

TRAPPING HARVEST STATISTICS

Division of Fish and Wildlife
500 Lafayette Road, Box 20
Saint Paul, MN 55155-4020
(651) 259-5207

2009 TRAPPER HARVEST SURVEY

Margaret Dexter, Wildlife Research Unit

INTRODUCTION

The Minnesota Department of Natural Resources, Research Surveys and Statistics unit annually conducts a survey of trapper license holders. Annual harvest estimates from survey data provide the basis for future trapping regulations and season structure.

METHODS

The Research Surveys and Statistics unit requests a list of all active trapper license holders from the Electronic License System database in late February. The sample consisted of all valid Regular, Junior and Non-resident Trapper License holders. For the 2009-10 trapping season there were 4,803 Resident Regular Trappers, 343 Resident Junior Trappers, 799 Resident Senior Trappers, 207 Lifetime Trappers, and 6 Nonresident (MN landowners) Trappers surveyed. Of the 6,158 valid licenses, 6,144 had usable addresses for purposes of the survey.

Trappers that returned the survey questionnaire within three weeks were marked returned and eliminated from follow-up mailings. Follow-up mailings were sent to non-respondents at intervals of three weeks. There were three follow-up mailings to non-respondents.

Completed and returned questionnaires were checked for completeness, consistency, and biological practicability. Cards were marked with numeric county codes corresponding to the trapper's written information. Data from each usable card was converted to an electronic database. Data were checked for errors, duplicate responses, and /or missing data. The following is a list of assumptions made in data coding:

- 1) If an individual checked the box indicating (s)he did not trap, but harvest information was provided, it was assumed that the individual did trap.
- 2) If a range was given for "number of days trapped" or "number of animals harvested", the median of the range, rounded to the nearest even integer was recorded.
- 3) If a trapper indicated spending time trapping for a species, but left "number trapped" blank, the # trapped was entered as missing data.
- 4) If a trapper indicated taking a species, but left "number of days trapped" blank, then "number of days trapped" was recorded as missing data.
- 5) If more than one county was indicated for "county trapped in most", the first county listed was recorded. However, if the several counties listed were indicated to apply to all species trapped, then counties were recorded in sequential order in relation to species hunted.
- 6) If "county trapped in most" was left unanswered or not legible, the county was recorded as missing data.

Data from all usable cards were tabulated and statistically analyzed by the St. Paul staff, using SAS statistical analysis software programs.

RESULTS

Attached are the survey results for Harvest Statewide and by License type, in tabular form (Tables 1 – 5).

Table 1. Trapper response to mail surveys, 1983-84 through 2009-10.

Year	Number mailed	Number not delivered	Delivered questionnaires <u>completed and returned</u>	
			Number	Percent
1983-84	770	10	663	87.2
1984-85	556	9	495	90.5
1985-86	581	13	506	89.1
1986-87	582	8	514	89.5
1987-88	721	11	607	85.5
1988-89	852	25	727	87.9
1989-90	3,302	120	2,804	88.1
1990-91	2,294	102	1,875	85.5
1991-92	2,643	149	2,062	82.7
1992-93	2,080	76	1,681	83.9
1993-94	2,828	100	2,194	80.4
1994-95	2,382	76	1,876	81.5
1995-96	3,244	118	2,467	80.3
1996-97	4,071	132	3,017	76.6
1997-98	3,500	96	2,629	77.2
1998-99	3,900	117	2,878	76.4
1999-00	3,110	74	2,313	76.2
2000-01	5,262	146	3,941	77.0
2001-02	5,482	127	4,132	78.6
2002-03	5,655	210	4,148	76.0
2003-04	5,812	197	4,234	75.4
2004-05	6,267	235	4,547	75.4
2005-06	6,060	88	4,396	73.6
2006-07	8,508	139	5,835	69.9
2007-08	6,342	104	4,326	69.9
2008-09	6,203	86	4,166	68.1
2009-10	6,144	70	4,425	71.7

Table 2. Use of trapper licenses, 1997-98 through 2009-10.

		Return from mail survey	Projections from license sales
1997-98	Trapped	2,310 (88.6%)	6,198
	Did not trap	<u>296 (11.4%)</u>	<u>798</u>
		2606 (100.0%)	6,996 ^a
1998-99	Trapped	2,398 (88.6%)	5,541
	Did not trap	<u>480 (16.7%)</u>	<u>1,111</u>
		2,878 (100.0%)	6,652 ^a
1999-00	Trapped	1,927 (83.5%)	4,122
	Did not trap	<u>381 (16.5%)</u>	<u>814</u>
		2,308 (100.0%)	4,936 ^a
2000-01	Trapped	2,897 (75.9%)	4,051
	Did not trap	<u>920 (24.1%)</u>	<u>1,286</u>
		3,817 (100.0%)	5,337 ^a
2001-02	Trapped	3,332 (81.5%)	4,510
	Did not trap	<u>754 (18.5%)</u>	<u>1,024</u>
		4,086 (100.0%)	5,534 ^a
2002-03	Trapped	3,344 (80.6%)	4,615
	Did not trap	<u>804 (19.4%)</u>	<u>1,111</u>
		4,148 (100.0%)	5,726 ^a
2003-04	Trapped	3,412 (81.1%)	4,737
	Did not trap	<u>793 (18.9%)</u>	<u>1,104</u>
		4,205 (100.0%)	5,841 ^a
2004-05	Trapped	3,697 (81.9%)	5,136
	Did not trap	<u>815 (18.1%)</u>	<u>1,135</u>
		4,512 (100.0%)	6,271 ^a
2005-06	Trapped	3,495 (80.0%)	4,930
	Did not trap	<u>875 (20.0%)</u>	<u>1,233</u>
		4,370 (100.0%)	6,163 ^a
2006-07	Trapped	4,782 (81.9%)	7,008
	Did not trap	<u>1,053 (18.1%)</u>	<u>1,549</u>
		5,835 (100.0%)	8,557 ^a
2007-08	Trapped	3,322 (77.2%)	5,533
	Did not trap	<u>980 (22.8%)</u>	<u>1,634</u>
		4,302 (100.0%)	7,167 ^a
2008-09	Trapped	3,154 (75.7%)	5,319
	Did not trap	<u>1,012 (24.3%)</u>	<u>1,708</u>
		4,166 (100.0%)	7,027 ^a
2009-10	Trapped	3,202 (72.7%)	4,467
	Did not trap	<u>1,202 (27.3%)</u>	<u>1,677</u>
		4,404 (100.0%)	6,144 ^a

^a excludes duplicates.

Table 3. Estimated number of trappers of various furbearers, 1996-97 through 2009-10.

	Estimated number of trappers													
	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Muskrat	3677	3901	3121	2137	2052	2419	2137	2117	2269	2351	4228	2371	2393	2088
Mink	3213	3201	2772	1919	1867	2117	1945	1917	2085	1864	3033	2168	2044	1541
Short-tailed weasel	443	580	366	383	318	411	408	473	470	349	864	595	511	417
Long-tailed weasel	385	562	347	330	272	313	312	374	299	211	694	434	345	254
Raccoon (Sept -Feb)	2975	3015	2769	1880	1599	2249	2427	2384	2505	2315	3766	3189	3150	2320
Raccoon (Mar -Aug) ^a	387	452	463	315	343	334	354	338	406	322				
Striped skunk	1149	1131	994	681	563	955	1052	1102	1161	1023	1644	1485	1488	949
Eastern spotted skunk	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Badger	322	301	234	178	135	250	237	292	310	219	347	330	293	206
Opossum	720	623	643	458	484	610	754	934	1037	957	1511	1392	1169	701
Red fox (Sept -Feb)	1772	1751	1186	1033	986	1093	1319	1290	1179	991	1608	1320	1232	1006
Red fox (Mar -Aug) ^a	138	196	137	107	89	91	111	113	110	85				
Gray fox	398	414	386	308	468	277	421	441	451	407	806	654	657	529
Coyote	873	825	576	552	491	606	813	812	826	857	1379	1203	1141	888
Beaver (Oct 09- Feb 10)	2456	2841	2483	1891	1695	2054	1844	1883	2171	1965	2659	2008	1877	1650
Beaver (Mar 09- Apr 09)	1577	2009	1907	1320	1425	1345	1296	1233	1449	1455	1710	1408	1257	1260

^a Raccoon and red fox season continuous May 1994 thru March 15, 2006.

Table 4. Estimated take per trapper of various furbearers, 1995-96 through 2009-2010.

	Estimated take per successful trapper reporting that species														
	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Muskrat	70	55	58	42	46	42	42	35	33	32	39	58	32	34	47
Mink	11	11	11	13	14	12	14	10	9	10	10	9	9	8	9
Short-tailed weasel	10	9	10	7	5	8	10	7	7	6	6	9	7	7	8
Long-tailed weasel	5	5	5	5	5	5	7	4	5	3	3	5	5	3	3
Raccoon (Sept -Feb)	23	23	24	23	20	20	27	25	22	23	21	21	23	23	19
Raccoon (Mar Aug) ^a	15	13	14	15	14	11	19	12	15	12	11				
Striped skunk	8	10	10	9	8	8	8	8	8	8	7	7	7	7	7
Eastern spotted skunk	5	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Badger	2	2	2	2	2	2	2	2	2	1	2	1	2	1	2
Opossum	9	9	9	11	13	11	8	11	12	14	12	14	12	10	7
Red fox (Sept -Feb)	9	7	7	5	6	6	6	6	5	4	4	4	3	3	3
Red fox (Mar -Aug) ^a	5	4	4	3	4	4	5	5	6	3	3				
Gray fox	2	n.a.	3	3	2	2	2	2	2	2	2	2	2	2	2
Coyote	5	4	3	3	4	4	4	4	5	4	5	4	4	4	4
Beaver (Oct 09-Feb 10)	14	16	16	16	16	15	18	13	12	13	13	13	11	11	11
Beaver (Mar 09 - Apr 09)	29	31	32	29	27	26	31	26	21	26	24	24	19	22	20

^a Raccoon and red fox season continuous May 1994 thru March 15, 2006.

Table 5. Minnesota trapper license sales and estimated annual harvest, 1996-97 through 2009-2010^a

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Trapper license sales ^b	6,675	6,996	6,652	4,936	5,337	5,534	5,725	5,841	6,271	6,163	8,557	7,167	7,027	6,158
Estimated harvest ^c														
Muskrat	201,794	188,189	131,439	97,333	85,555	100,819	75,190	69,131	72,079	91,271	243,360	75,439	80,157	98,524
Mink	34,612	32,449	36,152	26,808	22,590	28,684	19,894	16,716	21,478	18,048	26,084	18,626	16,647	13,207
Short-tailed weasel	4,196	6,401	2,400	1,763	2,586	4,160	2,895	3,519	2,679	2,223	8,145	4155	3,515	3,128
Long-tailed weasel	2,065	3,880	1,863	1,619	1,354	2,243	1,138	1,781	1,007	651	3,494	2013	1,118	838
Raccoon (Oct - Feb)	68,810	71,705	63,680	37,435	32,460	60,292	61,221	53,534	56,848	48,966	78,571	73498	71,893	45,118
Raccoon (Mar -Aug) [†]	4,936	8,986	6,849	4,263	3,702	6,468	4,137	4,933	4,940	3,594				
Striped skunk	11,168	10,027	9,181	5,266	4,580	7,168	7,901	8,474	8,704	6,881	10,773	10811	10,354	6,194
Eastern spotted skunk [‡]	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Badger	594	446	400	319	205	407	358	552	455	339	461	499	424	316
Opossum	6,453	5,201	6,916	5,907	5,351	5,127	8,491	11,251	14,313	11,754	20,442	17	11,296	4,963
Red fox (Oct - Feb)	12,477	9,995	6,347	6,508	6,165	6,870	7,851	6,721	4,684	3,528	6,783	4060	3,500	2,984
Red fox (Mar -Aug) [†]	529	680	458	379	357	447	612	635	334	222				
Gray fox	974	1,163	976	743	468	525	892	915	898	797	1,703	1360	1,320	1,084
Coyote	3,148	2,720	1,637	2,372	2,112	2,369	3,641	3,805	3,607	3,915	5,315	5355	4,532	3,797
Beaver (Oct 09- Feb 10)	38,113	47,370	38,720	30,564	24,802	35,963	23,592	22,801	28,716	26,029	33,966	21813	21,075	18,178
Beaver (Mar 09-Apr 09)	48,235	65,472	55,262	36,189	37,455	41,829	33,721	26,363	37,861	35,252	41,652	26286	27,815	25,008
Registered harvest														
Otter	2,219	2,145	1,946	1,635	1,578	2,301	2,145	2,766	3,450	2,846	2,720	1,861	1,938	1,544
Lynx [§]	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Bobcat ^c	223	359	103	206	231	250	544	483	631	590	890	702	853	884
Fisher	1,773	2,761	2,695	1,725	1,674	2,119	2,660	2,517	2,552	2,388	3,251	1,682	1,712	1,259
Marten	1,625	2,261	2,299	2,423	1,629	1,928	2,839	3,214	3,241	2,653	3,788	2,221	1,823	2,073

^a Includes data for all seasons from October through April of years indicated.

^b Separate licenses were issued for juveniles (13-17 years old) and adults (18 and older), beginning in 1982. Nonresident (MN Landowner) licenses started in 2004. Senior trapping licenses were first issued in 2007. Lifetime Licenses became available for free when renewing lifetime sports or small game licenses in 2007. As of April 4, 2010 6,158 trapping licenses were sold in 2009 343 (5.6%) were juvenile licenses, 4,803 (78.0%) were Regular adult licenses, 799 (12.9%) were Senior licenses, 207(3.4%) were Lifetime licenses, and 6 (<1%) were Nonresident (MN Landowner) licenses. Duplicate licenses excluded.

^c Based upon trappers' responses to mail surveys.

^e Registered harvest for bobcat includes animals taken by hunting. [†] Raccoon and red fox season continuous May 1994 thru March 15, 2006.

[§] Lynx (1984) and Eastern spotted skunk (1996) listed as Special Concern and threatened species (respectively) and are fully protected.

MINNESOTA FUR BUYERS SURVEY FOR THE 2009-2010 HUNTING AND TRAPPING SEASON

Jason Abraham, Wildlife Furbearer Program Coordinator
Margaret Dexter, Wildlife Policy and Research Unit

INTRODUCTION

Fur buyers are individuals licensed by the State of Minnesota to buy and sell raw fur. They are required to keep complete records of all transactions and activities related to buying, selling, and disposing of raw furs. Each year buyers are sent a questionnaire asking them to submit information regarding the “average” price they paid to trappers for various furbearers the previous season.

METHODS

In August 2010, questionnaires were mailed to the 43 licensed fur buyers in Minnesota. The survey asked them to report the number and type of fur purchased from Minnesota trappers and hunters in 2009-10 and the “average price” paid to those hunters and trappers based on all furs purchased. A total of 32 usable surveys were received, for a return rate of 74 percent. Calculations of average pelt price for each species (Table 1) were weighted according to the number of pelts purchased by each buyer. Average pelt prices for the past 15 years are summarized in Table 2. Total estimated value of the furbearer harvest to trappers and hunters in 2009-10 was \$734,582.41, a 20 percent increase from 2008-09.

Table 1. Minnesota fur prices as reported by licensed fur dealers, 2009-10.

Species	Number Buyers	Number Pelts	Minimum Price (\$)	Maximum Price (\$)	Weighted Mean (\$)
Muskrat	19	24,008	1.12	6.00	4.43
Mink Female	19	2,261	2.83	12.00	8.02
Mink male	19	2,993	7.00	13.00	9.37
Raccoon	18	22,173	7.00	13.00	9.18
Red Fox	16	927	6.63	15.00	10.85
Gray Fox	11	240	8.00	15.00	11.55
Coyote	18	2,791	2.00	20.00	8.62
Bobcat	9	246	35.00	125.00	42.77
River Otter	11	327	15.00	62.00	35.65
Beaver 10-2	16	4,419	6.00	16.00	12.49
Beaver 3-4	12	11,194	7.00	16.00	14.47
L.T. Weasel	4	101	1.00	5.00	3.02
S.T. Weasel	8	454	1.50	5.00	3.12
Striped Skunk	11	137	1.00	6.00	3.66
Badger	14	77	1.00	25.00	8.81
Opossum	8	172	0.50	1.50	1.30
Fisher Male	9	262	25.00	38.00	34.45
Fisher Female	9	173	30.00	40.00	34.90
Marten Male	8	249	28.40	35.00	26.76
Marten Female	6	158	25.00	35.00	29.95
Deer Hides	15	15,878	2.00	5.00	4.44
Bear Hides	6	48	25.00	60.00	43.00

Table 2. Average price (\$) per pelt paid to hunters and trappers in Minnesota, 1998-99 through 2009-10.

Species	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Muskrat	1.11	1.57	1.83	2.32	2.11	2.05	1.90	2.81	5.79	2.96	1.85	4.43
Mink (female)	6.11	8.22	7.70	6.76	6.52	7.23	10.22	10.23	13.18	9.05	7.45	8.02
Mink (male)	9.83	11.61	11.15	9.34	9.55	11.41	11.34	14.29	18.04	12.32	9.14	9.37
S.T. Weasel	1.72	2.16	2.30	2.41	2.63	2.53	2.52	2.60	3.58	3.18	3.57	3.02
L.T. Weasel	2.05	2.34	1.80	2.98	1.94	3.34	3.05	2.56	4.35	5.00	2.21	3.12
Raccoon	7.25	5.09	8.86	9.53	10.33	11.45	10.49	9.61	11.92	14.32	9.34	9.18
Striped Skunk	4.72	4.40	4.79	3.91	5.81	4.66	3.95	3.77	4.46	5.27	7.12	8.62
Badger	6.30	7.30	10.15	9.39	13.18	14.23	12.94	13.40	15.71	13.92	7.70	8.81
Opossum	0.58	0.96	0.97	1.19	1.22	1.23	1.51	1.40	1.52	1.76	1.21	1.30
Red Fox	8.04	11.82	14.45	17.07	22.08	20.02	17.28	16.96	17.68	14.69	11.79	10.85
Gray Fox	5.63	7.06	7.52	8.36	9.05	13.64	12.58	15.00	22.36	30.09	14.08	11.55
Coyote	5.57	9.42	12.40	13.37	16.12	18.37	15.24	13.57	17.76	13.51	7.12	8.62
Bobcat	27.66	24.23	33.09	46.00	71.54	95.90	98.99	95.74	101.07	93.41	74.74	42.77
Beaver (fall-winter)	11.40	11.51	14.66	12.74	10.05	12.57	13.62	14.48	18.35	14.60	14.63	12.49
Beaver (spring)	14.06	11.02	12.80	12.47	9.99	11.09	13.80	16.49	14.81	17.77	9.36	14.47
Otter	34.03	41.41	50.52	46.19	61.16	85.33	87.23	88.89	42.85	29.49	24.33	35.65
Fisher (male)	18.92	19.45	20.14	23.18	26.70	27.15	30.02	36.03	76.33	63.09	22.27	34.45
Fisher (female)	21.76	19.91	19.01	22.86	25.44	25.71	27.47	31.46	67.82	48.24	37.22	34.90
Marten (male)	19.70	24.89	27.56	24.10	28.00	30.09	30.65	37.47	74.04	58.72	30.61	26.76
Marten (female)	16.12	21.27	21.25	22.52	27.30	26.70	27.42	31.53	66.09	50.05	28.19	29.95
Deer Hides	6.40	6.32	6.46	2.86	3.48	5.41	3.95	4.14	4.51	3.92	3.53	4.44
Bear Hides	36.23	33.87	39.81	36.10	40.56	41.55	46.61	39.30	43.03	36.57	29.81	43.00

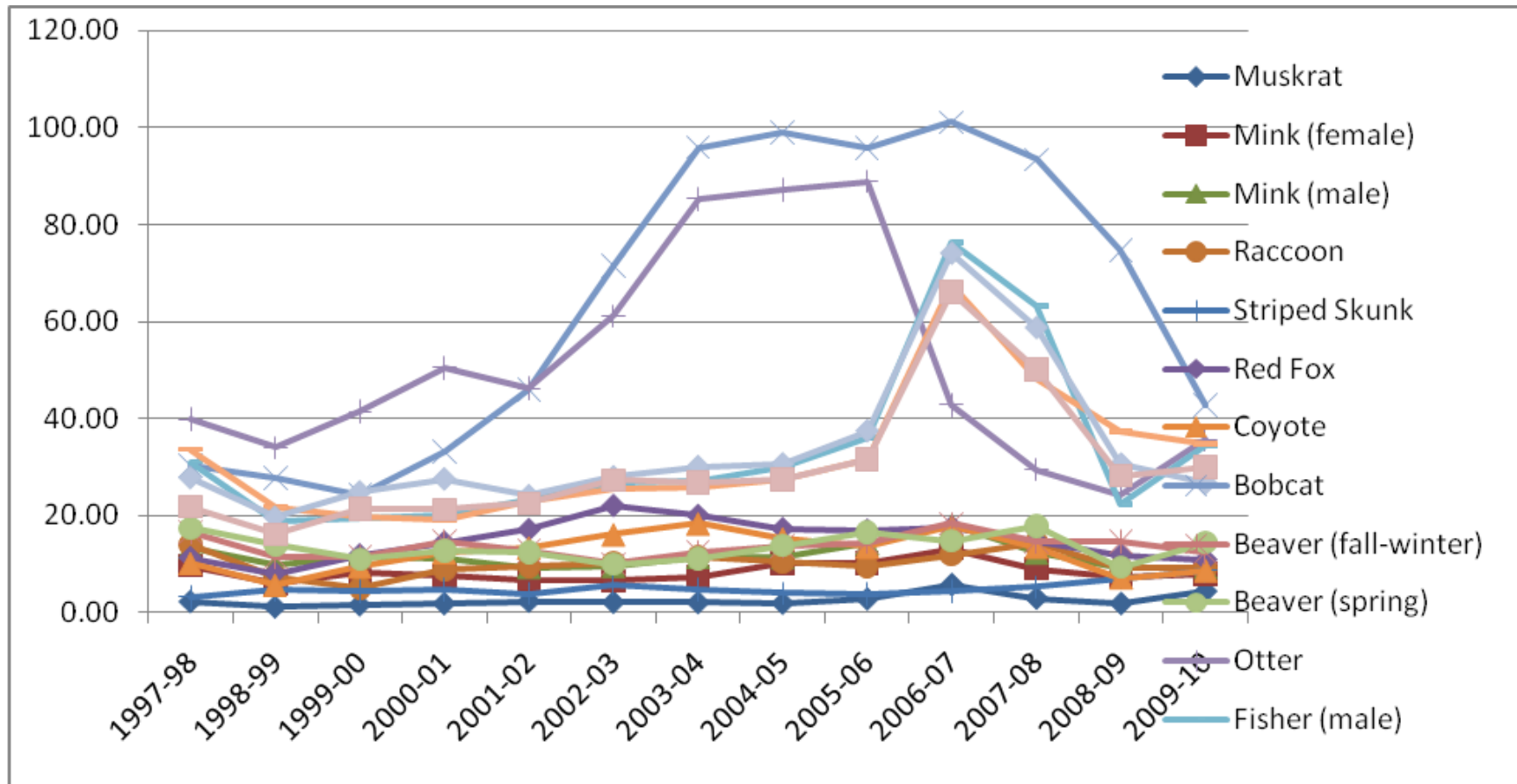


Figure 1. Average price per pelt paid to hunters and trappers for selected species in Minnesota, 1997-98 through 2009-10.