

2025 Kansas Night Vision Coyote Hunting Opinion Survey

PERFORMANCE REPORT STATEWIDE WILDLIFE RESEARCH AND SURVEYS

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Background

In August of 2020, the Kansas Wildlife and Parks Commission, by a 5 to 2 vote, established a night vision coyote hunting season in Kansas. This was following an extensive review process with broad public input. There was a lot of support for this season by hunters who wanted to use this equipment - but there was uncertainty and opposition as well, and as a result, some limitations were placed on the season that did not apply to traditional coyote hunting. Most notably, 1) limited season dates were established (Jan 1-Mar 31), 2) the activity was not allowed on public lands (potentially high-use areas where coyotes are not a problem) – or on WIHAs where there was concern that landowner opposition to the activity may result in a loss of enrollment in the access program, and 3) all night vision hunters were required to purchase a permit for the cost of processing (\$2.50) – to allow the Kansas Department of Wildlife and Parks (KDWP) to accurately assess participation based on permit sales and to identify participants for a post season harvest survey to estimate the harvest and activities of night vision hunters.

The 2025 season represented the 5th of these night vision coyote hunting seasons, and interest around this activity has remained high. Night vision hunters have frequently voiced their support for expanding opportunity associated with this season. Alternatively, some other hunters and individuals have expressed various concerns about the season as it currently exists. As a result, KDWP initiated a series of public meetings and developed a survey to broadly assess opinions on the subject. The specific objective of these efforts was to assess support for making changes to this season.

Methods

Sample groups - Based on comments received both for and against the night vision coyote season during various public meetings and surveys over several years, KDWP selected four user groups with a vested interest in this activity to survey. This included night vision permit holders, traditional coyote hunters (daytime coyote hunters or those hunting at night without the aid of night vision equipment), deer permit holders, and landowners. Within each group, individuals residing outside of Kansas and youths (<17 years old) were excluded from the population.

The survey sample of night vision and deer permit holders were randomly selected from the KDWP license sales database. Since there was not a specific license or permit required for traditional coyote hunters, their selection was more complicated. Anyone with a Kansas hunting license may hunt coyotes by traditional means, so traditional coyote hunters were selected from the population of individuals, also maintained in the KDWP licensing system, who had a Kansas hunting license for the previous hunting season. These individuals had already been identified as potential recipients of the annual KDWP Small Game Hunter Activity Survey which was the basis for the estimated population size of this group. Past results of this survey indicated about 20% of Kansas hunting license holders hunted coyotes so 5-times the sample of this group (n = 5000) was randomly selected for this survey. Landowners were identified by randomly selecting

points in ArcGIS throughout Kansas and then identifying the landowner of each point using onX. Points on properties that were <80 acres were omitted. The precise population size of the landowner group is unknown (i.e. the number of landowners in Kansas with 80 acres or more), but an estimate was calculated based on data on farms by size available through USDA National Agriculture Statistics Service (www.nass.usda.gov/AgCensus). The final group surveyed included all attendees of the three KDWP public meetings on night vision hunting. The total known or estimated population size of each group is provided in Figure 1.

Some individuals belonged to multiple groups, but unique individuals were selected as survey recipients from each group selected from KDWP license sales. All meeting attendees were surveyed regardless of their status in other groups, and landowners were selected independently of other groups because there was no unique identifier upon which to determine overlap. However, based on the percentage of landowner permits in the next largest group (21% of deer permit holders) multiplied by the deer sample (1000) and then divided by the total population of landowners (see Table 1), it is likely that fewer than 5 of the 1000 landowners surveyed also received a survey as a member of one of the other groups.

Sample size - Sample selection was consistent with established scientific survey design (Salant and Dillman 1994). Sample sizes were established to achieve approximately a 95% confidence level at $\pm 5\%$ sampling error. Population and sample sizes for each group surveyed are provided in Table 1 below.

Survey questionnaire - The survey questionnaire was developed by KDWP research office staff. It was intentionally brief (just 6 questions) and very specific due to the short time frame to develop and conduct the survey. The paper version of the survey was distributed on 1-page, front and back, of 8.5"x11" paper. The survey questionnaire can be found in Appendix 1.

Survey distribution - A web-based survey was developed in Qualtrics and distributed to survey recipients with an email in the KDWP licensing system. An initial e-mail invite was sent out on Feb. 28, 2025 containing a link to the survey and a request for participation, and a follow-up request was sent to nonrespondents on Mar. 7, 2025. A single mailing of the paper survey (Appendix 1) was sent to all e-mail nonrespondents and those without an e-mail on file approximately 1-week later.

Meeting attendees – KDWP held three public meetings intended to give constituents an opportunity to voice their opinion on the night vision coyote season or night hunting in general. These meetings were held in El Dorado (Mar. 10), Junction City (Mar. 24), and Hays (Mar. 25). All attendees were provided with the survey and asked to complete and turn it in as they left the meeting.

Results

The number of responses and the response rate for each sample group can be found in Table 1. The first two survey questions were used to categorize and/or validate the sample group of survey recipients. One item of note was that 80% of the meeting attendee respondents were night

vision hunters, such that the responses of the meeting attendee group largely reflected the opinions of the larger night hunting group.

The third question was intended to assess respondent's level of opposition or support for increasing the length of the night vision coyote season. A majority of survey respondents across all user groups expressed some level of support for expanding the season including at least 42% in each group who strongly supported some type of expansion (Figure 2).

The next question for all respondents inquired about which season option they most preferred. The options provided included 1) discontinue the season; 2) no change to existing season; 3) expand the season dates but exclude all antlered deer seasons including the entire rut (new dates Jan. 1-Aug. 31); and 4) expand the season dates to year-round except for the 12-day rifle (antlered) deer season (new dates Jan. 1-Dec. 2 & Dec. 15-31). This was the most important question of the survey and directly reflected the opinion of respondents toward the main question at hand. Results of this question are provided in Figure 3.

Individuals who opposed an expansion to the night vision season were provided with a list of potential reasons for their opposition and asked the importance of each. The results of this question can be found in Figure 4. Individuals who supported an expansion to the night vision season were provided with a list of potential reasons for their support and asked the importance of each. The results of this question can be found in Figure 5.

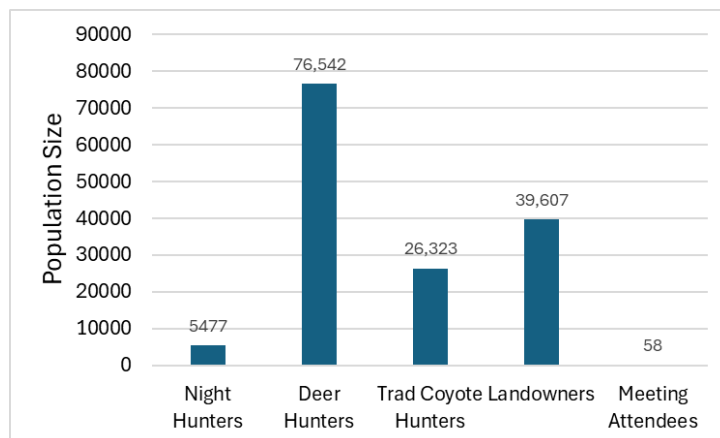


Figure 1. Estimated population size of each group surveyed.

Table 1. Population and sample size of groups selected to participate in the night vision coyote hunting survey.

Group	Population	Sample	E-mail	Non-deliverable	Responses	Response rate
Deer permit holders	76,542	1000	8881	22	264	27%
Landowners	39,606	1000	0	21	396	40%
Night vision permit holders	5,477	1000	974	25	479	49%
Kansas hunting license holders (Trad. coyote hunters)	203,786 (26,323)	5000	3299	359	1063	23%
Public meeting attendees	58	58	n/a	-	54	93%

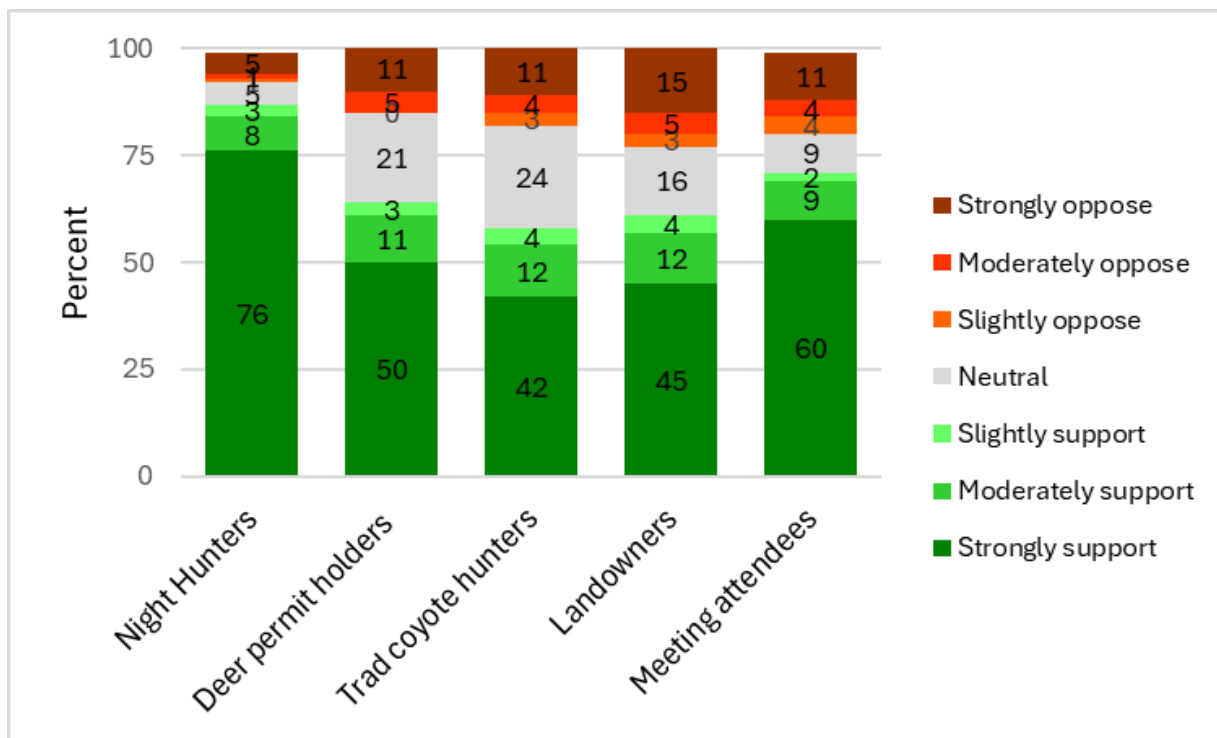


Figure 2. Each sample group's general level of opposition or support for increasing the length of the night vision coyote season.

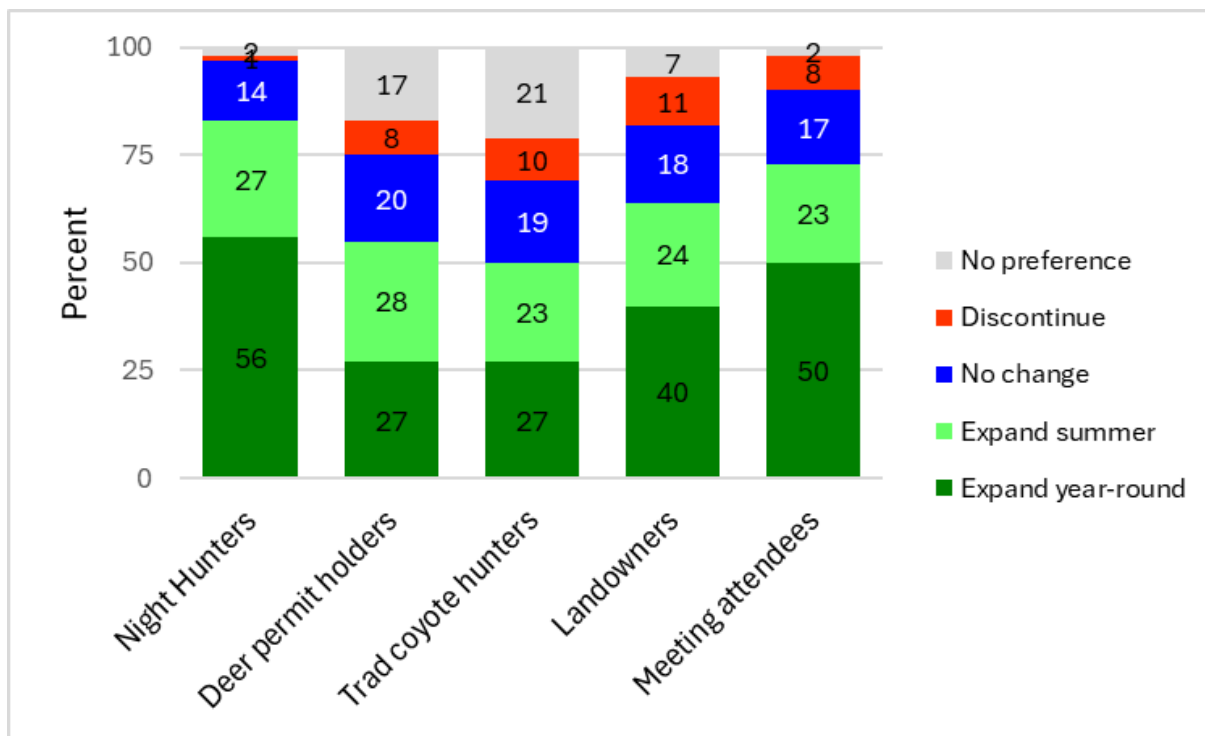


Figure 3. Response by each sample group to which season option they most preferred for the night vision coyote season. (In legend: “Expand summer” = new season from Jan. 1 – Aug. 31; “Expand year-round” = new season year-round except for 12 day firearms deer)

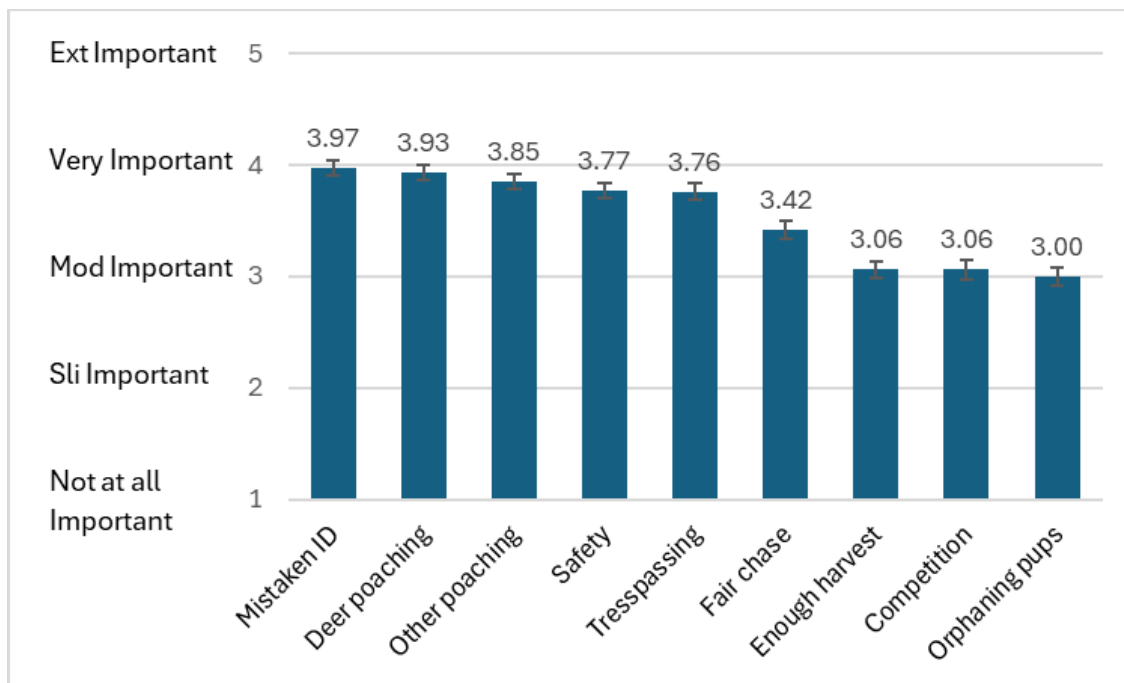


Figure 4. Importance of reasons why those who opposed an expansion of the night vision coyote season did so. Bars represent standard error.

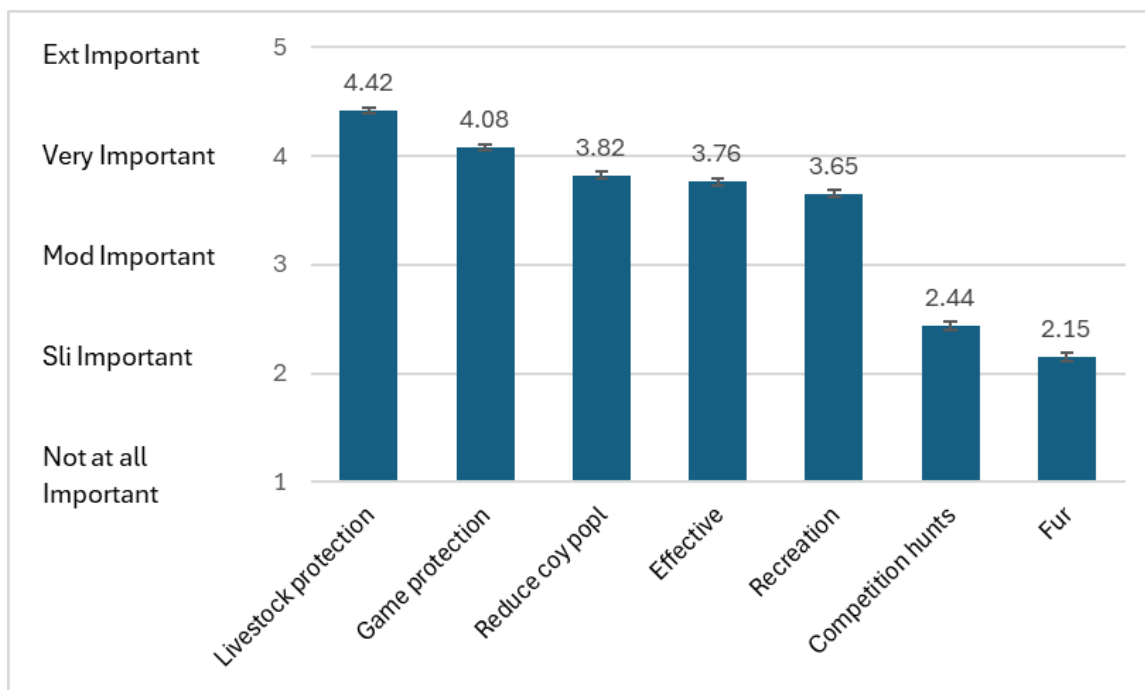


Figure 5. Importance of reasons why those who supported an expansion of the night vision coyote season did so. Bars represent standard error.

Discussion

Response rates - Response rates for this survey were good. Our objective was to obtain approximately 300 usable surveys per user group to achieve a sampling error of $\pm 5\%$ at the 95% confidence level. This was achieved for the selected sample groups except for the deer permit holders, from whom we received 264 usable responses. This number of responses falls within ± 6 to 7% at the 95% confidence level, and still represents an acceptable level of error such that results for this user group are still highly likely to be representative of the population.

Opposition/Support for season expansion - The most significant support for season expansion, as expected, was from the night hunters and meeting attendees, but the three much larger groups were also supportive. However, there was opposition to the expansion as well. Excluding the night hunter group, nearly 1 in 5 (19%) opposed any expansion, including over 10% who were strongly opposed.

Reasons for opposition/support – Those who opposed a season expansion did so based on a variety of concerns (see Figure 3). In fact, there was minimal difference between the top five concerns, which were all classified in the range of very important. There were two primary justifications for support (see Figure 4). This included livestock protection and game protection, which both scored between extremely and very important.

Preferred season dates – There was quite a bit of variability between groups relative to preferred season dates. Slightly over half of the night hunters (56%) supported the near year-round season option, as did half the meeting attendees (50%), which again, consisted of 80% night hunters. However, of those who had a preference from the other three groups, approximately 1/3 did not want the season expanded (i.e. they either wanted it discontinued or unchanged), 1/3 wanted it expanded only into the summer, and 1/3 wanted it expanded to near year-round. Of note here, there is apparently a concern by a majority of deer permit holders about allowing night hunting during the main deer seasons and/or the rut; Only 27% of deer permit holders supported the near year-round option. Traditional coyote hunters expressed a similar sentiment, except the majority with an opinion did not support an expansion at all (29%). Just 27% of traditional coyote hunters supported the near year-round option. Support for the near year-round option was most popular among landowners (40%), but a majority (53%) supported a more restrictive option, including 29% who did not support season expansion at all.

Total population size – This survey represents the opinions of an estimated 119,408 Kansans, including 96,388 unique KDWP license holders and another 23,020 Kansas landowners not represented in the KDWP license data base. By combining results across user groups based on population sizes, we can estimate total support for each season option. These results are provided in Figure 6. Of those with an opinion, 31% wanted to see the season expanded to near year-round, 28% wanted no expansion (no change or discontinue combined), and 26% wanted a limited expansion into the spring/summer.

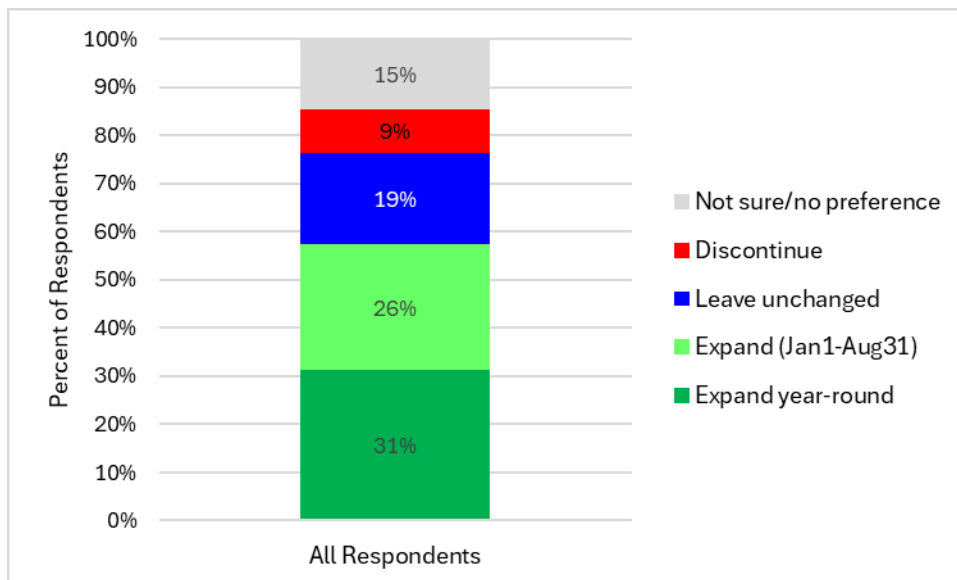


Figure 6. to which season option they most preferred for the night vision coyote season. (In legend: “Expand summer” = new season from Jan. 1 – Aug. 31; “Expand year-round” = new season year-round except for 12 day firearms deer)

Conclusions

Respondents to this survey were predominantly supportive of expanding the night vision coyote season. Based on the responses as well as general comments by respondents, it is apparent that many viewed an increased level of coyote harvest favorably.

However, there was much variability in responses in how the season should be changed. Of those with an opinion, approximately 1/3 of respondents supported, respectively, 1) the near year-round option (31%), 2) the expansion into summer (26%), and 3) no expansion (no change or discontinue the season, combined; 28%). The middle ground of these options would be to expand into the later spring and summer months. This would give the night hunters additional season length, notably during the time period that additional coyote control for livestock and game (the two primary reasons respondents supported season expansion) would be most effective (i.e. some calving runs into April and protection of game is most important during production (May-July)). In addition to providing additional days of opportunity for the night hunters, this option would keep night hunters out of the Fall deer seasons, which was apparently the major concern of the largest user group (deer hunters), it would retain the Fall time period for traditional coyote hunters to call without overlapping with the much more effective night hunters, and it would provide some consolation to those who expressed concerns about season expansion compared to the near year-round option.

Appendix 1. KDWP Night Vision Coyote Hunting Survey

KDWP | Night Vision Coyote Hunting Survey

ID

Dear FNAME LNAME

ADDRESS

CITY, STATE ZIP

Kansas Department of Wildlife and Parks (KDWP) is conducting a survey to assess opinions on the "Night Vision (NV) Coyote Hunting Season" in Kansas. As a Kansas landowner or KDWP license holder, your name was randomly selected for this survey. You can return your completed survey in the enclosed postage-paid envelope, and we ask that you do so within 7 days if possible. The results of this survey will be used to form season recommendation on the NV coyote season. Thank you for your participation in this project!

Background: The NV Coyote Season was established in 2021 and allows the hunting of coyotes at night using lights, night vision, and thermal imaging equipment. This season is currently limited to January 1 – March 31. **We would like your opinion on whether these season dates should be changed.** Note: Coyote hunting by traditional methods is open year-round and is not in question for the purpose of this survey.

1. Which of these describe you? (check all that apply)

- ☐ Kansas resident
- ☐ Kansas landowner or tenant of 80 acres or more
- ☐ None of the above

2. In which of the following activities have you participated in the last year? (check all that apply)

- ☐ I hunted coyotes with lights, night vision, or thermal imaging equipment.
- ☐ I hunted coyotes by any other legal means (i.e. without the aid of lights, night vision or thermal imaging equipment).
- ☐ I trapped coyotes.
- ☐ I hunted deer.
- ☐ None of the above

3. The current Night Vision Coyote Season in Kansas is January 1-March 31. In general, what is your level of opposition or support for increasing the length of this season? (check one)

Strongly Oppose	Moderately Oppose	Slightly Oppose	Neutral	Slightly Support	Moderately Support	Strongly Support
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Which option do you most prefer for the Night Vision Coyote Season? (check one)

- ☐ Discontinue this season
- ☐ Leave season dates unchanged (Jan 1-Mar 31)
- ☐ Expand season dates but exclude all antlered deer seasons including the entire rut (new dates: Jan 1-Aug 31)
- ☐ Expand season dates to year-round except for the 12-day rifle (antlered) deer season (new dates: Jan 1 – Dec 2 & Dec 15-31)

5. If you oppose an expansion of the Night Vision (NV) Coyote Season per Question #3 above, how important are each of the following as a reason why? (If you are neutral or support a season expansion per Question #3 above, skip this question.)

Possible reason I oppose expansion:	Not at all Important	Slightly Important	Moderately Important	Very Important	Extremely Important
Trespassing by NV coyote hunters	1	2	3	4	5
NV coyote hunters either kill or educate too many coyotes making other hunting ineffective	1	2	3	4	5
Concern for human safety related to shooting at night	1	2	3	4	5
Illegal take of deer by NV coyote hunters	1	2	3	4	5
Illegal take of other species besides deer	1	2	3	4	5
Mistaken identification of target species	1	2	3	4	5
Too much technology/it's not "fair chase"	1	2	3	4	5
Enough coyotes are already harvested	1	2	3	4	5
Unnecessary orphaning of coyote young	1	2	3	4	5
Other reason (please explain): _____	1	2	3	4	5

6. If you support an expansion of the Night Vision (NV) Coyote Season per Question #3 above, how important are each of the following as a reason why? (If you are neutral or oppose a season expansion per Question #3 above, skip this question.)

Possible reason I support expansion:	Not at all Important	Slightly Important	Moderately Important	Very Important	Extremely Important
Reducing coyote predation on game species like deer and turkeys	1	2	3	4	5
More recreational opportunity - would allow hunters to enjoy using this equipment more often	1	2	3	4	5
Allowing more time for competition hunts	1	2	3	4	5
Reducing coyote predation on livestock	1	2	3	4	5
NV hunting is more effective and can be used to kill more coyotes than traditional methods	1	2	3	4	5
Obtaining fur to sell or use	1	2	3	4	5
I want to see coyote populations reduced	1	2	3	4	5
Other reason (please explain): _____	1	2	3	4	5

Thank you for completing this survey. Please provide any comments below.
