2008-09 Furbearer Harvest Survey

PERFORMANCE REPORT
STATEWIDE WILDLIFE RESEARCH AND SURVEYS

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2008-09 Furbearer Harvest Survey

Prepared by Matt Peek, Furbearer Biologist

The Furbearer Harvest Survey (FHS) is mailed to furharvesters at the end of the trapping season. Since 2001, 70% of the furharvester license holders from each of nine physiographic provinces in Kansas have been surveyed. Two mailings are conducted, with the second being sent to all nonrespondents of the first. The format and questions of the survey have been the same since 1983. The questionnaire is divided into 5 sections: general information, trapping activities, hunting activities, running activities, and a special section.

Since 2006, furharvester survey recipient names have been randomly selected from an online database of all furharvester license buyers. In 2008, the initial survey mailing consisted of a post card directing recipients to an online survey. The second mailing consisted of a post card that contained an abbreviated version of the initial survey (Appendix 1), which could be completed on the card itself and was intended to elicit a high response rate.

There were a total of 6616 furbearer licenses sold in 2008, included 6358 resident licenses, 194 junior residents, and 64 nonresidents. The first mailing was sent to 4586 furharvesters on May 13, 2009, and a second mailing was sent to 3910 furharvesters on June 11, 2009. Eight hundred and eleven surveys were completed online and 687 additional post card surveys were received, for a total of 1498 usable surveys were returned. The final response rate, after removal of 75 nondeliverable surveys, was of 33.2%. The number of responses and the response rate of furharvesters within each physiographic province can be found in Figure 1.

Information provided by furharvesters is an estimate of their harvest and activities during the season. Results from bobcat and swift fox pelt tagging have always been lower than the harvest estimates derived from the FHS, suggesting an overestimate by the FHS. Consequently, harvest figures obtained from this survey should be considered representative of annual harvest indices rather than parameters.

Survey results were extrapolated to represent total harvest and activity. Seventy percent of the respondents indicated they participated in furharvesting activities during the 2008-09 season (i.e. were active). Estimated furharvester distribution based on the county in which they conducted most of their furharvesting activities can be found in Figure 2. The mean age of active furharvesters was 44 years old, with a range from 9 to 88 years. Age distribution can be found in Figure 3.

Furharvesters spent an estimated 200,458 user days in pursuit of furbearers, including 122,620 days trapping, 53,536 days hunting, and 24,301 days running. These figures represent a 2.2% decrease in combined user days from the previous season. Trappers, hunters, and runners spent an average of 42, 17, and 38 days afield, respectively. Participation in various combinations of furharvesting activities is presented in Table 1. Slightly more people hunt than trap furbearers in Kansas, and hunters consist of a more diverse group including houndsmen, predator callers, stalkers or stillhunters, and opportunistic shooters.

Harvest, participation, and activity levels for trapping, hunting and running are presented in Tables 2-4, respectively. Trappers account for the majority of harvest of all furbearer species. Though far more coyotes are taken by hunters than trappers, most hunters who take coyotes do

so on a hunting rather than furharvesting license, therefore aren't represented in this survey. The raccoon is the most heavily pursued furbearer species. Total harvest and harvest per furharvester for all 3 user groups was higher for raccoon than any other species, and raccoons are pursued for more total days by more furharvesters from each user group than any other species, with the exception that raccoon was second to coyote in number of hunters who pursued.

Historical furbearer harvest in Kansas based on the Furbearer Harvest Survey can be found in Table 5. The harvest trend relative to the previous 5 years' harvest data is found at the bottom of this table. Harvest of most species decreased from last year and from 5-year averages reflecting the sharply declining pelt values of most species. Muskrat and beaver were exceptions to this trend, as harvest of both increased from last season. This was likely because the market outlook for these species remained relatively stable throughout most of the season, rather than declining as with other species. Because the market forecast was optimistic leading right up to season, the full effect of the market decline was not fully realized this season in terms of furbearer harvest. However, unless an unexpected market turnaround occurs soon, substantial furbearer harvest declines are expected next season.

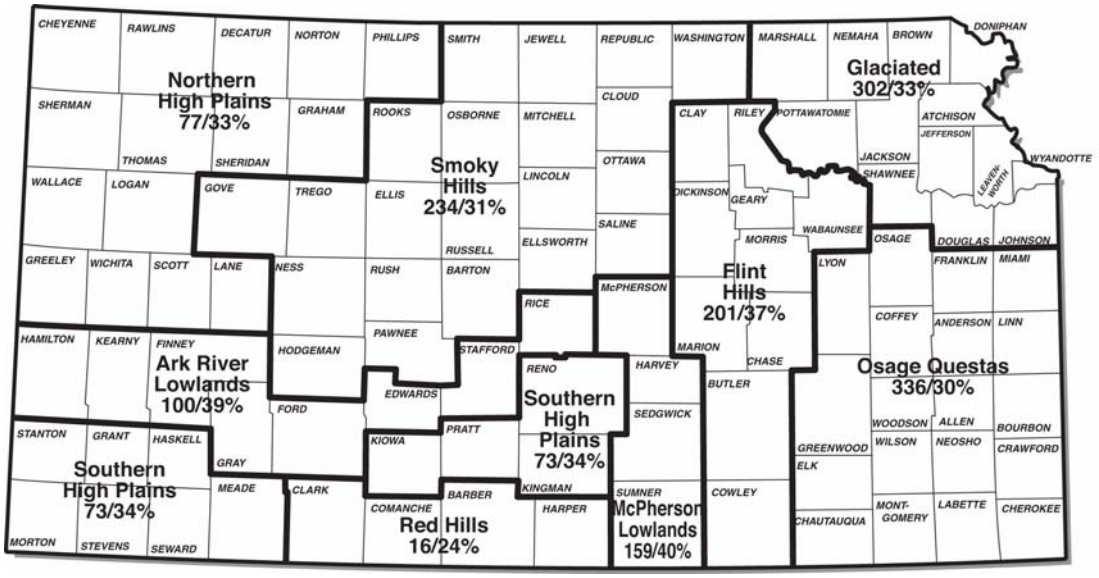

Figure 1. The number of survey respondents (number) and the response rate of furharvesters (percent) within each physiographic province in Kansas.

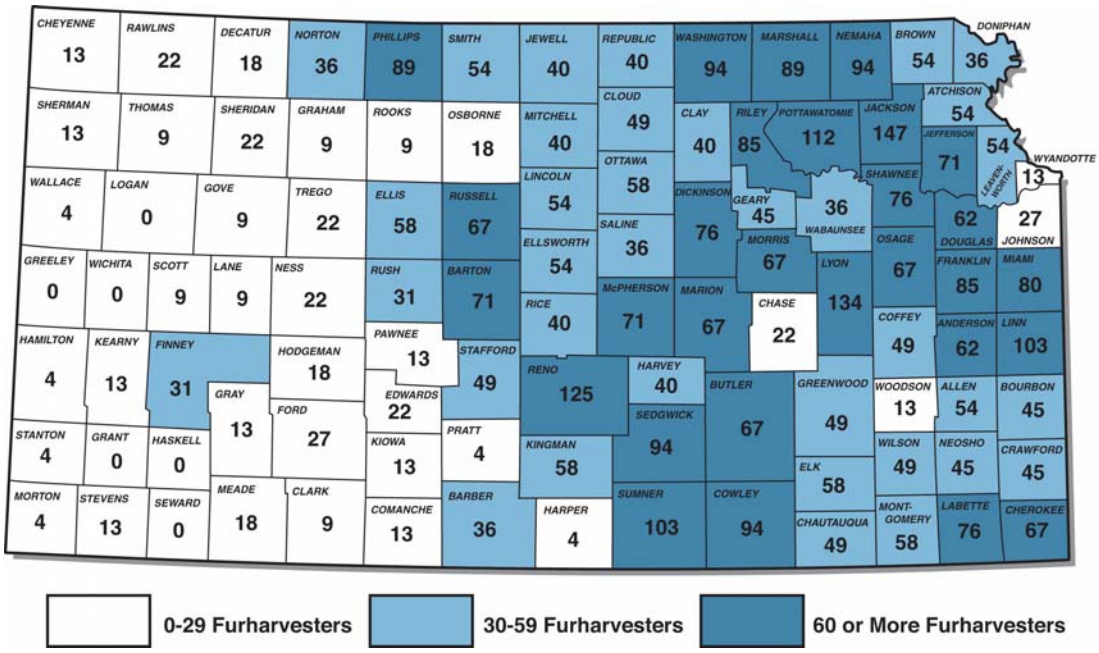

Figure 2. Estimated furharvester distribution in Kansas based on the county in which active survey respondents conducted most of their furharvesting activities.

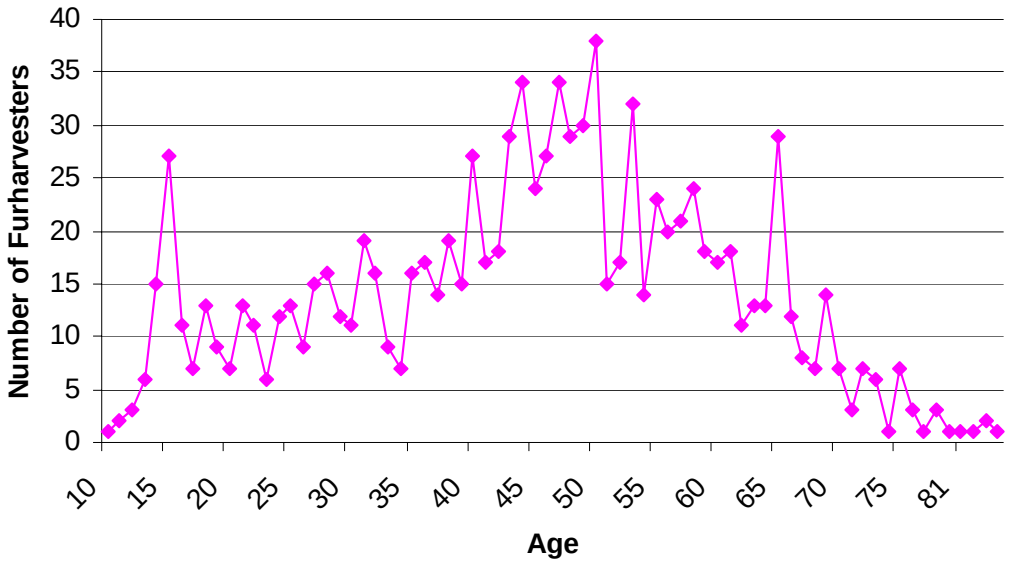

Figure 3. Age distribution of active Kansas furharvesters during the 2008-09 season (n=1042).

Table 1. Estimated number and percent of furharvesters who participated in various furharvesting activities, and total estimated participation in trapping, hunting and running by 6616 furharvesters in Kansas in 2008-09.

Activity	Number of Furharvesters	Percent of Furharvesters
Inactive	2005	30.3
Trap only	1344	20.3
Hunt only	1300	19.7
Run only	53	0.8
Trap and hunt	1278	19.3
Trap and run	35	0.5
Hunt and run	318	4.8
Trap, hunt and run	234	3.5
Total Participation		
Total trappers	2892	43.7
Total hunters	3131	47.3
Total runners	641	9.7

Table 2. Harvest, participation, and activity levels for trappers in Kansas during the 2008-09 harvest season.

Species	Number of Trappers Who Pursued (n)	Estimated Harvest	Total Days Traps Set	Ave Traps/Day	Captures/100 Trap Days	Maximum Harvest	Ave Harvest/ Trapper
Badger	151	1,318	2,046	10.1	8.7	30	2.0
Beaver	201	6,855	2,970	6.6	9.3	82	7.7
Bobcat	314	4,776	7,478	11.4	2.6	33	3.4
Coyote	321	12,891	6,876	11.6	4.1	140	9.1
Red Fox	72	619	1,504	8.6	3.9	10	1.9
Gray Fox	10	40	234	5.4	2.0	2	0.9
Swift Fox	3	27	1	4.0	25.0	2	1.3
Mink	26	177	430	15.1	2.6	13	1.5
Muskrat	121	5,767	1,434	9.9	12.1	138	10.8
Opossum	476	41,748	7,321	14.2	7.5	745	19.8
Raccoon	577	63,577	11,741	15.2	7.7	412	24.9
Skunk	336	15,178	5,657	13.9	5.6	177	10.2
Weasel	1	0	14	5.5	0.0	0	0

Table 3. Harvest, participation, and activity levels for hunters in Kansas during the 2008-09 harvest season.

Species	Number of Hunters Who Pursued (n)	Estimated Harvest	Harvest/100 Days	Maximum Harvest	Ave Harvest/ Hunter
Badger	47	301	46.4	5	1.5
Bobcat	255	1,168	10.4	17	1.0
Coyote	515	14,209	41.7	78	6.2
Red Fox	27	88	16.1	4	0.7
Gray Fox	6	44	40.0	5	1.7
Swift Fox	3	9	33.3	1	0.7
Opossum	106	4,365	104.2	130	9.3
Raccoon	283	21,484	105.5	110	17.2
Skunk	71	1,570	104.9	46	5.0

Table 4. Treeing success, participation, and activity levels for furharvesters in Kansas during the 2008-09 running season.

Species	Number of Runners Who Pursued (n)	Estimated Take*	Take/100 Days*	Maximum Take*	Ave Take/ Runner*
Bobcat	26	318	200.0	10	2.8
Red Fox	7	97	306.7	6	3.1
Gray Fox	1	18	400.0	4	4.0
Opossum	52	4,104	183.2	200	17.9
Raccoon	136	23,735	174.2	300	39.5

*Take refers to the number of animals “seen or treed” while running.

Table 1. Historical harvest of furbearers in Kansas based on furbearer harvest survey.

Seasons	Badger	Beaver	Bobcat Tagging *	Bobcat	Coyote	Gray Fox	Red Fox	Swift Fox Tagging *	Swift Fox	Mink	Muskrat	Opossum	Raccoon	Striped Skunk	Weasel
1969-70	311	8583		373	9758	81	193			2189	43773	10452	63004	2466	28
1970-72															
1972-73	305	5178		458	13385	102	508			1508	27828	11421	46101	3174	
1973-75															
1975-76	1202	6484		1454	30150	539	638			1875	51083	45994	102760	8703	
1976-77															
1977-78	4054	5826		1705	35138	141	703			1764	38167	45625	74731	9824	
1978-79	4530	5315	825	1705	50195	193	533			2192	36639	51156	101450	15184	
1979-80	5882	19140	1050	1955	51380	245	888			3378	75962	56937	133311	23297	
1980-81	2501	14939	1027	1966	35238	274	645			3304	59063	49741	94754	16495	
1981-82	2673	5440	882	1730	32310	171	672			2342	30703	59916	93823	15917	
1982-83	3708	7653	1014	1686	36526	247	795		1000	3583	49528	58138	87425	11453	
1983-84	1754	8908	1334	2471	31466	93	1193		740	1600	21791	19347	67042	4985	
1984-85	1774	11814	1869	3212	33066	122	876		426	1937	24863	31142	108694	6806	
1985-86	1348	15543	1916	2837	34418	117	487		314	1507	15241	30955	96708	6909	
1986-87	3009	14732	2720	4522	40999	107	961		1161	2571	25561	59190	119488	10460	21
1987-88	2402	12474	3192	4805	41460	123	1113		650	2619	33814	54714	118878	8847	23
1988-89	1417	13989	2878	4492	25387	235	672		442	1545	22822	24117	72028	4233	5
1989-90	476	9607	1560	2482	15314	30	462		264	630	7114	9775	38274	2043	4
1990-91	442	5214	1409	1694	11968	34	242		76	423	4083	5493	27137	1258	0
1991-92	571	5429	2043	2453	15941	77	509		93	713	3043	12427	43977	3576	0
1992-93	687	3044	1618	2307	16076	59	328		64	252	2115	8101	33710	3125	2
1993-94	649	5288	2413	2900	16595	55	731		73	368	2571	12727	48203	2610	146
1994-95	781	12123	3590	5352	17022	204	1003	48	34	746	6215	19692	64951	4131	9
1995-96	522	8089	3020	3932	14009	99	753	33	45	291	3598	16120	58600	2877	2
1996-97	874	10653	4296	7041	19794	179	1232	33	144	473	5451	29980	93190	8065	40
1997-98	876	13337	3347	6233	14398	71	823	17	25	718	9679	49437	108727	9323	101
1998-99	958	8606	2385	3938	12125	152	490	7	15	419	7445	26512	71709	6375	107
1999-00	451	8845	2121	3578	11920	191	455	5	0	257	7252	13051	51307	3887	11
2000-01	1094	9388	2731	4018	15054	97	559	6	24	164	3964	14294	56143	5460	0
2001-02	434	9617	3597	5286	15329	35	584	32	0	180	3348	17080	72918	5559	0
2002-03	910	7716	5054	6521	18577	62	578	86	203	246	4596	32595	79538	10255	0
2003-04	1760	7250	5963	9654	25407	64	625	178	470	303	2823	42125	94506	10952	40
2004-05	1469	7737	5353	7062	23322	140	783	86	129	230	4845	43356	84132	10910	0
2005-06	1312	7186	6021	7458	21861	89	459	58	135	206	5733	38909	66458	12730	3
2006-07	1882	11028	7234	9998	32494	179	774	70	309	439	8150	46965	87241	15583	0
2007-08	2020	6658	5668	9381	29305	84	976	65	136	209	5120	51138	93687	17669	4
2008-09	1619	6855	4080	5944	27100	84	707	98	27	177	5767	46113	85061	16748	0
5 yr trend	-4.1%	-14.0%	-32.5%	-31.8%	2.3%	-24.5%	-2.3%	7.2%	-88.5%	-36.2%	8.1%	3.6%	-0.2%	23.4%	-100%

Special Section

The "Special Section" of the Furbearer Harvest Survey changes annually and is used to collect information and opinions from furharvesters on a diversity of topics that relate to furharvesting or furbearers. Past surveys have addressed subjects such as wildlife diseases, trap ownership and use, and regulatory preferences. Last year, furharvester "churn" was addressed, which refers to how consistently furharvesters purchase licenses from one year to the next. The 2008-09 Special Section addressed the use of snares and body-gripping (conibear) traps on public lands in Kansas (Appendix 2). Since the second mailing of the survey consisted of an abbreviated post card survey, this portion of the survey was only available online. A total of 804 respondents participated in this portion of the survey.

Respondents were provided with a list of potential ways in which 220 body gripping traps and snares could be regulated in dryland sets on public wildlife areas, and asked to identify that which they most preferred. For both the 220 body gripper (Figure 4) and snare (Figure 5), the most popular response was "they should be allowed as they currently are" (no change), followed by no opinion. Thirty-five and 36% percent of the respondents, respectively, indicated they would like to see some form of more restrictive use or elimination of these traps in dryland sets on public hunting areas.

Respondents were also asked how strongly they agreed or disagreed with the statement that: "KDWP should enact additional trapping regulations on public hunting areas to reduce the likelihood that dogs will be captured in" body gripping traps or snares (Figure 6). The most notable thing about this figure is that, while over ¼ indicated they didn't have an opinion, most of those who did have an opinion had a strong opinion. This figure indicates that this is a contentious issue, even amongst furharvesters.

Respondents were asked in which of a series of activities they had participated within the past three years (Figure 7). Fifty-seven percent of respondents indicated they trapped on private lands, and 59% of respondents indicated they participated in at least one of the four trapping activities listed. Despite the initial appearance that trappers might be overrepresented in this portion of the survey, 43% of the respondents to this question trapped during this season, which is almost identical the estimated percent of all furharvesters who trap (44%) based on all survey responses. Also, of the 16% who indicated they hunted with hounds, 12% were active during this most recent season, which is similar to the percent of furharvesters who were active during the running season (10%). This indicates houndsmen are likely proportionally represented as well. From this data, we can estimate that over a 3 year period, approximately 1090 furharvesters will hunt with hounds on public land and 1100 furharvesters will trap on public land, including 570 who will trap with 220 body grippers and 530 who will use snares on public lands.

A comparison between activities in which furharvesters participate and support for regulatory change was made in tables 2 (body gripping traps) and 3 (snares). Support for regulatory change differed between trappers and non-trappers for both body-gripping traps ($p<.001$) and snares ($p<.001$). In both cases, the effect size was between minimal and typical. Perhaps surprisingly, there was no difference in support for regulatory change between houndsmen and

non-houndsmen for either trap type, though responses were very nearly significant with snares (p=.051). Support for regulatory change also did not differ with either trap type for those who did and did not hunt with dogs on wildlife areas for species other than furbearers.

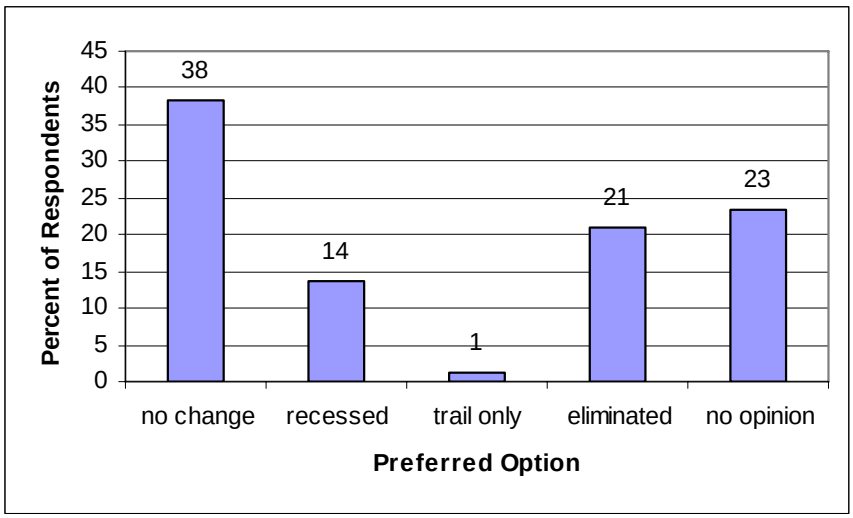

Figure 4. Respondent opinions on which option should be allowed when using 220 body gripping traps in dryland sets on public hunting areas.

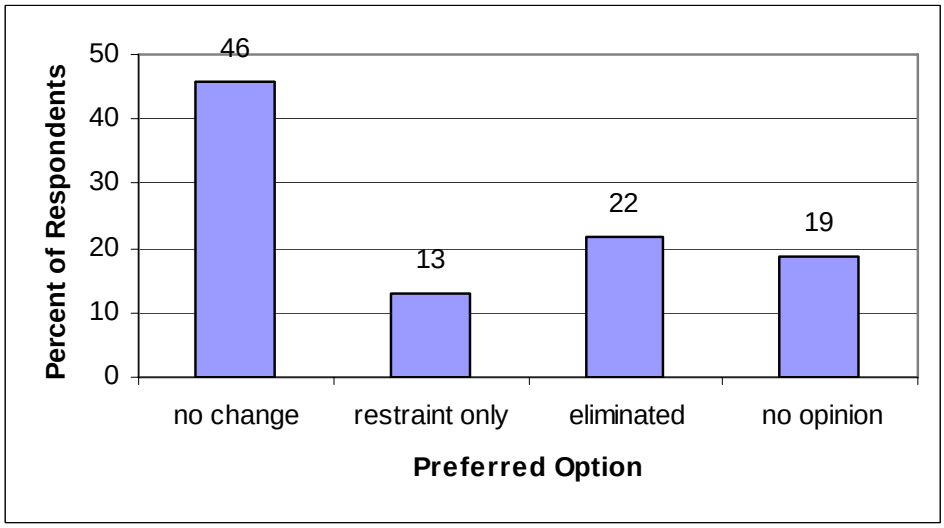

Figure 5. Respondent opinions on which option should be allowed when using snares in dryland sets on public hunting areas.

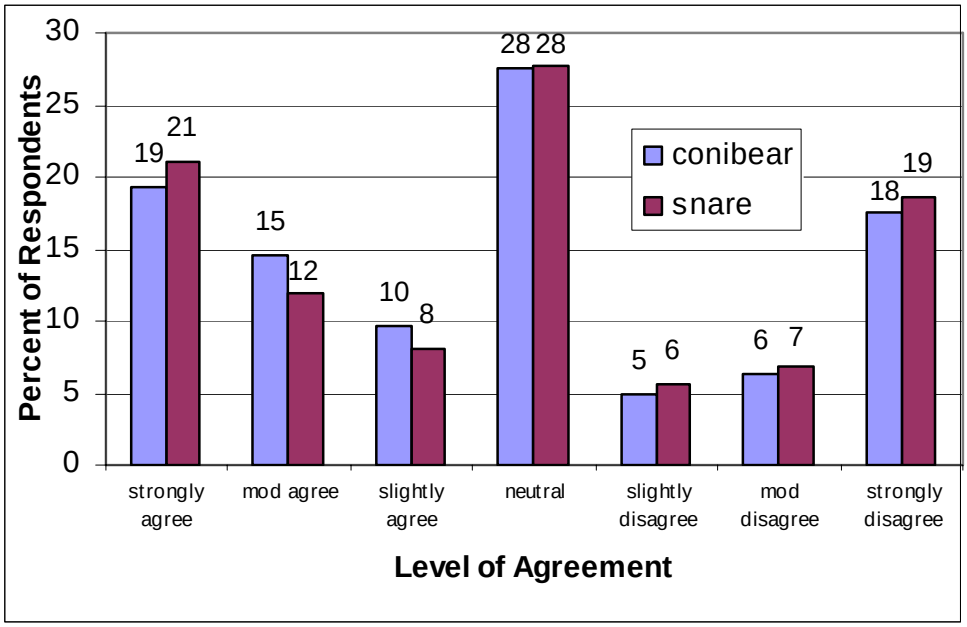

Figure 6. Level of agreement by respondents with the statement the "KDWP should enact additional trapping regulations on public hunting areas to reduce the likelihood that dogs will be captured in:" a conibear or snare.

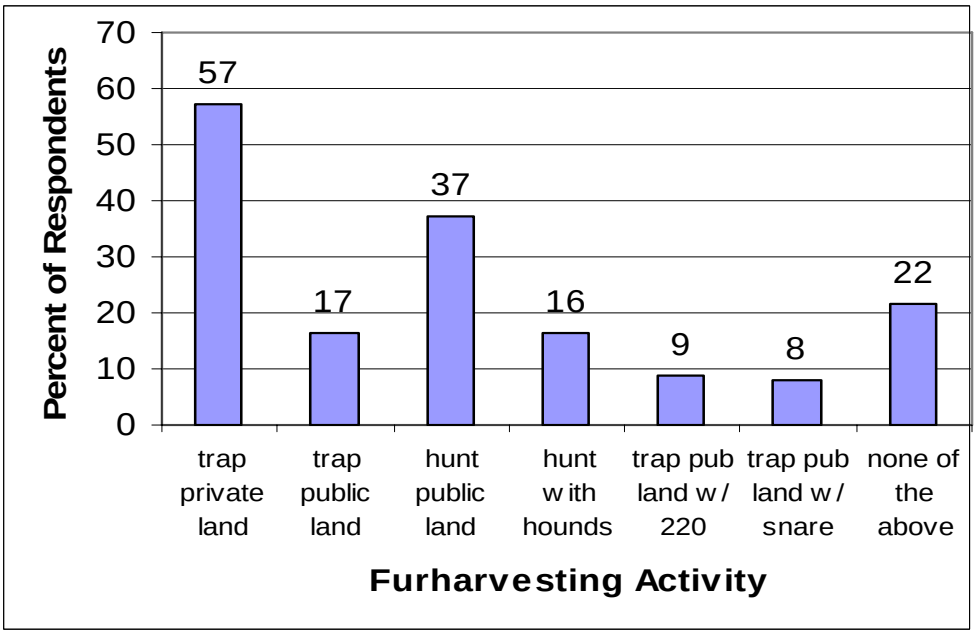

Figure 7. Participation in various activities by survey respondents.

Table 2. Agreement with statement that KDWP should enact more restrictive trapping regulations for **body gripping traps** on public hunting areas by trapping participation, hound hunting participation, and participation in hunting with dogs for non-furbearers on wildlife areas.

		Level of Agreement			Effect Size (Cramer's V)	p-value
		Agree[1]	Neutral	Disagree[2]		
Trapping Participation[3]					0.184	p>.001
	Trapper	39% (180)	26% (120)	36% (167)		
	Non-trapper	50% (165)	31% (101)	19% (62)		
Hound Hunting Participation					0.080	0.081
	Hound hunter	52% (68)	23% (32)	25% (30)		
	Non-hound hunter	42% (277)	29% (191)	30% (197)		
Dog Hunting Participation[4]					0.085	0.058
	Dog hunter	48% 142	23% 69	29% 85		
	Non-dog hunter	41% 203	30% 152	29% 144		

[1]Includes strongly agree, moderately agree, and slightly agree

[2]Includes strongly disagree, moderately disagree, and slightly disagree

[3]For these analyses, any respondent who indicated they trapped on private land, trapped on public land, trapped with 220 body grippers on public land, or snared on public land was considered a trapper.

[4]Refers to hunting with dogs for game birds, rabbits, or squirrels on public hunting areas.

Table 3. Agreement with statement that KDWP should enact more restrictive trapping regulations for **snares** on public hunting areas by trapping participation, hound hunting participation, and participation in hunting with dogs for non-furbearers on wildlife areas

		Level of Agreement				
		Agree[1]	Neutral	Disagree[2]	Effect Size (Cramer's V)	p-value
Trapping Participation[3]					0.213	p>.001
	Trapper	36%	24%	39%		
		(170)	(114)	(183)		
	Non-trapper	48%	33%	19%		
		(157)	(108)	(63)		
Hound Hunting Participation					0.087	0.051
	Hound hunter	50%	21%	29%		
		(65)	(27)	(38)		
	Non-hound hunter	39%	29%	31%		
		(262)	(195)	(208)		
Dog Hunting Participation[4]					0.050	0.367
	Dog hunter	43%	25%	32%		
		127	74	95		
	Non-dog hunter	40%	30%	30%		
		200	148	151		

[1]Includes strongly agree, moderately agree, and slightly agree

[2]Includes strongly disagree, moderately disagree, and slightly disagree

[3]For these analyses, any respondent who indicated they trapped on private land, trapped on public land, trapped with 220 body grippers on public land, or snared on public land was considered a trapper.

[4]Refers to hunting with dogs for game birds, rabbits, or squirrels on public hunting areas.

Appendix 1.

2008-09 Follow-up Post Card
(excluding outgoing and return address portions)

Attention Kansas Furharvesters!

There is still time for you to participate in the 2008-09 Furbearer Harvest Survey. Your participation is important to KDWP because the results are used to guide furbearer management decisions in Kansas.

To participate in this survey, go to *http://surveykansas.org* and log on using the number printed above your name. In addition to harvest information, the online survey includes a special opinion section on the use of conibears and snares on public lands.

If you do not have internet access, please complete the back side of this card and return it to us.

Please respond to this survey even if you did not pursue furbearers in 2008-09. If you have already responded to this survey online, it is not necessary for you to complete it again.

Thank you for participating in this important survey.

Kansas Department of Wildlife & Parks
Research & Survey Department

If you do not have internet access, please answer the following questions, fold the postage-paid card to show our address, and drop in any mailbox.

Check here if you did not trap, hunt, or run furbearers last season: ☐

How many of each did you harvest in Kansas by TRAPPING in 2008-09?

_____ beaver	_____ coyote	_____ swift fox	_____ opossum
_____ badger	_____ gray fox	_____ mink	_____ raccoon
_____ bobcat	_____ red fox	_____ muskrat	_____ striped skunk

How many of each did you harvest in Kansas by HUNTING in 2008-09?

_____ badger	_____ gray fox	_____ opossum
_____ bobcat	_____ red fox	_____ raccoon
_____ coyote	_____ swift fox	_____ striped skunk

How many of each did you "tree" during RUNNING season in 2008?

____bobcat ____gray fox ____red fox ____opossum ____raccoon

Thank you for your participation,
Kansas Department of Wildlife and Parks

Appendix 2.

2008-09 Special Section of the Furbearer Harvest Survey

2008-09 FURBEARER HARVEST SURVEY
Special Section

10. How do you feel about 220 body gripper (conibear) traps being used in dryland sets on public hunting areas? (check one circle)

O They should be allowed as they currently are.

O They should have to be recessed at least 8 inches within an enclosure – in order to reduce the likelihood of a dog being captured.

O They should be allowed only in non-baited, trail sets.

O They should not be allowed in dryland sets on public hunting areas.

O No opinion or not sure.

O Other option (specify): _____

11. How do you feel about snares being used in dryland sets on public hunting areas? (check one circle)

O They should be allowed as they currently are.

O Only restraining snares should be allowed (larger diameter cable with relaxing locks) – in order to reduce the likelihood of a dog being killed.

O They should not be allowed in dryland sets on public hunting areas.

O No opinion or not sure.

O Other option (specify): _____

12. How strongly do you agree or disagree with the following statement:

KDWP should enact additional trapping regulations on public hunting areas to reduce the likelihood that dogs will be captured in:	Strongly Agree	Moderately Agree	Slightly Agree	Neutral	Slightly Disagree	Moderately Disagree	Strongly Disagree
a) body gripping (conibear) traps.	1	2	3	4	5	6	7
b) snares.	1	2	3	4	5	6	7

13. Within the past 3 years, in which of the following have you participated? (circle yes or no for each choice)

Yes No Trap furbearers on private land.

Yes No Trap furbearers on public hunting areas.

Yes No Hunt furbearers with hounds.

Yes No Hunt with dogs for game birds, rabbits or squirrels on public hunting areas.

Yes No Trap with 220 body gripper (conibear) traps on public hunting areas.

Yes No Trap with snares on public hunting areas.