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ABSTRACT: Information from annual Furtaker Surveys has been used to determine trends in the number of furtakers and furbearer harvests since 1990. Furtaker license sales have increased steadily since 1999. During the 2008-2009 harvest season, 29,707 furtaker licenses were sold, the highest number recorded during the past 20 years. Harvest levels increased for raccoon, gray fox, muskrat, skunk, and opossum and decreased for red fox coyote, mink, weasel, and beaver. Despite moderately increasing and fluctuating pelt values and increasing market demand for wild furs, most furbearer populations in Pennsylvania remain underutilized. Reports of bobcat sightings, and incidental bobcat captures have been steadily increasing and suggest continued numeric and geographic expansion of bobcat populations. Reports of fisher observations suggest that fisher populations are expanding rapidly proximal to initial release sites, and throughout areas of the southcentral and southwest regions. Otter populations have expanded throughout the state. In 2008, river otters occupied 88% of Wildlife Conservation Officer (WCO) districts. Coyote complaints and damage to livestock remained stable. Beaver damage and nuisance complaints were relatively low. With 76% of WCO districts reporting increasing or stable beaver populations, the overall status appears good.

OBJECTIVES

1. To determine trends in the annual harvest of furbearing animals and numbers of trappers.
2. To monitor changes in furbearer population distribution and abundance.

METHODS

The annual fur harvest was estimated from the Furtaker Survey conducted in March. Due to budget constraints, this survey was not conducted during 2004, but was implemented in subsequent years. Harvest estimates were presented by species and Wildlife Management Unit (WMU).

Combination license holders have been extended furtaker privileges since 1999, but harvest totals for each species do not include them representing a sampling bias during subsequent years (Boyd and Weaver 2009).

Average pelt prices of furbearers sold at the Pennsylvania Trappers Association's (PTA) District fur sales were obtained to monitor trends in pelt value. Pelt values were averaged among several districts reporting fur sale results. Approximately 5% of all furbearers harvested in Pennsylvania are sold at these fur sales. Pelt value trends during 1986-2008 were assessed for each furbearer species.

The reported estimates of coyote harvest include only those animals recorded by furtakers and does not account for the incidental harvest recorded in the Game Take Survey. Boyd and Weaver (2009) provided the combined harvest totals. Prior analyses of the beaver harvests results are included in the beaver management plan report (see Job No. 64001). Current harvest levels and pelt prices are reported herein.

Questionnaires were mailed annually to all Wildlife Conservation Officers (WCOs) to collect information on captures and sightings of otter and fisher, and to record numbers and types of coyote damage complaints during the previous calendar year. Numbers of beaver complaints received and assessments of beaver, otter, fisher, and bobcat populations were also queried. This furbearer survey was mailed during April and returned by June.

Vehicle-caused mortalities and incidental trapping mortalities for bobcat, otter, and fisher were recorded annually by WCOs using standardized kill report forms. Mandatory WCO reporting of these mortalities was a year-round activity.

RESULTS

Fur Harvest

In 1985 a furtaker license was created, and since then furtaker license sales have generally declined ($r = -0.495$, $P < 0.05$) (Table 1). Since 1999, combination license holders were extended furtaking privileges, which resulted in reduced furtaker license sales. However, the numbers of furtaker licenses sold has been increasing steadily since 1999 (Table 1). During the 2008-2009 harvest season, 29,707 furtaker licenses were sold, the highest number recorded during the past 20 years. Future pelt prices, continued trapping device regulation, and international changes in fur demand will continue to affect the number of furtakers in Pennsylvania. Estimated statewide harvest numbers were similar to those during previous years. Harvests of raccoons, gray fox, muskrat, skunk, and opossum increased from the previous season whereas harvests of red fox, coyote, mink, beaver, and weasel declined (Table 2). Most populations of terrestrial furbearers remain underutilized. Species harvest totals by WMU are provided for regional comparison of relative species abundance and harvest intensity (Table 3).

In general, the demand and prices paid for furs has declined since historic high values of the early 1980s. Historic low pelt values occurred during the 1989 and 1990 trapping seasons. Fur prices during the 1990s were relatively stable with the lowest values observed during the 1998-1999 season. Average pelt values during 2008-2009 were significantly lower than the previous year with

the greatest reductions noted for raccoon, red fox, gray fox, and coyote (Table 4).

Population Monitoring

Bobcats.--The number of incidental bobcat captures, as estimated from the annual Furtaker Survey, has been steadily increasing since 1990. Greater than 500 incidental captures have been reported annually since 1995. The 3-year moving average of incidental captures has increased significantly during 1990-2008 ($r = 0.80$, $P < 0.05$) (Table 5). The number of incidental bobcat captures during 2008 was significantly higher than reported during previous years. Annual numbers of statewide vehicle-caused bobcat mortalities (i.e., roadkills) have also increased significantly ($r = 0.97$, $P < 0.01$) (Table 6). These indices suggest continued numeric and geographic expansion of bobcat counties. The greatest numbers of vehicle-caused mortalities have been reported from high-density populations in the northcentral and southwestern counties.

Since 2001, the Pennsylvania Game Commission (PGC) included questions concerning bobcat sightings on the annual Game Take Survey, which is sent to approximately 2% of general hunting license buyers each year (Boyd and Weaver 2009). An annual sighting index (number of observations divided by effort * 100) has been developed to detect changes in observation rates (Table 7). The 2008 bobcat sighting index was similar to previous years.

Fishers.--The number of incidental fisher captures reported on the furtakers survey has been increasing steadily during the past decade (Table 8). We estimate that nearly 1,900 fisher were captured and released by Pennsylvania trappers during 2008-2009 seasons. The annual number of fisher observations and incidental captures reported to WCOs has also been increasing since fishers were reintroduced in 1996 (Table 9). WCOs received 138 reports of fishers that were captured and released by licensed trappers and 561 reports of fisher observations. The geographic distribution of these reports suggests that fisher populations are rapidly expanding from the reintroduction areas in northern regions and naturally expanding into regions of southwestern and southcentral Pennsylvania. In addition, 76% of WCOs surveyed during 2008 reported fisher populations existing within their districts (Figure 1).

River Otters.--River otter populations have expanded throughout the commonwealth. Numbers of incidental otter captures, primarily by beaver trappers, have increased during recent years with greater than 25 incidental captures reported annually since 1996 (Table 9). The majority of these captures occur in the Northeast Region, but recent reports indicate continued population expansion throughout the Susquehanna drainage. Based on results of the 1995 WCO furbearer questionnaire, otters occurred in 51% of WCO districts. In 2008, otters occupied 88% of WCO districts (Figure 2.).

Since 2000, the annual hunting and trapping digest has provided trappers with additional information regarding the avoidance of otter while trapping beaver. Preliminary reports from WCOs indicate that trappers in high-density otter areas are using these techniques to avoid otter captures. Despite these efforts, during the 2008-2009 season, 47 incidental otter captures were reported. As otter populations continue to expand, more intensive monitoring will be required.

Coyotes.--Reports of coyote-caused damage to livestock and domestic pets have been relatively stable since 1993. Numbers of complaints and losses due to coyotes during 2008 were

similar to reports from previous years. Complaints related to concerns for human safety have increased significantly. Losses of calves, sheep and poultry have increased during recent years (Table 10). Reports of coyotes killing domestic dogs and cats are increasing, particularly in the southwest and southeast regions. Sixty-one WCO districts (54%) reported complaints during the most recent survey period. The majority of coyote complaints received by WCOs are people expressing concern for pets, livestock, wildlife, or human safety issues.

Beavers.--In 2008, beaver damage and nuisance complaints remained relatively low. Since 1996, when beaver complaints peaked at 1,140, reports of problem beavers gradually decreased. Only 412 beaver complaints were recorded by WCOs during 2008. Most beaver complaints occurred along the western, northern, and eastern tiers of Pennsylvania (Figure 3). Few complaints were reported in the central and southcentral portions of the commonwealth.

The overall status of beaver populations appears good, with 76% of WCO districts reporting increasing or stable populations (Figure 4). WCOs observed decreases in established populations within 9% of districts. Non-established populations comprised 14% of WCO districts. Only one WCO reported no existing beaver populations within his district. However, areas of suitable habitat with decreasing or non-established beaver populations may need trapping regulation changes to allow for population growth and expansion.

RECOMMENDATIONS

1. The fur harvest should continue to be reported by species and WMU to monitor area-specific harvest trends.
2. Pelt price information should be collected annually to monitor trends in fur value relative to regional harvest trends.
3. Current methods for monitoring changes in density and distribution of bobcat, otter, and fisher should be continued, and for otter, intensified to better understand population trends.
4. The Game Take Survey should continue to query general license buyers regarding bobcat, fisher, and coyote observations. Effects of geographic sampling bias should be assessed once the Pennsylvania Automated License System is fully implemented.
5. The PGC should continue educational efforts concerning techniques for avoiding otter captures.
6. Increased numbers of coyote-related complaints should be addressed through educational programs in rural and suburban communities.

LITERATURE CITED

Boyd, R. C., and M. Weaver. 2009. Game Take and Furtaker Surveys. Annual Job Report 11101. Pennsylvania Game Commission. Harrisburg, USA.

Table 1. Number of furtaker licenses sold in Pennsylvania.

Year	Licenses sold
1985	64,000
1986	44,087
1987	42,000
1988	36,000
1989	29,000
1990	20,377
1991	20,251
1992	20,345
1993	19,458
1994	22,376
1995	21,376
1996	25,636
1997	27,413
1998	25,877
1999	17,591 ^a
2000	18,551 ^a
2001	19,410 ^a
2002	20,676 ^a
2003	22,454 ^a
2004	24,094 ^a
2005	23,941 ^a
2006	26,589 ^a
2007	28,032 ^a
2008	29,707 ^a

^a Combination license holders were extended furtaker privileges since 1999, but the number who pursue furbears has not been determined. Therefore these numbers misrepresent to an unknown degree the number of furtakers in Pennsylvania.

Table 2. Annual harvest and percent change, calculated using a 3-year moving average, by species in Pennsylvania during 1985-2008.

Year ^a	Raccoon	%	Red Fox	%	Gray Fox	%	Coyote ^b	%	Muskrat	%	Mink	%	Skunk	%	Opossum	%	Beaver ^c	%	Weasel	%
1985-86	532,898		72,957		44,907				387,857				52,498		255,334		5,980			
1986-87	426,625		95,330		46,387				440,880				39,064		210,953		6,690			
1987-88	443,534	-22.0	74,590	-8.3	56,944	-14.7			346,558	-13.4	18,513		39,632	-27.6	217,552	-21.9	6,490	-6.6		
1988-89	224,514	-24.7	52,737	-23.3	23,072	-13.9			229,958	-29.4	12,896		16,351	-19.6	105,812	-24.4	4,721	-11.2		
1989-90	155,761	-39.7	43,525	-24.5	28,818	-32.4			141,577	-32.6	9,669	-27.9	20,409	-39.7	80,660	-44.8	4,678	-19.3		
1990-91	116,443	-18.9	32,699	-18.8	21,683	10.0	1,810		112,358	-15.3	7,053	-8.6	9,298	-16.2	36,574	-30.8	3,431	-4.8	798	
1991-92	130,608	-7.8	28,495	-15.2	30,409	-4.2	3,719		156,014	-1.5	10,355	-1.9	8,907	-34.2	37,177	-34.3	4,107	-1.4	481	
1992-93	124,404	0.7	27,611	-7.7	25,395	2.8	4,402	43.8	135,533	2.3	9,157	2.8	7,221	-5.4	27,754	-10.6	4,506	1.5	343	-16.8
1993-94	118,964	15.0	25,862	2.6	23,839	3.7	6,161	17.7	121,657	5.4	7,808	-0.5	7,920	15.4	25,807	-8.3	3,606	43.0	526	17.9
1994-95	186,551	-0.9	30,649	4.2	33,387	-2.3	6,240	13.4	178,145	-1.2	10,208	-2.0	12,620	10.0	29,621	2.3	9,360	11.1	723	21.6
1995-96	120,462	22.5	31,110	4.3	23,518	-0.7	6,662	9.4	130,442	5.7	8,602	5.7	9,995	12.0	29,688	26.7	6,454	31.8	687	3.3
1996-97	214,958	1.6	29,623	6.9	23,307	-9.2	7,959	2.1	146,013	8.3	9,315	13.7	11,571	-0.8	48,549	28.8	9,789	12.8	589	22.5
1997-98	194,696	14.1	36,923	16.5	26,043	12.9	6,685	23.4	216,066	3.6	14,063	11.4	12,344	3.5	60,717	19.1	12,628	7.9	1,172	-1.0
1998-99	195,110	-17.8	47,202	6.4	32,922	4.2	11,652	6.2	148,205	-10.2	12,238	12.5	11,190	-13.8	56,287	-9.0	8,727	-4.5	662	-11.1
1999-00	107,407	-17.3	36,860	-3.2	26,794	-1.9	9,586	13.2	94,215	-29.7	13,774	-13.6	6,723	-15.9	33,723	-21.0	8,377	-14.2	319	-38.6
2000-01	108,890	-17.8	33,060	-12.1	24,452	-11.5	10,383	2.2	79,880	-8.1	8,614	2.8	7,534	-7.6	29,093	-24.4	8,408	8.7	340	-0.4
2001-02	121,810	-0.3	33,003	-3.7	23,275	-10.7	12,363	5.7	121,994	-6.4	13,214	-10.4	9,245	2.1	27,192	1.2	10,934	-13.8	657	6.6
2002-03	106,485	-1.2	33,007	-1.5	18,805	-12.8	11,444	3.8	75,340	-3.1	10,069	-6.6	7,207	7.4	34,787	5.1	4,538	-2.2	406	1.4
2003-04	104,781	-4.7	31,592	7.7	15,956	-9.8	11,697	-7.6	71,368	-19.0	6,494	-13.0	9,319	2.9	33,760	17.3	6,772	9.6	359	-6.3
2005-06	106,082	10.1	40,551	11.9	17,616	3.7	9,670	1.3	70,995	21.1	9,335	10.1	9,997	13.1	43,770	11.9	14,283	37.8	567	6.1
2006-07	138,640	4.8	45,512	17.3	20,754	4.9	11,879	5.0	121,167	0.3	12,680	12.3	10,687	1.7	48,102	5.9	14,210	13.5	487	32.1
2007-08	121,446	10.0	52,000	3.0	18,613	5.7	13,360	8.9	72,174	1.2	10,004	-2.2	9,818	7.7	41,168	7.9	11,542	-10.8	813	-3.3
2008-09	142,808		44,745		20,845		12,776		74,059		8,632		12,331		54,273		9,942		504	

^aFurtaker survey was not conducted for the 2004-2005 season.

^bCoyote harvest is calculated from only the Furtaker Survey and does not include coyote harvests from the Game Take Survey.

^cBeaver harvest was based on mandatory pelt tagging totals until the 2004-05 season. Harvest was estimated from furtaker surveys from the 2005-06 trapping season to present.

Table 3. Estimated harvests of furbearers by WMU during the 2008-2009 hunting and trapping seasons.

WMU	Raccoon	Red Fox	Gray Fox	Coyote ^a	Muskrat	Mink	Skunk	Opossum	Beaver	Weasels
1A	11,135	746	157	942	3,813	202	102	1,247	762	0
1B	14,760	984	179	1,144	6,998	628	429	2,247	1,490	34
2A	11,428	1,097	359	796	5,237	202	429	4,304	762	22
2B	8,613	1,572	1,099	303	1,256	78	226	1,641	137	0
2C	10,167	3,030	2,725	942	4,968	404	993	3,270	603	56
2D	16,190	1,798	2,299	886	7,211	415	1,320	5,686	535	34
2E	4,627	577	908	527	449	90	485	1,629	410	0
2F	3,502	351	718	572	303	90	147	618	774	34
2G	5,224	1,029	1,996	1,066	1,301	314	857	3,674	455	0
3A	2,713	611	572	482	740	191	158	921	307	11
3B	3,524	441	1,043	987	3,252	202	429	2,315	501	22
3C	3,288	498	1,144	942	740	258	214	1,405	569	34
3D	1,126	384	426	628	45	67	124	629	387	0
4A	3,693	2,115	1,716	303	1,873	247	384	1,202	148	0
4B	5,697	2,273	875	202	5,069	471	733	3,832	46	11
4C	4,042	1,798	437	404	2,658	269	338	1,809	216	11
4D	5,787	1,979	1,962	505	4,329	460	1,568	4,540	182	56
4E	4,729	837	695	415	6,213	1,390	666	2,955	387	56
5A	6,361	6,434	594	112	8,041	1,166	530	2,506	216	45
5B	7,138	7,079	168	179	7,626	1,132	1,196	2,607	239	34
5C	3,884	7,079	78	101	325	146	519	1,247	57	11
5D	687	498	0	11	34	45	34	11	23	0
Unknown	4,492	1,538	695	325	1,581	168	451	3,978	739	34
Total	142,808	44,745	20,845	12,776	74,059	8,632	12,331	54,273	9,942	504

^b Coyote harvest is calculated from only the Furtaker Survey and does not include coyote harvests from the Game Take Survey.

Table 4. Average pelt prices paid for furbearer species in Pennsylvania (1992-present).

Trapping	Average pelt price (\$) ^a									
season	Raccoon	Red Fox	Gray Fox	Coyote	Muskrat	Mink	Skunk	Opossum	Beaver	Bobcat
1992-93	6.77	12.96	11.32	25.40	2.25	19.95		1.71	10.63	
1993-94	8.54	15.44	11.02	24.15	2.88	18.35	2.66	1.88	19.03	
1994-95	9.15	18.73	11.47	24.70	3.09	14.08	2.21	1.51	19.94	
1995-96	10.27	16.30	9.40	13.36	3.15	11.88	3.00	1.74	19.65	
1996-97	15.34	18.05	11.94	20.68	6.03	19.06	3.92	1.83	29.37	
1997-98	12.07	13.18	9.65	9.72	3.44	11.66		1.41	21.73	
1998-99	6.87	9.73	4.84	6.40	1.87	9.48		0.49	15.29	
1999-00	4.94	10.72	6.19	15.43	3.16	9.75		1.47	16.08	
2000-01	7.42	16.58	8.61	16.07	3.40	9.64		2.47	20.00	
2001-02	8.34	20.14	10.05	17.16	3.85	8.47		1.54	15.86	
2002-03	9.39	22.84	12.81	22.57	3.81	9.69		2.12	14.33	
2003-04	10.15	19.92	18.74	25.29	3.33	10.50		2.03	15.84	
2005-06	10.11	16.48	18.04	9.37	2.89	12.84	3.14	2.51	16.11	
2006-07	17.50	20.36	26.54	24.50	6.10	17.42	4.50	5.05	17.18	
2007-08	12.88	20.84	43.84	20.02	3.20	12.88	4.04	2.45	22.14	
2008-09	9.79	11.58	25.11	12.37	3.96	10.06	4.42	3.45	18.05	26.36

^aAverage pelt prices paid at PA Trappers Association fur sales.

Table 5. Numbers of incidental bobcat captures as estimated from the annual Furtaker Survey. This survey was not conducted during 2004-2005.

Trapping season	No. survey respondents	No. furtaker licenses	No. bobcats^a captured and released	Extrapolated no. bobcat captures	3-year moving average^b (no. bobcat captures)
1990-1991	2,302	20,377	40	354	
1991-1992	2,361	20,215	24	205	293
1992-1993	1,652	20,345	26	320	222
1993-1994	2,175	19,246	16	142	513
1994-1995	2,056	21,905	101	1,076	559
1995-1996	2,181	21,840	46	460	736
1996-1997	2,363	25,636	62	673	566
1997-1998	2,233	27,413	46	565	790
1998-1999	2,466	25,877	108	1,133	797
1999-2000	1,557	17,414	62	693	991
2000-2001	1,681	18,551	52	574	656
2001-2002	1,553	19,410	56	700	599
2002-2003	1,779	20,676	45	523	639
2003-2004	2,204	22,454	68	693	951
2005-2006	2,412	23,941	165	1,638	1,414
2006-2007	2,436	26,589	175	1,910	1,916
2007-2008	2,994	28,032	235	2,200	2,405
2008-2009	2,622	29,717	274	3,105	

^a Does not include bobcats legally harvested by permit holders.

^b $r = 0.80$, $P < 0.05$

Table 6. Numbers and geographic distribution of vehicle-caused bobcat mortalities during 1985-2008.

Year	No. reported bobcat roadkills	No. counties with roadkills	No. new county records	3-year moving average
1985	2	2	0	
1986	15	2	7	12.0
1987	19	8	3	15.3
1988	12	5	4	15.7
1989	16	6	1	18.7
1990	28	7	5	26.3
1991	35	11	1	34.0
1992	39	13	5	44.0
1993	58	19	1	42.7
1994	31	14	1	48.7
1995	57	17	2	45.7
1996	49	15	0	59.0
1997	71	19	5	59.0
1998	57	18	3	71.3
1999	86	24	3	87.3
2000	119	29	3	102.7
2001	103	28	0	109.7
2002	107	28	0	107.0
2003	111	27	0	108.7
2004	108	27	0	106.7
2005	101	28	0	106.0
2006	109	27	0	106.0
2007	108	28	0	112.7
2008	121	28	0	

Table 7. Reports of bobcat and fisher sightings by county from the annual Game Take Survey, 2001-2008. Furtaker Survey was not conducted in 2004.

Year	Season	N (%)	Effort days	Bobcat		Fisher	
				Number	SI ^a	Number	SI ^a
2001	Spring Turkey Hunters	2,785 (24.8)	12,735	200	1.57	90	0.71
	Firearms Deer Hunters	8,628 (76.9)	40,254	585	1.45	152	0.38
	Archery Deer Hunters	3,237 (28.8)	36,439	407	1.12	134	0.37
	All Hunters	11,221 (100.0)	89,428	1,192	1.33	376	0.42
2002	Spring Turkey Hunters	2,423 (24.8)	10,952	205	1.87	43	0.39
	Firearms Deer Hunters	7,176 (73.3)	33,412	465	1.39	170	0.51
	Archery Deer Hunters	2,816 (28.8)	31,396	266	0.85	95	0.3
	All Hunters	9,777 (100.0)	75,760	936	1.24	308	0.41
2003 ^b	Spring Turkey Hunters	2,728 (27.3)	12,147	131	1.08	49	0.4
	Firearms Deer Hunters	7,388 (73.8)	34,133	367	1.08	95	0.28
	Archery Deer Hunters	2,923 (29.2)	27,137	265	0.97	63	0.23
	All Hunters	10,005 (100.0)	73,417	763	1.04	207	0.28
2005	Spring Turkey Hunters	2,845 (21.7)	12,327	163	1.32	104	0.84
	Firearms Deer Hunters	7,213 (55.0)	35,011	316	0.9	107	0.31
	Archery Deer Hunters	3,065 (23.4)	28,674	442	1.54	125	0.44
	All Hunters	13,123 (100.0)	76,012	921	1.21	336	0.44
2006	Spring Turkey Hunters	2,580 (20.7)	10,243	481	4.7	121	1.18
	Firearms Deer Hunters	6,865 (55.0)	32,609	707	2.17	230	0.71
	Archery Deer Hunters	3,025 (24.3)	32,065	109	0.34	109	0.34
	All Hunters	12,470 (100.0)	74,917	1,297	1.73	460	0.61
2007	Spring Turkey Hunters	2,369 (25.2)	9,467	316	3.33	70	0.73
	Firearms Deer Hunters	5,736 (60.9)	57,500	784	1.36	270	0.46
	Archery Deer Hunters	2,832 (30.0)	13,445	385	2.86	171	1.27
	All Hunters	9,415 (100.0)	80,412	1,485	1.84	511	0.63
2008	Spring Turkey Hunters	4,498 (20.2)	9,676	270	2.79	111	1.15
	Firearms Deer Hunters	12,350 (55.5)	29,739	502	1.69	224	0.75
	Archery Deer Hunters	5,412 (24.3)	29,478	348	1.18	116	0.39
	All Hunters	8,478 (100.0)	68,893	1,120	1.63	451	0.65

^a SI = Sighting Index = observations/effort * 100

Table 8. Numbers of incidental fisher captures as estimated from the annual Furtaker Survey. This survey was not conducted during 2004-2005.

Trapping season	No. survey respondents	No. furtaker licenses	No. fisher^a captured and released	Extrapolated no. fisher captures	3-year moving average (no. fisher captures)
1999-2000	1,557	17,414	5	56	
2000-2001	1,681	18,551	1	11	47
2001-2002	1,553	19,410	6	75	71
2002-2003	1,779	20,676	11	128	102
2003-2004	2,204	22,454	10	102	351
2005-2006	2,412	23,941	83	824	625
2006-2007	2,436	26,589	87	950	919
2007-2008	2,994	28,033	105	983	1275
2008-2009	2,622	29,717		1,8	

^a $r = 0.91$, $P < 0.001$

Table 9. Reports of otter and fisher captures and fisher observations estimated from annual questionnaires of WCOs, 1994-2007.

Survey Season	No. Districts Reporting	No. Incidental Otter Captures	No. Incidental Fisher Captures	No. Reported Fisher Observations
1995	123	15		
1996	123	15		
1997	123	31	10	60
1998	123	26	9	67
1999	127	30	6	94
2000	123	35	8	82
2001	137	25	6	105
2002	122	27	9	106
2003	133	26	20	206
2004	122	42	31	303
2005	123	50	49	341
2006	118	44	86	385
2007	133	57	132	481
2008	132	47	138	561

Table 10. Types and numbers of coyote-related complaints reported to WCOs, 1995-2008.

Survey Results	Survey Period													
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Proportion of districts with complaints (%)														
Nature of complaints														
Concern for Cattle	8	19	27	8	12	11	11	11	11	16	18	24	9	12
Concern for Sheep	37	24	43	22	23	26	17	15	30	23	43	29	19	22
Concern for Goats	3	5	8	3	4	1	1	1	4	3	5	3	4	7
Concern for Poultry	16	5	13	12	17	14	15	15	15	25	24	11	19	16
Concern for Dogs	7	9	17	12	11	22	12	12	10	19	12	19	8	9
Concern for Cats	13	7	15	19	13	29	23	22	24	77	25	38	28	19
Afraid of Coyotes	71	86	114	69	114	126	114	115	98	316	263	199	155	171
Concern for Deer	89	52	41	49	47	57	29	28	50	87	73	36	61	74
Concern for Turkeys	23	13	10	14	10	18	6	5	13	37	31	12	12	21
Other	4	1	15	31	0	0	7	8	26	0	32	36	36	32
Total	271	221	303	239	251	304	235	232	281	603	526	407	351	383
Coyote-caused mortalities														
Cows	0	3	1	0	0	1	0	0	0	0	2	0	1	1
Calves	2	8	9	3	7	8	5	5	4	13	10	27	7	9
Sheep	82	100	251	60	81	91	21	21	31	37	30	47	28	47
Goats	3	0	9	6	3	0	1	1	6	0	0	2	3	4
Poultry	112	27	51	43	52	44	49	48	66	85	51	71	93	132
Dogs	0	6	6	3	6	17	5	6	3	4	3	3	1	2
Cats	24	11	14	14	5	30	21	21	14	73	16	33	15	34
Rabbits	12	9	4	2	2	3	2	2	8	5	8	12	2	8
Deer		10	3	5	5	9	10	10	12	17	13	10	8	10
Other	17	1	0	0	3	3	0	0	0	2	2	1	1	0
Total	252	175	348	136	164	206	114	114	140	236	135	206	159	247

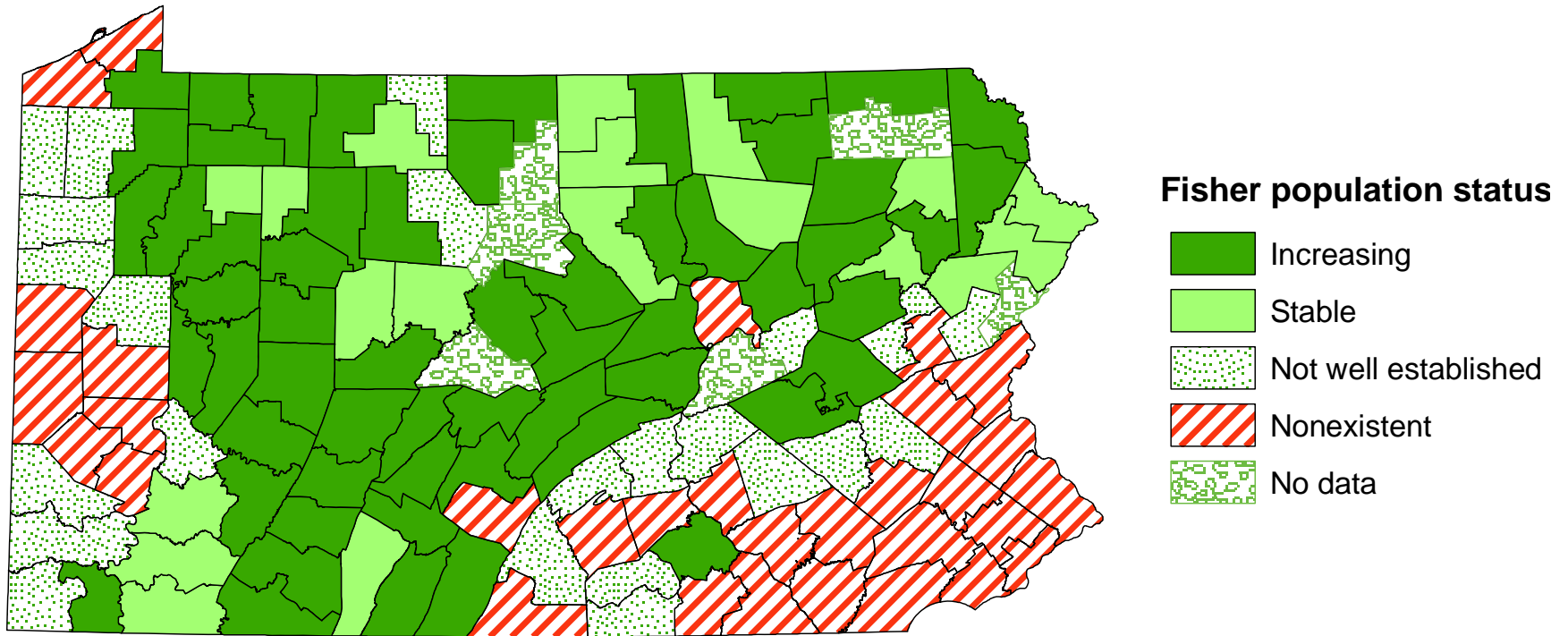


Figure 1. Fisher population status based on Wildlife Conservation Officer observations during 2008.

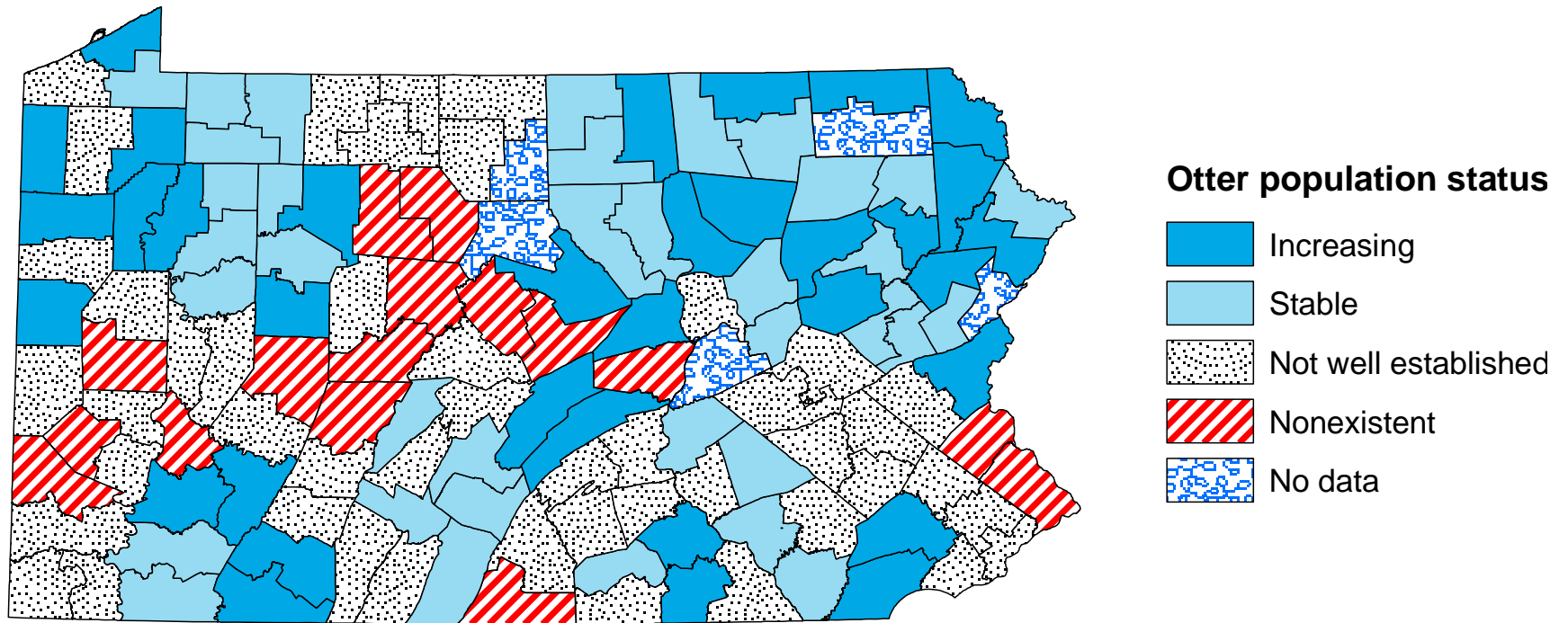


Figure 2. River otter population status based on Wildlife Conservation Officer observations during 2008.

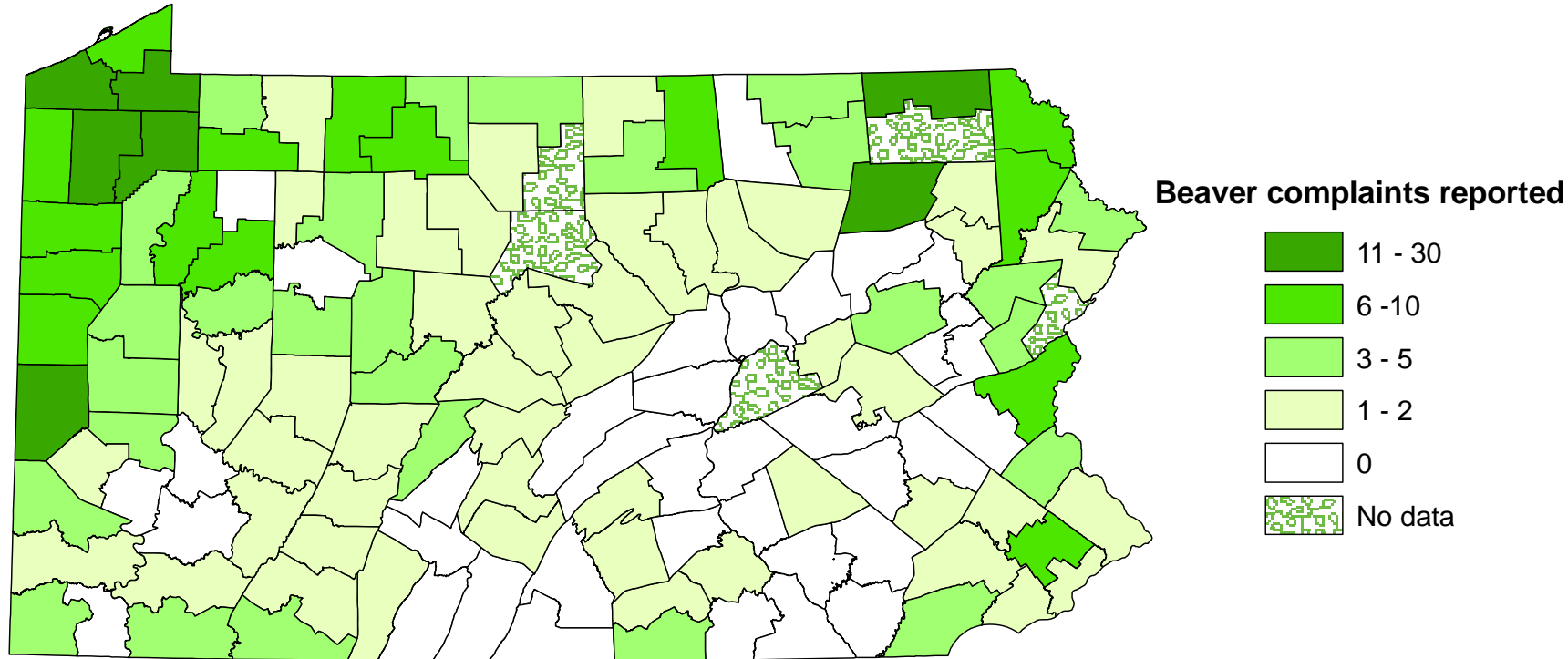


Figure 3. Distribution and frequency of beaver complaints reported by Wildlife Conservation Officers during 2008.

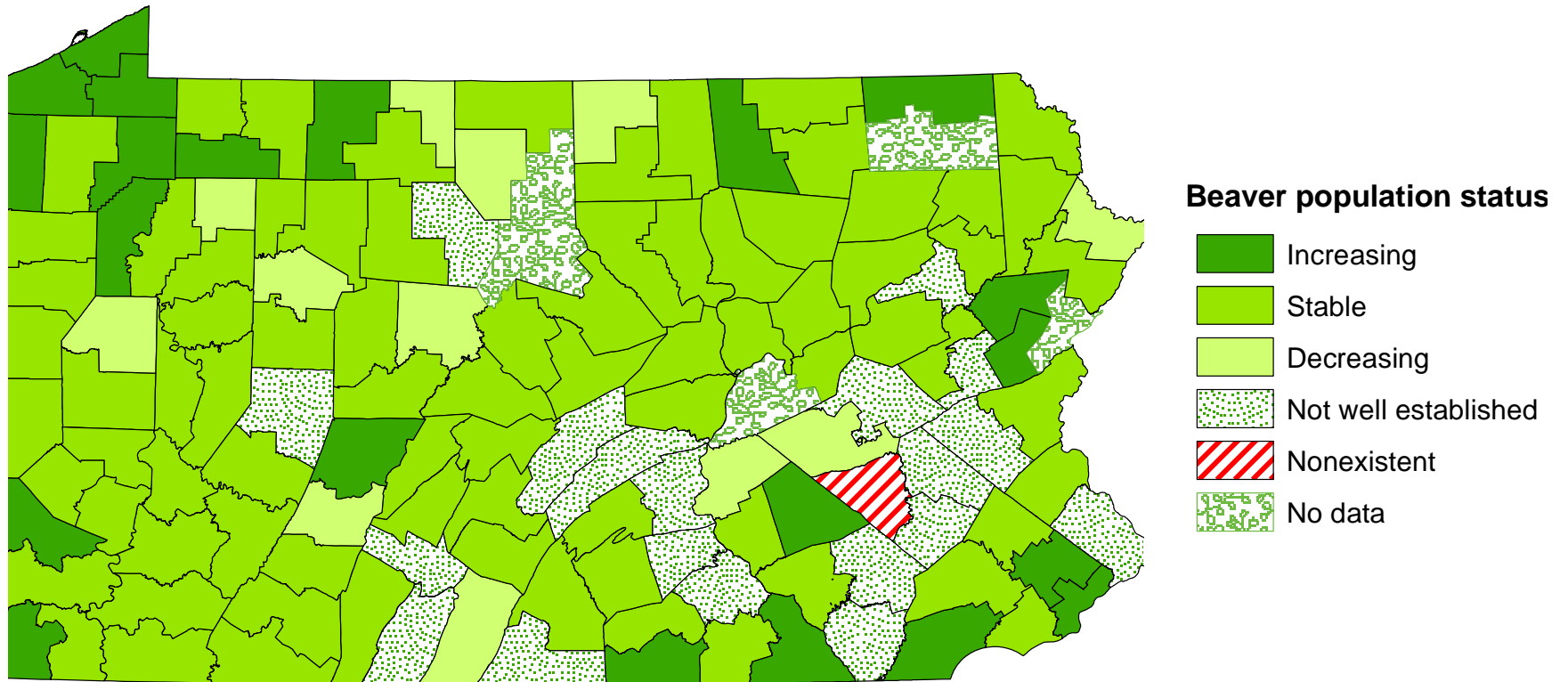


Figure 4. Beaver population status based on Wildlife Conservation Officer observations during 2008.