the sample.

Region II

The number of samples collected from Region II this year was nearly 2 times greater than the 1985-86 collection. As in Region I, this increase can be attributed to better compliance with the mandatory submission of skulls and a larger number of harvested animals. The sex ratio of Region II bobcats (Table 2) was 123:100 (75:61) males to females. This was consistent with data from past collections. The percentage of young-of-the-year (31.6%) was comparable to values from 1981, 1982, and 1986, but higher than 1983, 1984, and 1985. The yearling age class (33.1%) was nearly twice last year's value (19.4%) and comparable to the data from 1984 (36.0%). The age groups 0-3 years made up nearly 78.7% of the total animals submitted, comparable to 1982 and 1986 values.

Regions I and II

Compliance with the mandatory skull submission this year was 82.1% (549 of 669) of the bobcats registered. This was up markedly from last year's 56.0%, the first year of mandatory skull submission. The combined totals for the two Regions (Table 3) exhibit a distribution in the age classes and sex ratios consistent with past year's data for either Region. As expected, the 0-1 and 1-2 year-old age classes made up a high percentage (64.3%) of the total animals examined.

Sex ratios calculated by tooth measurement in previous years have not differed significantly from the actual sex ratios of the samples (Friedrich et al. 1983 and Unpublished Data). However, the differences suggest that the calculated values could be adjusted by +4.4% for juvenile males, -4.5% for juvenile females, -1.5% for adult males, and +1.7% for adult females.

Management Application

The collection and examination of bobcat teeth provided additional baseline information. The development of new sexing techniques using dental measurements has allowed for easier data collection. This data, in conjunction with future information, will allow the Wildlife Division to develop a management model and hopefully assure Michigan trappers and hunters the opportunity to harvest and export this furbearing species in the future.

Acknowledgements

We thank the bobcat trappers and hunters for their cooperation and the biologists and technicians for gathering the bobcat heads and submitting them for examination. Thanks is also extended to Julie Wickham for assisting in the preparation of this report.

Literature Cited

- Cooley, T. M., S. M. Schmitt, and P. D. Friedrich. 1981. Bobcat survey 1980-81. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 2894. 13pp.
- _____, _____, and _____. 1982. Bobcat survey 1981-82. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 2916. 14pp.
- _____, _____, and _____. 1983. Bobcat survey 1982-83. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 2948. 13pp.
- _____, _____, and _____. 1984. Bobcat survey 1983-84. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 2979. 12pp.
- _____, _____, and _____. 1985. Bobcat survey 1984-85. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 3003. 13pp.
- _____, _____, and _____. 1986. Bobcat survey 1985-86. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 3042. 8pp.
- Crowe, D. M. 1975. Aspects of aging, growth, and reproduction of bobcats from Wyoming. J. Mamm. 56:177-198.
- Erickson, A. W. 1955. An ecological study of the bobcat in Michigan. M. S. Thesis. Michigan State College, East Lansing, Michigan. 133pp.
- Friedrich, P. D., G. E. Burgoine, Jr., T. M. Cooley, and S. M. Schmitt. 1983. Use of lower canine teeth for determining the sex of bobcats in Michigan. Mich. Dep. Nat. Resour. Wildl. Div. Rep. No. 2960. 5pp.
- Hoppe, R. 1980. Population dynamics of the Michigan bobcat (Lynx rufus) with reference to age structure and reproduction. M. S. Thesis. Michigan State University, East Lansing, Michigan. 53pp.

Table 1. Estimated age and sex ratio of Region I bobcats.

Age	Number	Male	Female	Percent of Total
0-1	161	85	76	39.3
1-2	102	50	52	24.9
2-3	60	32	28	14.6
3-4	26	9	17	6.3
4-5	22	13	9	5.4
5-6	16	11	5	3.9
6-7	7	4	3	1.7
7-8	6	3	3	1.5
8-9	1	1	0	0.2
9-10	2	2	0	0.5
10-11	3	2	1	0.7
11-12	2	2	0	0.5
12-13	1	1	0	0.2
13-14	1	1	0	0.2
	410	216	194	99.9

Table 2. Estimated age and sex ratio of Region II bobcats.

Age	Number	Male	Female	Percent of Total
0-1	43	26	17	31.6
1-2	45	25	20	33.1
2-3	19	10	9	14.0
3-4	10	7	3	7.4
4-5	5	1	4	3.7
5-6	3	1	2	2.2
6-7	2	1	1	1.5
7-8	3	1	2	2.2
8-9	2	1	1	1.5
9-10	0	0	0	0.0
10-11	3	1	2	2.2
11-12	1	1	0	0.7
	136	75	61	100.1

Table 3. Estimated age and sex ratio of bobcats from Regions I and II.

Age	Number	Male	Female	Percent of Total
0-1	205	112	93	37.3
1-2	148	76	72	27.0
2-3	79	42	37	14.4
3-4	36	16	20	6.6
4-5	27	14	13	4.9
5-6	19	12	7	3.5
6-7	9	5	4	1.6
7-8	9	4	5	1.6
8-9	3	2	1	0.5
9-10	3	3	0	0.5
10-11	6	3	3	1.1
11-12	3	3	0	0.5
12-13	1	1	0	0.2
13-14	1	1	0	0.2
	549	294	255	99.9

APPENDIX I.

1986-87 BOBCAT DATA - REGION I

DIST.	COUNTY	LOCATION Twp, Rng, Sec.	DATE Mo, Da, Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
UNKNOWN								
1	UNKNOWN				M	2.5		
1	UNKNOWN		02 22 87	8600780	F	2.5		
1	BARAGA	47N 32W 22	11 26 86	8600694	M	1.5	G	
1	BARAGA	48N 31W 18	11 03 86	8600692	F	1.5	T	
1	GOGEBIC	45N 44W 23	12 07 86	8600784	M	0.5	T	
1	GOGEBIC	45N 42W 07	10 28 86	8600781	M	1.5	T	
1	GOGEBIC	46N 43W 21	11 13 86	8600783	M	2.5	T	
1	GOGEBIC	46N 45W 17	02 04 87	8600787	M	9.5	T	
1	GOGEBIC	45N 45W 08	01 07 87	8600786	M	11.5	T	
1	GOGEBIC	47N 42W 04	02 10 87	8600788	F	0.5	T	
1	GOGEBIC	45N 42W 27	10 30 86	8600782	F	1.5	T	
1	GOGEBIC	45N 40W 27	10 31 86	8600801	F	4.5	T	
1	GOGEBIC	45N 44W 27	12 07 86	8600785	F	6.5	T	
1	HOUGHTON	47N 36W 02	02 08 87	8600294	F	7.5	T	+/- 1 YEAR
1	HOUGHTON	47N 37W 03	10 27 86	8600795			T	
1	HOUGHTON	47N 37W 03	10 27 86	8600794			T	
1	ONTONAGON	50N 39W	11 15 86	8600776	M	0.5	T	
1	ONTONAGON	50N 39W 31	01 12 87	8600791	M	8.5	T	
1	ONTONAGON	50N 38W 27	02 02 87	8600778	F	0.5	G	
1	ONTONAGON	50N 38W 27	01 30 87	8600779	F	0.5	G	
1	ONTONAGON	50N 39W 31	12 14 86	8600793			T	
1	ONTONAGON	49N 38W 01	02 24 87	8600796			G	
2	UNKNOWN			8600410	F	0.5		
2	DICKINSON	41N 28W 34	01 10 87	8601039	M	0.5	T	
2	DICKINSON	41N 29W 29	02 16 87	8600339	M	0.5	T	
2	DICKINSON	42N 29W 19	02 23 87	8600342	M	0.5	T	
2	DICKINSON	42N 29W 13	02 25 87	8600344	M	0.5	T	
2	DICKINSON	40N 28W 03	11 18 86	8600312	M	0.5	G	
2	DICKINSON	43N 27W 27	12 27 86	8600762	M	0.5	T	
2	DICKINSON	43N 29W 11	02 18 87	8600330	M	0.5	T	
2	DICKINSON	42N 29W 13	02 25 87	8600345	M	0.5	T	
2	DICKINSON	41N 29W 11	01 27 87	8600326	M	0.5	T	
2	DICKINSON	44N 30W 30	01 03 87	8600285	M	0.5	G	
2	DICKINSON	43N 28W 07	01 03 87	8601068	M	0.5	T	
2	DICKINSON	42N 27W 02	11 12 86	8600733	M	0.5	T	
2	DICKINSON	41N 27W 21	01 03 87	8600422	M	0.5	G	
2	DICKINSON	41N 30W 10	12 22 86	8600314	M	0.5	T	
2	DICKINSON	42N 28W 27	12 15 86	8600408	M	0.5	T	
2	DICKINSON	42N 30W 12	02 04 87	8600333	M	0.5	T	
2	DICKINSON	41N 28W 34	02 28 87	8600432	M	0.5	T	
2	DICKINSON	41N 29W 11	01 27 87	8600325	M	0.5	T	
2	DICKINSON	41N 30W 02	02 05 87	8600332	M	0.5	T	
2	DICKINSON	39N 29W 13	11 06 86	8600302	M	1.5		
2	DICKINSON	41N 28W 05	12 30 86	8600418	M	1.5	T	
2	DICKINSON	41N 29W 01	02 26 87	8600346	M	1.5	T	
2	DICKINSON	41N 29W 31	01 19 87	8600322	M	1.5	T	
2	DICKINSON	43N 28W 36	01 12 87	8601034	M	1.5	T	
2	DICKINSON	41N 28W 34	02 20 87	8600429	M	1.5	T	
2	DICKINSON	40N 30W 29	10 31 86	8600301	M	1.5	T	

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION	DATE	SEAL	SEX	AGE	HOW	COMMENTS	
								Twp.Rng.Sec.	Mo.Da.Yr.
2	DICKINSON	43N 28W 17	01 14 87	B600427	M	1.5	T		
2	DICKINSON	44N 29W 35	01 22 87	B601053	M	1.5	T		
2	DICKINSON	42N 28W 21	01 03 87	B601013	M	2.5	T		
2	DICKINSON	43N 29W 27	11 08 86	B600730	M	2.5	T		
2	DICKINSON	40N 29W 19	02 23 87	B600341	M	2.5	T		
2	DICKINSON	41N 27W 21	01 03 87	B600421	M	2.5	G		
2	DICKINSON	44N 28W 22	02 21 87	B600102	M	2.5	G		
2	DICKINSON	41N 28W 33	01 12 87	B601042	M	2.5	T		
2	DICKINSON	39N 28W 01	01 29 87	B601064	M	3.5	T		
2	DICKINSON	40N 29W 06	11 17 86	B600306	M	3.5	G		
2	DICKINSON	41N 29W 31	01 19 87	B600323	M	3.5	T		
2	DICKINSON	44N 30W 34	02 10 87	B600296	M	3.5	G		
2	DICKINSON	42N 29W 03	11 08 86	B600729	M	3.5	T		
2	DICKINSON	43N 29W 11	02 04 87	B601074	M	4.5	T		
2	DICKINSON	43N 29W 36	12 28 86	B600760	M	4.5	T		
2	DICKINSON	44N 28W 10	01 04 87	B601006	M	4.5	T		
2	DICKINSON	40N 28W 12	01 29 87	B601065	M	5.5	T		
2	DICKINSON	44N 28W 27	02 23 87	B600043	M	5.5	G		
2	DICKINSON	40N 28W 30	12 25 86	B600317	M	5.5	T		
2	DICKINSON	42N 27W 02	11 12 86	B600735	F	0.5	T		
2	DICKINSON	41N 29W 36	11 21 86	B600309	F	0.5	T		
2	DICKINSON	41N 29W 10	02 15 87	B600338	F	0.5	T		
2	DICKINSON	41N 28W 04	12 06 86	B600406	F	0.5	T		
2	DICKINSON	41N 30W 13	01 03 87	B600318	F	0.5	T		
2	DICKINSON	43N 27W 27	12 27 86	B600763	F	0.5	T		
2	DICKINSON	41N 29W 36	11 21 86	B600308	F	0.5	T		
2	DICKINSON	42N 27W 02	11 12 86	B600734	F	0.5	T		
2	DICKINSON	42N 28W 21	01 04 87	B601014	F	0.5	T		
2	DICKINSON	41N 28W 34	01 10 87	B601038	F	0.5	T		
2	DICKINSON	41N 30W 13	01 03 87	B600319	F	0.5	T		
2	DICKINSON	43N 28W 28	01 21 87	B601052	F	0.5	T		
2	DICKINSON	41N 28W 34	02 20 87	B600428	F	0.5	T		
2	DICKINSON	43N 27W 24	01 11 87	B600287	F	0.5	G		
2	DICKINSON	43N 29W 11	01 21 87	B601051	F	0.5	T		
2	DICKINSON	40N 29W 08	02 15 87	B600337	F	0.5	T		
2	DICKINSON	43N 23W 07	01 23 87	B601054	F	0.5	T		
2	DICKINSON	41N 28W 34	01 10 87	B601040	F	0.5	T		
2	DICKINSON	40N 28W 30	02 15 87	B600340	F	0.5	T		
2	DICKINSON	40N 28W 19	01 25 87	B600324	F	0.5	T		
2	DICKINSON	43N 29W 08	02 15 87	B600300	F	0.5	T		
2	DICKINSON	44N 27W 28	02 23 87	B600042	F	1.5	G		
2	DICKINSON	41N 28W 34	01 10 87	B601041	F	1.5	T		
2	DICKINSON	42N 29W 26	02 23 87	B600343	F	1.5	T		
2	DICKINSON	41N 30W 13	12 21 86	B600313	F	1.5	T		
2	DICKINSON	44N 28W 10	01 04 87	B601007	F	1.5	T		
2	DICKINSON	43N 28W 07	02 12 87	B601135	F	1.5	T		
2	DICKINSON	41N 29W 36	11 22 86	B600310	F	1.5	T		
2	DICKINSON	42N 28W 28	12 28 86	B600414	F	2.5	T		
2	DICKINSON	41N 28W 34	12 14 86	B600419	F	2.5	T		
2	DICKINSON	42N 29W 24	01 02 87	B601012	F	2.5	T		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

APPENDIX I.

1986-87 BOBCAT DATA - REGION I

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS	
2	DICKINSON	42N 30W 12	02 04 87	8600334	F	3.5	T		
2	DICKINSON	41N 28W 04	12 06 86	8600405	F	3.5	T		
2	DICKINSON	42N 29W 24	01 02 87	8601011	F	3.5	T		
2	DICKINSON					4.5			
2	DICKINSON	43N 27W 27	12 27 86	8600764	F	10.5	T	+/- 1 YEAR	
2	DICKINSON	43N 29W 36	02 28 87	8601172			T		
2	DICKINSON	42N 27W 27	11 11 86	8600402			T		
2	DICKINSON	41N 27W 16	11 16 86	8600403			T		
2	DICKINSON	44N 30W 12	11 10 86	8600961			B		
2	DICKINSON	43N 30W 10	01 15 87	8600286			G		
2	DICKINSON	43N 30W 15	01 17 87	8600289			T		
2	IRON	45N 33W 31	01 17 87	8600288	M	0.5	T		
2	IRON	43N 31W 17	02 22 87	8600298	M	0.5	T		
2	IRON	43N 31W 09	02 17 87	8600327	M	0.5	T		
2	IRON	44N 33W 14	11 03 86	8600277	M	1.5	T		
2	IRON	44N 31W 16	11 13 86	8600278	M	1.5	T		
2	IRON	45N 33W 22	01 02 87	8600283	M	1.5	T		
2	IRON	45N 33W 19	01 22 87	8601056	M	1.5	G		
2	IRON	45N 33W 01	01 21 87	8600290	M	2.5	T		
2	IRON	46N 35W 25	02 07 87	8601077	M	3.5	G		
2	IRON	43N 31W 23	02 17 87	8600329	M	4.5	T		
2	IRON	43N 31W 17	01 04 87	8600282	M	5.5	T	SEXED IN FIELD, AGED BY PREMOLAR	
2	IRON	44N 35W 03	02 07 87	8600295	M	5.5	T		
2	IRON	45N 33W 20	02 07 87	8600293	M	7.5	T		
2	IRON	42N 32W 26	02 16 87	8600297	F	0.5	T		
2	IRON	44N 31W 17	01 26 87	8600292	F	0.5	T		
2	IRON	42N 31W 21	11 32 86	8600279	F	0.5	G		
2	IRON	42N 31W 27	02 23 87	8600299	F	0.5	T		
2	IRON	44N 31W 03	11 02 86	8600725	F	0.5	T		
2	IRON	44N 34W 11	12 31 86	8600281	F	1.5	T		
2	IRON	44N 32W 23	01 21 87	8600291	F	1.5	T		
2	IRON	45N 33W 19	01 24 87	8601057	F	1.5	G		
2	IRON	43N 35W 07	10 26 86	8600276	F	1.5	T		
2	IRON	44N 31W 03	11 02 86	8600724	F	3.5	T		
2	IRON	42N 31W 27	02 22 87	8601171	F	4.5	T		
2	IRON	46N 35W 24	02 08 87	8601078			G		
2	IRON	46N 35W 23	02 08 87	8601079			G		
2	MENOMINEE	38N 27W 30	11 10 86	8600303	M	0.5	T		
2	MENOMINEE	39N 26W 08	12 02 86	8600746	M	0.5	T		
2	MENOMINEE	41N 26W 29	02 21 87	8601148	M	0.5	T		
2	MENOMINEE	39N 25W 05	02 26 87	8600431	M	0.5	T		
2	MENOMINEE	41N 26W 29	11 05 86	8600727	M	0.5	T		
2	MENOMINEE	39N 25W 04	02 21 87	8600430	M	0.5	T		
2	MENOMINEE	40N 25W 33	12 29 86	8600417	M	0.5	T		
2	MENOMINEE	38N 27W 24	01 11 87	8600320	M	0.5	T		
2	MENOMINEE	33N 26W 20	12 13 86	8600446	M	0.5	T		
2	MENOMINEE	40N 25W 04	01 10 87	8600424	M	0.5	T		
2	MENOMINEE	40N 26W 09	11 30 86	8600743	M	0.5	T		
2	MENOMINEE	41N 26W 18	01 17 87	8601047	M	0.5	T		
2	MENOMINEE	39N 26W 23	12 11 86	8600750	M	0.5	T		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
2	MENOMINEE	41N 26W 18	01 11 87	8601032	M	0.5	T	
2	MENOMINEE	40N 25W 04	01 10 87	8600423	M	0.5	T	
2	MENOMINEE	36N 27W 22	01 12 87	8600449	M	0.5	T	
2	MENOMINEE	41N 26W 28	12 28 86	8600416	M	0.5	T	
2	MENOMINEE	40N 25W 19	12 23 86	8600413	M	0.5	T	
2	MENOMINEE	37N 25W 08	01 11 87	8601035	M	0.5	G	
2	MENOMINEE	40N 27W 27	12 26 86	8600761	M	1.5	T	
2	MENOMINEE	40N 25W 33	12 02 86	8600744	M	1.5	T	
2	MENOMINEE	41N 29W 09	02 19 87	8600328	M	1.5	T	
2	MENOMINEE	39N 25W 12	01 05 87	8601024	M	1.5	T	
2	MENOMINEE	37N 28W 15	11 17 86	8600304	M	1.5	G	
2	MENOMINEE	40N 27W 08	01 10 87	8601033	M	1.5	T	
2	MENOMINEE	40N 26W 05	12 16 86	8600409	M	1.5	T	
2	MENOMINEE	40N 26W 28	01 05 87	8601028	M	1.5	T	
2	MENOMINEE	40N 26W 08	12 17 86	8600755	M	1.5	T	
2	MENOMINEE	41N 26W 03	11 22 86	8600404	M	1.5	T	
2	MENOMINEE	34N 26W 28	12 29 86	8600447	M	1.5	T	
2	MENOMINEE	40N 24W 23	10 19 86	8600307	M	1.5	T	
2	MENOMINEE	40N 27W 13	02 21 87	8601149	M	1.5	T	
2	MENOMINEE	38N 26W 25	12 24 86	8600315	M	2.5	T	
2	MENOMINEE	40N 25W 33	01 05 87	8601023	M	2.5	T	
2	MENOMINEE	38N 28W 19	02 15 87	8600336	M	2.5	T	
2	MENOMINEE	40N 26W 35	11 11 86	8600731	M	2.5	T	
2	MENOMINEE	39N 25W 16	11 26 86	8600741	M	2.5	T	
2	MENOMINEE	34N 26W 33	11 15 86	8600441	M	4.5	T	
2	MENOMINEE	41N 26W 07	01 27 87	8601067	M	6.5	T	
2	MENOMINEE	39N 25W 16	11 26 86	8600720	M	6.5	T	
2	MENOMINEE	40N 26W 04	01 28 87	8601066	M	7.5	T	
2	MENOMINEE	40N 26W 36	11 12 86	8600732	M	7.5	T	
2	MENOMINEE	36N 27W 22	02 02 87	8600451	M	10.5	T	
2	MENOMINEE	35N 27W 07	12 10 86	8600445	M	13.5	G	+/- 2 YEARS
2	MENOMINEE	39N 26W 23	12 28 86	8600759	F	0.5	T	
2	MENOMINEE	39N 25W 05	12 10 86	8600407	F	0.5	T	
2	MENOMINEE	38N 29W 35	02 25 87	8600347	F	0.5	T	
2	MENOMINEE	32N 27W 10	01 13 87	8600448	F	0.5	T	
2	MENOMINEE	41N 25W 30	01 27 87	8601061	F	0.5	T	
2	MENOMINEE	39N 25W 05	01 13 87	8601043	F	0.5	T	
2	MENOMINEE	38N 29W 28	01 18 87	8600321	F	0.5	T	
2	MENOMINEE	35N 26W 16	02 01 87	8600450	F	0.5	T	
2	MENOMINEE	37N 25W 23	02 04 87	8600452	F	0.5	T	
2	MENOMINEE	37N 26W 21	02 28 87	8600456	F	0.5	T	
2	MENOMINEE	38N 28W 15	11 24 86	8600311	F	0.5	T	
2	MENOMINEE	38N 28W 15	11 11 86	8600305	F	1.5	T	
2	MENOMINEE	38N 27W 15	12 28 86	8600316	F	1.5	T	
2	MENOMINEE	39N 25W 04	12 16 86	8600420	F	1.5	T	
2	MENOMINEE	39N 25W 05	02 01 87	8601070	F	1.5	T	
2	MENOMINEE	38N 27W	11 20 86	8600777	F	1.5	G	
2	MENOMINEE	40N 25W 21	12 09 86	8600749	F	1.5	T	
2	MENOMINEE	39N 27W 31	01 31 87	8600331	F	1.5	T	
2	MENOMINEE	40N 27W 13	02 21 87	8601150	F	1.5	T	

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

APPENDIX I.

1986-87 BOBCAT DATA - REGION I

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN†	COMMENTS	
									TAKEN†
2	MENOMINEE	39N 26W 23	12 17 86	B600754	F	2.5	T		
2	MENOMINEE	36N 28W 26	11 19 86	B600444	F	2.5	T		
2	MENOMINEE	41N 25W 30	01 27 87	B601062	F	2.5	T		
2	MENOMINEE	40N 25W 33	01 05 87	B601027	F	2.5	T		
2	MENOMINEE	39N 26W 08	12 02 86	B600745	F	2.5	T		
2	MENOMINEE	37N 26W 18	02 23 87	B600455	F	2.5	T		
2	MENOMINEE	39N 26W 23	02 17 87	B601138	F	2.5	T		
2	MENOMINEE	38N 28W 28	02 08 87	B600335	F	2.5	T		
2	MENOMINEE	41N 26W 29	11 05 86	B600726	F	2.5	T		
2	MENOMINEE	39N 26W 31	01 28 87	B601063	F	3.5	T		
2	MENOMINEE	37N 26W	11 30 86	B600280	F	3.5	G		
2	MENOMINEE	40N 25W 19	12 23 86	B600412	F	3.5	T		
2	MENOMINEE	40N 26W 05	12 28 86	B600415	F	3.5	T		
2	MENOMINEE	40N 25W 12	01 05 87	B601029	F	3.5	T		
2	MENOMINEE	39N 27W 05	02 11 87	B601132	F	3.5	T		
2	MENOMINEE	37N 26W 18	02 18 87	B600454	F	4.5	T		
2	MENOMINEE	39N 25W 06	12 15 86		F	4.5	T		
2	MENOMINEE	41N 25W 13	12 24 86	B600411	F	5.5	T	+/- 1 YEAR	
2	MENOMINEE	37N 25W 23	02 07 87	B600453			T		
2	MENOMINEE	40N 25W 08	11 24 86	B600719			G		
2	MENOMINEE	37N 25W 01	11 13 86	B600736			G		
2	MENOMINEE	36N 28W 09	11 15 86	B600442			T		
2	MENOMINEE	37N 25W 23	10 29 86	B600722			G		
2	MENOMINEE	41N 26W 29	10 28 86	B600401					
2	MENOMINEE	40N 25W 05	11 22 86	B600717			G		
2	MENOMINEE	40N 26W 08	01 19 87	B601046			T		
2	MENOMINEE	37N 28W 09	11 17 86	B600443			G		
3	UNKNOWN			B601049	F	1.5			
3	ALGER	45N 21W 32	11 08 86	B600677	M	1.5	T		
3	ALGER	44N 21W 18	11 03 86	B600718			T		
3	DELTA	43N 21W 29	12 31 86	B600769	M	0.5	T		
3	DELTA	37N 24W 17	02 01 87	B601072	M	0.5	T		
3	DELTA	40N 20W 21	01 21 87	B600583	M	0.5	T		
3	DELTA	41N 19W 21	12 27 86	B600572	M	0.5	T		
3	DELTA	39N 22W 24	01 05 87	B601031	M	0.5	T		
3	DELTA	40N 19W 21	01 06 87	B600576	M	0.5	T		
3	DELTA	41N 24W 11	01 26 87	B601059	M	0.5	T		
3	DELTA	39N 18W 24	02 12 87	B601019	M	0.5	T		
3	DELTA	38N 24W 17	12 27 86	B600765	M	0.5	T		
3	DELTA	39N 22W 24	12 31 86	B601010	M	0.5	T		
3	DELTA	39N 22W 25	12 20 86	B600758	M	0.5	T		
3	DELTA	37N 24W 17	02 01 87	B601071	M	0.5	T		
3	DELTA	38N 21W 05	01 19 87	B601050	M	1.5	T		
3	DELTA	41N 19W 09	12 13 86	B600532	M	1.5	T		
3	DELTA	41N 19W 17	12 27 86	B600580	M	1.5	T		
3	DELTA	38N 18W 24	02 21 87	B601151	M	1.5	T		
3	DELTA	38N 21W 05	01 06 87	B601025	M	1.5	T		
3	DELTA	41N 18W 32	01 02 87	B600578	M	1.5	T		
3	DELTA	43N 23W 36	01 11 87	B601036	M	2.5	T		
3	DELTA	39N 22W 24	12 15 86	B600753	M	2.5	T		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS	
3	DELTA	40N 20W 21	01 17 87	8600581	M	4.5	T		
3	DELTA	38N 24W 01	10 27 86	8600721	M	4.5	T		
3	DELTA	39N 1BW 24	01 19 87	8601022	M	4.5	T	+/- 1 YEAR	
3	DELTA	43N 20W 05	11 15 86	8600738	M	5.5	T		
3	DELTA	37N 24W 12	11 07 86	8600728	M	6.5	T		
3	DELTA	43N 23W 36	02 19 87	8601145	F	0.5	T		
3	DELTA	39N 21W 33	01 14 87	8601044	F	0.5	T		
3	DELTA	41N 23W 07	02 17 87	8601144	F	0.5	T		
3	DELTA	38N 21W 05	02 18 87	8601147	F	0.5	T		
3	DELTA	41N 19W 17	02 12 87	8600594	F	0.5	T		
3	DELTA	41N 24W 08	12 31 86	8601016	F	0.5	T		
3	DELTA	43N 22W 33	01 19 87	8601046	F	0.5	T		
3	DELTA	37N 24W 17	02 01 87	8601073	F	0.5	T		
3	DELTA	40N 19W 05	12 07 86	8600529	F	1.5	T		
3	DELTA	41N 23W 07	02 08 87	8601131	F	1.5	T		
3	DELTA	41N 18W 36	11 25 86	8600526	F	1.5	T		
3	DELTA	41N 23W 16	12 29 86	8600768	F	1.5	T		
3	DELTA	41N 22W 02	12 28 86	8600766	F	1.5	T		
3	DELTA	39N 24W 06	11 17 86	8600739	F	1.5	G		
3	DELTA	41N 24W 08	12 31 86	8601015	F	1.5	T		
3	DELTA	41N 20W 26	12 07 86	8600748	F	1.5	T		
3	DELTA	41N 19W 17	01 31 87	8600587	F	1.5	T		
3	DELTA	41N 22W 15	02 17 87	8601141	F	1.5	T		
3	DELTA	38N 23W 17	02 20 87	8601146	F	2.5	T		
3	DELTA	41N 24W 22	01 06 87	8601026	F	2.5	T		
3	DELTA	38N 23W 29	02 18 87	8601142	F	2.5	T		
3	DELTA	39N 18W 22	12 26 86	8600711	F	2.5	T		
3	DELTA	41N 23W 01	01 24 87	8601058	F	2.5	T		
3	DELTA	43N 21W 01	01 10 87	8601030	F	2.5	T		
3	DELTA	40N 20W 30	01 12 87	8600577	F	3.5	T		
3	DELTA	42N 19W 17	01 03 87	8601009	F	4.5	T	+/- 1 YEAR	
3	DELTA	39N 21W 09	01 03 87	8601008			G		
3	DELTA	39N 18W 24	02 14 87	8601020			T		
3	DELTA	41N 23W 32	11 29 86	8600087			G		
3	DELTA	43N 23W 08	11 20 86	8601143			G		
3	DELTA	42N 21W 25	02 07 87	8601076			T		
3	DELTA	39N 21W 25	12 31 86	8600861			G		
3	DELTA	43N 23W 28	11 12 86	8600715			T		
3	DELTA	39N 21W 02	02 08 87	8601080			T		
3	DELTA	43N 23W 07	12 17 86	8600757			T		
3	DELTA	41N 19W 23	12 24 86	8600571			T		
3	DELTA	42N 22W 35	11 19 86	8600716			G		
3	DELTA	39N 21W 12	02 14 87	8601137			T		
3	DELTA	38N 24W 08	11 19 86	8600714			G		
3	DELTA	41N 24W 04	11 18 86	8600740			G		
3	DELTA	38N 19W 33	01 11 87	8601017			T		
3	DELTA	42N 23W 36	01 26 87	8601055			T		
3	DELTA	42N 22W 32	12 10 86	8600751			G		
3	DELTA	39N 21W 35	12 18 86	8600756			T		
3	DELTA	39N 21W 35	12 14 86	8600752			T		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

APPENDIX I.

1986-87 BOBCAT DATA - REGION I

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS	
3	DELTA	40N 21W 04	02 10 87	8601133			T		
3	DELTA	38N 19W 33	01 18 87	8601018			T		
3	DELTA	39N 20W 06	01 12 87	8601037			G		
3	DELTA	40N 21W 11	01 31 87	8601069			G		
3	DELTA	41N 22W 35	02 11 87	8601136			T		
3	DELTA	39N 21W 25	12 31 86	8600770			G		
3	MARQUETTE	42N 24W 16	02 27 87	8601161	M	0.5	T		
3	MARQUETTE	43N 25W 14	01 03 87	8601004	M	0.5	T		
3	MARQUETTE	45N 30W 17	11 08 86	8600693	M	0.5	T		
3	MARQUETTE	42N 24W 16	02 14 87	8601139	M	0.5	T		
3	MARQUETTE	45N 23W 04	01 12 87	8600679	M	0.5	T		
3	MARQUETTE	44N 24W 25	11 02 86	8600676	M	1.5	T		
3	MARQUETTE	43N 24W 10	02 23 87	8601160	M	1.5	T		
3	MARQUETTE	45N 23W 01	12 21 86	8600681	M	1.5	T		
3	MARQUETTE	48N 25W 18	01 24 87	8600697	M	1.5	T		
3	MARQUETTE	43N 24W 10	01 19 87	8601048	M	2.5	T		
3	MARQUETTE	44N 26W 26	02 11 87	8601134	M	2.5	T		
3	MARQUETTE	43N 25W 04	01 11 87	8600426	M	2.5	T		
3	MARQUETTE	48N 25W 18	01 11 87	8600696	M	4.5	T		
3	MARQUETTE	45N 27W 35	01 05 87	8600800	M	4.5	T		
3	MARQUETTE	43N 25W 01	12 24 86	8601002	F	0.5	T		
3	MARQUETTE	43N 25W 01	12 24 86	8601003	F	0.5	T		
3	MARQUETTE	43N 25W 14	01 03 87	8601005	F	0.5	T		
3	MARQUETTE	47N 30W 23	12 28 86	8600695	F	1.5	T		
3	MARQUETTE	42N 24W 15	01 26 87	8601060	F	1.5	T		
3	MARQUETTE	43N 25W 01	02 16 87	8601140	F	1.5	T		
3	MARQUETTE	43N 27W 23	01 11 87	8600425	F	2.5	T		
3	MARQUETTE	45N 27W 29	01 15 87	8600705	F	2.5	T		
3	MARQUETTE	50N 26W 30	12 11 86	8600515	F	3.5	T		
3	MARQUETTE	44N 23W 31	12 28 86	8600767	F	3.5	T		
3	MARQUETTE	43N 25W 01	12 27 86	8601001	F	6.5	T		
3	MARQUETTE	50N 29W 18	11 23 86	8600678	F	7.5	T	+/- 1 YEAR	
3	MARQUETTE	46N 30W 12	12 17 86	8600680			T		
3	MARQUETTE	46N 24W 18	11 20 86	8600703			T		
3	MARQUETTE	45N 26W 05	12 26 86	8600704			T		
3	MARQUETTE	42N 25W 27	11 26 86	8600742			G		
3	MARQUETTE	44N 26W 07	10 25 86	8600701			T		
3	MARQUETTE	42N 24W 32	11 03 86	8600723			G		
3	MARQUETTE	42N 25W 25	11 17 86	8600737			O		
3	MARQUETTE	43N 25W 04	02 06 87	8601075			T		
3	MARQUETTE	46N 29W	01 04 87	8600284					
3	MARQUETTE	45N 28W 06	10 29 86	8600691			T		
3	MARQUETTE	44N 23W 36	02 26 87	8600771			T		
3	MARQUETTE	45N 26W 33	11 03 86	8600702			T		
3	MARQUETTE	42N 25W 13	01 14 87	8601045			T		
4	UNKNOWN			8600549	M	0.5			
4	UNKNOWN				M	0.5			
4	ALGER	46N 17W 25	12 08 86	8600747			G		
4	CHIPPEWA	45N 02W 10	11 17 86	8600511	M	0.5	G		
4	CHIPPEWA	45N 03W 12	01 10 87	8600553	M	0.5	T		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	NETS		COMMENTS
								THRU	TRAP	
4	CHIPPEWA	47N 06W 24	02 15 87	8600877	M	0.5	T			SEX DETERMINED PHYSIOLOGICALLY
4	CHIPPEWA	44N 02W 06	02 21 87	8600562	M	0.5	G			
4	CHIPPEWA	43N 03E 29	02 02 87	8600557	M	0.5	T			
4	CHIPPEWA	42N 04E 29	12 27 86	8600520	M	0.5	T			
4	CHIPPEWA	45N 01E 36	11 23 86	8600513	M	0.5	G			
4	CHIPPEWA	46N 02W 31	01 10 87	8600552	M	1.5	T			
4	CHIPPEWA	45N 01E 33	02 17 87	8600559	M	2.5	G			
4	CHIPPEWA	44N 01E 25	11 15 86	8600510	M	2.5	T			
4	CHIPPEWA	44N 06W	12 08 86	8600851	M	3.5	O			
4	CHIPPEWA	47N 04W 26	11 01 86	8600507	M	4.5	T			
4	CHIPPEWA	44N 01E 09	01 21 87	8600555	M	11.5	G			
4	CHIPPEWA	43N 02E 17	11 21 86	8600512	F	0.5	G			
4	CHIPPEWA		12 15 86	8600516	F	0.5	T			
4	CHIPPEWA	44N 04W 23	11 01 86	8600508	F	0.5	T			
4	CHIPPEWA	42N 03E 30	12 31 86	8600551	F	1.5	T			
4	CHIPPEWA	44N 01E 25	11 05 86	8600509	F	1.5	T			
4	CHIPPEWA	42N 03E 32	12 15 86	8600517	F	1.5	T			
4	CHIPPEWA	44N 01W 01	10 27 86	8600506	F	1.5	T			
4	CHIPPEWA	44N 01E 08	12 16 86	8600227	F	1.5	G			
4	CHIPPEWA	49N 07W 35	12 01 86	8600542	F	2.5	T			
4	CHIPPEWA	44N 01W 21	11 23 86	8600871	F	2.5	G			
4	CHIPPEWA	44N 04W 24	02 17 87	8600560	F	4.5	G			
4	CHIPPEWA	42N 04E 29	01 19 87	8600554	F	5.5	T			
4	CHIPPEWA	45N 01E 33	12 17 86	8600518	F	6.5	G			
4	CHIPPEWA	47N 07W 12	12 08 86	8600514	F	7.5	T			
4	CHIPPEWA	47N 06W 24	02 01 87	8600875			T			
4	CHIPPEWA	46N 02W	11 21 86	8600962			T			
4	CHIPPEWA	47N 06W 27	11 18 86	0850787			T			
4	LUCE	46N 10W 26	02 22 87	8600615	M	0.5	G			
4	LUCE	45N 12W 31	12 14 86	8600544	M	2.5	T			
4	LUCE	46N 09W 12	10 28 86	8600538	M	3.5	T			
4	LUCE	46N 11W 23	12 05 86	8600530	M	5.5	G			
4	LUCE	45N 09W 15	02 04 87	8600611	F	0.5	T			
4	LUCE	45N 09W 02	11 08 86	8600539	F	5.5	T			+/- 1 YEAR
4	LUCE	46N 11W 13	10 28 86	8600537	F	5.5	T			
4	LUCE	49N 11W 34	12 09 86	8600272			T			
4	LUCE	49N 11W 34	12 08 86	8600270			T			
4	LUCE	46N 07W 26	02 08 87	8600612			G			
4	LUCE	49N 11W 34	12 09 86	8600271			T			
4	MACKINAC	42N 12W 11	01 31 87	8600590	M	0.5	T			
4	MACKINAC	43N 11W 01	02 23 87	8600617	M	0.5	T			
4	MACKINAC	42N 07W 08	11 19 86	8600481	M	0.5	T			
4	MACKINAC	42N 07W 08	02 21 87	8600488	M	0.5	T			
4	MACKINAC	42N 07W 06	11 11 86	8600478	M	0.5	T			
4	MACKINAC	43N 07W 08	01 28 87	8600486	M	0.5	T			
4	MACKINAC	44N 10W 09	12 20 86	8600546	M	1.5	T			
4	MACKINAC	41N 04W 24	11 06 86	8600221	M	1.5	T			
4	MACKINAC	43N 08W 29	01 01 87	8600484	M	1.5	T			
4	MACKINAC	43N 10W 23	11 14 86	8600480	M	1.5	T			
4	MACKINAC	43N 10W 14	11 05 86	8600477	M	1.5	T			

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

APPENDIX I.

1986-87 BOBCAT DATA - REGION I

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS	
								TAKEN*	
4	MACKINAC	42N 05W 03	02 28 87	8600490	M	2.5	6		
4	MACKINAC	43N 07W 22	02 15 87	8600561	M	2.5	6		
4	MACKINAC	42N 11W 05	10 28 86	8600476	M	2.5	T		
4	MACKINAC	43N 01W 23	12 07 86	8600062	M	2.5	T		
4	MACKINAC	44N 11W 13	11 29 86	8600540	M	2.5	T		
4	MACKINAC	42N 11W 26	10 26 86	8600536	M	3.5	T		
4	MACKINAC	42N 05W 36	02 27 87	8600619	M	4.5	6		
4	MACKINAC	43N 08W	02 04 87	8600971	M	5.5	6	+/- 1 YEAR	
4	MACKINAC	43N 08W 08	02 03 87	8600550	M	5.5	T		
4	MACKINAC	42N 03W 04	01 26 87	8600556	M	10.5	6		
4	MACKINAC	42N 02E 20	02 07 87	8600558	M	12.5	6		
4	MACKINAC	44N 10W 09	01 09 87	8600548	F	0.5	T		
4	MACKINAC	42N 09W 30	01 29 87	8600203	F	0.5	0		
4	MACKINAC	43N 11W 01	02 23 87	8600616	F	0.5	T		
4	MACKINAC	44N 12W 19	12 13 86	8600531	F	0.5	6		
4	MACKINAC	44N 11W 13	01 07 87	8600547	F	0.5	T		
4	MACKINAC	43N 08W 29	02 23 87	8600489	F	0.5	T		
4	MACKINAC	43N 01W 11	12 19 86	8600519	F	1.5	6		
4	MACKINAC	42N 01E 08	11 11 86	8600061	F	1.5	T		
4	MACKINAC	43N 08W 14	12 06 86	8600911	F	1.5	6		
4	MACKINAC	44N 07W 13	02 28 87	8600618	F	1.5	T		
4	MACKINAC	43N 08W 29	01 02 87	8600485	F	1.5	T		
4	MACKINAC	42N 01W 02	11 16 86	8600982	F	1.5	6		
4	MACKINAC	42N 04W 17	12 01 86	8600001	F	2.5	6		
4	MACKINAC	42N 08W 01	11 11 86	8600479	F	2.5	T		
4	MACKINAC	44N 10W 06	12 07 86	8600543	F	3.5	T		
4	MACKINAC	43N 07W 6	01 29 87	8600487	F	3.5	T		
4	MACKINAC	42N 04W	10 30 86	8600219			T		
4	MACKINAC	43N 08W 11	12 08 86	8600226			6		
4	MACKINAC	42N 04W	10 30 86	8600220			T		
4	SCHOOLCRAFT	42N 16W 12	01 07 87	8600492	M	0.5	T		
4	SCHOOLCRAFT	41N 14W 03	12 31 86	8600535	M	0.5	T		
4	SCHOOLCRAFT	41N 16W 16	02 04 87	8600400	M	0.5	T		
4	SCHOOLCRAFT	39N 17W 03	02 18 87	8600713	M	0.5	T		
4	SCHOOLCRAFT	42N 15W 15	01 05 87	8600573	M	0.5	T		
4	SCHOOLCRAFT	42N 15W 22	02 27 87	8600596	M	0.5	T		
4	SCHOOLCRAFT	47N 14W	02 15 87	8600257	M	0.5	6		
4	SCHOOLCRAFT	40N 17W 03	02 18 87	8600712	M	0.5	T		
4	SCHOOLCRAFT	42N 16W 34	12 31 86	8600192	M	0.5	6		
4	SCHOOLCRAFT	42N 13W 36	12 19 86	8600534	M	1.5	T		
4	SCHOOLCRAFT	42N 16W 34	12 31 86	8600191	M	1.5	6		
4	SCHOOLCRAFT	42N 13W 09	12 13 86	8600533	M	1.5	T		
4	SCHOOLCRAFT	42N 17W 25	11 18 86	8600522	M	1.5	6		
4	SCHOOLCRAFT	43N 17W 23	11 24 86	8600482	M	1.5	T		
4	SCHOOLCRAFT	43N 15W 31	10 31 86	8600501	M	2.5	T		
4	SCHOOLCRAFT	42N 15W 36	02 20 87	8600495	M	2.5	T		
4	SCHOOLCRAFT	42N 17W 20	02 28 87	8600597	M	2.5	6		
4	SCHOOLCRAFT	40N 17W 22	02 18 87	8601159	M	2.5	T		
4	SCHOOLCRAFT	40N 17W 22	02 18 87	8601157	M	2.5	T		
4	SCHOOLCRAFT	43N 15W 03	11 17 86	8600523	M	4.5	6		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
4	SCHOOLCRAFT	44N 13W 23	02 16 87	8600493	M	5.5	G	
4	SCHOOLCRAFT	41N 14W 03	02 10 87	8600591	M	5.5	T	
4	SCHOOLCRAFT	40N 17W 03	02 18 87	8601021	M	6.5	T	
4	SCHOOLCRAFT	42N 13W 12	11 18 86	8600524	M	9.5	G	+/- 1 YEAR
4	SCHOOLCRAFT	42N 15W 25	02 16 87	8600595	F	0.5	T	
4	SCHOOLCRAFT	43N 15W 05	12 06 86	8600528	F	0.5	T	
4	SCHOOLCRAFT	40N 16W 02	02 18 87	8601158	F	0.5	T	
4	SCHOOLCRAFT	41N 16W 02	11 08 86	8600527	F	0.5	T	
4	SCHOOLCRAFT	42N 16W 23	12 30 86	8600574	F	0.5	T	
4	SCHOOLCRAFT	44N 14W 28	12 01 86	8600541	F	0.5	T	
4	SCHOOLCRAFT	42N 16W 01	01 27 87	8600585	F	0.5	T	
4	SCHOOLCRAFT	42N 15W 14	01 21 87	8600582	F	0.5	T	
4	SCHOOLCRAFT	41N 14W 03	01 31 87	8600588	F	0.5	T	
4	SCHOOLCRAFT	41N 15W 11	02 07 87	8600599	F	0.5	T	
4	SCHOOLCRAFT	42N 14W 32	01 29 87	8600586	F	0.5	T	
4	SCHOOLCRAFT	46N 14W 30	02 09 87	8600614	F	0.5	T	
4	SCHOOLCRAFT	46N 13W 20	01 11 87	8600256	F	0.5	G	
4	SCHOOLCRAFT	42N 15W 14	10 27 86	8600521	F	0.5	T	
4	SCHOOLCRAFT	42N 14W 36	01 23 87	8600584	F	1.5	T	
4	SCHOOLCRAFT	41N 17W 17	11 17 86	8600525	F	1.5	G	
4	SCHOOLCRAFT	42N 14W 32	12 26 86	8600579	F	1.5	T	
4	SCHOOLCRAFT	42N 17W 04	02 27 87	8600598	F	1.5	G	
4	SCHOOLCRAFT	41N 15W 11	02 11 87	8600592	F	1.5	T	
4	SCHOOLCRAFT	42N 16W 24	02 11 87	8600593	F	1.5	T	
4	SCHOOLCRAFT	47N 15W 19	01 13 87	8600545	F	2.5	T	
4	SCHOOLCRAFT	40N 16W	02 19 87	8601152	F	2.5	T	
4	SCHOOLCRAFT	42N 14W 36	02 28 87	8600601	F	2.5	T	
4	SCHOOLCRAFT	44N 17W 29	12 31 86	8600483	F	3.5	T	
4	SCHOOLCRAFT	43N 13W 04	02 07 87	8600613	F	3.5	T	
4	SCHOOLCRAFT	41N 17W 36	02 01 87	8600589	F	4.5	T	
4	SCHOOLCRAFT	42N 16W 14	01 10 87	8600575	F	4.5	T	
4	SCHOOLCRAFT	42N 16W 12	01 08 87	8600491	F	5.5	T	
4	SCHOOLCRAFT	40N 16W 03	02 19 87	8601153			T	

APPENDIX II.

1986-87 BOBCAT DATA - REGION II

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
	UNKNOWN				M	0.5		
	UNKNOWN				M	2.5		
	UNKNOWN				M	3.5		
	UNKNOWN				F	0.5		
	UNKNOWN				F	2.5		
5	ALPENA	31N 09E 09	02 05 87	8600073	M	0.5	6	
5	ALPENA	32N 05E 27	01 24 87	8600939	M	1.5	6	
5	ALPENA	32N 06E 24	01 22 87	8600067	M	2.5	6	
5	ALPENA	32N 07E 01	02 20 87	8600169	M	3.5	6	
5	ALPENA	32N 08E 06	01 04 87	8600232	M	4.5	6	
5	ALPENA	29N 06E 05	02 09 87	8600074	M	7.5	6	
5	ALPENA	32N 06E 13	02 03 87	8600072	F	0.5	6	
5	ALPENA	29N 07E 13	01 31 87	8600891	F	0.5	6	
5	ALPENA	31N 06E 24	01 16 87	8600079	F	1.5	6	
5	ALPENA	31N 05E 09	01 05 87	8600137	F	2.5	6	
5	ALPENA	31N 09E 09	01 10 87	8600066		6		
5	ALPENA	32N 06E 13	02 09 87	8600071		6		
5	ALPENA	31N 07E 12	01 21 87	8600070		6		
5	ALPENA	31N 07E 12	01 21 87	8600069		6		
5	ALPENA	31N 06E 13	02 09 87	8600893		6		
5	ALPENA	31N 07E 12	01 26 87	8600068		6		
5	ALPENA	31N 07E 16	02 18 87	8600080		6		
5	ALPENA	32N 08E 26	01 12 87	8600065		6		
5	ANTRIM	30N 07W 03	02 04 87	8600876	M	1.5	6	
5	ANTRIM	32N 09W 14	02 01 87	8600874	F	2.5	6	
5	ANTRIM	30N 07W 02	01 09 87	8600872	F	4.5	6	
5	ANTRIM	31N 06W 20	02 14 87	8600878	F	10.5	6	
5	CHARLEVOIX	33N 05W 25	01 30 87	8600204	M	0.5	6	
5	CHARLEVOIX	33N 09W 24	01 07 87	8600942	M	1.5	6	
5	CHARLEVOIX	33N 04W 09	02 10 87	8600038	M	2.5	6	
5	CHARLEVOIX	32N 06W 19	01 21 87	8600035	M	2.5	6	
5	CHARLEVOIX	33N 09W 23	01 05 87	8600195	F	1.5	6	
5	CHARLEVOIX	33N 08W 20	02 14 87	8601081		6		
5	CHARLEVOIX	33N 05W 14	02 01 87	8600037		6		
5	CHEBOYGAN	33N 01E 29	02 01 87	8600903	M	0.5	6	
5	CHEBOYGAN		02 01 87	8600905	M	0.5	6	
5	CHEBOYGAN	34N 01W 32	02 21 87	8600040	M	0.5	6	
5	CHEBOYGAN	35N 03W 33	01 21 87	8600111	M	1.5	6	
5	CHEBOYGAN	33N 01E 29	01 31 87	8600904	M	1.5	6	
5	CHEBOYGAN	34N 01E 26	01 16 87	8600032	M	1.5	6	
5	CHEBOYGAN	36N 01W 26	02 01 87	8600181	M	2.5	6	
5	CHEBOYGAN	38N 03W 27	02 01 87	8600207	M	3.5	6	
5	CHEBOYGAN	35N 01W 34	01 19 87	8600034	M	3.5	6	
5	CHEBOYGAN	33N 01W 11	01 24 87	8600036	M	8.5	6	
5	CHEBOYGAN	33N 01E 21	02 02 87	8601096	F	1.5	6	
5	CHEBOYGAN	33N 01E 05	02 01 87	8600254	F	1.5	B	
5	CHEBOYGAN	33N 01E 17	02 01 87	8600206		6		
5	CHEBOYGAN	33N 01E 10	01 05 87	8600886		6		
5	CHEBOYGAN	33N 03W 28	01 09 87	8600031		6		
5	CHEBOYGAN	35N 03W 18	02 17 87	8600182		6		

* B = BOW, S = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
5	CHEBOYGAN	33N 01E 19	01 31 87	8600205		6		
5	CHEBOYGAN	33N 01W 27	02 17 87	8600968		6		
5	CHEBOYGAN	34N 01E 26	02 10 87	8600039		6		
5	EMMETT	38N 05W 02	02 25 87	8600044	M	1.5	6	
5	EMMETT	35N 04W 35	02 19 87	8600041	F	1.5	6	
5	EMMETT	35N 04W 22	02 07 87	8600966		6		
5	MONTMORENCY	32N 02E 12	11 15 86	8600086	M	0.5	T	
5	MONTMORENCY			0850870	M	0.5		ROAD KILL
5	MONTMORENCY	29N 03E 18	01 17 87	8600033	M	0.5	6	
5	MONTMORENCY	30N 02E 35	02 01 87	8600151	M	0.5	6	
5	MONTMORENCY	31N 04E 21	01 19 87	8600088	M	0.5		
5	MONTMORENCY	29N 02E 24	02 01 87	8600132	M	1.5	6	
5	MONTMORENCY	30N 04E 13	01 24 87	8600090	M	2.5	6	
5	MONTMORENCY	31N 05E 10	02 07 87	8600092	M	6.5	6	
5	MONTMORENCY	30N 02E 35	01 29 87	8600134	F	0.5	6	
5	MONTMORENCY	31N 03E 32	02 01 87	8600131	F	1.5	6	
5	MONTMORENCY	30N 04E 13	01 30 87	8600135	F	2.5	6	
5	MONTMORENCY	32N 03E 09	02 15 87	8600152	F	3.5	6	SEX DETERMINED PHYSIOLOGICALLY
5	MONTMORENCY	30N 04E 12	02 27 87	8600154	F	4.5	6	+/- 1 YEAR
5	MONTMORENCY	32N 03E 21	01 25 87	8600873	F	5.5	6	+/- 1 YEAR
5	MONTMORENCY	30N 02E	12 03 86	8600136			T	ACCIDENTALLY TRAPPED & DROWNED
5	MONTMORENCY	30N 03E 04	02 16 87	8600153		6		
5	MONTMORENCY	31N 02E 34	02 09 87	8600093		6		
5	MONTMORENCY	30N 02E 04	02 13 87	8600094		6		
5	MONTMORENCY	30N 01E 30	01 03 87	8600194		6		
5	OTSEGO	31N 01W 17	02 01 87	8600208	M	1.5	6	
5	OTSEGO	32N 01W 04	01 14 87	8600199	M	1.5	6	
5	OTSEGO	29N 04W 22	01 13 87	8600887	M	2.5	T	
5	OTSEGO	29N 02W 05	01 12 87	8600198	M	3.5	6	
5	OTSEGO	29N 04W 18	02 25 87	8600103	F	0.5	6	
5	OTSEGO	29N 01W 19	01 01 87	8600193	F	0.5	6	
5	OTSEGO	31N 01W 14	01 23 87	8600202	F	0.5	6	
5	OTSEGO	31N 01W 13	01 31 87	8600209	F	1.5	6	
5	OTSEGO	32N 01W 14	02 15 87	8600002	F	1.5	6	
5	OTSEGO	29N 02W 20	02 15 87	8600101	F	3.5	6	
5	OTSEGO	29N 04W 36	01 02 87	8600941	F	5.5	T	
5	OTSEGO	29N 01W 09	10 14 86		F	8.5	O	ROAD KILL, +/- 1 YEAR
5	OTSEGO	31N 03W 14	01 11 87	8600197		6		
5	OTSEGO	29N 04W 31	01 09 87	8600196		6		
5	PRESQUE ISLE	34N 05E 32	01 25 87	8600138	M	0.5	6	
5	PRESQUE ISLE	34N 05E 33	02 16 87	8600078	M	0.5	6	
5	PRESQUE ISLE	36N 03E 25	02 02 87	8600084	M	0.5	6	
5	PRESQUE ISLE	34N 05E 32	01 25 87	8600160	M	1.5		
5	PRESQUE ISLE	34N 02E 13	01 19 87	8600091	M	1.5	6	
5	PRESQUE ISLE	34N 0BE 01	02 09 87	8600075	M	1.5	6	
5	PRESQUE ISLE	33N 0BE 35	02 09 87	8600077	M	1.5	6	
5	PRESQUE ISLE	34N 04E 24	01 26 87	8600140	F	0.5	6	
5	PRESQUE ISLE	34N 0BE 01	02 10 87	8600076	F	1.5	6	
5	PRESQUE ISLE	34N 04E 24	01 26 87	8600139	F	7.5	6	
5	PRESQUE ISLE	34N 02E 22	01 30 87	8600081		6		

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
								TAKEN*
5	PRESQUE ISLE	34N 02E 18	02 17 87	8600096		6		
5	PRESQUE ISLE	35N 03E 08	02 18 87	8600097		6		
5	PRESQUE ISLE	36N 03E 25	02 02 87	8600083		6		
5	PRESQUE ISLE	36N 03E 33	02 19 87	8600098		6		
5	PRESQUE ISLE	35N 06E 21	02 05 87	8600082		6		
5	PRESQUE ISLE	35N 02E 15	02 17 87	8600095		6		
5	PRESQUE ISLE	33N 08E 14	01 12 87	8600064		6		
5	PRESQUE ISLE	36N 02E 23	02 04 87	8600085		6		
5	PRESQUE ISLE	34N 05E 21	01 21 87	8600089		6		
6	LAKE	19N 13W 09	03 26 87	8600863		0		ROAD KILL
6	MANISTEE	22N 16W 25	10 26 86	8600860	F	1.5	0	ROAD KILL
6	WEXFORD	24N 10W 09	03 17 87		F	1.5	0	ROAD KILL
7	UNKNOWN			8600935	M	1.5		
7	ALCONA	26N 07E 22	02 25 87	8600170	M	0.5	6	
7	ALCONA	25N 05E 11	01 27 87	8600940	M	0.5	6	
7	ALCONA	25N 09E 29	01 01 87	8600927	M	0.5	6	
7	ALCONA	28N 09E 15	01 07 87	8600933	M	0.5	6	
7	ALCONA	26N 07E 22	02 25 87	8600180	M	0.5	6	
7	ALCONA	25N 09E 15	01 20 87	8600938	M	1.5	6	
7	ALCONA	26N 07E 27	01 06 87	8600934	M	1.5	6	
7	ALCONA	25N 09E 06	01 05 87	8600932	M	1.5	6	
7	ALCONA	27N 07E 17	01 03 87	8600926	M	2.5	6	
7	ALCONA	26N 07E 11	02 09 87	8600892	M	3.5	6	
7	ALCONA	26N 08E 09	01 05 87	8600930	M	5.5	6	
7	ALCONA	26N 05E 06	02 03 87	8601097	M	11.5	6	
7	ALCONA	28N 09E 15	02 04 87	8600894	F	1.5	6	
7	ALCONA	26N 07E 29	01 03 87	8600928	F	1.5	6	
7	ALCONA	28N 09E 17	01 04 87	8600063	F	2.5	6	
7	ALCONA	26N 05E 12	01 24 87	8600008	F	2.5	6	
7	ALCONA	25N 09E 17	02 25 87	8600900		6		
7	ALCONA	26N 07E 02	01 07 87	8600936		6		
7	ALCONA	25N 05E 11	01 03 87	8600929		6		
7	ALCONA	25N 05E 11	01 11 87	8600937		6		
7	CRAWFORD	25N 01W 10	01 31 87	8600965	F	0.5	6	
7	MISSAUKEE	22N 05W	01 18 87	8600845		6		
7	OSCODA	26N 01E 17	01 18 87	8600200	M	0.5	6	
7	OSCODA	27N 04E 22	01 07 87	8600943	M	0.5	6	
7	OSCODA	26N 02E 04	02 15 87	8601098	M	0.5	6	
7	OSCODA	27N 04E 22	01 07 87	8600945	M	0.5	6	
7	OSCODA	25N 01E 26	01 31 87	8600210	M	1.5	6	
7	OSCODA	25N 01E 35	02 04 87	8600230	M	1.5	6	
7	OSCODA	26N 01E 17	01 13 87	8600889	F	0.5	6	
7	OSCODA	27N 03E 09	01 01 87	8600882	F	0.5	6	
7	OSCODA	27N 03E 09	01 01 87	8600884	F	0.5	0	
7	OSCODA	27N 03E 09	01 04 87	8600881	F	0.5	6	
7	OSCODA	25N 01E 07	01 18 87	8600201	F	1.5	6	
7	OSCODA	27N 04E 22	01 07 87	8600944	F	4.5	6	
7	OSCODA	26N 01E 17	01 14 87	8600888	F	7.5	6	+/- 1 YEAR
7	OSCODA	27N 03E 09	01 04 87	8600883	F	10.5	6	+/- 2 YEARS
7	ROSCOMMON	21N 04W 35	01 17 87	8600248	M	0.5	6	

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW	COMMENTS	
								TAKEN*	
7	ROSCOMMON	22N 02W 22	01 01 87	8600228	M	0.5	6		
7	ROSCOMMON	22N 04W	01 04 87	8600842	M	1.5	6		
7	ROSCOMMON	22N 04W 20	01 24 87	8600913	M	1.5	6		
7	ROSCOMMON	23N 01W 10	01 04 87	8600885	M	1.5	6		
7	ROSCOMMON	22N 04W	01 04 87	8600843	M	2.5	6		
7	ROSCOMMON	23N 01W 19	01 07 87	8600229	M	3.5	6		
7	ROSCOMMON	23N 01W 04	02 22 87	8601123	M	10.5	6		
7	ROSCOMMON	22N 04W 32	02 01 87	8600917	F	0.5	6		
7	ROSCOMMON	22N 04W 32	01 10 87	8600921	F	1.5	6		
7	ROSCOMMON	23N 01W 10	01 03 87	8600912	F	1.5	6		
7	ROSCOMMON	23N 04W 04	02 15 87	8601113	F	1.5	6		
7	ROSCOMMON	24N 04W 34	02 27 87	8601099	F	1.5	6		
7	ROSCOMMON	22N 02W 08	01 03 87	8600007	F	1.5	6		
7	ROSCOMMON	23N 04W 06	01 31 87	8600964	F	2.5	6		
7	ROSCOMMON	24N 01W 28	01 11 87	8600963	F	2.5	6		
7	ROSCOMMON	23N 04W 20	01 30 87	8600915	F	2.5	6		
7	ROSCOMMON	22N 02W 29	01 03 87	8600246	F	3.5	6		
7	ROSCOMMON	23N 04W 30	02 15 87	8600919	F	4.5	6		
7	ROSCOMMON	21N 03W 30	01 26 87	8600252	F	6.5	6	+/- 1 YEAR	
7	ROSCOMMON	23N 01W 17	01 21 87	8600234		6			
7	ROSCOMMON	21N 04W 35	01 11 87	8600923		6			
7	ROSCOMMON	21N 04W 23	01 03 87	8600231		6			
7	ROSCOMMON	24N 03W 02		8600850		0		ROAD KILL	
7	ROSCOMMON	21N 04W 01	02 01 87	8600253		6			
7	ROSCOMMON	21N 02W 23	01 27 87	8600207		6			
7	ROSCOMMON	23N 01W 15	01 20 87	8600848		6			
7	ROSCOMMON	22N 02W 29	01 02 87	8600841		6			
7	ROSCOMMON	24N 01W 16	02 16 87	8600967		6			
7	ROSCOMMON	23N 02W 01	02 22 87	850963		6			
7	ROSCOMMON	23N 01W 15	01 20 87	8600847		6			
7	ROSCOMMON	22N 02W 22	01 31 87	8600255		6			
7	ROSCOMMON	24N 04W 36	01 01 87	8600233		6			
7	ROSCOMMON	22N 02W 21	02 01 87	8601111		6			
7	ROSCOMMON	24N 04W 32	01 21 87	8600250		6			
7	ROSCOMMON	23N 02W 01	02 23 87	850964		6			
7	ROSCOMMON	23N 01W 14	01 22 87	8600235		6			
7	ROSCOMMON	24N 04W 32	01 09 87	8600862		6			
7	ROSCOMMON	24N 03W 11	01 14 87	8600844		6			
7	ROSCOMMON	22N 02W 27	01 28 87	8600849		6			
7	ROSCOMMON	23N 04W 08	01 19 87	8600846		6			
8	UNKNOWN			8601120	F	1.5			
8	CLARE	19N 06W 10	01 17 87	8600247	M	0.5	6		
8	CLARE	20N 04W 06	02 14 87	8600920	M	1.5	6		
8	CLARE	19N 05W 06	02 01 87	8600916	M	1.5	6		
8	CLARE	20N 04W 10	01 09 87	8600922	M	2.5	6		
8	CLARE	19N 06W 11	01 21 87	8600251	F	0.5	6		
8	CLARE	20N 05W 06	01 25 87	8600914	F	0.5	6		
8	CLARE	20N 05W 06	02 09 87	8600918	F	0.5	6		
8	CLARE	17N 04W 31	02 19 87	8601122		6			
8	CLARE	18N 06W 21	02 14 87	8601127		6			

* B = BOW, G = GUN, T = TRAPPED, O = OTHER

APPENDIX II.

1986-87 BOBCAT DATA - REGION II

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
8	CLARE	19N 06W 10	02 10 87	8601121		6		
8	CLARE	18N 04W 12	01 20 87	8600249		0		ROAD KILL

APPENDIX III.

1986-87 BOBCAT DATA - REGION UNKNOWN

DIST.	COUNTY	LOCATION Twp.Rng.Sec.	DATE Mo.Da.Yr.	SEAL NUMBER	SEX	AGE	HOW TAKEN*	COMMENTS
				0850788	M	0.5		
					M	1.5		
					M	9.5		

