



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

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BOBCAT SURVEY - 1992-93 <sup>[1]</sup>

by

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Introduction

In order to allow the export of bobcat (*Felis rufus*) pelts under the Convention on International Trade in Endangered Species (CITES) the Fish and Wildlife Service compiles data on the harvest and status of bobcats. This documentation is necessary to verify the stability of populations and to allow continued harvest and exportation of pelts. This is the thirteenth consecutive year of the bobcat survey in Michigan (Cooley et al. 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992).

During the winter of 1992-93, the Wildlife Division of the Department of Natural Resources required that trappers and hunters submit bobcat skulls for examination. Age and sex of harvested bobcats were determined by canine tooth examination. This information is summarized for bobcats harvested in the 2 northern Regions (Appendices I and II).

Materials and Methods

A lower canine was extracted after the skull was boiled in water for 1 hour. Maximum root width and thickness of the canine allowed for sex determination (Friedrich et al. 1983). Age was estimated by cementum layer counts (Crowe 1975).

Results and Discussion

Region I

The number of samples collected (85 in 1992-93, 66 in 1991-92) was greater this year than last, even though the total harvest was nearly the same (176 in 1992-93, 164 in 1991-92). The sex ratio of bobcats examined from Region I (Table 1) was 124:100 (47:38) males to females. This was the tenth time in 13

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years of data collection that the ratio favored males (Cooley et al. 1981, 1982, 1983, 1986, 1987, 1988, 1989, 1990 and 1991). The percentage of young-of-the-year (21.2%) was less than last year (28.8%), well below the average (36%) of previous years. Of the bobcats submitted, 68.3% were less than 3 years of age, slightly lower than previous years' data. The 1-2 year old (30.6%) age class occurred most frequently in the sample.

### Region II

The number of samples collected (135 in 1992-93, 131 in 1991-92) and the total harvest from Region II was nearly the same (204 in 1992-93, 195 in 1991-92) as last year. The sex ratio of Region II bobcats (Table 2) was 181:100 (87:48) males to females. The data was consistent with past years' data in that males were predominant in the sample. The percentage of young-of-the-year (17.8%) was down from last year (25.2%) and below the 13 year average (26.0%). Of the bobcats submitted, 72.6% were less than 3 years of age, consistent with previous years' data. The yearling (31.1%) age class occurred most frequently in the sample.

### Regions I and II

Bobcat harvest regulations for the 1992-93 season included a bag limit of one (unchanged from the previous year) and mandatory submission of the animal's head to the DNR for examination (compared to voluntary submission prior to last year). The harvest increased from 359 in 1991-92 to 380 in 1992-93. The number of samples submitted was up slightly from 197 in 1991-92 to 220 in 1992-93 (a 58% compliance). The combined totals of the submitted skulls from both regions (Table 3) exhibited a distribution in the age classes and sex ratios consistent with past years' data.

In a previous study, sex ratios calculated by tooth measurement did not differ significantly from sex ratios determined by physical examination (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 provides baseline information on the status of bobcat populations. Using dental measurements for sex determination has allowed for easier data collection. These data, in conjunction with future information will allow the Wildlife Division to develop a population model and help assure Michigan trappers and hunters the opportunity to harvest and export this furbearing species in the future.

### Acknowledgements

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Table 1. Estimated age and sex ratio of Region I bobcats, 1992-93 season

Age	Number	Male	Female	Percent of Total
0-1	18	6	12	21.2
1-2	26	14	12	30.6
2-3	14	10	4	16.5
3-4	15	8	7	17.6
4-5	4	3	1	4.7
5-6	4	2	2	4.7
7-8	1	1	0	1.2
8-9	1	1	0	1.2
9-10	1	1	0	1.2
11-12	1	1	0	1.2
Total	85	47	38	100

Table 2. Estimated age and sex ratio of Region II bobcats, 1992-93 season

Age	Number	Male	Female	Percent of Total
0-1	24	14	10	17.8
1-2	42	27	15	31.1
2-3	32	21	11	23.7
3-4	15	11	4	11.1
4-5	8	4	4	5.9
5-6	3	1	2	2.2
6-7	4	3	1	3.0
7-8	2	1	1	1.5
8-9	2	2	0	1.5
9-10	1	1	0	0.7
10-11	2	2	0	1.5
Total	135	87	48	100

Table 3. Estimated age and sex ratio of bobcats from Regions I and II, 1992-93

Age	Number	Male	Female	Percent of Total
0-1	42	20	22	19.1
1-2	68	41	27	30.9
2-3	46	31	15	20.9
3-4	30	19	11	13.6
4-5	12	7	5	5.5
5-6	7	3	4	3.2
6-7	4	3	1	1.8
7-8	3	2	1	1.4
8-9	3	3	0	1.4
9-10	2	2	0	0.9
10-11	2	2	0	0.9
11-12	1	1	0	0.5
Total	220	134	86	100



APPENDIX I.

1992-93 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION	DATE	SEAL	SEX	AGE	METHOD	COMMENTS
		Twp. Rng. Sec	Mo. Da. Yr.	NUMBER				
1	Baraga	48N 32W 08	11 9 92	9200553	F	0.5	Trapping	Field F
1	Baraga	48N 33W 06	11 28 92	9200981	M	0.5	Road Kill	
1	Gogebic	45N 39W 06	11 4 92	9200557B	M	3.5	Trapping	Duplicate Seal #
1	Gogebic	45N 41W 18	1 12 93	9200983	F	1.5	Trapping	Field F
1	Gogebic	45N 43W 18	2 28 93	9200989			Hunting	
1	Gogebic	46N 42W 27	11 18 92	9200559	F	0.5	Hunting	Field F
1	Gogebic	46N 43W 15	1 9 93	9200982	F	0.5	Trapping	
1	Gogebic	47N 42W 13	1 19 93	9200985	M	1.5	Trapping	
1	Gogebic	47N 43W 22	1 24 93	9200987			Hunting	
1	Gogebic	47N 44W 34	11 26 92	9200560	F	0.5	Trapping	Field F
1	Gogebic	48N 44W 17	2 20 93	9200988			Hunting	
1	Gogebic	48N 49W 12	1 17 93	9200986	F	0.5	Hunting	
1	Houghton	47N 35W 05	11 4 92	9200557A	M	1.5	Trapping	Duplicate Seal #
1	Houghton	47N 36W 30	11 1 92	9200471			Hunting	
1	Houghton	48N 36W 30	1 1 93	9200995			Trapping	
1	Houghton	48N 37W 11	11 8 92	9200552			Trapping	
1	Ontonagon	46N 38W 30	10 28 92	9200555	M	2.5	Trapping	
1	Ontonagon	46N 39W 19	12 30 92	9200994			Trapping	
1	Ontonagon	46N 40W 05	10 28 92	9200558	M	1.5	Hunting	
1	Ontonagon	47N 38W 19	12 30 92	9200551			Hunting	
1	Ontonagon	49N 40W 06	11 29 92	9200763	F	0.5	Trapping	
1	Ontonagon	49N 40W 06	11 17 92	9200762			Trapping	
1	Ontonagon	51N 40W 29	11 17 92	9200554			Hunting	
2	Dickinson	39N 28W 26	1 1 93	9200217			Hunting	
2	Dickinson	40N 30W 21	11 4 92	9200212			Trapping	
2	Dickinson	41N 27W 22	12 28 92	9200151	M	2.5	Trapping	
2	Dickinson	41N 28W	11 28 92	9200248			Hunting	
2	Dickinson	42N 28W 24	11 22 92	9200247	M	1.5	Hunting	
2	Dickinson	42N 29W 02	1 16 93	9200952			Hunting	
2	Dickinson	42N 29W 25	11 16 92	9200161			Hunting	
2	Dickinson	42N 30W 35	11 17 92	9200213	F	1.5	Trapping	Field F
2	Dickinson	43N 30W 35	12 5 92	9200221			Hunting	
2	Dickinson	44N 27W 10	10 26 92	9100261	M	1.5	Trapping	
2	Dickinson	44N 28W 03	12 14 92	9200565	F	0.5	Trapping	Field F
2	Dickinson	44N 29W 05	11 15 92	9200220			Hunting	
2	Iron	43N 31W 09	12 8 92	9200291	M	3.5	Trapping	
2	Iron	43N 32W 33	12 31 92	9200296	F	1.5	Trapping	
2	Iron	43N 33W 24	12 20 92	9200300	M	0.5	Trapping	
2	Iron	44N 32W 16	10 28 92	9200250	F	1.5	Trapping	
2	Iron	44N 33W 27	11 5 92	9200242			Trapping	
2	Iron	44N 34W 13	2 10 93	9200298	M	4.5	Hunting	Field M
2	Iron	44N 35W 08	12 11 92	9200293	M	1.5	Trapping	
2	Iron	44N 35W 08	1 26 93	9200297	M	1.5	Trapping	
2	Iron	44N 37W 22	1 1 93	9200295			Trapping	
2	Iron	44N 37W 35	10 30 92	9200245			Road Kill	
2	Iron	45N 33W 04	11 8 92	9200246			Hunting	
2	Iron	45N 33W 28	11 6 92	9200243			Trapping	
2	Iron	45N 34W 33	11 29 92	9200249	F	3.5	Hunting	age +/- 1 yr.

APPENDIX I.

1992-93 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
3	Delta	42N	22W	35	11	15	92	9200580	F	3.5	Hunting	
3	Delta	42N	23W	17	1	2	93	9200829	M	9.5	Hunting	
3	Delta	43N	19W	04	10	29	92	9200805	M	1.5	Hunting	
3	Delta	43N	20W	18	1	29	93	9200629			Trapping	
3	Delta	43N	20W	19	1	29	93	9200628			Trapping	
3	Delta	43N	21W	24	1	28	93	9200627			Trapping	
3	Delta	43N	22W	36	10	31	92	9200571	M	2.5	Trapping	
3	Delta	43N	23W	16	11	17	92	9200574	F	3.5	Trapping	
3	Delta	43N	23W	31	1	31	93	9200626			Trapping	
3	Delta	43N	23W	36	2	2	93	9200741			Trapping	
3	Marquette	42N	24W	10	11	19	92	9200575	M	2.5	Hunting	
3	Marquette	43N	25W	15	10	30	92	9200588			Trapping	
3	Marquette	44N	24W	36	11	11	92	9200581	F	0.5	Trapping	
3	Marquette	44N	25W	07	11	27	92	9200584	F	1.5	Hunting	
3	Marquette	45N	26W	09	12	17	92	9200585	F	0.5	Trapping	
3	Marquette	45N	26W	32	2	4	92	9200586			Trapping	
3	Marquette	45N	27W	28	11	18	92	9200587			Hunting	
3	Marquette	45N	27W	29	11	1	92	9200590	M	2.5	Trapping	
3	Marquette	45N	27W	33	10	30	92	9200589	M	3.5	Trapping	
3	Marquette	46N	28W	13	12	2	92	9200593	M	7.5	Trapping	
3	Marquette	46N	29W	08	12	15	92	9200216			Trapping	
3	Marquette	46N	29W	12	2	28	93	9200608			Trapping	
3	Marquette	46N	29W	14	2	28	93	9200609			Trapping	
3	Marquette	46N	30W	05	12	19	92	9200598	F	2.5	Trapping	
3	Marquette	46N	30W	11	12	29	92	9200567	M	3.5	Trapping	
3	Marquette	46N	30W	18	12	30	92	9200597			Trapping	
3	Marquette	47N	23W	33	11	28	92	9201019			Trapping	
3	Marquette	47N	24W	16	2	28	93	9200721			Trapping	
3	Marquette	47N	27W	33	1	6	93	9200568	M	0.5	Trapping	
3	Marquette	47N	28W	18	2	13	93	9200570			Trapping	
3	Marquette	47N	28W	29	1	10	93	9200594			Trapping	
3	Marquette	47N	29W	02	12	2	92	9200562	F	3.5	Trapping	
3	Marquette	47N	29W	06	11	20	92	9200583	F	3.5	Trapping	
3	Marquette	47N	29W	33	11	20	92	9200591	M	0.5	Trapping	
3	Marquette	47N	30W	20	1	11	93	9200224			Trapping	
3	Marquette	48N	28W	30	11	23	92	9200561	M	1.5	Trapping	
3	Marquette	49N	29W	24	1	23	93	9200569	M	2.5	Trapping	
4	Alger	46N	17W	27	7	13	93	9200087			Road Kill	
4	Alger	46N	18W	25	10	26	92	9200010	F	1.5	Trapping	
4	Chippewa				11	17	92	9200771	M	4.5	Hunting	
4	Chippewa	41N	03E	06	10	27	92	9200009			Trapping	
4	Chippewa	43N	02E	33	2	25	93	9200079	F	5.5	Hunting	age +/- 1 yr.
4	Chippewa	45N	01E	01	2	27	93	9200076	F	0.5	Hunting	
4	Chippewa	45N	01W	19	11	11	92	9200071			Trapping	
4	Chippewa	45N	02E	08	10	28	92	9200091			Trapping	
4	Chippewa	45N	02W	01	11	28	92	9200080			Trapping	
4	Chippewa	46N	06W	30	1	17	93	9200005			Trapping	
4	Luce	45N	08W	20	1	2	93	9200483			Hunting	



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1992-93 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION	DATE	SEAL	SEX	AGE	METHOD	COMMENTS
		Twp. Rng. Sec	Mo. Da. Yr.	NUMBER				
2	Iron	45N 35W 01	12 26 92	9200294	M	5.5	Hunting	
2	Iron	45N 37W 09	12 8 92	9200292	F	1.5	Trapping	
2	Iron	45N 37W 15	11 1 92	9100962	F	2.5	Hunting	
2	Iron	45N 37W 16	11 7 92	9200244	M	2.5	Trapping	
2	Iron	46N 32W 04	12 7 92	9200222			Hunting	
2	Iron	46N 32W 09	11 8 92	9200223			Trapping	
2	Iron	46N 35W 23	1 10 93	9200971			Hunting	
2	Iron	46N 35W 34	11 5 92	9200241	F	3.5	Trapping	
2	Menominee	33N 27W 18	11 1 92	9200167	F	1.5	Hunting	
2	Menominee	34N 25W 17	1 10 93	9200172			Trapping	
2	Menominee	34N 26W 16	11 16 92	9200171			Hunting	
2	Menominee	36N 27W 09	2 28 93	9200174			Trapping	
2	Menominee	37N 25W 07	2 21 93	9200173			Trapping	
2	Menominee	38N 26W 04	10 28 92	9200166			Hunting	
2	Menominee	38N 28W 08	11 18 92	9200215	M	0.5	Hunting	
2	Menominee	38N 28W 08	11 19 92	9200214	F	0.5	Hunting	
2	Menominee	39N 25W 04	1 15 93	9200622	M	0.5	Trapping	
2	Menominee	39N 25W 10	2 28 93	9200631	F	2.5	Trapping	
2	Menominee	39N 25W 10	12 9 92	9200170			Hunting	
2	Menominee	39N 26W 11	11 20 92	9200169			Hunting	
2	Menominee	39N 26W 23	12 12 92	9200579	M	2.5	Trapping	
2	Menominee	39N 26W 35	11 19 92	9200577			Hunting	
2	Menominee	39N 27W 06	10 25 92	9600000	M	6.5	Road Kill	
3	Alger	44N 19W 11	10 28 92	9200081	F	1.5	Trapping	
3	Alger	44N 21W 04	12 6 92	9200563	F	4.5	Trapping	
3	Alger	47N 22W 19	12 12 92	9200564	F	2.5	Trapping	
3	Delta		10 25 92	9200830			Trapping	
3	Delta		1 26 93	9200475	M	1.5	Trapping	Field M
3	Delta	38N 18W 02	2 21 93	9200613			Trapping	
3	Delta	38N 18W 06	12 15 92	9200611			Hunting	
3	Delta	38N 24W 14	11 22 92	9200578	M	1.5	Hunting	
3	Delta	39N 18W 14	2 27 93	9200614	M	8.5	Trapping	age +/- 1 yr.
3	Delta	39N 19W 27	1 13 93	9200612			Hunting	
3	Delta	39N 21W 02	11 16 92	9200572	M	4.5	Hunting	
3	Delta	39N 21W 15	1 23 93	9200625	F	1.5	Trapping	
3	Delta	39N 21W 28	12 28 92	9200812	M	2.5	Hunting	
3	Delta	39N 24W 01	1 15 93	9200623	F	3.5	Trapping	
3	Delta	40N 18W 09	11 28 92	9200802			Road Kill	
3	Delta	40N 20W 05	12 27 92	9200811	M	3.5	Hunting	
3	Delta	40N 24W 19	11 17 92	9200168			Hunting	
3	Delta	41N 18W 09	1 2 93	9200980	F	5.5	Hunting	Age +/- 1 Yr., Field F
3	Delta	41N 19W 25	1 23 93	9200624			Trapping	
3	Delta	41N 19W 26	11 20 92	9200961			Hunting	
3	Delta	41N 22W 04	2 14 93	9200630			Road Kill	
3	Delta	41N 22W 22	11 17 92	9200573	M	3.5	Hunting	
3	Delta	42N 18W 02	10 26 92	9200801	M	1.5	Hunting	
3	Delta	42N 21W 29	11 19 92	9200576			Hunting	
3	Delta	42N 22W 33	1 4 92	9200621	F	1.5	Trapping	

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1992-93 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
4	Luce	46N	10W		12	1	92	9200505			Hunting	
4	Luce	46N	11W	23	1	3	92	9200085			Hunting	
4	Luce	47N	08W	31	1	19	93	9200004			Trapping	
4	Mackinac	39N	02W	12	11	19	92	9200950			Hunting	
4	Mackinac	41N	02W	02	1	26	93	9200113			Hunting	
4	Mackinac	42N	01W	13	12	3	92	9200095			Trapping	
4	Mackinac	42N	02W	05	12	20	92	9200096			Trapping	
4	Mackinac	42N	02W	08	2	27	93	9200444			Trapping	
4	Mackinac	42N	02W	17	11	29	92	9200094			Hunting	
4	Mackinac	42N	02W	18	2	26	93	9200007			Trapping	
4	Mackinac	42N	03W	09	2	10	93	9200112			Hunting	
4	Mackinac	42N	04W	12	11	10	92	9200093			Trapping	
4	Mackinac	42N	05W	23	1	29	93	9200111			Hunting	
4	Mackinac	42N	11W	23	11	8	92	9200092			Trapping	
4	Mackinac	43N	01W	23	11	27	92	9200073	M	2.5	Hunting	
4	Mackinac	43N	04W	27	1	20	93	9200097			Trapping	
4	Mackinac	43N	05W	07	11	2	92	9200001	M	1.5	Trapping	
4	Mackinac	43N	06W	15	1	31	93	9200490	M	0.5	Hunting	
4	Mackinac	43N	07W	35	11	6	92	9200761			Hunting	
4	Mackinac	43N	11W	17	2	22	93	9200006			Trapping	
4	Mackinac	43N	11W	17	12	20	92	9200481	F	0.5	Hunting	
4	Mackinac	43N	11W	17	12	19	92	9200482	M	3.5	Hunting	
4	Mackinac	43N	12W	22	12	17	92	9200566	M	2.5	Road Kill	
4	Mackinac	43N	12W	26	11	4	92	9200101			Road Kill	
4	Mackinac	44N	08W	22	11	21	92	9200072	M	5.5	Trapping	
4	Mackinac	44N	10W	26	11	22	92	9200949			Hunting	
4	Mackinac	44N	10W	27	10	27	92	9200008			Hunting	
4	Mackinac	44N	10W	32	12	6	92	9200003			Trapping	
4	Mackinac	44N	12W	19	1	9	93	9200451	M	1.5	Hunting	
4	Schoolcraft	40N	16W	12	1	16	93	9200386	M	3.5	Hunting	
4	Schoolcraft	41N	13W	30	1	1	93	9100412	F	1.5	Trapping	
4	Schoolcraft	42N	13W	05	7	7	92				Found Dead	
4	Schoolcraft	42N	13W	06	2	23	93	9200121			Trapping	
4	Schoolcraft	42N	15W	15	11	18	92	9100411	M	11.5	Trapping	
4	Schoolcraft	42N	16W	01	2	9	93	9200130	F	1.5	Road Kill	
4	Schoolcraft	42N	17W	03	11	12	92	9200083			Trapping	
4	Schoolcraft	43N	16W	12	10	29	92	9200082			Trapping	
4	Schoolcraft	43N	17W	22	12	20	92	9200084			Trapping	
4	Schoolcraft	44N	16W	35	12	19	92	9200351			Hunting	
4	Schoolcraft	44N	18W	07	1	31	93	9200086			Hunting	
4	Schoolcraft	45N	17W	15	12	12	92	9200946			Hunting	
4	Schoolcraft	46N	13W	25	11	20	92	9200002			Hunting	



APPENDIX II.

1992-93 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION	DATE	SEAL	SEX	AGE	METHOD	COMMENTS
		Twp. Rng. Sec	Mo. Da. Yr.	NUMBER				
5	Alpena	29N 07E 27	1 16 93	9200531	F	0.5	Hunting	
5	Alpena	29N 09E 31	2 9 93	9200906			Hunting	
5	Alpena	30N 06E 07	1 12 93	9200532	M	2.5	Hunting	
5	Alpena	30N 06E 28	1 22 93	9200929	F	1.5	Hunting	
5	Alpena	30N 07E 02	1 9 93	9200452			Hunting	
5	Alpena	30N 07E 17	2 7 93	9200933	F	1.5	Hunting	
5	Alpena	30N 08E 08	1 15 93	9200974	M	3.5	Hunting	
5	Alpena	31N 06E 15	1 31 93	9200939	M	2.5	Hunting	
5	Alpena	31N 07E 18	1 26 93	9200931	M	1.5	Hunting	
5	Alpena	31N 08E 06	2 21 93	9200896	F	7.5	Hunting	Age +/- 1 yr.
5	Alpena	31N 08E 18	2 20 93	9200935	M	1.5	Hunting	
5	Alpena	31N 09E 04	1 27 93	9200927	M	1.5	Hunting	
5	Alpena	32N 05E 07	2 24 93	9200885	M	2.5	Hunting	
5	Alpena	32N 05E 33	1 31 93	9200932	F	1.5	Hunting	
5	Alpena	32N 06E 13	2 26 93	9200936	M	1.5	Hunting	
5	Alpena	32N 07E 05	2 20 93	9200892	M	1.5	Hunting	
5	Alpena	32N 07E 22	1 27 93	9200928	M	1.5	Hunting	
5	Antrim	29N 09W 33	2 22 93	9200955			Hunting	
5	Antrim	30N 06W 03	2 13 93	9200956	M	1.5	Hunting	Field M
5	Antrim	30N 06W 05	1 10 93	9200301			Hunting	
5	Antrim	31N 05W 35	1 20 93	9200824	M	2.5	Hunting	
5	Antrim	31N 07W 36	2 26 93	9200960	F	1.5	Hunting	
5	Antrim	32N 08W 04	3 17 93	9200926B	M	0.5	Found Dead	Duplicate Seal #
5	Charlevoix	32N 06W 36	1 17 93	8900700			Hunting	
5	Charlevoix	33N 05W 34	1 8 93	9200861			Hunting	
5	Cheboygan	33N 01E 01	2 20 93	9200902			Hunting	
5	Cheboygan	33N 01E 02	1 16 93	9200791			Hunting	
5	Cheboygan	33N 01E 21	1 10 93	9200766			Hunting	
5	Cheboygan	33N 01E 24	1 17 93	9200827	M	0.5	Hunting	
5	Cheboygan	33N 01E 30	1 18 93	8900699	M	2.5	Hunting	
5	Cheboygan	33N 01W 04	2 9 93	9200941			Hunting	
5	Cheboygan	33N 01W 08	2 20 93	9200954			Hunting	
5	Cheboygan	33N 01W 11	2 8 93	9200942			Hunting	
5	Cheboygan	33N 01W 11	2 21 93	9200863			Hunting	
5	Cheboygan	33N 01W 12	2 10 93	9200912	M	6.5	Hunting	
5	Cheboygan	33N 01W 22	1 31 93	9200869	M	3.5	Hunting	
5	Cheboygan	34N 01E 02	2 27 93	9200841			Hunting	
5	Cheboygan	34N 01E 06	1 9 93	9200822	M	0.5	Hunting	
5	Cheboygan	34N 01E 09	2 28 93	9200874	M	1.5	Hunting	
5	Cheboygan	34N 01E 17	2 22 93	9200873	F	3.5	Hunting	
5	Cheboygan	34N 01E 31	2 19 93	9200872	M	0.5	Hunting	
5	Cheboygan	34N 01W 08	2 27 93	9200868	F	1.5	Hunting	
5	Cheboygan	34N 01W 12	1 23 93	9200870			Hunting	
5	Cheboygan	34N 01W 30	1 27 93	9200862			Hunting	
5	Cheboygan	34N 01W 30	2 28 93	9200919			Hunting	
5	Cheboygan	34N 02W 16	2 23 93	9200867	M	10.5	Hunting	Field M
5	Cheboygan	34N 02W 36	2 27 93	9200917			Hunting	
5	Cheboygan	35N 01E 05	2 28 93	9200875	M	1.5	Hunting	

APPENDIX II.

1992-93 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
5	Cheboygan	35N	02W	15	2	28	93	9200920			Hunting	
5	Cheboygan	36N	01W	23	2	28	93	9200903			Hunting	
5	Cheboygan	37N	01E	08	1	30	93	9200977			Hunting	
5	Cheboygan	38N	03W	21	2	20	93	9200866			Hunting	
5	Cheboygan	38N	03W	22	2	20	93	9200864			Hunting	
5	Cheboygan	38N	03W	22	2	21	93	9200865			Hunting	
5	Emmet	34N	05W	07	1	17	93	9200314	F	0.5	Hunting	
5	Emmet	38N	04W	16	1	15	93	9200973	M	3.5	Hunting	
5	Emmet	38N	04W	35	1	5	93	9200951	M	7.5	Hunting	Age +/- 1 yr.
5	Emmet	38N	05W	29	1	14	93	9200972	M	2.5	Hunting	
5	Emmet	39N	04W	34	2	28	93	9200943	F	4.5	Hunting	
5	Montmorency	29N	01E	05	1	5	93	9200765	F	0.5	Hunting	
5	Montmorency	29N	02E	06	2	1	93	9200891	F	3.5	Hunting	
5	Montmorency	29N	02E	35	1	3	93	9000556			Hunting	
5	Montmorency	29N	03E	13	1	1	93	9200921	F	0.5	Hunting	
5	Montmorency	29N	03E	13	2	27	93	9200504	F	2.5	Hunting	
5	Montmorency	29N	03E	17	1	18	93	9200541			Road Kill	
5	Montmorency	30N	02E	36	1	6	93	9200501	M	0.5	Hunting	
5	Montmorency	30N	03E	02	2	23	93	9200897	F	0.5	Road Kill	
5	Montmorency	30N	04E	12	2	28	93	9200914	M	6.5	Hunting	
5	Montmorency	30N	04E	27	2	3	93	9200938	M	1.5	Hunting	
5	Montmorency	30N	04E	32	1	23	93	9200930	M	3.5	Hunting	
5	Montmorency	31N	01E	30	2	26	93	9200959	F	1.5	Hunting	
5	Montmorency	31N	01E	30	1	2	93	9200948	F	2.5	Hunting	
5	Montmorency	31N	02E	34	1	15	93	9200423			Hunting	
5	Montmorency	31N	03E	07	2	27	93	9200775	F	4.5	Hunting	
5	Otsego	29N	02W	27	1	17	93	8900692	M	2.5	Hunting	
5	Otsego	29N	04W	31	2	15	93	9200953	M	1.5	Hunting	
5	Otsego	30N	01W	20	1	9	93	9200751	M	1.5	Road Kill	
5	Otsego	30N	03W	26	1	22	93	9200826	M	2.5	Hunting	
5	Otsego	31N	01W	16	2	28	93	9200457	M	1.5	Hunting	
5	Otsego	31N	01W	27	1	14	93	9200947			Hunting	
5	Otsego	31N	01W	29	1	9	93	9200453			Hunting	
5	Otsego	31N	02W	12	3	1	93	9200904	M	4.5	Hunting	
5	Otsego	31N	02W	35	2	16	93	9200832			Hunting	
5	Otsego	32N	01W	23	2	27	93	9200487			Hunting	
5	Otsego	32N	01W	27	2	15	93	9200957	M	6.5	Hunting	
5	Otsego	32N	01W	27	1	3	93	9200828	M	1.5	Hunting	
5	Otsego	32N	03W	26	1	27	93	9200911			Hunting	
5	Presque Isle	33N	02E	06	1	2	93	9200772			Hunting	
5	Presque Isle	33N	02E	07	1	23	93	9200901			Hunting	
5	Presque Isle	33N	04E	25	5	23	93	9200913			Road Kill	
5	Presque Isle	33N	04E	28	1	16	93	9200924	M	1.5	Hunting	
5	Presque Isle	33N	05E	08	1	16	93	9200926A	M	0.5	Hunting	Duplicate Seal #
5	Presque Isle	33N	07E	21	2	26	93	9200895	M	1.5	Hunting	
5	Presque Isle	33N	07E	21	2	27	93	9200937	F	0.5	Hunting	
5	Presque Isle	33N	08E	14	2	28	93	9200893	F	4.5	Hunting	Age +/- 1 yr.
5	Presque Isle	33N	08E	36	1	7	93	9200910	F	1.5	Hunting	



APPENDIX II.

1992-93 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
5	Presque Isle	33N	08E	36	2	19	93	9200909	M	2.5	Hunting	
5	Presque Isle	34N	02E	11	1	31	93	9200871	M	4.5	Hunting	
5	Presque Isle	34N	04E	25	1	5	93	9200922	M	3.5	Hunting	
5	Presque Isle	34N	05E	03	1	29	93	9200881	M	1.5	Hunting	
5	Presque Isle	34N	05E	07	2	15	93	9200883	M	2.5	Hunting	
5	Presque Isle	34N	06E	27	1	16	93	9200925	M	1.5	Hunting	
5	Presque Isle	35N	02E	12	2	28	93	9200886	F	1.5	Hunting	
5	Presque Isle	35N	02E	36	2	15	93	9200884	F	6.5	Hunting	Age +/- 1 yr.
5	Presque Isle	35N	04E	05	2	28	93	9200887	M	3.5	Hunting	
5	Presque Isle	35N	04E	10	2	8	93	9200882	F	4.5	Hunting	Age +/- 1 yr.
5	Presque Isle	35N	04E	28	1	22	93	9200940	F	2.5	Hunting	
5	Presque Isle	36N	02E	35	2	27	93	9200459	M	0.5	Hunting	
5	Presque Isle	36N	02E	35	2	27	93	9200458	M	1.5	Hunting	Field M
6	Kalkaska	25N	07W	12	1	16	93	9200425			Hunting	
6	Kalkaska	26N	05W	19	1	18	93	9200361	M	1.5	Hunting	
6	Kalkaska	26N	06W	05	1	20	93	9200302	M	2.5	Hunting	
6	Kalkaska	26N	06W	20	2	15	93	9200304	M	2.5	Hunting	Field M
6	Kalkaska	27N	06W	12	2	7	93	9200915	F	1.5	Hunting	Field F
6	Kalkaska	27N	06W	34	1	11	93	9200821			Hunting	
6	Kalkaska	28N	06W	30	1	24	93	9200303	F	2.5	Hunting	
6	Kalkaska	28N	08W	36	1	26	93	9200958	M	1.5	Hunting	
6	Missaukee	21N	05W	04	2	10	93	9200433	F	2.5	Hunting	
6	Missaukee	21N	07W	05	1	28	93	9200365			Hunting	
6	Missaukee	21N	07W	05	1	26	93	9200364			Hunting	
6	Missaukee	22N	05W	18	1	15	93	9200424	F	1.5	Hunting	
6	Missaukee	23N	05W	12	2	6	93	9200432			Hunting	
6	Missaukee	23N	06W	19	2	14	93	9200831			Hunting	
6	Missaukee	23N	06W	20	1	16	93	9200816	M	1.5	Hunting	
6	Missaukee	24N	05W	27	1	31	93	9200429	M	9.5	Hunting	
6	Osceola	18N	07W	17	1	15	93	9200371	M	0.5	Hunting	
6	Osceola	19N	07W	09	1	30	93	9200331	M	1.5	Hunting	
6	Osceola	20N	07W	14	1	30	93	9200825	M	3.5	Hunting	
6	Osceola	20N	10W	23	4	22	93				Road Kill	
6	Wexford	21N	10W	22	1	31	93	9200850	M	2.5	Hunting	
6	Wexford	21N	12W	18	1	15	93	9200359			Road Kill	
6	Wexford	22N	10W	27	1	17	93	9200362	F	3.5	Hunting	
6	Wexford	22N	11W	34	1	31	93	9200363			Hunting	
6	Wexford	24N	09W	05	2	14	93	9200838	F	2.5	Hunting	Field F
6	Wexford	24N	09W	25	2	14	93	9200840	i.s.	i.s.	Hunting	
6	Wexford	24N	09W	25	2	14	93	9200839	M	2.5	Hunting	
6	Wexford	24N	09W	30	2	14	93	9200837	F	2.5	Hunting	
6	Wexford	24N	12W	30	10	3	92	9200360	M	0.5	Road Kill	Field M
6	Unknown							9200340	M	1.5	Road Kill	
7	Alcona				1	22	93	9200404	M	3.5	Hunting	
7	Alcona	25N	05E	05	1	6	93	9200518			Hunting	
7	Alcona	25N	05E	05	1	6	93	9200923	M	10.5	Hunting	Age +/- 1 yr.
7	Alcona	25N	05E	15	1	13	93	9200403			Hunting	
7	Alcona	25N	09E	20	2	4	93	9200405			Hunting	

## APPENDIX II.

## 1992-93 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
7	Alcona	25N	09E	29	1	1	93	9200402	F	1.5	Hunting	
7	Alcona	26N	05E	18	1	22	93	9200412			Hunting	
7	Alcona	26N	05E	34	1	9	93	9200764	M	0.5	Hunting	
7	Alcona	26N	08E	18	2	24	93	9200411			Hunting	
7	Alcona	26N	09E	01	11	30	92	9200514			Road Kill	
7	Alcona	27N	05E	06	10	21	92	9200511			Road Kill	
7	Alcona	27N	05E	06	1	23	93	9200773	M	1.5	Hunting	
7	Alcona	27N	06E	27	2	12	93	9200406	M	0.5	Hunting	
7	Alcona	27N	06E	36	2	20	93	9200409	i.s.	i.s.	Hunting	
7	Alcona	27N	08E	25	2	19	93	9200410			Hunting	
7	Arenac	19N	03E	29	1	17	93	9200473			Hunting	
7	Arenac	19N	05E	21	12	4	92	9200472			Trapping	
7	Arenac	20N	03E	19	2	6	93	9200476	F	0.5	Hunting	
7	Clare	17N	05W	23	1	5	93	9200484			Road Kill	
7	Clare	19N	06W	19	1	30	93	9200503	F	0.5	Hunting	
7	Clare	20N	05W	06	1		93	9200333	M	1.5	Hunting	
7	Clare	20N	05W	26	1	20	93	9200502	M	0.5	Hunting	
7	Clare	20N	05W	27	1	17	93	9200962	M	2.5	Hunting	
7	Clare	20N	06W	17	1	29	93	9200342			Hunting	
7	Clare	20N	06W	34	1	18	93	9200545			Hunting	
7	Gladwin	17N	01E	19	9	1	92	9100696	M	1.5	Road Kill	
7	Gladwin	18N	01E	10	2	14	93	9200752	F	3.5	Hunting	
7	Gladwin	19N	01E	35	1	16	93	9200770	M	0.5	Hunting	
7	Gladwin	19N	02E	25	3	1	93	9200133			Hunting	
7	Gladwin	19N	02E	27	1	17	93	9200823	M	2.5	Hunting	
7	Gladwin	20N	02E	03	2	6	93	9200485	F	0.5	Hunting	
7	Gladwin	20N	02E	26	1	6	93	9200477	M	0.5	Hunting	
7	Gladwin	20N	02E	28	2	6	93	9200753			Hunting	
7	Iosco	21N	05E	33	5	13	93		M	1.0	Road Kill	WDL93-200
7	Iosco	21N	07E	22	11	9	92	9200512	M	3.5	Found Dead	
7	Iosco	22N	06E	28	1	25	93	9200474	M	1.5	Hunting	
7	Iosco	23N	08E	13	1	16	93	9200767			Hunting	
7	Iosco	24N	05E	06	2	17	93	9200408	M	3.5	Hunting	
7	Iosco	24N	05E	06	2	17	93	9200407			Hunting	
7	Iosco	24N	06E	00	1	8	93	9200517			Hunting	
7	Ogemaw				1	19	93	9200450			Hunting	
7	Ogemaw				1	30	93	9200443			Hunting	
7	Ogemaw	21N	01E	14	1	31	93	9200455			Hunting	
7	Ogemaw	21N	01E	16	1	31	93	9200461	F	1.5	Hunting	
7	Ogemaw	21N	04E	33	2	14	93	9200964			Hunting	
7	Ogemaw	22N	04E	06	1	28	93	9200442	F	1.5	Hunting	
7	Ogemaw	23N	03E	02	1	15	93	9200519			Hunting	
7	Ogemaw	23N	03E	10	1	23	93	9200441			Hunting	
7	Ogemaw	24N	03E	19	2	13	93	9200520			Hunting	
7	Oscoda	25N	01E	22	2	4	93	9200139	M	1.5	Hunting	
7	Oscoda	26N	01E	11	2	21	93	9200836	M	8.5	Hunting	
7	Oscoda	26N	01E	11	1	31	93	9200489	M	0.5	Hunting	
7	Oscoda	26N	01E	16	2	12	93	9200136	M	4.5	Hunting	



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1992-93 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
7	Oscoda	26N	01E	17	2	21	93	9200137	F	2.5	Hunting	
7	Oscoda	26N	01E	20	2	24	93	9200456	M	5.5	Hunting	
7	Oscoda	26N	01E	23	2	25	93	9200439	M	3.5	Hunting	
7	Oscoda	26N	01E	26	2	5	93	9200546	M	2.5	Hunting	
7	Oscoda	26N	01E	26	2	27	93	9200486	M	3.5	Hunting	
7	Oscoda	26N	01E	33	2	24	93	9200138	M	1.5	Hunting	
7	Oscoda	26N	02E	10	2	27	93	9200438	M	2.5	Hunting	
7	Oscoda	26N	03E	14	3	1	93	9200135			Hunting	
7	Oscoda	26N	04E	23	2	25	93	9200413	M	8.5	Hunting	
7	Oscoda	27N	01E	07	1	23	93	9200976	F	5.5	Hunting	
7	Oscoda	27N	01E	32	3	1	93	9200134			Hunting	
7	Oscoda	27N	01E	33	1	12	93	9200422	F	1.5	Hunting	
7	Oscoda	27N	01E	33	1	2	93	9200807	F	0.5	Hunting	
7	Oscoda	27N	01E	36	2	18	93	9200437	M	4.5	Hunting	Age +/- 1 yr.
7	Oscoda	28N	01E	19	1	19	93	9200542	M	2.5	Hunting	
7	Oscoda	28N	03E	33	12	6	92	9200806			Road Kill	
7	Oscoda	28N	04E	15	2	20	93	9200934			Hunting	
7	Roscommon	21N	03W	21	2	13	93	9200131			Hunting	
7	Roscommon	21N	04W	33	1	30	93	9200430	F	0.5	Hunting	
7	Roscommon	22N	02W	22	2	14	93	9200132	F	1.5	Hunting	
7	Roscommon	22N	02W	28	1	30	93	9200454	F	2.5	Hunting	Field F
7	Roscommon	22N	04W	09	1	20	93	9200426	F	2.5	Hunting	
7	Roscommon	22N	04W	15	2	13	93	9200434	M	0.5	Hunting	
7	Roscommon	22N	04W	28	1	31	93	9200428	M	2.5	Hunting	
7	Roscommon	23N	03W	22	2	15	93	9200436	F	5.5	Hunting	Age +/- 1 yr.
7	Roscommon	23N	04W	02	2	15	93	9200774	M	2.5	Hunting	
7	Roscommon	23N	04W	33	7	19	93	9200440	F	0.5	Road Kill	
7	Roscommon	24N	02W	30	9	2	92	9200421			Road Kill	
7	Roscommon	24N	02W	30	8	4	93	9200651	M	1.5	Road Kill	
7	Roscommon	24N	04W	04	2	3	93	9200431	F	2.5	Hunting	
7	Roscommon	24N	04W	34	2	14	93	9200963			Hunting	
7	Roscommon	24N	04W	34	2	15	93	9200435	F	3.5	Road Kill	

