

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

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BOBCAT SURVEY - 1991-92 <sup>[1]</sup>

by

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Introduction

In order to allow 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 twelfth consecutive year of the bobcat survey in Michigan (Cooley et al. 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991).

During the winter of 1991-92, the Wildlife Division required that trappers and hunters submit bobcat 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).

Materials and Methods

A lower canine was extracted after the skull was boiled in water for 1 hour. 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 (66 in 1991-92, 32 in 1990-91) was much greater this year than last, even though the total harvest was nearly the same (164 in 1991-92, 157 in 1990-91). The sex ratio of bobcats examined from Region I (Table 1) was 144:100 (39:27) males to females. This was the ninth time in 12

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<sup>[1]</sup> A contribution of Federal Aid in Wildlife Restoration, Michigan Project W-127-R.  
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years of data collection that the ratio favored males (Cooley et al. 1981, 1982, 1983, 1986, 1987, 1988, 1989, and 1990). The percentage of young-of-the-year (28.8%) was nearly the same as last year (28.1%) but below the average (36%) of all the years bobcats have been examined. The age classes 0-3 years made up 83% of the total animals submitted, being consistent with previous data. The 1-2 year old (34.8%) and the 0-1 year old (28.8%) age classes occurred most frequently in the sample.

### Region II

The number of samples collected from Region II increased dramatically (131 in 1991-92, 62 in 1990-91), even though the total harvest was nearly the same (195 in 1991-92, 181 in 1990-91) as last year. The sex ratio of Region II bobcats (Table 2) was 173:100 (83:48) males to females. The data was consistent with past years' data in that males were predominant in the samples collected. The percentage of young-of-the-year (25.2%) was up from last year's data (17.7%). The percentage was near the average (26.1%) of all of the years bobcats have been examined. The age classes 0-3 years made up 71.0% of the total animals submitted, up slightly from last year's figures (67.7%). The yearling (27.5%), young-of-the-year (25.2%), and 2-3 year (18.3%) age classes occurred most frequently in the sample.

### Regions I and II

Bobcat harvest regulations for the 1991-92 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 previously). The harvest increased from 338 in 1990-91 to 359 in 1991-92. The number of samples submitted was up markedly from 94 in 1990-91 to 197 in 1991-92 (a 55% 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.

Sex ratios calculated by tooth measurement in a previous study 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 provided additional baseline information. 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

We thank the bobcat trappers and hunters for their cooperation and the Wildlife Division personnel for gathering the bobcat heads and submitting them for examination. Thanks is also extended to Rita A. Johnston for assisting in the preparation of this report.

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Table 1. Estimated age and sex ratio of Region I bobcats, 1991-92 season

Age	Number	Male	Female	Percent of Total
0-1	19	14	5	28.8
1-2	23	11	12	34.8
2-3	13	8	5	19.7
3-4	5	3	2	7.6
4-5	1	0	1	1.5
6-7	1	1	0	1.5
7-8	1	0	1	1.5
8-9	2	2	0	3.0
11-12	1	0	1	1.5
Total	66	39	27	100

Table 2. Estimated age and sex ratio of Region II bobcats, 1991-92 season

Age	Number	Male	Female	Percent of Total
0-1	33	17	16	25.2
1-2	36	27	9	27.5
2-3	24	16	8	18.3
3-4	21	13	8	16.0
4-5	7	3	4	5.3
5-6	6	5	1	4.6
6-7	1	1	0	0.8
7-8	2	1	1	1.5
8-9	1	0	1	0.8
Total	131	83	48	100

Table 3. Estimated age and sex ratio of bobcats from Regions I and II, 1991-92

Age	Number	Male	Female	Percent of Total
0-1	52	31	21	26.4
1-2	59	38	21	29.9
2-3	37	24	13	18.8
3-4	26	16	10	13.2
4-5	8	3	5	4.1
5-6	6	5	1	3.0
6-7	2	2	0	1.0
7-8	3	1	2	1.5
8-9	3	2	1	1.5
11-12	1	0	1	0.5
Total	197	122	75	100



APPENDIX I.

1991-92 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION			DATE			SEAL	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
1	Baraga	48N	31W	24	3	1	92	9100282			Road Kill	
1	Baraga	50N	30W	11	11	23	91	9100983	M	1.5	Hunting	
1	Baraga	50N	30W	11	11	23	91	9100981	F	1.5	Hunting	
1	Gogebic	46N	43W	16	12	25	91	9100021	F	4.5	Trapping	
1	Gogebic	47N	41W	32	1	13	92	9100022	M	1.5	Hunting	
1	Houghton	47N	36W	04	10	29	91	9100011	M	3.5	Trapping	
1	Houghton	47N	37W	14	2	9	92	9100332			Hunting	
1	Houghton	48N	37W	14	10	26	91	9100003			Trapping	
1	Ontonagon	46N	38W	33	11	11	91	9100002	M	2.5	Trapping	
1	Ontonagon	48N	40W	08	2	7	92	9100004			Hunting	
1	Ontonagon	50N	39W	06	12	26	91	9100012			Hunting	
2	Dickinson	40N	30W	18	11	15	91	9100142	M	1.5	Road Kill	
2	Dickinson	41N	27W	08	11	20	91	9100296			Hunting	
2	Dickinson	41N	27W	08	11	21	91	9100295	M	0.5	Hunting	
2	Dickinson	41N	27W	12	11	15	91	9100084	F	2.5	Trapping	
2	Dickinson	41N	30W	27	11	16	91	9100201	M	1.5	Hunting	
2	Dickinson	42N	27W	07	10	31	91	9100083	F	2.5	Trapping	
2	Dickinson	42N	30W	05	11	19	91	9100143			Hunting	
2	Dickinson	43N	27W	29	11	19	91	9100999			Hunting	
2	Dickinson	43N	28W	15	3	1	92	9100953	M	2.5	Hunting	
2	Dickinson	43N	30W		2	14	92	9100980			Hunting	
2	Dickinson	44N	27W	10	10	28	91	9100231			Trapping	
2	Dickinson	44N	28W	22	1	10	92	9100552	M	2.5	Hunting	
2	Dickinson	44N	28W	23	1	11	92	9100551	M	2.5	Hunting	
2	Dickinson	44N	28W	26	1	8	92	9100236			Hunting	
2	Dickinson	44N	28W	27	1	12	92	9100553	M	1.5	Hunting	
2	Dickinson	44N	28W	33	10	25	91	9100081	M	3.5	Trapping	
2	Dickinson	44N	28W	33	10	25	91	9100082	F	1.5	Trapping	
2	Dickinson	44N	30W	13	2	23	92	9100348	M	0.5	Hunting	
2	Iron	43N	31W	27	11	26	91	9100145			Hunting	
2	Iron	43N	33W	13	2	5	92	9100151			Road Kill	
2	Iron	44N	31W	12	12	22	91	9100148			Trapping	
2	Iron	44N	31W	12	12	18	91	9100147			Trapping	
2	Iron	44N	35W	08	10	9	91	9100141			Trapping	
2	Iron	44N	36W	07	1	12	92	9100149			Hunting	
2	Iron	44N	36W	18	11	29	91	9100929	F	0.5	Hunting	
2	Iron	45N	31W	12	11	21	91	9100144	F	1.5	Hunting	Field F
2	Iron	46N	32W	26	11	27	91	9100701			Hunting	
2	Menominee				2	28	92	9100346	F	0.5	Hunting	
2	Menominee	34N	26W	29	2	6	92	9100319			Trapping	
2	Menominee	35N	24W	22	11	17	91	9100291	M	1.5	Hunting	
2	Menominee	38N	26W	10	1	20	92	9100349			Hunting	
2	Menominee	38N	26W	34	2	28	92	9100345			Hunting	
2	Menominee	39N	27W	10	2	11	92	9100313			Hunting	
2	Menominee	40N	25W	14	2	14	92	9100314	M	0.5	Trapping	
2	Menominee	40N	25W	21	1	20	92	9100308	M	0.5	Trapping	
3	Alger	44N	20W	18	2	28	92	9100403			Hunting	

## APPENDIX I.

## 1991-92 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
3	Alger	44N	20W	30	2	25	92	9100402			Hunting	
3	Alger	45N	20W	18	2	28	92	9100215			Trapping	
3	Alger	45N	21W	33	1	13	92	9100204	F	1.5	Trapping	
3	Delta	37N	24W	22	1	28	92	9100312			Trapping	
3	Delta	38N	22W	11	12	13	91	9100302			Hunting	
3	Delta	38N	23W	19	1	19	92	9100305			Trapping	
3	Delta	39N	18W	31	2	22	92	9100952	M	8.5	Hunting	
3	Delta	39N	21W	13	1	22	92	9100307			Trapping	
3	Delta	39N	21W	18	11	25	91	9100301			Hunting	
3	Delta	39N	21W	24	2	29	92	9100341			Trapping	
3	Delta	39N	22W	31	1	30	92	9100320			Found Dead	
3	Delta	39N	24W	21	11	7	91	9100300			Hunting	
3	Delta	39N	24W	36	2	16	92	9100317			Hunting	
3	Delta	40N	18W	33	1	28	92	9100271			Trapping	
3	Delta	40N	18W	33	2	25	92	9100272			Trapping	
3	Delta	40N	19W	09	11	15	91	9100299			Hunting	
3	Delta	40N	21W	17	1	3	92	9100310			Trapping	
3	Delta	40N	21W	27	2	14	92	9100315	F	7.5	Hunting	
3	Delta	40N	23W	02	12	26	91	9100466			Road Kill	
3	Delta	40N	23W	08	1	17	92	9100309			Trapping	
3	Delta	40N	23W	10	11	21	91	9100294	M	1.5	Hunting	
3	Delta	41N	19W	08	12	24	91	9100303	F	1.5	Trapping	
3	Delta	41N	21W	14	11	18	91	9100298			Hunting	
3	Delta	41N	22W	13	2	15	92	9100554	M		Hunting	Field M
3	Delta	42N	21W	25	1	29	92	9100311			Trapping	
3	Delta	43N	20W	19	1	18	92	9100306	F	0.5	Hunting	
3	Delta	43N	21W	27	2	18	92	9100449			Hunting	
3	Marquette	42N	24W	04	11	23	91	9100293			Hunting	
3	Marquette	42N	24W	21	2	5	92	9100316			Trapping	
3	Marquette	42N	25W	32	1	11	92	9100304			Hunting	
3	Marquette	43N	24W	24	11	18	91	9100297			Hunting	
3	Marquette	43N	26W	32	11	23	91	9100292			Hunting	
3	Marquette	44N	23W	31	11	4	91	9100232	M	9.5	Road Kill	
3	Marquette	44N	24W	26	1	1	92	9100239	F	1.5	Trapping	
3	Marquette	45N	26W	07	2	20	92	9100237			Trapping	
3	Marquette	45N	27W	18	1	10	92	9000216			Trapping	
3	Marquette	45N	28W	32	1	8	92	9000215			Hunting	
3	Marquette	46N	23W	02	12	29	91	9100209	M	2.5	Trapping	
3	Marquette	46N	23W	04	12	28	91	9100210			Hunting	
3	Marquette	46N	23W	10	11	17	91	9100233	F	1.5	Trapping	
3	Marquette	46N	23W	17	2	11	92	9100212	M	0.5	Trapping	
3	Marquette	46N	29W	04	10	27	91	9100051	F	1.5	Trapping	
3	Marquette	46N	29W	32	2	22	92	9100214			Hunting	
3	Marquette	47N	23W	14	2	3	92	9100207	M	0.5	Trapping	
3	Marquette	47N	23W	14	2	3	92	9100208	M	0.5	Trapping	
3	Marquette	47N	23W	20	2	22	92	9100213			Trapping	
3	Marquette	47N	24W	19	1	26	92	9000217			Trapping	



APPENDIX I.

1991-92 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
3	Marquette	47N	28W	10	1	4	92	9100235	F	0.5	Trapping	
3	Marquette	47N	28W	12	10	15	91	9100240	M	1.5	Road Kill	
3	Marquette	47N	28W	16	12	15	91	9100234	F	2.5	Trapping	
3	Marquette	47N	29W	03	1	15	92	9100205			Road Kill	
3	Marquette	48N	26W	05	12	31	91	9100203			Trapping	
3	Marquette	48N	28W	30	2	8	92	9100211	F	2.5	Trapping	
3	Marquette	48N	29W	04	11	2	91	9100290			Trapping	
3	Marquette	49N	29W	26	12	14	91	9100202	F	2.5	Trapping	
4	Alger	49N	13W	07	2	15	92	9100474			Hunting	
4	Chippewa				3	1	92	9100640	M	0.5	Hunting	
4	Chippewa	41N	07E	15	11	17	91	9100931	F	11.5	Hunting	
4	Chippewa	42N	02E		11	23	91	0910561	M	1.5	Hunting	
4	Chippewa	42N	02E	05	2	29	92	9100339	M	8.5	Hunting	
4	Chippewa	42N	04E	05	11	3	91	9100432			Trapping	
4	Chippewa	43N	01E	30	3	1	92	9100933	M	0.5	Hunting	
4	Chippewa	44N	01E	02	11	23	91	9100026			Hunting	
4	Chippewa	44N	01E	06	2	28	92	9100437	M	0.5	Hunting	Field M
4	Chippewa	44N	02E	36	12	21	91	9100836			Hunting	
4	Chippewa	44N	03W	01	2	9	92	9100634	F	1.5	Hunting	
4	Chippewa	44N	05W	36	11	15	91	9100469	M	1.5	Trapping	
4	Chippewa	45N	01W	09	1	8	92	9100333	F	1.5	Hunting	
4	Chippewa	45N	01W	29	12	6	91	9100434	M	3.5	Trapping	
4	Chippewa	45N	01W	29	12	6	91	9100433	M	1.5	Trapping	
4	Chippewa	45N	02W	04	11	17	91	9100432			Trapping	
4	Chippewa	45N	02W	08	2	27	92	9100435			Hunting	
4	Chippewa	45N	02W	08	2	27	92	9100436			Hunting	
4	Chippewa	45N	04W	01	11	17	91	9100470	M	1.5	Trapping	
4	Chippewa	46N	06W	10	12	4	91	9100463			Hunting	
4	Chippewa	47N	07W	29	2	28	92	9100453			Hunting	
4	Chippewa	47N	07W	29	2	28	92	9100451			Hunting	
4	Chippewa	49N	06W	17	12	25	91	9100984	M	0.5	Hunting	
4	Luce	45N	09W	11	10	27	91	9100924			Road Kill	
4	Luce	46N	10W	11	1	3	92	9100467			Trapping	
4	Luce	47N	08W	16	11	18	91	9100951			Trapping	
4	Luce	47N	08W	36	12	20	91	9100464			Trapping	
4	Luce	50N	08W	30	11	20	91	9100803			Trapping	
4	Mackinac	41N	04W	09	10	27	91	9100441	M	2.5	Trapping	
4	Mackinac	41N	04W	11	12	5	91	9100443			Hunting	
4	Mackinac	41N	04W	12	12	30	91	9100541	F	3.5	Road Kill	
4	Mackinac	41N	04W	13	12	20	91	9100444			Hunting	
4	Mackinac	41N	04W	33	12	22	91	9100446			Hunting	
4	Mackinac	42N	01W	16	11	19	91	9100461			Hunting	
4	Mackinac	42N	01W	26	11	14	91	9100561	F	2.5	Accidental Trap	
4	Mackinac	42N	02W	05	2	29	92	9100481	F	3.5	Hunting	
4	Mackinac	42N	02W	24	2	22	92	9100450			Hunting	
4	Mackinac	42N	03W	16	11	24	91	9100442			Hunting	
4	Mackinac	42N	03W	16	12	21	91	9100445			Hunting	

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1991-92 BOBCAT DATA - REGION I

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
4	Mackinac	42N	03W	36	12	16	91	9100521			Trapping	
4	Mackinac	42N	04W	03	1	19	92	9100560			Trapping	
4	Mackinac	42N	04W	35	12	20	91	9100871			Hunting	
4	Mackinac	42N	04W	35	12	22	91	9100872			Hunting	
4	Mackinac	42N	06W	16	1	14	92	9100447			Trapping	
4	Mackinac	42N	11W	27	2	26	92	9100476			Trapping	
4	Mackinac	42N	12W	14	2	28	92	9100639	M	2.5	Hunting	
4	Mackinac	43N	03W	06	2	2	92	9100448			Hunting	
4	Mackinac	43N	04W	02	2	29	92	9100452			Hunting	
4	Mackinac	43N	05W	27	12	24	91	9100522			Hunting	
4	Mackinac	43N	07W	05	2	9	92	0910758			Hunting	
4	Mackinac	43N	07W	05	2	9	92	9100937	F	3.5	Hunting	
4	Mackinac	43N	08W	06	11	21	91	9100462	M	0.5	Trapping	
4	Mackinac	43N	08W	23	2	24	92	9100527			Trapping	
4	Mackinac	43N	11W	23	12	14	91	9100468			Trapping	
4	Mackinac	44N	07W	13	11	8	91	9100982	F	0.5	Hunting	
4	Mackinac	44N	08W	22	1	25	92	9100935			Hunting	
4	Mackinac	44N	08W	33	10	27	91	9100927			Hunting	
4	Mackinac	44N	10W	05	1	7	92	9100471			Trapping	
4	Mackinac	44N	10W	34	2	11	92	9100473			Trapping	
4	Mackinac	44N	10W	35	2	9	92	9100472			Trapping	
4	Mackinac	44N	12W	06	2	18	92	9100475			Trapping	
4	Mackinac	44N	12W	18	2	28	92	9100479	M	1.5	Trapping	
4	Schoolcraft	39N	17W	34	2	29	92	9100273			Hunting	
4	Schoolcraft	40N	17W	12	2	23	92	9100401			Hunting	
4	Schoolcraft	41N	13W	31	3	1	92	9100477	M	0.5	Trapping	
4	Schoolcraft	41N	13W	31	2	29	92	9100478	M	0.5	Trapping	
4	Schoolcraft	41N	16W	01	2	12	92	9100318			Trapping	
4	Schoolcraft	41N	16W	14	1	4	92	9100454			Road Kill	
4	Schoolcraft	42N	14W	03	2	19	92	9100350			Trapping	
4	Schoolcraft	42N	16W	02	2	22	92	9100803	F	1.5	Hunting	
4	Schoolcraft	43N	13W	10	2	14	92	9100337	M	6.5	Hunting	
4	Schoolcraft	44N	13W	17	12	31	91	9100465			Trapping	
4	Schoolcraft	44N	17W	03	11	23	91	9100974	F	1.5	Hunting	Field F
4	Schoolcraft	46N	15W	13	11	29	91	9100990	M	2.5	Hunting	
NA									M	2.5		Skull Received, No ID
NA									M	0.5		Carcass Received, No ID



APPENDIX II.

1991-92 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION Twp. Rng. Sec	DATE Mo. Da. Yr.	SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
5	Unknown				M	2.5		Tooth Received, No ID
5	Unknown				M	1.5	Road Kill	Carcass Received, No ID
5	Alpena		6 16 92	9100572	M	1.5	Road Kill	
5	Alpena	29N 07E 15	2 24 92	9100569			Road Kill	
5	Alpena	29N 08E 05	2 29 92	0910563	F	0.5	Hunting	
5	Alpena	29N 08E 23	1 19 92	9100603	M	5.5	Hunting	
5	Alpena	29N 08E 23	1 27 92	9100610	M	1.5	Hunting	
5	Alpena	30N 06E 08	2 13 92	9100618	M	0.5	Road Kill	
5	Alpena	30N 06E 10	2 26 92	9100846	M	2.5	Hunting	
5	Alpena	30N 07E 19	2 11 92	9100615	M	2.5	Hunting	
5	Alpena	30N 07E 19	2 12 92	9100616	M	1.5	Hunting	
5	Alpena	30N 07E 28	2 27 92	9100567			Road Kill	
5	Alpena	30N 08E 17	2 23 92	9100517	M	0.5	Hunting	
5	Alpena	30N 08E 17	2 23 92	9100518	M	1.5	Hunting	
5	Alpena	30N 08E 33	1 19 92	9100608	M	3.5	Hunting	
5	Alpena	31N 05E 09	1 11 92	9100571	M	2.5	Hunting	
5	Alpena	31N 05E 14	1 20 92	9100604	M	2.5	Hunting	
5	Alpena	31N 05E 18	2 11 92	9100511	M	1.5	Hunting	
5	Alpena	31N 05E 23	1 27 92	9100612	M	3.5	Hunting	
5	Alpena	31N 05E 30	1 19 92	9100605	M	3.5	Hunting	
5	Alpena	31N 06E 21	2 1 92	9100620	M	5.5	Hunting	
5	Alpena	31N 06E 30	2 29 92	9100564			Road Kill	
5	Alpena	31N 06E 32	2 12 92	9100617	F	4.5	Hunting	
5	Alpena	31N 07E 18	2 13 92	9100619	M	2.5	Hunting	
5	Alpena	31N 07E 28	1 1 92	9100851			Hunting	
5	Alpena	31N 07E 34	2 23 92	9100519	F	0.5	Hunting	
5	Alpena	31N 08E 34	1 2 92	9100601			Hunting	
5	Alpena	32N 05E 34	2 2 92	9100613	M	1.5	Hunting	
5	Alpena	32N 06E 04	2 22 92	9100566	M	0.5	Hunting	
5	Alpena	32N 06E 06	2 25 92	9100565	M	0.5	Hunting	
5	Alpena	32N 06E 35	2 20 92	9100515	M	1.5	Road Kill	
5	Alpena	32N 07E 21	2 2 92	9100614	M	1.5	Hunting	
5	Alpena	32N 08E 19	2 17 92	9100514	F	0.5	Hunting	
5	Alpena	32N 09E 06	2 27 92	9100562			Hunting	
5	Antrim	29N 05W 13	2 21 92	9100638	M	1.5	Hunting	
5	Antrim	29N 08W 12	1 26 92	9100632	F	1.5	Hunting	
5	Antrim	30N 07W 11	2 16 92	9100628			Hunting	
5	Antrim	30N 09W 03	2 10 92	9100636	M	2.5	Hunting	
5	Antrim	31N 06W 32	2 8 92	9100626	F	0.5	Hunting	
5	Charlevoix	33N 04W 20	2 1 92	9100542	F	2.5	Hunting	
5	Charlevoix	33N 04W 29	1 26 92	9100624	F	1.5	Hunting	
5	Charlevoix	33N 05W 25	2 9 92	9100544	M	2.5	Hunting	
5	Charlevoix	34N 08W 31	1 25 92	9100631	M	2.5	Hunting	
5	Cheboygan	33N 01E 02	2 29 92	9100946	M	3.5	Hunting	
5	Cheboygan	33N 01W 07	2 16 92	9100710	M	0.5	Hunting	
5	Cheboygan	33N 01W 28	1 25 92	9100989			Hunting	
5	Cheboygan	33N 03W 10	1 14 92	9100622	F	3.5	Hunting	Field F

## APPENDIX II.

## 1991-92 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
5	Cheboygan	34N	01E	14	1	12	92	9100802			Hunting	
5	Cheboygan	34N	01E	31	2	28	92	9100549	F	2.5	Hunting	
5	Cheboygan	34N	01W	02	2	26	92	9100546			Hunting	
5	Cheboygan	34N	01W	06	2	29	92	9100547	M	1.5	Hunting	
5	Cheboygan	34N	01W	12	2	22	92	9100557	F	1.5	Hunting	
5	Cheboygan	34N	01W	27	2	24	92	0910082			Hunting	
5	Cheboygan	34N	01W	32	2	25	92	0911986			Hunting	
5	Cheboygan	35N	01E	04	2	29	92	9100550	M	4.5	Hunting	
5	Cheboygan	35N	01E	05	2	29	92	0910556			Hunting	
5	Cheboygan	35N	01E	08	2	24	92	9100558	M	1.5	Hunting	
5	Cheboygan	35N	01W	14	2	9	92	9100961			Hunting	
5	Cheboygan	35N	01W	22	2	25	92	9100585	M	1.5	Hunting	Original Seal 0910083
5	Cheboygan	35N	01W	25	2	23	92	9100556	F	2.5	Hunting	
5	Cheboygan	35N	01W	26	2	9	92	9100583	M	2.5	Hunting	
5	Cheboygan	35N	01W	26	2	23	92	9100545	M	7.5	Hunting	
5	Cheboygan	35N	02W	19	2	29	92	9100548	M	3.5	Hunting	
5	Cheboygan	36N	01E	01	3	1	92	9100987	M	4.5	Hunting	
5	Cheboygan	36N	01E	12	2	19	92	9100531	M	6.5	Hunting	
5	Cheboygan	36N	01E	32	2	29	92	9100584	M	5.5	Hunting	
5	Cheboygan	36N	01W	04	2	8	92	9100543	F	3.5	Hunting	
5	Cheboygan	36N	03W	01	3	28	92	9100662	F	0.5	Road Kill	
5	Cheboygan	38N	03W	06	1	24	92	9100206	F	1.5	Road Kill	
5	Emmet	36N	05W	03	2	19	92	9100555			Hunting	
5	Emmet	38N	05W	12	2	19	92	9100559	M	4.5	Hunting	
5	Emmet	39N	04W	27	2	23	92	9100526	M	0.5	Hunting	
5	Montmorency				6	14	91		F	0.5	Road Kill	
5	Montmorency	29N	01E	19	2	9	92	9100633	M	0.5	Hunting	
5	Montmorency	29N	01E	32	1	22	92	9100507	M	1.5	Hunting	
5	Montmorency	29N	02E	09	1	11	92	9100942	M	0.5	Hunting	Field M
5	Montmorency	29N	02E	26	1	4	92	9100502	M	3.5	Hunting	
5	Montmorency	29N	03E	28	1	4	92	9100881			Hunting	
5	Montmorency	30N	03E	23	12	1	91	9100501			Road Kill	
5	Montmorency	30N	04E	01	2	24	92	9100508	M	0.5	Hunting	
5	Montmorency	31N	01E	01	12	14	91	9100503			Road Kill	
5	Montmorency	31N	01E	03	2	29	92	9100661	F	0.5	Hunting	
5	Montmorency	31N	01E	08	2	22	92	9100338	M	1.5	Hunting	
5	Montmorency	31N	01E	35	2	22	92	9100932	M	1.5	Hunting	
5	Montmorency	31N	02E	28	1	3	92	9100621	M	0.5	Hunting	
5	Montmorency	31N	02E	28	2	16	92	9100945	F	1.5	Hunting	
5	Montmorency	31N	03E	27	1	6	92	0910562			Hunting	
5	Montmorency	31N	04E	20	1	21	92	9100506			Hunting	
5	Montmorency	31N	04E	27	1	16	92	9100602	M	2.5	Hunting	
5	Montmorency	31N	04E	32	1	26	92	9100611	F	3.5	Hunting	
5	Montmorency	32N	03E	26	1	18	92	9100607	F	3.5	Hunting	
5	Montmorency	32N	03E	26	1	18	92	9100606	M	0.5	Hunting	
5	Otsego	29N	02W	04	3	1	92	9100629	M	1.5	Hunting	
5	Otsego	29N	04W	31	2	11	92	9100635	M	5.5	Hunting	



APPENDIX II.

1991-92 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
5	Otsego	31N	01W	03	2	17	92	9100637	M	1.5	Hunting	
5	Otsego	31N	01W	08	2	28	92	9100630	F	5.5	Hunting	
5	Otsego	31N	01W	21	2	5	92	9100625	M	3.5	Hunting	
5	Otsego	31N	02W	25	2	18	92	0910731			Hunting	
5	Otsego	31N	02W	25	2	1	92	9100930	M	1.5	Hunting	
5	Otsego	32N	01W	35	2	13	92	9100627	M	1.5	Hunting	
5	Otsego	32N	02W	01	1	15	92	9100623	F	2.5	Hunting	
5	Otsego	32N	02W	21	2	16	92	9100709	F	1.5	Hunting	
5	Presque Isle	33N	05E	04	1	14	92	9100505			Hunting	
5	Presque Isle	33N	07E	10	2	29	92	9100568			Hunting	
5	Presque Isle	34N	03E	19	2	22	92	9100516	F	0.5	Hunting	
5	Presque Isle	34N	04E	27	2	29	92	9100563	M	2.5	Hunting	
5	Presque Isle	34N	04E	34	2	11	92	9100512	M	0.5	Hunting	
5	Presque Isle	34N	05E	32	1	15	92	9100504			Hunting	
5	Presque Isle	34N	07E	34	1	25	92	9100609	F	0.5	Hunting	
5	Presque Isle	35N	02E	11	1	29	92	9100581	M	3.5	Hunting	
5	Presque Isle	35N	02E	25	2	6	92	9100582	F	2.5	Hunting	Field F
5	Presque Isle	35N	04E	06	1	26	92	9100986			Hunting	
5	Presque Isle	36N	02E	23	2	29	92	9100587	F	3.5	Hunting	
5	Presque Isle	36N	02E	25	2	29	92	9100586	M	1.5	Hunting	
5	Presque Isle	37N	02E	27	1	25	92	9100739	F	1.5	Hunting	
6	Kalkaska	25N	06W	16	2	4	92	9100712			Hunting	
6	Kalkaska	26N	06W	20	3	5	92	9100713	F	1.5	Found Dead	Had been shot
6	Kalkaska	26N	06W	21	1	19	92	9100884	M	5.5	Hunting	
6	Kalkaska	27N	06W	33	1	29	92	9100750	F	0.5	Hunting	
6	Kalkaska	27N	07W	05	4	20	92	9100714			Road Kill	
6	Kalkaska	27N	07W	17	1	19	92	9100711			Hunting	
6	Kalkaska	27N	08W	36	2	8	92	9100702	F	4.5	Hunting	
6	Kalkaska	28N	08W	17	2	3	92	9100703	F	4.5	Hunting	
6	Missaukee	21N	06W	23	1	31	92	9100749			Hunting	
6	Missaukee	21N	07W	06	1	26	92	9100938			Hunting	
6	Missaukee	22N	05W	22	1	20	92	9100817	M	3.5	Hunting	
6	Missaukee	22N	05W	34	1	19	92	9100816	M	1.5	Hunting	
6	Missaukee	22N	06W	01	2	1	92	9100741	M	2.5	Hunting	
6	Missaukee	22N	07W	12	1	19	92	9100934	M	1.5	Hunting	
6	Missaukee	23N	05W	35	3	29	92	9100834	M	0.5	Road Kill	
6	Missaukee	23N	06W	01	1	26	92	9100819	M	1.5	Hunting	
6	Missaukee	23N	06W	36	1	30	92	9100821	F	7.5	Hunting	Field F
6	Missaukee	24N	05W	10	1	18	92	9100862	M	2.5	Hunting	
6	Osceola	18N	07W	08	1	22	92	9100726			Hunting	
6	Osceola	18N	09W	05	2	14	92	9100706	M	0.5	Hunting	
6	Osceola	19N	10W	16	2	14	92	9100742	F	3.5	Hunting	
6	Wexford	21N	10W	26	2	14	92	9100743	M	2.5	Hunting	
6	Wexford	22N	10W	27	1	27	92	9100727	F	8.5	Hunting	
6	Wexford	24N	09W	13	1	25	92	9100728	M	1.5	Hunting	
6	Wexford	24N	09W	26	1	19	92	9100740	M	0.5	Hunting	
6	Wexford	24N	09W	32	2	9	92	9100331	F	0.5	Hunting	

## APPENDIX II.

## 1991-92 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL NUMBER	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
7	Alcona	25N	05E	12	1	9	92	9100806			Hunting	
7	Alcona	25N	06E	20	2	1	92	9100813			Hunting	
7	Alcona	25N	08E	08	1	28	92	9100810			Hunting	
7	Alcona	25N	08E	19	2	22	92	9100903			Hunting	
7	Alcona	25N	08E	19	2	22	92	9100904			Hunting	
7	Alcona	26N	05E	18	1	11	92	9100853			Hunting	
7	Alcona	26N	05E	31	2	26	92	9100520	F	0.5	Hunting	
7	Alcona	26N	08E	20	1	30	92	9100812			Hunting	
7	Alcona	26N	09E	31	2	1	92	9100814			Hunting	
7	Alcona	27N	07E	18	2	28	92	9100900			Hunting	
7	Alcona	27N	07E	18	2	28	92	9100909			Hunting	
7	Alcona	27N	08E	24	1	12	92	9100807			Hunting	
7	Alcona	27N	08E	27	2	22	92	9100902			Hunting	
7	Alcona	27N	09E	14	1	15	92	9100808			Hunting	
7	Alcona	27N	09E	18	2	28	92	9100907			Hunting	
7	Alcona	27N	09E	19	2	28	92	9100906			Hunting	
7	Alcona	27N	09E	22	1	20	92	9100809			Hunting	
7	Alcona	27N	09E	25	2	9	92	9100901			Hunting	
7	Alcona	27N	09E	25	1	31	92	9100815			Hunting	
7	Alcona	28N	07E	12	2	16	92	9100513	M	0.5	Hunting	
7	Alcona	28N	09E	09	2	26	92	9100905			Hunting	
7	Alcona	28N	09E	15	2	28	92	0000371			Hunting	Seal "Blue MI"
7	Alcona	28N	09E	21	2	29	92	9100908			Hunting	
7	Clare	18N	05W	07	1	16	92	9100861	F	3.5	Hunting	
7	Clare	19N	05W	20	1	25	92	9100863	M	3.5	Hunting	
7	Clare	19N	06W	19	1	26	92	9100864	M	1.5	Hunting	
7	Clare	20N	04W	02	2	16	92	9100865	F	0.5	Hunting	
7	Clare	20N	05W	28	1	25	92	9100928			Hunting	
7	Clare	20N	06W	09	1	26	92	9100936			Hunting	
7	Crawford	25N	03W	35	2	9	92	9100875	F	1.5	Road Kill	
7	Crawford	26N	04W	13	1	27	92	9100818	F	1.5	Hunting	
7	Crawford	27N	03W		6	23	91	9000589			Road Kill	
7	Gladwin	18N	02E	23	2	16	92	9100854	M	1.5	Hunting	
7	Gladwin	18N	02E	23	2	16	92	9100856	F	1.5	Hunting	
7	Gladwin	18N	02E	24	2	16	92	9100855	M	3.5	Hunting	
7	Gladwin	19N	02E	07	2	1	92	9100925			Hunting	
7	Gladwin	19N	02E	23	2	16	92	9100857	M	2.5	Hunting	
7	Gladwin	20N	02E		2	2	92	9100921			Hunting	
7	Gladwin	20N	02E	33	1	17	92	9100852			Hunting	
7	Iosco	23N	08E	22	1	20	92	9100811			Hunting	
7	Ogemaw	21N	01E	15	2	3	92	9100841	F	4.5	Road Kill	
7	Ogemaw	21N	01E	22	2	15	92	9100842	F		Hunting	Field F
7	Ogemaw	22N	02E	08	2	15	92	9100844	M	2.5	Hunting	
7	Ogemaw	22N	02E	17	2	16	92	9100845	M	1.5	Hunting	
7	Ogemaw	22N	03E	24	1	20	92	9100837			Hunting	
7	Ogemaw	23N	01E	33	1	23	92	9100874	F	2.5	Hunting	
7	Ogemaw	23N	02E	02	2	16	92	9100691	M	1.5	Hunting	



APPENDIX II.

1991-92 BOBCAT DATA - REGION II

DIST	COUNTY	LOCATION			DATE			SEAL	SEX	AGE	METHOD	COMMENTS
		Twp.	Rng.	Sec	Mo.	Da.	Yr.					
7	Oscoda	25N	01E	12	2	8	92	9100321			Hunting	
7	Oscoda	25N	02E	10	2	25	92	9100878			Hunting	
7	Oscoda	25N	02E	17	2	27	92	9100327			Hunting	
7	Oscoda	25N	02E	17	2	9	92	9100922	M	0.5	Hunting	
7	Oscoda	26N	01E	02	1	14	92	9100882	F	4.5	Hunting	
7	Oscoda	26N	01E	04	1	16	92	9100883	M	0.5	Hunting	
7	Oscoda	26N	01E	11	2	25	92	9100877			Hunting	
7	Oscoda	26N	01E	27	2	8	92				Hunting	
7	Oscoda	26N	02E	17	2	26	92	9100886			Road Kill	
7	Oscoda	26N	03E	04	2	28	92	9100328			Hunting	
7	Oscoda	26N	03E	07	2	8	92	9100943	F	0.5	Hunting	
7	Oscoda	26N	04E	01	1	25	92	9100885	M	0.5	Hunting	
7	Oscoda	26N	04E	02	2	24	92	9100923			Hunting	
7	Oscoda	26N	04E	02	2	25	92	9100326			Hunting	
7	Oscoda	26N	04E	10	1	7	92	9100985	F	1.5	Hunting	
7	Oscoda	26N	04E	13	2	8	92	9100335			Hunting	
7	Oscoda	27N	01E	11	11	17	91				Found Dead	
7	Oscoda	27N	01E	27	10	11	91				Road Kill	
7	Oscoda	27N	03E	12	2	23	92	9100692	F	0.5	Hunting	
7	Oscoda	28N	01E	06	1	8	92	9100941	F	3.5	Hunting	Field F
7	Oscoda	28N	01E	30	1	4	92	9100801	F	0.5	Hunting	Field F
7	Oscoda	28N	03E	18	2	29	92	9100693	F	0.5	Hunting	
7	Roscommon	21N	04W	07	2	2	92	9100831	F	0.5	Hunting	
7	Roscommon	21N	04W	36	2	16	92	9100849	M	3.5	Hunting	Field M
7	Roscommon	22N	02W	19	2	2	92	9100977	F	2.5	Hunting	
7	Roscommon	22N	02W	23	2	14	92	9100876			Hunting	
7	Roscommon	23N	01W	13	1	21	92	9100873	M	1.5	Hunting	
7	Roscommon	23N	02W	17	1	25	92	9100832	F	2.5	Road Kill	
7	Roscommon	23N	02W	19	2	15	92	9100833	M	0.5	Road Kill	
7	Roscommon	23N	02W	31	2	16	92	9100843	M	3.5	Hunting	
7	Roscommon	23N	03W	01	4	15	92	9100891	F	1.5	Road Kill	
7	Roscommon	24N	02W	32	1	10	92	9100944	F	2.5	Hunting	
7	Roscommon	24N	04W	03	7	31	92	9100835			Road Kill	1991 Tag 009, Re-tag 035 7/28/92
NA									M	0.5		Carcass Received, No ID

