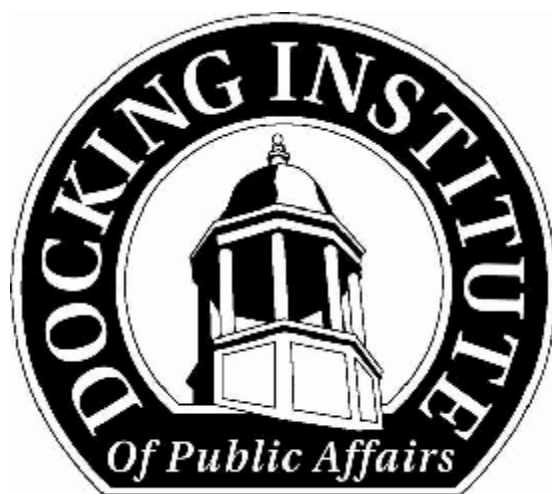


**Kansas Department of Wildlife and Parks
Survey of Landowners on Opinions
About Deer Populations in Kansas**

Report Prepared by

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**Kansas Department of Wildlife and Parks
Survey of Landowners on Opinions
About Deer Populations in Kansas**

Conducted January 29 to April 12, 2001

Executive Summary

All univariate results reported in this Executive Summary can be found in detail in the Appendix, which contains all questionnaire items and the relative frequency (percentage) distributions on discrete items and the means and medians for all continuous items. Results by Deer Management Unit (DMU) outlined in this Executive Summary are detailed in the body of the report with tables and discussion. Trend results reported in the Executive Summary are also detailed in the body of the report with charts and discussion.

The primary objectives of this survey for the Kansas Department of Wildlife and Parks (KDWP) were to:

- ! Categorize landowners' perceptions of changes in deer populations
- ! Assess landowners' attitudes toward deer populations
- ! Obtain estimates of deer populations and the hunter harvest of deer on lands owned or operated by the survey recipient
- ! Assess perceived destructiveness of deer, and types and levels of damage incurred
- ! Assess landowners' knowledge and use of damage control and abatement techniques
- ! Determine landowners' support of deer hunting and deer population management
- ! Determine landowner farming/ranching operation characteristics
- ! Analyze trends on selected issues

From analyses of survey results, we find that:

- ! Most (56%) landowners perceive an increase in the deer population in their area over the previous three years (1998 – 2000). However, when asked to compare this year’s population at this time of the year to the deer population at the same time of the year one year ago, only 38% indicated an increase, while 42% believe that the population about the same. Comparing the results among those who reported damage from deer in 2000 to those not reporting damage from deer in 2000, one very notable pattern is the propensity of those who experienced damage to report an increase at a much higher rate than those who did not experience damage. Not surprisingly, the reverse pattern is found for “decrease,” with those who did not experience damage consistently reporting higher rates of decrease than those who experienced damage. This pattern exists without exception in every DMU.

- ! When asked how many deer they would like to have on their farm or ranch, 11% would like to have more, while 33% would like to have the same number they now have. About 38% (the single largest percentage) would like to have fewer, and 14% would like to have no deer on their land. About 5% are uncertain. As a general tendency, statewide results and results within DMUs show that both those who experienced deer damage in 2000 and those who did not tend not to want more deer on their farm or ranch. At a statewide level and among those who received damage, the largest single percentage (52%) indicate that they want fewer deer. At a statewide level and among those who experienced no damage, the single largest percentage (48%) report that they want the same number of deer. There is a consistent tendency across all DMUs for those who experienced damage to desire less deer than those who did not experience damage.

- ! Landowners report a mean number of deer on their property in 2000 of 18, and a mean maximum number at any one time in 2000 of 24. Observing differences across deer management units (DMU) in the state, the mean density of deer generally found on landowners’ operations and the maximum number seen at one point in time in 2000 is highest in DMUs 10, 11 and 12. Results from hunters indicate that DMUs 10, 11, 12, and 14 have the highest mean densities of antlerless deer harvested, while the lowest densities are found in DMUs 1, 2 and 18.

- ! The mean number of antlered buck taken by hunters on land owned by respondents is 1.9, while the mean number of antlerless deer taken is 2.3.

- ! About 46% of respondents report that they or other people using their property watch or photograph deer (12% did not answer), 16% plant food plots or leave crops to attract deer (13% did not answer), 11% improve habitat primarily for deer (14% did not answer), 28% hunt for shed antlers (12% did not answer), and about 6% use nonlethal means to reduce conflict with deer (20% did not answer).

- ! Of twelve recreational activities listed, the largest percentage (64%) of respondents and/or their family members participate in watching wildlife, followed by fishing (60%). Ranking third is hunting upland game (48%), and ranking fourth is hunting deer/big game at 45% [no more than 3.7% failed to answer any one of the above questions].
- ! Seventy-two percent report that deer hunting does occur on their property. Eighty-one percent of those who indicate that hunting does occur report that immediate family members hunt on their land, and about 65% report that other relatives hunt on their property. About 76% report that invited friends hunt, and about 54% report that other landowners hunt. About 53% indicate that “most who ask permission” are allowed to hunt on their property [no more than 5.8% failed to answer any one of the above questions].
- ! The vast majority (96%) of those who indicate that hunting does occur on their property report that they do not receive any money from allowing deer hunting (0.5% did not answer). However, about 25% indicate that the favor [of allowing hunting] was returned in some way (6.3% did not answer), and the most frequently mentioned ways were reciprocation of hunting permission, receiving meat from the harvest, and help with work.
- ! The vast majority (91%) did not serve as a hunting guide on their property in 2000 (1% did not answer). About 12% did provide food and/or lodging to those who hunted on their land in 2000. There is a level of disruption from hunters as about half (49.2%) indicate that they have experienced some damage to their property from hunters (5.7% did not answer).
- ! Among those who allow hunting on their property, 62% indicate that they restrict the activities of deer hunters. The most common restrictions include where hunting is allowed (85%), how many hunters are allowed at once (72%), when hunting occurs (65%) and the use of vehicles (65%) [no more than 4.2% failed to answer any one of the above questions].
- ! From a list, respondents were asked to report the various types of hunting equipment used by themselves and/or others in their family when deer hunting. About 71% use a rifle. About 30% use a compound bow, About 16% use a muzzleloader, and about 9% use a shotgun. About 7% use a pistol and 6% use a long or recurve bow [no more than 4.9% failed to answer any one of the above questions].
- ! About 40% report that deer hunting is a family tradition (1.5% did not answer).
- ! About 63% of the respondents indicate that hunting does take place on their land during a second season for antlerless deer implemented by KDWP in 1998.
- ! About 62% of those who indicate that a second, antlerless season of hunting does occur on

their land report that immediate family members hunt on their land, and about 45% report that other relatives hunt on their property. About 64% report that invited friends hunt, and about 39% report that other landowners hunt. About 41% indicate that “most who ask permission” are allowed to hunt on their property [Fewer than 7% failed to answer any one of the above questions].

- ! Forty percent indicate that the second season made no difference in controlling the deer on their land, but about 31% feel that it is somewhat beneficial. About 8% feel it is very beneficial, and about 21% do not know how beneficial it is.
- ! Relative to disruption from hunters during the regular season, less perceived disruption is experienced during the second, antlerless season as only 17% indicate that their operation has been disrupted in some way.
- ! Sixty percent report that deer caused damage to their land in 2000. About 37% describe this damage as light, and 39% describe it as moderate. About 17% classify this damage as substantial, and 6% call it severe. Only 1% are uncertain of how they would classify the damage.
- ! In terms of certain deer related issues, 43% classify deer-vehicle accidents as large problems, followed by fence damage by deer at 30%. Nearly the same percentage (about 22%) indicate that deer attracting hunters and crop/property damage are large problems.
- ! Only one fourth (24%) of respondents took some action to limit deer damage to their property in 2000. Of those who took such measures, 81% increased hunting pressure, and 28% used nonlethal means. About 51% rate their actions as ineffective, while 39% rate them as moderately effective. Only about 4% rate their actions as highly effective.
- ! About 16% reported the deer damage to KDWP, and after meeting with KDWP, most (56%) have used a damage control permit to mitigate the damage [5% failed to answer the question]. About 16% have called the 1-800 hot line.
- ! A list of factors with potential to increase favorable attitudes toward deer was presented to landowners who were asked to indicate whether each factor would increase their appreciation of deer on their property. The most important factors are: reduced damage (60%), lower numbers of deer (51%), better behavior among hunters (51%), being appreciated by hunters (46%), easier access to permits (45%), and longer seasons (43%).
- ! From a list of deer management actions, the most important action according to respondents is providing simple deer regulations with 44% describing this as extremely important. About 32% describe providing liberal hunting opportunities as extremely important, followed closely by

collecting estimates on deer populations at 31%.

- ! Using a scale of “extremely satisfied, satisfied, neutral, dissatisfied or extremely dissatisfied”, a combined percentage of 32% were extremely satisfied (3%) or satisfied (29%) with the way the KDWP manages deer populations. About 28% were neutral, and a combined percentage of 28% were dissatisfied (18%) or extremely dissatisfied (10%). About 12% were uncertain about their satisfaction level.
- ! The mean number of acres in farm or ranch operations among the respondents is 908, and the median is 400. The mean percentage of total household income that is derived from the agricultural operation is 46%, and the median is 40%.
- ! About 73% live on their farm or ranch. The mean number of years landowners have owned or operated their farm or ranch is 26.7 years, and the median is 25 years. From a list of six possible reasons that the respondent decided to own or operate, the single most important reasons is for “family security and lifestyle freedoms.”
- ! With the exception of around 1975, the percentage indicating deer damage to their property has shown escalating increases from 1965 to 1996. The 2000 results are the same as 1996, indicating at least a leveling. Greater severity of deer damage is reported in 2000 relative to 1996.
- ! The 2000 data show levels of desire for deer similar to those levels observed in the early 1990s, which is a reversal of the declining desire generally in effect since the 1970s.
- ! Clearly in all survey years examined, those respondents who report no deer damage tend to express greater desire to have deer on their property.
- ! A notable trend is that relative to 1964, fewer respondents in both 1996 and 2000 report that they want more deer.

Methods

Between January 29 and April 12, 2001 the University Center for Survey Research conducted a survey of 3,528 randomly selected landowners in Kansas from a list of agricultural operators maintained by the Kansas Agricultural Statistics Service (KAS). Three waves of a self-administered mail survey were sent by the KAS on behalf of the Docking Institute's University Center for Survey Research to a sample of landowners from all counties in Kansas. The number of landowners sampled from each county was proportionate to the total number of landowners in the county according to KAS lists.

The self-administered mail survey included return postage to the Docking Institute paid by the Docking Institute. The first copy of the survey was mailed with a cover letter briefly explaining the survey. Signatures of both the Secretary of the Department of Wildlife and Parks and the Director of the Docking Institute's University Center for Survey Research appeared on the cover letters. The two follow-up waves followed this initial mailing to all those who had not yet responded to the previous wave(s) of mailing. Of 3,528 questionnaires mailed, 26 were undeliverable due to changes in address, the targeted respondent was deceased, or the respondent was no longer a landowner or operator. Thus the total number of eligible respondents was 3502. The University Center for Survey Research received 2087 completed questionnaires, resulting in a response rate of 60%. Non respondent bias was not assessed.

Survey Instrument

The Docking Institute and the Kansas Department of Wildlife and Parks agreed on the survey items used. It was the responsibility of KDWP to identify information areas and objectives of the survey. It was the responsibility of the Docking Institute to develop survey items that were technically correct and without bias. Question wording and the design of the survey instrument are the joint property of the Docking Institute and KDWP and are not to be used for additional surveys unless written permission is given by both owners. The Appendix contains the questionnaire and the relative frequency (percentages) of answers falling in each response category.

Trend Analyses

The KDWP has conducted this survey over a number of years, and was interested in comparing the results of selected items to past results. An item of high interest is trends in deer damage. Figure 1 shows that since 1965, with the exception of around 1975, the percentage indicating deer damage to their property has increased. The data for 1996 and 2000 are essentially the same with about 60% of the landowners claiming some damage from deer.

Figures 2 and 3 represent the rating of deer damage severity among those who indicated deer damage had occurred to property they own or operate for the 1996 and the 2000 survey years, respectively. The largest single percentage (47%) of respondents in 1996 rated deer damage as “light,” but the largest single percentage (39%) in 2000 rate deer damage as “moderate.” In addition, in 1996 13% rated deer damage as substantial, and this increased to 17% in 2000. Thus, there is a trend of escalating deer damage, albeit, a trend from only two data points in time.

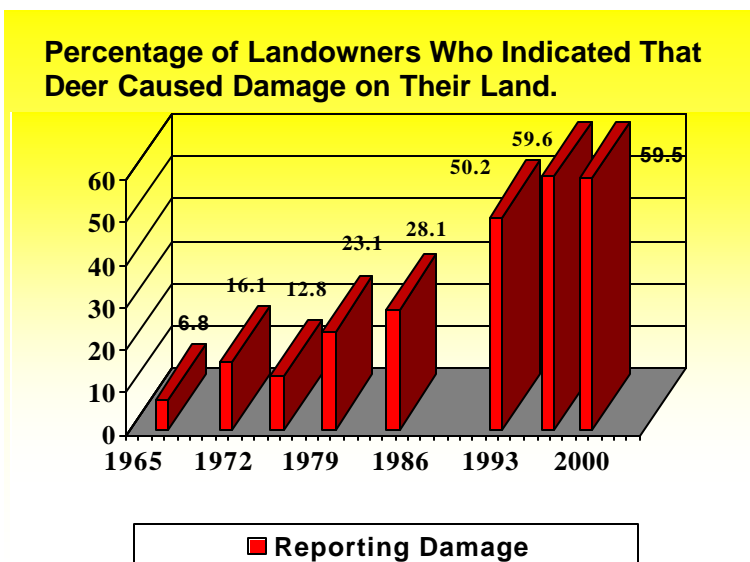


Figure 1.

Landowner’s Opinion on the Severity of Crop Damage Caused by Deer, 1996.

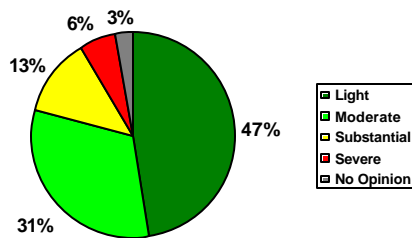


Figure 2

Landowner’s Opinion on the Severity of Crop Damage Caused by Deer, 2000.

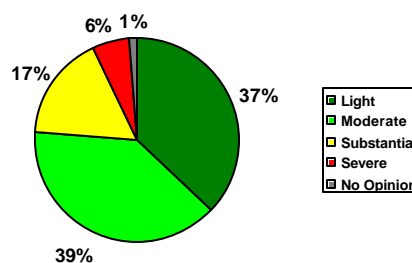


Figure 3

Turning to the change in the desired number of deer (see Figure 4), from the early 1970s through the 1996 survey year, the percentage who wanted fewer deer was on the increase, and the percentage who wanted more deer was on the decline. The 2000 data mark a curious reversal of this trend to levels of desire for deer similar to those observed in the early 1990s, which is still far lower in terms of desire than the early 1970s.

Figure 5 shows the desire for deer among those who experienced damage in the survey year and those who did not report damage for the 1964, 1996, and 2000 survey years. Within each survey year, the stacked bar on the *left* reports the feelings of those *with damage*, while the bar on the *right* reports the feelings of those *without damage*. Clearly in all survey years examined, those respondents who report no deer damage tend to express greater desire to have deer on their property. A notable trend is that relative to 1964, fewer respondents in both 1996 and 2000 report that they want more deer. Comparing respondents with no deer damage across the three study years, much larger percentages in 1996 and 2000 report that they want fewer deer relative to 1964.

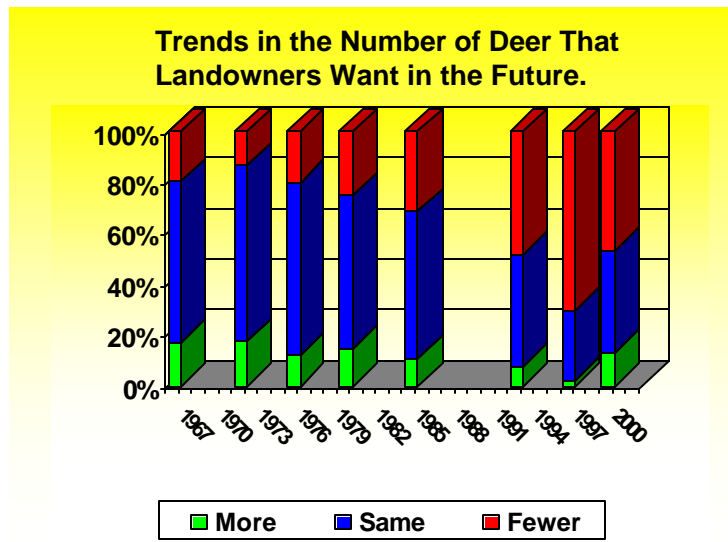


Figure 4

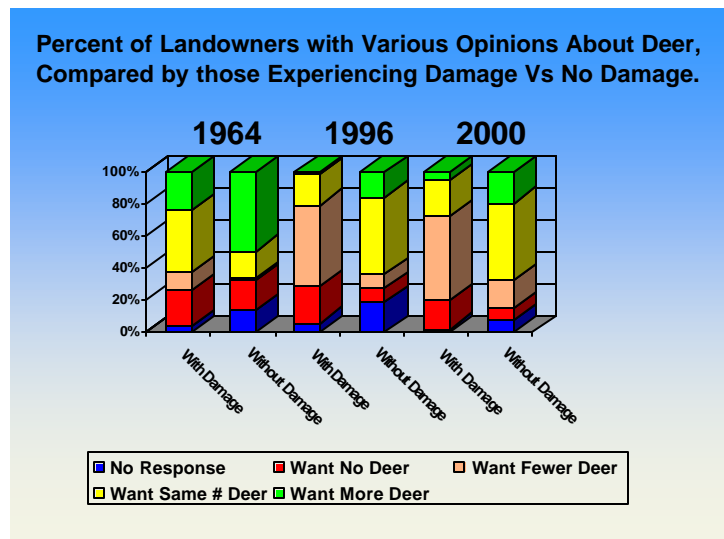


Figure 5

Results Within Deer Management Units on Selected Items

Figure 6 is a map of the 18 deer management units (DMU) of the KDWP. The percentage that each unit represents of the entire group of respondents is noted, and the total number of respondents within each unit appears in parentheses.

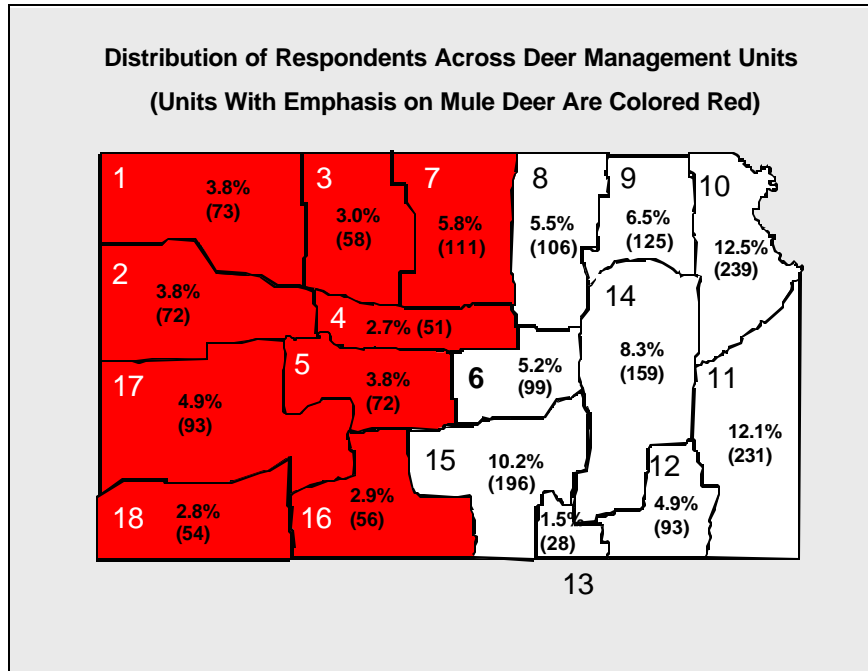


Figure 6

Respondents were asked to report the average number of deer generally on their property in 2000 (see question 5a in the Appendix). That information was combined with total land in their operation to derive deer densities within DMUs. The far right column of Table 1 shows the mean density of deer per 100 square miles of operation (farm or ranch) in 2000. The statewide mean density is 2,982 per 100 square miles of operation, and across the DMUs density ranges from a low of 462 to a high of 4,918. The highest densities are concentrated along the eastern tier of DMUs, with a mean density in DMU 10 of 4,918, a density in DMU 11 of 4,191, and a density in DMU 12 of 4,892. The lowest densities are found in DMUs 18, 17, 2 and 1.

To assess the extent to which estimates of deer vary by important individual experiences, deer densities were analyzed for those who reported deer damage to their operation in 2000 (see question 24 in the Appendix) and for those who hunt deer (see question 7b in the Appendix). Table 1 shows that on a statewide level, the mean density observed among those who received no damage (3,153) exceeds the mean density observed among those who reported deer damage (2,870). In addition, of the 18 deer management units, 10 follow the same pattern in which those with no deer damage report a higher mean density of deer per 100 square miles of operation.

Turning to mean density assessments among those who hunt deer and those who do not, there is essentially no difference in mean density reported among hunters (2,973) and non hunters (2,990). In addition, there is no pattern among the DMUs in terms of the mean density derived from hunter responses and non hunter responses, as eight of the 18 show higher mean estimates among hunters, while ten show higher mean estimates among non hunters.

Table 1. Deer Density Per 100 Square Miles on Farm and Ranch Operations in 2000:
Estimates by Damage Status and Hunting Status

	Damage		Hunt Deer		All	
	Yes	No	Yes	No		
Deer Management Unit #	Mean	Mean	Mean	Mean	Number	Mean
Not Specified	1964.8	2817.4	3057.7	1851.8	80	2273.9
1 High Plains	1179.4	1372.3	1187.4	1248.3	65	1223.9
2 Smoky Hills	658.5	695.8	642.9	680.2	62	669.9
3 Kirwin-Webster	1589.9	1711.1	2079.6	1340.9	55	1623.0
4 Kanopolis	583.7	1732.2	529.8	2009.3	47	1316.8
5 Pawnee	1306.9	2144.0	1353.0	1879.5	61	1663.7
6 Middle Arkansas	5995.9	1323.7	3530.5	3823.9	91	3736.8
7 Republican	3646.1	2217.9	3316.5	3129.3	95	3210.1
8 Solomon	3490.3	2982.9	3762.5	2711.0	93	3310.2
9 Tuttle Creek	3212.8	2979.8	3990.5	2060.7	112	3146.2
10 Kaw	4615.5	5241.6	4409.0	5276.8	213	4918.3
11 Osage Prairie	4116.1	4308.8	3671.2	4805.9	214	4190.8
12 Chautauqua Hills	4049.3	5734.6	4111.3	5984.8	84	4892.0
13 Lower Arkansas	2024.2	2800.8	2080.1	2293.7	25	2148.5
14 Flint Hills	3120.3	3091.2	2826.2	3356.2	143	3107.9
15 Ninescah	2329.7	2787.1	2571.9	2582.2	170	2577.2
16 Red Hills	1026.1	5245.5	1244.9	2925.5	51	2101.7
17 West Arkansas	776.8	446.6	1113.3	490.8	82	688.2
18 Cimarron	642.4	195.4	494.2	435.4	47	461.7
Statewide	2869.6	3152.6	2973.0	2989.5	1790	2982.0

Using respondents' reports of the maximum number of deer seen on their farm or ranch at any one time in 2000 (see question 5b in the Appendix) and the number of acres in their operation, mean maximum number of deer seen at any one time per 100 square miles was calculated. Like Table 1, Table 2 reports results broken down by those who received damage and those who did not as well as those who hunt and those who do not. The highest means tend to be found in the three DMUs that also reported the highest mean number of deer generally on one's property, DMUs 10, 11 and 12. At the statewide level, the mean maximum number of deer seen at any one time per 100 square miles is 3,554 among those who received damage in 2000 and 4,353 among those who did not receive damage in 2000. There is a slight tendency across the DMUs for the mean maximum densities to be higher among those who did not experience damage. However, in five of the 18 DMUs (DMUs 5, 6, 11, 17 and 18), the mean maximum densities are smaller among those who did not experience damage. The differences in mean estimates among those who received damage and those who did not are quite disparate in DMU 16, at 1,443 and 6,296, respectively.

Turning to the differences between the hunting and non hunting landowners, statewide mean maximum density results are very similar, at 3,929 among hunters and 3,823 among non hunters. No clear pattern emerges with regard to hunters estimating higher maximum densities versus non hunters, as eight of the 18 DMUs exhibit higher means among hunters than among non hunters. Again, DMU 16 stands out as having the largest mean difference, with a mean of 1,426 among the hunters and a mean of 3,885 among the non hunters.

Table 2. Density of Maximum Number of Deer at One Time Per 100 Square Miles on Farm and Ranch Operations in 2000: Estimates by Damage Status and Hunting Status

	Damage		Hunt Deer		All	
	Yes	No	Yes	No		
Deer Management Unit #	Mean	Mean	Mean	Mean	Number	Mean
Not Specified	2386.1	4439.6	2653.4	3387.4	80	3130.5
1 High Plains	1771.4	1810.7	1509.2	1961.3	65	1780.5
2 Smoky Hills	908.8	1159.7	1180.9	911.9	62	985.6
3 Kirwin-Webster	3494.7	4302.2	4537.2	3176.5	56	3711.0
4 Kanopolis	1068.6	2261.2	1141.3	2435.7	47	1829.8
5 Pawnee	2551.2	2207.1	1801.4	2823.4	61	2404.5
6 Middle Arkansas	4012.8	2176.4	3091.1	3111.0	89	3104.9
7 Republican	2827.4	3718.7	2874.1	3270.5	95	3099.5
8 Solomon	3806.9	5511.8	5226.0	3344.8	94	4405.5
9 Tuttle Creek	3525.6	4582.6	4424.8	3059.7	112	3827.6
10 Kaw	6472.2	6932.6	6553.9	6794.1	213	6694.9
11 Osage Prairie	5779.0	5758.8	5135.9	6523.0	214	5771.1
12 Chautauqua Hills	5169.8	6229.9	4824.1	6925.9	84	5699.9
13 Lower Arkansas	3327.7	2997.5	3560.3	2668.4	25	3274.9
14 Flint Hills	3744.6	4220.5	4451.0	3503.9	143	3947.6
15 Ninescah	3086.1	4073.4	3429.7	3798.2	170	3620.4
16 Red Hills	1442.6	6295.7	1425.6	3885.4	51	2679.6
17 West Arkansas	1204.6	535.8	1675.9	723.1	82	1025.2
18 Cimarron	799.9	196.9	638.9	489.2	47	556.1
Statewide	3554.0	4353.2	3929.0	3823.4	1790	3871.5

From the item that asks respondents to report the number of antlerless deer taken by hunters on their farm or ranch in 2000 (see question 5d in the Appendix) and the number of acres in their operation, the mean density of antlerless deer killed per 100 square miles was derived. Results from hunters indicate that DMUs 10, 11, 12, and 14 have the highest mean densities of antlerless deer harvested, while the lowest densities are found in DMUs 1, 2 and 18. Statewide mean densities are almost identical, comparing those who experienced deer damage (214) and those who did not (212). There is no consistent pattern in terms of those with damage estimating more or less antlerless deer harvested than those without damage among the DMUs.

Comparing statewide mean densities estimated by hunters and non hunters finds that hunters tend to estimate more (338) than non hunters (109). In addition, with the exception of DMU 13, hunters tend to estimate much higher densities of antlerless deer taken than non hunters.

Table 3. Density of Antlerless Deer Harvested Per 100 Square Miles on Farm and Ranch Operations in 2000: Estimates by Damage Status and Hunting Status

	Damage		Hunt Deer		All	
	Yes	No	Yes	No		
Deer Management Unit #	Mean	Mean	Mean	Mean	Number	Mean
Not Specified	217.0	48.4	403.8	22.4	80	155.9
1 High Plains	21.7	43.1	50.0	11.1	65	26.6
2 Smoky Hills	41.2	22.7	75.3	20.5	62	35.5
3 Kirwin-Webster	68.4	189.9	224.0	21.3	56	100.9
4 Kanopolis	181.6	3.3	144.9	0.0	47	67.8
5 Pawnee	105.2	48.4	131.9	45.6	61	81.0
6 Middle Arkansas	175.6	108.0	180.9	126.9	91	142.9
7 Republican	140.7	197.0	289.3	58.2	95	157.9
8 Solomon	200.7	327.5	367.4	88.4	93	244.4
9 Tuttle Creek	243.7	145.0	327.2	71.8	112	215.5
10 Kaw	237.6	295.8	498.5	105.5	213	266.0
11 Osage Prairie	475.4	160.4	456.3	231.2	214	353.2
12 Chautauqua Hills	516.6	669.8	687.4	461.2	84	593.2
13 Lower Arkansas	248.4	0.0	182.4	264.4	25	208.6
14 Flint Hills	301.2	385.9	388.0	292.8	143	337.4
15 Ninescah	89.0	230.0	297.5	42.1	170	165.3
16 Red Hills	143.0	65.6	160.0	89.9	52	123.6
17 West Arkansas	69.6	26.5	165.1	8.3	82	58.0
18 Cimarron	54.4	4.5	49.7	21.7	47	34.2
Statewide	213.5	212.0	337.7	109.2	1792	212.9

Turning to the perceived changes in deer populations, respondents were asked whether the deer population in their area had increased, remained the same, or decreased from the population levels three years ago (2000 versus 1998 populations – see question 1 in the Appendix) . Table 4 shows responses by DMUs among those who have experienced damage and those who have not. One very notable pattern is the propensity of those who experienced damage to report an increase at a much higher rate than those who did not experience damage. Not surprisingly, the reverse pattern is found for “decrease,” with those who did not experience damage consistently reporting higher rates of decrease than those who experienced damage. This pattern exists without exception in every DMU.

The percentage that report an increase, among those who experienced damage, is at least 80% in DMUs 5, 6, 7, 8 and 18, which is well above the statewide percentage reporting an increase among those who experienced damage (74%). The DMUs with less than 70% (well below the statewide level of 74%) of those who experienced damage reporting an increase include: 1, 4, 9, 10, 12 and 14.

Table 4 Perceived Three Year Change (1998 – 2000) in Area Deer Population by Damage Status

		Increase	Remain the Same	Decrease	Sample
Deer Management Unit #	Damage	%	%	%	Size
Not Specified	Yes	81.5	14.8	3.7	81
	No	47.5	32.5	20.0	40
1 High Plains	Yes	65.3	20.4	14.3	49
	No	28.6	35.7	35.7	14
2 Smoky Hills	Yes	72.5	25.5	2.0	51
	No	31.3	56.3	12.5	16
3 Kirwin-Webster	Yes	79.5	17.9	2.6	39
	No	23.1	46.2	30.8	13
4 Kanopolis	Yes	58.8	23.5	17.6	17
	No	17.2	44.8	37.9	29
5 Pawnee	Yes	83.8	8.1	8.1	37
	No	34.8	56.5	8.7	23
6 Middle Arkansas	Yes	81.6	18.4	0.0	49
	No	33.3	53.8	12.8	39
7 Republican	Yes	82.6	15.9	1.4	69
	No	60.6	27.3	12.1	33
8 Solomon	Yes	81.2	17.4	1.4	69
	No	53.1	28.1	18.8	32
9 Tuttle Creek	Yes	65.8	24.1	10.1	79
	No	25.0	43.8	31.3	32
10 Kaw	Yes	66.1	21.2	12.7	118
	No	48.0	41.2	10.8	102
11 Osage Prairie	Yes	75.4	17.4	7.2	138
	No	40.8	42.1	17.1	76
12 Chautauqua Hills	Yes	66.7	19.0	14.3	42
	No	26.8	46.3	26.8	41
13 Lower Arkansas	Yes	76.2	23.8	0.0	21
	No	20.0	80.0	0.0	5
14 Flint Hills	Yes	61.0	30.5	8.5	82
	No	36.7	51.7	11.7	60
15 Ninescah	Yes	78.6	17.9	3.6	84
	No	41.4	41.4	17.2	99
16 Red Hills	Yes	77.5	22.5	0.0	40
	No	41.7	41.7	16.7	12
17 West Arkansas	Yes	78.0	15.3	6.8	59
	No	36.4	36.4	27.3	22
18 Cimarron	Yes	82.8	13.8	3.4	29
	No	27.8	33.3	38.9	18
Statewide	Yes	74.2	19.4	6.4	1153
	No	39.0	42.5	18.6	706

Another question asked respondents to indicate how the deer herd in their area had changed compared to the same time one year ago (see question 2 in the Appendix). Table 5 reports result by those who have experienced damage in the past year and those who have not. As in Table 4, results in Table 5 show that those who received deer damage in 2000 consistently report that deer damage is higher this year at a rate much greater than those who did not experience damage. For example, at the statewide level 54% of those who experienced deer damage reported that the deer population is higher than it was at the same time last year, while only 23% of those who did not receive damage report that the population is higher. This pattern is found, without exception, across all DMUs.

Table 5. Perceived One Year Change in Area Deer Population by Damage Status

Deer Management Unit #	Damage	Higher %	Remain Same %	Lower %	Sample Size
Not Specified	Yes	65.4	32.1	2.6	78
	No	30.0	45.0	25.0	40
1 High Plains	Yes	55.3	34.0	10.6	47
	No	13.3	53.3	33.3	15
2 Smoky Hills	Yes	51.0	42.9	6.1	49
	No	25.0	62.5	12.5	16
3 Kirwin-Webster	Yes	58.5	39.0	2.4	41
	No	15.4	53.8	30.8	13
4 Kanopolis	Yes	47.1	35.3	17.6	17
	No	14.3	39.3	46.4	28
5 Pawnee	Yes	71.1	15.8	13.2	38
	No	28.0	64.0	8.0	25
6 Middle Arkansas	Yes	55.1	44.9	0.0	49
	No	21.6	64.9	13.5	37
7 Republican	Yes	61.4	34.3	4.3	70
	No	29.0	51.6	19.4	31
8 Solomon	Yes	55.1	43.5	1.4	69
	No	20.0	63.3	16.7	30
9 Tuttle Creek	Yes	32.1	51.9	16.0	81
	No	12.9	54.8	32.3	31
10 Kaw	Yes	47.0	43.5	9.6	115
	No	22.8	62.4	14.9	101
11 Osage Prairie	Yes	56.6	36.8	6.6	136
	No	23.7	57.9	18.4	76
12 Chautauqua Hills	Yes	51.2	37.2	11.6	43
	No	20.5	51.3	28.2	39
13 Lower Arkansas	Yes	59.1	40.9	0.0	22
	No	0.0	100.0	0.0	5
14 Flint Hills	Yes	40.5	51.2	8.3	84
	No	24.6	60.7	14.8	61
15 Ninescah	Yes	51.9	44.4	3.7	81
	No	27.5	48.4	24.2	91
16 Red Hills	Yes	56.4	43.6	0.0	39
	No	23.1	76.9	0.0	13
17 West Arkansas	Yes	57.6	37.3	5.1	59
	No	18.2	63.6	18.2	22
18 Cimarron	Yes	74.1	25.9	0.0	27
	No	22.2	38.9	38.9	18
Statewide	Yes	53.5	40.0	6.5	1145
	No	22.8	56.4	20.8	692

Table 6 shows results from an attitudinal question measuring respondents' desires to have deer on their farm or ranch (see question 3 in the Appendix). Again, results are reported for two groups of respondents, those who experienced deer damage in 2000 and those who did not. As a general tendency, statewide results and results within DMUs show that both groups tend not to want more deer on their farm or ranch. At a statewide level and among those who received damage, the largest single percentage (52%) indicate that they want fewer deer. At a statewide level and among those who experienced no damage, the single largest percentage (48%) report that they want the same number of deer. There is a consistent tendency across all DMUs for those who experienced damage to desire less deer than those who did not experience damage. It is interesting to note that the DMUs that have the highest densities of deer (DMUs 10, 11, and 12 – see Table 1) have some of the highest percentages indicating a desire for more deer among all DMUs. It is important to note, however, that DMU 12 is somewhat polarized, as it also has one of the highest percentages of respondents indicating that they want no deer at all (20% among those who experienced damage). The other two DMUs with relatively high percentages indicating a desire for more deer are DMU 17 and 18. The two DMUs that experience the strongest opposition to more deer are DMU 5 and 6, with relatively high percentages desiring no deer at all and relatively low percentages desiring more deer.

Table 6. Desire for Deer on the Farm or Ranch by Damage Status

Deer Management Unit #	Deer Damage in 2000	More (%)	Same (%)	Fewer (%)	Want No Deer (%)	Don't Know (%)	Sample Size
1 High Plains	Yes	0.0	28.8	46.2	23.1	1.9	52
	No	22.2	50.0	22.2	0.0	5.6	18
2 Smoky Hills	Yes	1.9	17.3	61.5	17.3	1.9	52
	No	10.5	57.9	26.3	0.0	5.3	19
3 Kirwin-Webster	Yes	4.7	27.9	55.8	9.3	2.3	43
	No	40.0	33.3	13.3	6.7	6.7	15
4 Kanopolis	Yes	11.1	22.2	55.6	11.1	0.0	18
	No	24.2	36.4	24.2	6.1	9.1	33
5 Pawnee	Yes	2.6	12.8	53.8	25.6	5.1	39
	No	17.2	44.8	20.7	6.9	10.3	29
6 Middle Arkansas	Yes	0.0	18.0	58.0	24.0	0.0	50
	No	10.9	58.7	15.2	4.3	10.9	46
7 Republican	Yes	2.8	19.7	59.2	16.9	1.4	71
	No	16.7	38.9	30.6	2.8	11.1	36
8 Solomon	Yes	4.2	18.3	60.6	16.9	0.0	71
	No	17.6	52.9	20.6	2.9	5.9	34
9 Tuttle Creek	Yes	5.9	21.2	54.1	15.3	3.5	85
	No	5.4	67.6	10.8	10.8	5.4	37
10 Kaw	Yes	7.5	21.7	49.2	19.2	2.5	120
	No	18.1	44.8	20.7	7.8	8.6	116
11 Osage Prairie	Yes	5.7	29.1	50.4	14.2	0.7	141
	No	20.7	54.0	12.6	6.9	5.7	87
12 Chautauqua Hills	Yes	6.7	20.0	51.1	20.0	2.2	45
	No	26.1	56.5	8.7	6.5	2.2	46
13 Lower Arkansas	Yes	9.1	50.0	36.4	4.5	0.0	22
	No	20.0	60.0	20.0	0.0	0.0	5
14 Flint Hills	Yes	3.4	23.6	58.4	10.1	4.5	89
	No	25.0	45.6	20.6	5.9	2.9	68
15 Ninescah	Yes	4.7	30.2	46.5	16.3	2.3	86
	No	22.4	43.9	17.8	9.3	6.5	107
16 Red Hills	Yes	2.4	31.7	48.8	17.1	0.0	41
	No	28.6	35.7	28.6	0.0	7.1	14
17 West Arkansas	Yes	8.2	16.4	54.1	19.7	1.6	61
	No	21.4	42.9	14.3	14.3	7.1	28
18 Cimarron	Yes	10.3	20.7	41.4	27.6	0.0	29
	No	26.1	47.8	0.0	4.3	21.7	23
Statewide	Yes	4.7	23.1	52.3	17.9	1.9	1201
	No	19.6	48.0	17.3	7.2	7.9	815

Respondents were asked about their general attitude toward deer on their property (see question 4 in the Appendix). Table 7 shows results for those experiencing deer damage and those who did not. A large discrepancy between those who experienced damage and those who did not is apparent for one of the response in particular, “enjoy deer around.” At the statewide level, only 12% of those who experienced damage in 2000 indicate that they enjoy deer around. In stark contrast, 58% of those who did not experience damage indicate that they enjoy deer around. This large difference exists within all DMUs, with the percentages saying that they “enjoy deer around” commonly above 50% among those who did not experience damage and always below 17% among those who did experience damage. Still, even those with damage tend to express an interest in having deer around. The response category with the single largest percentage of responses among those with damage at a statewide level and across all DMUs is the “I enjoy deer, but they cause problems at times” category.

Table 7. General Attitude Toward Presence of Deer in Area by Damage Status

		Enjoy Deer Around	Enjoy But Problematic	Deer Are Nuisance	Sample
Deer Management Unit #	Damage	%	%	%	Size
Not Specified	Yes	4.7	50.6	44.7	85
	No	52.0	32.0	16.0	50
1 High Plains	Yes	3.8	67.3	28.8	52
	No	61.1	16.7	22.2	18
2 Smoky Hills	Yes	7.8	47.1	45.1	51
	No	55.6	44.4	0.0	18
3 Kirwin-Webster	Yes	16.7	50.0	33.3	42
	No	66.7	13.3	20.0	15
4 Kanopolis	Yes	5.6	77.8	16.7	18
	No	54.8	38.7	6.5	31
5 Pawnee	Yes	10.3	59.0	30.8	39
	No	62.1	27.6	10.3	29
6 Middle Arkansas	Yes	10.2	57.1	32.7	49
	No	61.4	27.3	11.4	44
7 Republican	Yes	7.1	64.3	28.6	70
	No	33.3	52.8	13.9	36
8 Solomon	Yes	15.7	58.6	25.7	70
	No	45.5	45.5	9.1	33
9 Tuttle Creek	Yes	11.8	58.8	29.4	85
	No	52.8	36.1	11.1	36
10 Kaw	Yes	16.0	51.3	32.8	119
	No	57.0	32.5	10.5	114
11 Osage Prairie	Yes	13.6	63.6	22.9	140
	No	68.2	23.5	8.2	85
12 Chautauqua Hills	Yes	15.6	57.8	26.7	45
	No	65.9	29.5	4.5	44
13 Lower Arkansas	Yes	13.6	72.7	13.6	22
	No	80.0	20.0	0.0	5
14 Flint Hills	Yes	11.1	57.8	31.1	90
	No	58.2	32.8	9.0	67
15 Ninescah	Yes	9.2	66.7	24.1	87
	No	56.7	36.5	6.7	104
16 Red Hills	Yes	14.6	48.8	36.6	41
	No	42.9	57.1	0.0	14
17 West Arkansas	Yes	16.9	47.5	35.6	59
	No	48.1	37.0	14.8	27
18 Cimarron	Yes	13.8	51.7	34.5	29
	No	87.0	8.7	4.3	23
Statewide	Yes	11.7	57.8	30.6	1193
	No	57.8	32.7	9.6	793

Like Table 7, Table 8 presents results on general attitude toward the presence of deer in one's area. However, Table 8 reports results by hunting status (those who hunt and those who do not hunt) rather than damage status. Not unexpectedly, hunters tend to respond "enjoy deer around" at a higher rate than non-hunters. This is true at both the statewide level, 38% versus 23% respectively, and within most DMUs, with the exception of DMU 4 and DMU 13. Even so, the difference between hunters and non hunters on this response category within DMU 4 is negligible, and the unusual findings in DMU 13 could be the function of the low number of responses (27) in that DMU.

Table 8. General Attitude Toward Presence of Deer in Area by Hunting Status

		Enjoy Deer Around	Enjoy But Problematic	Deer Are Nuisance	Sample
Deer Management Unit #	Hunt Deer	%	%	%	Size
Not Specified	Yes	27.3	52.3	20.5	44
	No	25.0	36.1	38.9	72
1 High Plains	Yes	28.6	64.3	7.1	28
	No	9.5	52.4	38.1	42
2 Smoky Hills	Yes	35.0	45.0	20.0	20
	No	18.2	43.2	38.6	44
3 Kirwin-Webster	Yes	59.1	27.3	13.6	22
	No	11.8	47.1	41.2	34
4 Kanopolis	Yes	36.4	59.1	4.5	22
	No	37.5	45.8	16.7	24
5 Pawnee	Yes	48.0	48.0	4.0	25
	No	15.8	47.4	36.8	38
6 Middle Arkansas	Yes	55.2	34.5	10.3	29
	No	25.4	47.6	27.0	63
7 Republican	Yes	29.8	61.7	8.5	47
	No	5.5	60.0	34.5	55
8 Solomon	Yes	35.6	55.9	8.5	59
	No	12.5	52.5	35.0	40
9 Tuttle Creek	Yes	31.3	54.7	14.1	64
	No	16.0	50.0	34.0	50
10 Kaw	Yes	46.0	43.7	10.3	87
	No	27.5	44.3	28.2	131
11 Osage Prairie	Yes	37.6	50.4	12.0	117
	No	29.6	45.9	24.5	98
12 Chautauqua Hills	Yes	49.0	42.9	8.2	49
	No	22.2	52.8	25.0	36
13 Lower Arkansas	Yes	11.1	83.3	5.6	18
	No	44.4	33.3	22.2	9
14 Flint Hills	Yes	35.3	50.0	14.7	68
	No	29.1	45.6	25.3	79
15 Ninescah	Yes	41.2	54.1	4.7	85
	No	32.6	47.7	19.8	86
16 Red Hills	Yes	28.0	52.0	20.0	25
	No	10.3	51.7	37.9	29
17 West Arkansas	Yes	37.9	41.4	20.7	29
	No	21.8	43.6	34.5	55
18 Cimarron	Yes	50.0	31.8	18.2	22
	No	38.5	34.6	26.9	26
Statewide	Yes	38.3	50.3	11.4	860
	No	23.1	46.6	30.3	1011

Appendix

Kansas Landowner Opinion Survey on Deer

We greatly appreciate your help in monitoring the deer population in Kansas. When the questions refer to your land, this means all the rural land you own or operate. Even if you have seen no or very few deer on your land, the information you can provide is still important. When finished, return the questionnaire to us in the postage paid envelope provided.

DEER ON THE LAND YOU OWN OR OPERATE

1. During the past 3 years (1998 - 2000) has the deer population in your area:
(Please circle the number that corresponds to your answer)

1 Increased in number from level three years ago	55.8%
2 Remained the same	25.8%
3 Decreased in number from level three years ago	10.3%
8 Don't know	8.1%

2. Compared to this time last year, is the deer herd: (Circle your answer)

1 Higher this year	38.2%
2 About the same	41.8%
3 Lower this year	10.9%
8 Don't know	9.2%

3. How many deer would you like to have on your farm or ranch: (Circle your answer)

1 More than I have now	10.8%
2 Same as I have now	33.0%
3 Fewer than I have now	38.1%
4 I want no deer on my land	13.7%
8 Don't know	4.5%

4. How do you feel about having deer on and around your property: (Circle your answer)

1 I enjoy having deer around	29.6%
2 I enjoy deer, but they cause problems at times	47.0%
3 I generally regard deer as a nuisance	22.0%
8 Don't know	1.4%

5. Please indicate your best estimate for the number of deer in each category below that occurred on your property last year (2000).

a. Average number of deer <i>generally</i> on your property	Mean = 18.0	Median = 10.0
b. Maximum number of deer <i>at one time</i> last year.	Mean = 24.3	Median = 15.0
c. Number of <i>antlered</i> bucks killed by hunters.	Mean = 1.9	Median = 1.0
d. Number of <i>antlerless</i> deer hunters took last year.	Mean = 2.3	Median = 1.0

6. Which of the following activities do you or people using your property participate in?
(Circle your answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Watch or photograph deer	45.7%	41.9%	12.4%
b. Plant food plots or leave crops to attract deer	16.0%	71.2%	12.8%
c. Improve habitat primarily for deer	11.0%	75.0%	14.0%
d. Hunt for shed antlers	27.8%	59.8%	12.4%
e. Use nonlethal means to reduce conflicts with deer	6.4%	73.2%	20.3%

RECREATIONAL USES OF LAND AND DEER

7. Last year did you or your family participate in: (Circle your answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Hunting upland game	48.4%	49.0%	2.6%
b. Hunting deer/big game	44.6%	53.1%	2.3%
c. Hunting other	37.6%	58.7%	3.7%
d. Fishing	60.3%	37.4%	2.3%
e. Trapping	6.7%	90.0%	3.2%
f. Bicycling	25.1%	71.4%	3.5%
g. Wildlife photography	21.5%	75.0%	3.4%
h. Watching wildlife	64.0%	33.4%	2.7%
i. Camping / ATV	32.7%	64.5%	2.8%
j. Hiking / Backpacking	20.7%	76.3%	3.1%
k. Boating / Swimming	32.4%	64.7%	2.9%
l. Horse riding	32.3%	64.5%	3.2%
o. Other	6.8%	66.8%	26.4%
(If so, what other? _____)			

8. Does anyone hunt deer on your property?

1 Yes	71.9%
2 No  (If not, please skip to Question 24 now.)	28.1%

9. In the *last five years*, who have you allowed to hunt deer on your property? (Circle each that you have allowed in the last five years)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Immediate family members	81.0%	16.4%	2.6%
b. Other relatives	64.9%	31.6%	3.5%
c. Invited friends	75.6%	21.5%	3.0%
d. Other landowners	53.6%	42.4%	4.0%
e. Hunting lessees	10.4%	84.6%	5.0%
f. County residents	52.3%	43.6%	4.1%
g. City residents	48.2%	47.2%	4.6%
h. Out-of-state residents	23.7%	70.7%	5.6%
i. All who ask permission	29.7%	66.3%	4.0%
j. Most who ask permission	52.5%	41.7%	5.8%
k. Other	7.5%	61.6%	30.9%
(If so, what other? _____)			

10. Did you receive any money from allowing deer hunting in 2000?

1 Yes	3.3%
2 No	96.2%
9 No Answer5%

11. Did hunters on your land return the favor in any way?

1 Yes (If yes, what? _____)	24.7%
2 No	69.0%
9 No Answer	6.3%

12. Did you or any member of your family serve as a hunting guide on your land in 2000?

1 Yes	7.6%
2 No	91.4%
9 No Answer	1.0%

13. Did you or another family member provide food or lodging to hunters on your land in 2000?

1 Yes 12.4%
 2 No 87.1%
 9 No Answer5%

14. Have you ever experienced damage to your property from hunters?

1 Yes 49.2%
 2 No 45.1%
 8 Don't Know 5.7%

15. Have hunters created inconveniences for you or disrupted your operation in some way?

1 Yes 44.0%
 2 No 52.7%
 8 Don't Know 3.3%

16. Do you restrict the activities of deer hunters?

1 Yes 61.5%
 2 No  (If not, please skip to **Question 18** now.) 38.5%

17. Do you place any of the following restrictions on deer hunters using your property?

(Circle you answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. When they hunt	64.8%	33.1%	2.1%
b. Where they hunt	85.0%	13.4%	1.5%
c. How many hunters at a time	71.8%	25.3%	2.8%
d. Harvest bucks only	7.2%	85.8%	7.0%
e. Equipment they may use	24.6%	70.3%	5.1%
f. Species they may take	15.1%	79.1%	5.8%
g. Use of vehicles	64.8%	31.0%	4.2%
h. Antlerless first or only	11.4%	80.9%	7.7%
i. Other	12.5%	54.0%	33.5%
(list) _____			

18. Do you or members of your family use the following deer hunting equipment?

(Circle you answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Shotgun	8.9%	86.6%	4.5%
b. Rifle	71.2%	25.5%	3.3%
c. Compound Bow	29.6%	66.4%	4.0%
d. Muzzleloader	16.4%	79.4%	4.2%
e. Pistol	6.9%	88.6%	4.6%
f. Long or Recurve Bow	6.3%	88.8%	4.9%

19. Is deer hunting a tradition in your family?

1 Yes 40.2%
 2 No 58.3%
 9 No Answer 1.5%

Since 1998 the Kansas Department of Wildlife and Parks has allowed a second deer season designed to slow the growth of deer herds. This second season allows hunters to take antlerless deer only.

20. Did anyone hunt deer on your land during this second deer season?

- 1 Yes 62.5%
- 2 No  (If not, please skip to **Question 24** now.) 37.5%

21. Who has participated in this second season for deer hunting on your property? (Circle each that has hunted on your land during this second season since it was implemented in 1998)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Immediate family members	62.1%	35.7%	2.2%
b. Other relatives	44.5%	52.7%	2.8%
c. Invited friends	63.8%	33.8%	2.4%
d. Other landowners	39.1%	57.4%	3.5%
e. Hunting lessees	6.6%	90.1%	3.4%
f. County residents	45.4%	51.1%	3.4%
g. City residents	42.2%	54.2%	3.6%
h. Out-of-state residents	12.2%	83.2%	4.6%
i. All who ask permission	24.9%	71.5%	3.6%
k. Most who ask permission	40.7%	52.9%	6.4%
j. Other	8.9%	65.0%	26.0%
(What other? _____)			

22. How beneficial was the second deer season in controlling the deer herd on your land?
(Circle your answer)

- 1 Very Beneficial 7.7%
- 2 Somewhat Beneficial 31.4%
- 3 Made No Difference 40.0%
- 8 Don't Know 20.9%

23. Have hunters created inconveniences for you or disrupted your operation in some way during this second season? (Circle your answer)

- 1 Yes 17.3%
- 2 No 78.3%
- 9 No Answer 4.4%

(Please continue to next page)

PROBLEMS WITH DEER

24. Did deer cause damage to your land in 2000?

- 1 Yes 59.5%
- 2 No  (If not, please skip to **Question 32** now) 40.5%

25. How would you describe the level of the damage caused by deer to your crops or property within the past 12 months? (Circle only one answer)

Light damage	Moderate damage	Substantial damage	Severe damage	Don't know
37.3%	38.8%	16.7%	6.2%	1.0%

26. In relation to deer on your land, please indicate how much of a problem each of the following items are for you. (Please circle only one answer in each row.)

	<u>Not a Problem</u>	<u>Somewhat of a Problem</u>	<u>Great Problem</u>	<u>No Opinion</u>
a. Crop / property damage	11.4%	65.2%	22.4%	.9%
b. Competition with livestock for forage	50.4%	35.2%	9.3%	5.1%
c. Transmission of disease	50.7%	17.8%	9.0%	22.4%
d. Fence damage by deer	20.4%	46.6%	29.8%	3.2%
e. Deer / vehicle accidents	22.0%	31.8%	42.8%	3.4%
f. Deer attract hunters who trespass	30.9%	41.9%	22.7%	4.5%

27. Did you take any action to limit deer damage to your property in 2000?

- 1 Yes 24.3%
- 2 No  (If not, please skip to **Question 32** now.) 75.7%

28. Which of the following means did you use on your property to limit deer damage? (Circle your answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Increased hunting pressure during regular seasons	80.6%	15.8%	3.6%
b. Used nonlethal means	27.8%	66.7%	5.5%
c. Used some other means	20.0%	61.8%	18.2%
(What other?)			

29. How would you rate your overall effectiveness at limiting deer damage on your property in 2000? (Circle your answer)

Highly effective	Moderately effective	Ineffective	No opinion
3.5%	38.7%	50.5%	7.3%

30. Did you contact Kansas Department of Wildlife and Parks concerning the damage? (Circle your answer)

- 1 Yes 16.3%
- 2 No  (If not, please skip to **Question 32** now.) 83.7%

31. After meeting with KDWP, which of the following activities do you use on your property?
(Circle your answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Damage Control Permit	56.1%	39.0%	4.9%
b. Hunter Referral Program	3.0%	87.9%	9.1%
c. Called 1-800 hot line	15.6%	78.1%	6.3%
d. Requested to be considered for WIHA lease	6.1%	78.8%	15.2%

32. Have you experienced damage from any of the listed species of wildlife? Circle either YES or NO for each species or group. Then RANK each group you checked with a YES. Start with the most destructive species and give it a value of 1. Select the next most important species causing you concern and give it a rank of 2. Continue that process for each species you circle with a YES.

	<u>Yes</u>	<u>No</u>	<u>Rank</u>	(Based on % "Yes")
Antelope	4.2%	95.8%	18	
Bats	0.8%	99.2%	20	
Beaver	30.9%	69.1%	6	
Blackbird	30.6%	69.4%	7	
Bobcat	20.5%	79.5%	10	
Coyote	42.9%	57.1%	4	
Deer	64.6%	35.4%	1	
Ducks/Geese	16.2%	83.8%	14	
Elk	1.0%	99.0%	19	
Fox	5.6%	94.4%	17	
Gophers/Moles	51.6%	48.4%	3	
Hawks/Owls	18.2%	81.8%	11	
Prairie Dogs	13.9%	86.1%	15	
Rabbits/Hares	17.6%	82.4%	13	
Raccoon	38.4%	61.6%	5	
Rats/Mice	59.1%	40.9%	2	
Skunk	29.5%	70.5%	8	
Squirrel	8.2%	91.8%	16	
Turkey	22.9%	77.1%	9	
Other	17.1%	82.9%	12	

Name of other species: _____

BACKGROUND INFORMATION

33. Approximately how many ACRES of your farm or ranch are in the following types of uses:

TYPE	ACRES		TYPE	ACRES	
	Mean	Median		Mean	Median
Corn	155.3	50.0	Soybeans	120.3	50.0
Milo	143.5	75.0	Wheat	340.9	140.0
Alfalfa	52.8	20.0	Orchard	2.6	.0
Nursery	0.7	.0	Woodlands	35.8	20.0
Garden Crop	0.7	.0	Pasture/Hay	384.8	120.0
Forage Sorghum	38.4	10.0	Pond/Wetlands	10.1	3.0
CRP/Idle	114.6	38.0	Other	75.7	.0

Total number of acres in farm / ranch Mean = 908.4 Median = 400.0

34. Please use the Deer Management Unit map at the back of the questionnaire to tell us in which COUNTY and Deer Management Unit **most** of your land is located.

County _____ Deer Management Unit # _____

35. Where do you live? (Circle one)

- 1 On this farm or ranch 73.3%
- 2 In the country but not on this farm or ranch 6.6%
- 3 In a small town or rural community (place of less than 2000 people) 10.6%
- 4 In a city or urban community 7.9%
- 5 Outside of Kansas 1.6%

36. How many years have you owned or operated this land? Mean = 26.7 Years Median = 25.0 Years

37. Approximately what percent of your household's net income in 2000 was derived from agricultural products from this land? Mean = 45.6% Median = 40.0%

38. Which of the following are reasons you decided to own or operate this property? (Circle your answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Economic return from crop production	60.2%	34.1%	5.8%
b. Economic return from livestock production	65.3%	29.4%	5.3%
c. To maintain family traditions or obligations	69.3%	26.1%	4.6%
d. Defray taxes or use as an investment or land value speculation . . .	17.9%	74.9%	7.2%
e. Recreational uses or wildlife benefits	32.8%	60.2%	6.9%
f. Family security and lifestyle freedoms	85.4%	10.7%	3.9%

Please tell us the **single most** important reason in the question above (number 38) by writing its letter here_____.

FUTURE DIRECTIONS

39. Would the following factors improve *your* appreciation of the deer on *your property*:

(Circle your answer)

	<u>Yes</u>	<u>No</u>	<u>No Answer</u>
a. Reduced damage	60.3%	25.9%	13.8%
b. Better behavior of hunters	50.8%	32.8%	16.4%
c. More hunter restrictions	17.9%	60.7%	21.4%
d. Direct monetary returns	35.3%	46.6%	18.2%
e. Deer damage insurance	24.0%	55.0%	21.0%
f. More opportunities to see deer	28.0%	55.8%	16.2%
g. Being appreciated by hunters	46.2%	36.6%	17.2%
h. Lower numbers of deer	51.2%	34.8%	13.9%
i. Longer seasons	43.1%	40.1%	16.8%
j. Better information about deer	22.3%	55.0%	22.8%
k. Easier access to permits	44.8%	37.8%	17.4%
l. Bigger / quality deer	29.6%	50.1%	20.3%
m. Some other factor(s)	12.7%	43.8%	43.5%
(What other? _____)			

Please tell us the **single most** important factor in the question above (number 39) by writing its letter here _____.

40. How important is it for the Kansas Department of Wildlife and Parks to take the following deer management actions?

	<u>Extremely Important</u>	<u>Somewhat Important</u>	<u>Neutral</u>	<u>Somewhat Unimportant</u>	<u>Extremely Unimportant</u>
a. Provide simple deer regulations	44.2%	31.5%	20.2%	2.3%	1.9%
b. Provide liberal hunting opportunities	31.8%	28.0%	28.2%	6.1%	5.9%
c. Collect estimates on deer populations	30.5%	34.5%	26.0%	5.4%	3.6%
d. Allowing more nonresidents to hunt	16.2%	17.9%	32.1%	11.6%	22.2%
e. Maintain accurate deer harvest data	23.6%	30.8%	32.9%	7.4%	5.3%
f. Provide more law enforcement during seasons	25.2%	24.9%	34.4%	8.1%	7.4%

41. How do you feel about the way the Kansas Department of Wildlife and Parks manages deer populations? (Circle one)

1 I am extremely satisfied	3.3%
2 I am satisfied	29.0%
3 I feel neutral about their effort	27.8%
4 I am dissatisfied	18.4%
5 I am extremely dissatisfied	9.7%
8 Don't know	11.8%

Thank you for completing this important survey! Please place the questionnaire in the postage paid pre-addressed envelope and drop it in the mail.