

INTERIM PERFORMANCE REPORT

State: Oklahoma

Grant Number: F23AF01181

Grant Program: Wildlife Restoration Program

Grant Title: Game Harvest Survey

Project Leader: Betsey York

Grant Period: July 1, 2023 – June 30, 2025

TRACS Project Category:

Conservation/Management

TRACS Action Categories:

Data Collection and Analysis

Project Description:

This grant allows the Oklahoma Department of Wildlife Conservation to monitor upland game harvest and hunter opinion as well as share data trends within the agency and to the public.

Objective 1 – Data Collection and Analysis – Research, Survey Monitoring - Utilization:

Complete a harvest survey of 2,000 hunting license holders annually from July 1, 2023, through June 30, 2025.

Accomplishments

Year 1: July 1, 2022- June 30, 2023: Conducted 2023 Game Harvest Survey contacting 2,928 license holders (both resident and non-resident). This project was shared with the agency and the public in fall of 2024.

Objective 1: A sample of 2,928 license holders was interviewed during February 2024. 1,163 individuals interviewed did not hunt during 2023. 1,765 did hunt. Deer season was most popular with hunters. Harvest estimates for most species were calculated statewide and limitations of the harvest estimates were discussed in detail. Human dimensions questions pertained to public land satisfaction, use of hunting guides, support for regulation changes related to antlered deer harvest, access to private land, and trapping.

Abstract:

The Oklahoma Department of Wildlife Conservation (ODWC) has conducted hunter surveys since 1986 to estimate the number of hunters and game harvest statewide and regionally. A sample of resident and non-resident hunting license holders ($n = 2,928$) was contacted during February and March 2024. Sixty percent of individuals interviewed hunted during 2023. Hunter and game harvest estimates and statistics were calculated statewide. Deer (*Odocoileus virginianus* and *O. hemionus*) season was most popular with hunters. Comparing year over year between resident license holders (senior, lifetime, and annual/5-year resident licenses), statewide harvest estimates for 2023 increased from 2022 estimates for bobcat (*Lynx rufus*) and pheasant (*Phasianus colchicus*). Harvest estimates decreased from 2022 estimates for raccoon (*Procyon lotor*), beaver (*Castor canadensis*), fox squirrel (*Sciurus niger*), quail (*Colinus virginianus* and *Callipepla s. quamata*), coyote (*Canis latrans*) swamp rabbit (*S. aquaticus*), gray fox (*Urocyon cinereoargenteus*), dove (*Zenaida macroura*), cottontail (*Sylvilagus floridanus*), crow (*Corvus brachyrhynchos*), gray squirrel (*S. carolinensis*), fall turkey (*Meleagris gallopavo silvestris* and *M. g. intermedia*), river otter (*Lutra canadensis*), jackrabbit (*Lepus californicus*), and spring turkey (*Meleagris gallopavo silvestris* and *M. g. intermedia*). Estimates continued, for a second year in a row, to not be able to be made for red fox (*Vulpes fulva*) and woodcock (*Scolopax minor*). A series of human dimensions questions were asked to learn about public land satisfaction, use of hunting guides, support for regulation changes related to antlered deer harvest, access to private land, and trapping.

Procedures:

The 2023-season Game Harvest Survey (hereafter referred to as the survey or the Game Harvest Survey) was administered using a mixed-mode methodology (mail and telephone). The methodology for this project was developed because of methodological research conducted during the 2014-season survey (Jager 2014) and is a hybrid version of past methodologies. Results are considered comparable from 1986 to present.

A random sample of license holders, stratified by license category, was drawn from the resident database of annual, lifetime, and senior license holders (Table A1). Five-year license holders were sampled with annual license holders. The 2023 survey also included a random sample of non-resident license holders. Based on the sampling scheme above, a sample of 5,992 license holders (1,257 annual/five-year, 2,151 lifetime, 1,584 senior citizen, and 1,000 nonresidents) was selected for the survey. A goal of more than 2,000 completed responses was set for this project.

Contact to sampled hunting license holders was first established in the form of a mailed survey. The first survey mailing was mailed on January 23, 2024. The mailed survey packet included a self-addressed, postage-paid envelope for respondents to use to send in their completed survey. We began making calls to sampled hunters on February 13, 2024.

All license holders who had not responded by any method were sent a mailed reminder postcard on February 14, 2024. (Appendix C). License holders without telephone numbers, and who had not responded to the first mailed survey were mailed a second survey on February 22, 2024.

The ODWC hired 9 contract laborers to collect telephone interview data and data-enter mail surveys. The interviewers were trained to collect data systematically. A computer assisted telephone interview (CATI) system was used. If participants completed the survey by both telephone and mail, telephone interview data were used.

Telephone interviews were conducted Monday through Thursdays between 5:00 p.m. and 9:00 p.m. with some day shifts (between 9:00 a.m. to 4:00 p.m.) on various days each week to catch those respondents not available during evening hours or by appointment. Saturday shifts lasted from 9:00 a.m. to 1:00 p.m. Before a phone number was retired as “over quota,” it was attempted at least 6 different times.

Survey participants answered questions regarding their hunting activities during 2023. Individuals that hunted were asked which species they hunted, the number of days they hunted each species, the number of each species harvested, the county which they hunted each species most, and whether they hunted each species on private or public land. Individuals that hunted on public land were asked the number of days they hunted on public land for each species and the number of each species harvested on public land. The harvest portion of the questionnaire was like previous years. Information regarding license holder opinion about current wildlife-related issues was also collected. The survey instrument was reviewed by wildlife division regional supervisors, the wildlife division assistant chief and chief. Modifications were incorporated as needed.

We calculated statewide (Figure A1-A20) estimates for harvest and hunter participation. Hunter and harvest estimates were determined by calculating the proportion of license holders hunting each species and their mean bag for that season. These estimates were extrapolated for all license holders. Differences between categorical variables were detected using the chi-square test. Multiple means were compared using a one-way ANOVA. All tests were considered significant at $P \leq 0.05$.

Results:

Surveys were completed for 49% ($n = 2,928$) of the 5,992 individuals we attempted to contact. The remaining license holders were not interviewed for a variety of reasons:

- Wrong or disconnected number ($n = 1,012$)

- No phone number available ($n = 390$)
- “Over quota” after six attempts ($n = 1,050$)
- Refused to complete the interview ($n = 452$)
- Health issues or deceased ($n = 13$)
- Unavailable during the survey period ($n = 42$)
- Language barrier or hearing impaired ($n = 5$)

The final adjusted response rate was calculated by dividing the number of completed surveys by the number of all eligible individuals. “Eligible individuals” were individuals that could potentially have resulted in completed surveys. After eliminating phone numbers that could not possibly have resulted in completed surveys (deceased license holders, fax numbers, and wrong or disconnected numbers; $n = 1,029$), the final, adjusted survey response rate was 59%.

Fifty-nine percent of the completed surveys were conducted by telephone and 41% by mail. To examine the impact of mixed methodology, survey responses were compared between mail and telephone respondents for seven variables. There were statistically significant differences found between mail and telephone respondents for licenses held, public land use, 2023 dove season participation, deer season participation and likelihood to hunt in 2023 ($P < 0.05$). Overall, there was no significant difference for spring turkey participation. ($P > 0.05$). Because the survey methodology included multiple contacts, regardless of invitation method, response-mode and invitation-mode biases were not considered a significant problem in data validity; results were not weighted.

Harvest Estimates (Tables and Figures in Appendix A)

Number of hunters and game harvest estimates and statistics were calculated statewide (Table A2). Statewide harvest estimates for 2023 increased from 2022 estimates for bobcat (+.5%) and pheasant (+17%). Harvest estimates decreased from 2022 estimates for swamp rabbit (-84%), fall turkey (-42%), river otter (-60%), jackrabbit (-41%), gray squirrel (-78%), quail (-24%), raccoon (-51%), beaver (-24%), fox squirrel (-50%), gray fox (-91%), coyote (-75%), crow (-36%), dove (-62%), and cottontail (-50%), and spring turkey (-24%). Estimates did not change for red fox and woodcock as estimates were unable to be calculated in 2022 and again in 2023. Statewide trends in estimated harvest and number of hunters by species from 1986 to 2023 are presented in Table A3 and Figures A1 – A20.

Small samples sizes have traditionally been a problem for less-popular game seasons. Increasing the sample from previous years improved sub-samples for several species, yet it was still not enough to improve the reliability for certain species.

Deer hunter participation was assessed. On average, deer hunters spent 15.5 days in the field during the 2023 deer season (Std. Error = 0.49, Table A4). The average number of days spent hunting deer differed by license category ($P < 0.01$). Deer hunters with a lifetime license averaged 19.0 deer hunting days, annual/five-year license holders averaged 16.2 days, senior citizen license holders averaged 9.5 days and nonresidents averaged 9.3 days.

The average number of days archery hunters spent in pursuit of deer in 2023 was 16.9 days. Muzzleloader hunters averaged 4.3 days. Youth season hunters averaged 2.3 days. Gun hunters averaged 5.7 days and special antlerless (holiday) season hunters averaged 2.9 days. There was a significant difference found in the number of days hunted by license category during the regular gun season ($P < 0.05$), with lifetime license holders hunting on average 6.3 days, annual license holders 5.2 days, senior license holders hunting 5.0 days and nonresident hunters hunting 4.5 days. There was a significant difference found in the number of days hunted by license category during the archery season ($P < 0.05$) with annual license holders hunting the most during archery (19.6 days). No differences were found by license type for days spent hunting during muzzleloader or the holiday antlerless season ($P \geq 0.05$).

Deer hunter success was also examined. On average, deer hunters harvested 0.46 bucks and 0.44 does during all the 2023 deer seasons, for a total average deer harvest of 0.90 per hunter (Table A5). Harvest did not significantly differ by license type ($P \geq 0.05$).

Human Dimensions Issues (Tables and Figures in Appendix B)

Human dimensions questions were designed to help ODWC become more familiar with hunting license holders and understand their hunting preferences. The rates of participation in different hunting seasons were analyzed for the various license holder categories (lifetime, annual/5-year/senior citizen, tribal and nonresident license holders). Use of public land was examined. Several special management questions were also asked.

Hunting Activity

Overall, 60% of participants indicated that they hunted in 2023, but the rate of participation varied significantly according to license type ($P < 0.001$; Figure B1). Senior citizen license holders used their hunting privileges far less often (15% active) than annual/five-year (75%), lifetime license holders (66%), and nonresident license holders (86%). To estimate the number of license holders that hunted in 2023, the total number of license holders in Table A1 (419,095) was multiplied by the ratio of active hunters interviewed (1,765/2,928). The estimated number of resident and nonresident license holders who hunted in Oklahoma during 2023 was 252,631. This number is likely inflated due to the high rate of participation of nonresident license holders.

Rates of participation in the different hunting seasons, overall and by license type, are presented in Table B1. Combining all types of hunting license holders, the most popular hunting seasons were deer (enjoyed by 46% of hunting license holders-both active and non-active), ducks and dove (12.5% and 10.9% respectively). Although the ODWC does not manage feral swine (*Sus scrofa*) and a hunting license is typically not required to pursue the species, we collect data on the amount of people that target feral swine and how many are harvested using this survey. Feral swine are now the second most pursued species by Oklahoma licensed hunters, with 13.8% having spent time pursuing them in 2023.

Land Use

Participants used a variety of land types when hunting different game species. Excluding seasons with small sample sizes, the use of private land exclusively among active hunters was most common for pursuit of pheasant (88% of pheasant hunters used only private land), dove, (85%), and feral swine (84%; Figure B2).

Sixteen percent of survey participants used public land for some portion of their hunting during 2023 (both active and inactive hunting license holders). Focusing only on *active* hunting license holders (those who hunted during 2023), 26% hunted on public land in 2023. Use of public land by active hunters varied by license category (Figure B3; $P < 0.05$) with annual license holders using public land most often (29%) followed by and lifetime (28%), and nonresident (23%). Seniors used public land 21% of the time.

The problem with either of these approaches to measuring public land use is that they do not portray the *relative* importance of public land to Oklahoma's hunting license holders. A hunter who supplemented private land access with public land hunting once or twice during 2023 carried a weight equal to a hunter who relied on public land exclusively, although the relative importance of public land to those two hunters was probably much different. To capture the importance of public land more accurately, active hunters were asked to indicate how much of their hunting in 2023 occurred on public versus private land. Averaging across all active hunters, 17% of the hunting in 2023 occurred on public land. This measure of public land varied by license category with annual license holders spending 19% of time on public land, seniors with 15% on public land, lifetime license holders with 14% on public land and nonresidents hunting 19% of the time on public land. A greater proportion of active hunters said they used public land located in the southern half of the state than in the northern (Figure B4). Looking at the issue from another angle, most active license holders used private land for at least some of their hunting during 2023. Only 10% relied exclusively on public land for hunting.

Deer Hunting

Deer season is the most popular hunting season in Oklahoma. Forty-six percent of *all* survey participants and 77% of *active* hunters (those who hunted at all 2023) hunted deer during 2023. Participation in deer season by active hunters in 2023 varied according to license category ($P < 0.001$). Ninety percent of active lifetime license holders hunted deer, while 82% of active annual/five-year license holders, 72% of active senior citizen license holders, and only 55% of active nonresident license holders hunted deer during 2023.

The regular rifle season was the most popular among 2023 deer hunters (78% participating), followed by archery (56%), primitive firearms (30%), special antlerless (holiday) season (20%), and the youth rifle season (4% participating as a youth) (Figure B5). Deer hunter participation in the individual seasons was analyzed by license type. Archery season participation was most likely for lifetime license holders (60%), followed by annual license holders (53%), nonresident license holders (52%), and senior citizen license holders (39%) ($P < 0.05$). Muzzleloader season participation was more likely for lifetime license holders (47%) than senior citizen license holders (35%), annual/five-year license holders (21%) or nonresident license holders (3%) ($P < 0.001$). Rifle season participation was most likely for lifetime license holders (86%), followed by senior license holders (85%), annual/5-year license holders (81%) and nonresident license holders (58%) ($P < 0.05$). Special antlerless (holiday) season participation was most likely for lifetime license holders (27%), followed by annual-5-year (20%) and seniors (21%) and nonresident license holders (5%). Differences in the special season were significantly different ($P < 0.05$).

Patterns in deer season participation were also examined. Most resident deer hunters participated in more than one season (53%), and some hunted all four (6%; Figure B6). The most common patterns were participation in gun season only (28%), participation in archery season only (16%), and participation in both archery and gun (15%; Figure B7). Youth deer season participation was not included in this analysis because it only applied to a small portion of surveyed hunters. Examined separately, 91% of youth season participants also hunted deer during other seasons: 85% hunted during rifle season, 46% hunted during archery, 26% hunted during muzzleloader, and 20% hunted during the special antlerless (holiday) deer gun season (Figure B8).

Over half (54%) of all deer hunters successfully harvested a deer during the 2023 season (Figure B9). Less than 1% of hunters filled the annual bag limit of deer for 2023 (a combined season limit of 6 deer no more than two may be antlered during deer archery, youth deer gun, deer muzzleloader and deer gun seasons. Deer taken during controlled hunts or during the holiday antlerless deer gun season do not count toward the combined season limit.).

Barriers to Participation

ODWC continues to assess barriers to hunting participation. Forty percent ($n = 1,163$) of license holders did not hunt in 2023 and were asked to identify the main reason why they did not hunt. Twenty-six percent identified health issues, and another 35% indicated other priorities. Eleven percent were simply not interested in hunting (Figure B10). The finding of “health concerns” was unsurprising, given that 45% ($n=520$) of the inactive hunting license holders were senior citizen license holders. Similarly, the finding of “not interested” was expected, as over the years it has become apparent that many senior citizen license holders purchased the combination hunting and fishing license with no intent to hunt. ODWC continues to face limitations in the things the agency can directly influence to remove barriers to hunting.

Special Management Issues

Public Land Use and Satisfaction

On top of the annual questions, we ask about public land which entail overall use, percent of overall activity on public land, and regional use of public land, we also asked this year if it was their first time using public land and their satisfaction with different aspects of the public land that they used. Of all those that used public land, 21% were using public land for the first time. This varied by residency of public land user ($\chi^2 = 32.0$, $df=1$,

$p < 0.05$) with 39.4% of residents hunting on Oklahoma public land for the first time and only 12.5% of nonresidents hunting on public land for the first time.

We asked about user satisfaction with the accessibility of roads, the availability of bathroom facilities, campgrounds, and signage. Reporting on the combination of satisfied and very satisfied, each of the four amenities varied in their level of satisfaction with roads (76.9%) and signage (66.0%) being high and bathrooms and (33.0%) campgrounds (44.0%) less so. Neutral sentiments for bathrooms and campgrounds were higher than sentiments of dissatisfaction. This could be because users did not use or look for these amenities during their visits. Satisfaction for all amenities was not significantly different between first time users and non-first-time users ($p > 0.05$, Figure B11).

Finally, we asked about the use of privately owned land but which the Department leases for public hunting access. These properties include Oklahoma Land Access Program (OLAP) and the Honobia/Three-Rivers Wildlife Management Area. Out of all active hunters, 1.8% used OLAP in 2023, 0.8% used Three Rivers and 0.7% used Honobia (Table B2).

Use of Hunting Guides

During 2023, 10.0% of active hunters in Oklahoma had used the services of a hunting guide. This was significantly different by residency ($\chi^2 = 200.7$, $df = 2$, $p < 0.05$). 25% of nonresidents used a guide for hunting in Oklahoma in 2023 while only 3.2% of resident hunters used a guide (Figure B12). Of those that used a guide, ($n = 171$) the most often selected answer was ducks (45.6%), followed by geese (37.4%), and white-tailed deer (28.7%).

Antlered deer harvest reduction

Deer season is the most popular season in Oklahoma. As such, regulations and reductions continue to be proposed by various bodies. To keep up with the opinions of our license holders, we asked about their opinions related to a reduction in the number of antlered deer that could be harvested over the season. The reduction proposed was from 2 antlered deer to only one antlered deer for all hunters. Of all license holders, responses were mixed across opposition and support to a reduction. 38.5% of all license holders either oppose or strongly oppose and 34.7% of license holders support or strongly support a reduction (Figure B13). This can be broken down into many different groups to highlight if there are different feelings across user groups. There is a significantly higher opposition to this in residents (40.0%) compared to nonresidents (32.9%, $\chi^2 = 38.2$, $df = 6$, $p < 0.05$). There is also significantly higher opposition in active hunters (of any species; 42.0%) compared to non-active hunters (32.6%, $\chi^2 = 183.4$, $df = 6$, $p < 0.05$). Also understandable is that active deer hunters had higher opposition (46.6%) compared to non-active deer hunters (26.5%, $\chi^2 = 301.6$, $df = 12$, $p < 0.05$). There was also highest opposition in annual license holders (45.1%) followed by lifetime license holders (41.4%), nonresidents (32.9%) and senior license holders (31.3%, $\chi^2 = 224.6$, $df = 24$, $p < 0.05$).

Access to private land for hunting

We asked hunters how their access to private land for hunting has changed over the last five years. When looking only at resident hunters, the plurality of hunters selected that they have about the same access as five years ago (44.5%). Next most often selected was that they have less access than five years ago (27.4%), then unsure (16.5%) and more access (11.6%). This varied significantly by type of resident license ($\chi^2 = 352.7$, $df = 12$, $p < 0.05$). 35.2% of senior license holders have the same access compared to 48.0% of lifetime license holders maintaining the same access and 46.2% of annual license holders (Figure B14). Almost 20% of annual license holders stated they have more access compared to 10.8% of lifetime license holders and 3.8% of senior license holders. Finally, lifetime license holders were most likely to state they have less access (31.4%) compared to senior license holders (25.3%) and annual license holders (22.7%). This could be attributed to different reference points of private land access whereas lifetime license holders may have grown up with access and no longer have it compared to annual license holders who may never have had access or did not have access growing up and now have some or the same- meaning they didn't have it and they still don't have it.

Trapping in Oklahoma

We wanted to get an idea of support for trapping in Oklahoma as well as past activity, future interest, and species interest. We first asked to what extent respondents approve or disapprove of regulated trapping. We asked it in this way after research done in nationwide surveys denoted that calling it “regulated” trapping tended to get more people okay with it. There was some confusion from respondents on what this meant and some of the phone callers were heard to explain it in different ways. Overall, support was very high among resident license holders (51%; Figure B15). When removing phone responses from this number, support was higher. Only 9% of resident license holders had some level of disapproval towards trapping.

Only ten percent of resident respondents had trapped in Oklahoma in the last five years, but interest in trapping was high with 33% interested in trapping in the future (Figure B16). There was a significant difference when comparing interest in trapping by resident license type. Annual license holders were most interested in trapping in the future (40%) along with lifetime license holders (39%) while senior license holders were much less interested (8%; $\chi^2= 296.9$, $df=6$, $p<0.05$). We would expect those interested in trapping to be more avid this more likely to have a lifetime license. The difference in annuals being so highly interested could be the fact they are less likely to have trapped in the past. There was a significant difference by license type when looking at those that had trapped in the last five years. 15% of lifetime license holders had trapped while only 7% of annual license holders had trapped and 4% of senior license holders ($\chi^2= 154.9$, $df=6$, $p<0.05$). This is a great opportunity for recruitment to trapping with low previous participation but high interest for annual license holders.

Finally, we asked about what species those who would be interested in trapping in the future would be most interested in attempting to trap. The top five selected species were coyote (64% selected), feral hogs (57%), bobcat (51%), raccoon (49%), and beaver (35%).

Discussion:

The Game Harvest Survey has been conducted for over 30 years and has provided valuable data for ODWC programs. However, the survey is not without its limitations. For years, ODWC managers and biologists have had reservations about the estimates resulting from the Game Harvest Survey because the numbers of hunters and harvest estimates were inflated beyond what they felt was realistic. Over-estimation of hunter numbers and game harvest may have stemmed from several sources.

Recall Bias

Participants were asked questions about hunting seasons that may have begun 11 months prior to the interview (e.g., spring turkey). Most participants probably did not keep written records of the number of field days and harvest and responded to questions based on memory. A 1998 mail survey found that participants in a one-day controlled quail hunt over-estimated their quail harvest almost a year after the event (Crews 1999). If hunters had trouble recalling an isolated one-day event, the problems of recall bias were surely magnified when hunters were asked to recall hunting activities for seasons spanning several months, as occurred during the Game Harvest Survey. Recall bias during the Game Harvest Survey might only be addressed by breaking the survey into smaller segments to be conducted throughout the year, immediately following the close of each season. At this time, such a change in methodology is cost prohibitive.

Social Desirability Bias

Yet another source of estimation error could have been social pressure, or the participant’s desire to give socially acceptable answers. Participants may have felt uncomfortable admitting that they did not harvest any game, did not hunt very many days, harvested more game than legally allowed, harvested game without a tag, etc. To minimize bias from social pressure, interviewers are trained to read the questions the same way during each interview, avoid discussion about the question items, and not reveal personal opinions. Although the desire to give socially acceptable answers may significantly impact the results of opinion questions, it is presumed that

the effect on harvest data should be consistent from year to year and should not impact the trend data, except perhaps in scale.

It is assumed that respondents participating in the survey over the phone may be more likely to provide socially desirable answers than those participating by mail. This was examined on the 2014-season survey by comparing the percentage of respondents reporting unsuccessful hunts by their mode of response. The percentages of respondents who reported not harvesting, deer, spring turkey and dove were nearly identical for mail and phone responses, suggesting phone surveys may not be any more likely to introduce social desirability bias.

Rounding Bias (Digit Preference)

The exact number of game harvested for species with long seasons and/or large bag limits may have been difficult for participants to remember. For example, when successful hunters reported the number of animals harvested, they often respond with numbers ending in 0 or 5 (Crews 1999, 1998). Rounding bias, or digit preference, may have some unknown influence on harvest estimates. This bias was assessed and confirmed to exist on previous Game Harvest Surveys (Jager 2014). It is presumed that any bias introduced by the tendency toward rounded numbers is consistent from year to year and should not impact the trend data, except perhaps in scale.

Non-Response Bias

Non-response bias (resulting when the proportion of the sample interviewed does not represent the proportion which could not be interviewed) can be formally addressed by a follow-up study of non-respondents, comparative analysis, and subsequent weighting of the original data if differences are found. Another way to detect non-response bias is to compare the responses of early and late respondents on a few key variables. The presumption is that the people who could not be interviewed (non-respondents) would be more like those that were difficult to interview (success after repeated attempts) than those that were successfully interviewed within the first few attempts. This second approach is typically used to assess non-response bias in the Game Harvest Survey; however, data were unavailable for this analysis on the 2023-season survey. Past results of the assessment suggested that non-response bias was present on occasion, but not a significant problem.

Sample Size Limitations

The current number of completed surveys ($n = 2,928$) is more than adequate to analyze results of questions asked of all respondents (e.g., participation in hunting). A standard sample size of 400 is generally used for populations over 1,000, as the results from a random sample can be reported with 95% confidence at a level of precision of plus or minus 5% (Dillman 2000). Further increasing the sample size does not yield a significant return on investment in reduced sampling error.

However, during the Game Harvest Survey, estimates of hunter numbers and harvest are often calculated from a much smaller sub-sample (e.g., active hunters or participants in a particular season). The overall sample size for the 2023-seasons GHS was doubled from previous years. This helped increase certain sub-sample sizes, however, participant samples of less than 400 were still used for nearly all the seasons listed in Table A2. Variability in these small samples often yields wide confidence intervals.

The incidence of participation in some seasons is so low that an unrealistic number of completed surveys would be needed to yield a sub-sample size of 400 for estimating harvest. For example, based on 2017 season participation rates, over 10,000 completed surveys would be needed to identify 400 pheasant hunters (3.3% of completed 2017 surveys). For other seasons, almost an entire population census would be necessary (e.g., 1,048 woodcock hunters were estimated to exist statewide in 2017).

Recommendations:

The value of this project in collecting trend data on species harvest outweighs the cost, despite concerns about biases. Within the constraint of budget and time, ODWC should continue to sample at the rate necessary to complete more than 2,000 completed surveys, to yield the greatest amount of data possible from active hunters.

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Equipment:

None.

Significant Deviation:

None.

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APPENDIX A

Harvest Estimates – Tables and Graphs

Table A1. Distribution of license types for Game Harvest Survey population, sample, and completed surveys, 2023.

| LICENSE TYPE | Population | | Sampled | | Completed | |
|--------------------------|----------------|-------------|--------------|-------------|--------------|-------------|
| | Number | Percent | Number | Percent | Number | Percent |
| Lifetime | | | | | | |
| Hunting | 39,181 | 10.6 | 484 | 9.7 | 249 | 10.8 |
| Combination | 124,493 | 33.8 | 1,639 | 32.8 | 787 | 34.0 |
| Hunting Over 60 | 349 | 0.1 | 14 | 0.3 | 3 | 0.1 |
| Combination Over 60 | 1,516 | 0.4 | 14 | 0.3 | 8 | 0.3 |
| <i>Subtotal</i> | <i>165,539</i> | <i>45.0</i> | <i>2,151</i> | <i>43.1</i> | <i>1,047</i> | <i>45.3</i> |
| Senior Citizen | | | | | | |
| Hunting | 2,417 | 0.7 | 28 | 0.6 | 14 | 0.6 |
| Combination | 100,336 | 27.3 | 1,556 | 31.2 | 598 | 25.9 |
| <i>Subtotal</i> | <i>102,753</i> | <i>27.9</i> | <i>1,584</i> | <i>31.7</i> | <i>612</i> | <i>26.5</i> |
| Annual | | | | | | |
| Hunting | 51,654 | 14.0 | 675 | 13.5 | 343 | 14.8 |
| Hunting Fiscal Year (FY) | 118 | 0.0 | 2 | 0.0 | 1 | 0.0 |
| Combination | 19,371 | 5.3 | 212 | 4.2 | 113 | 4.9 |
| Combination FY | 266 | 0.1 | 3 | 0.1 | 1 | 0.0 |
| Youth Hunting | 4,893 | 1.3 | 83 | 1.7 | 42 | 1.8 |
| Youth Combination | 1,454 | 0.4 | 16 | 0.3 | 3 | 0.1 |
| <i>Subtotal</i> | <i>77,756</i> | <i>21.1</i> | <i>991</i> | <i>19.9</i> | <i>503</i> | <i>21.8</i> |
| Five-Year | | | | | | |
| Hunting | 4,915 | 1.3 | 62 | 1.2 | 40 | 1.7 |
| Combination | 17,198 | 4.7 | 204 | 4.1 | 110 | 4.8 |
| <i>Subtotal</i> | <i>22,113</i> | <i>6.0</i> | <i>266</i> | <i>5.3</i> | <i>150</i> | <i>6.5</i> |
| Total | 368,161 | | 4,992 | | 2,312 | |

Non-Residents Table

| LICENSE TYPE | POPULATION | | SAMPLED | | COMPLETED | |
|--|------------|---------|---------|---------|-----------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| NONRESIDENT 5-DAY HUNTING | 16,741 | 32.9% | 312 | 31.2% | 184 | 29.9% |
| NONRESIDENT DEER ARCHERY | 11,825 | 23.2% | 241 | 24.1% | 150 | 24.4% |
| NONRESIDENT DEER GUN | 7,875 | 15.5% | 177 | 17.7% | 112 | 18.2% |
| NONRESIDENT FISCAL YEAR HUNTING | 702 | 1.4% | 13 | 1.3% | 8 | 1.3% |
| NONRESIDENT HUNTING | 11,941 | 23.4% | 226 | 22.6% | 148 | 24.0% |
| NONRESIDENT TRAPPER | 24 | 0.0% | 1 | 0.1% | 1 | 0.0% |
| NONRESIDENT YOUTH DEER ARCHERY ANTLERLESS | 190 | 0.4% | 2 | 0.2% | 1 | 0.0% |
| NONRESIDENT YOUTH DEER GUN ANTLERLESS | 403 | 0.8% | 9 | 0.9% | 2 | 0.0% |
| NONRESIDENT YOUTH DEER GUN EITHER SEX | 1,189 | 2.3% | 19 | 1.9% | 10 | 1.6% |
| NONRESIDENT YOUTH DEER MUZZLELOADER ANTLERLESS | 8 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| NONRESIDENT YOUTH DEER MUZZLELOADER EITHER SEX | 36 | 0.1% | 0 | 0.0% | 0 | 0.0% |
| NONRESIDENT YOUTH DEER PRIVATE LANDS ANTLERLESS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| TOTAL | 50,934 | | 1,000 | | 616 | |

Table A2. Statewide hunter and game harvest estimates and statistics by species/subspecies in Oklahoma, 2023 Includes all resident license types.

| Species | Sample | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Number of Hunters | Number of Days Hunted | Total Harvest | Lower Confidence Interval (95%) | Upper Confidence Interval (95%) |
|--------------------------|--------|---------------------|------------------|----------------|-------------------|-----------------------|---------------|---------------------------------|---------------------------------|
| Crow | 40 | 10.54 | 4.28 | 2.90 | 6,371 | 27,252 | 67,150 | 18,187 | 116,113 |
| Dove | 286 | 20.54 | 4.39 | 4.90 | 45,550 | 200,163 | 935,548 | 748,146 | 1,122,950 |
| Furbearers | | | | | | | | | |
| Coyote | 122 | 7.64 | 22.09 | 0.61 | 19,430 | 429,264 | 148,435 | 86,214 | 210,656 |
| Bobcat | 36 | 1.59 | 17.40 | 0.16 | 5,734 | 99,764 | 9,143 | 2,529 | 15,757 |
| Raccoon | 55 | 11.98 | 25.84 | 0.87 | 8,760 | 226,375 | 104,953 | 64,147 | 145,758 |
| Beaver | 12 | 8.42 | 13.83 | 0.60 | 1,911 | 26,438 | 16,086 | 3,090 | 29,082 |
| Gray Fox | 4 | 0.50 | 20.25 | 0.26 | 637 | 12,900 | 318 | - | 679 |
| Red Fox | 1 | 0 | 1 | 0 | 159 | 159 | 0 | - | - |
| Otter | 3 | 1.00 | 25.67 | 0.03 | 478 | 12,263 | 478 | 0 | 1,018 |
| Pheasant | 39 | 3.92 | 3.54 | 1.01 | 6,211 | 21,979 | 24,341 | 13,455 | 35,228 |
| Quail | 69 | 12.05 | 4.94 | 3.02 | 10,989 | 54,280 | 132,371 | 90,382 | 174,360 |
| Rabbits | | | | | | | | | |
| Cottontail Rabbit | 61 | 3.69 | 3.05 | 1.31 | 9,715 | 29,631 | 35,835 | 19,471 | 52,199 |
| Jackrabbit | 2 | 0.50 | 1.00 | 0.50 | 319 | 319 | 159 | 0 | 471 |
| Swamp Rabbit | 5 | 2.00 | 2.60 | 0.93 | 796 | 2,070 | 1,593 | 0 | 4,011 |
| Squirrels | | | | | | | | | |
| Fox Squirrel | 103 | 7.72 | 8.23 | 1.59 | 16,404 | 134,934 | 126,571 | 89,927 | 163,214 |
| Gray Squirrel | 107 | 9.77 | 9.40 | 1.62 | 17,041 | 160,254 | 166,555 | 96,237 | 236,873 |
| Turkey | | | | | | | | | |
| Fall Turkey | 56 | 0.18 | 5.38 | 0.12 | 8,919 | 48,000 | 1,622 | 712 | 2,531 |
| Spring Turkey | 209 | 0.27 | 4.67 | 0.12 | 33,286 | 155,390 | 9,122 | 7,104 | 11,139 |
| Woodcock | 1 | 0 | 1 | 0 | 159 | 159 | - | - | - |
| Feral Swine | 320 | 37.52 | 41.38 | 0.83 | 50,965 | 2,109,055 | 1,912,174 | 1,791,220 | 2,033,129 |

^aEstimated number of hunters that hunted at least one species/subspecies within a given season.

^bEstimated total harvest within a given season.

Table A3. Statewide trends in estimated harvest and estimated number of hunters in Oklahoma, 1986-2023. In survey years 2019-2021 tribal licenses were included in statewide estimates.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-------------|-------|-------------------|---------------------|------------------|----------------|---------------|---|---------|-----------|
| Crow | 1986 | 12,398 | 18.55 | 5.15 | 3.60 | 229,979 | 142,439 | - | 317,519 |
| | 1987 | 13,987 | 14.07 | 12.25 | 1.15 | 196,744 | 109,783 | - | 283,705 |
| | 1988 | 6,711 | 14.45 | 6.45 | 2.24 | 96,957 | 55,851 | - | 138,063 |
| | 1989 | 8,467 | 17.08 | 4.05 | 4.21 | 144,601 | 56,951 | - | 232,252 |
| | 1990 | 7,675 | 16.64 | 5.79 | 2.86 | 127,678 | 65,706 | - | 189,650 |
| | 1991 | 6,518 | 19.77 | 7.32 | 2.94 | 128,893 | 70,572 | - | 187,214 |
| | 1992 | 6,197 | 12.77 | 4.82 | 2.84 | 79,150 | 36,475 | - | 121,826 |
| | 1993 | 7,654 | 22.22 | 8.56 | 3.57 | 170,054 | 70,368 | - | 269,740 |
| | 1994 | 5,309 | 24.58 | 4.10 | 4.86 | 130,501 | 41,608 | - | 219,394 |
| | 1995 | 6,756 | 22.30 | 5.18 | 3.85 | 150,683 | 53,458 | - | 247,909 |
| | 1996 | 13,958 | 20.87 | 5.69 | 3.94 | 291,375 | 190,710 | - | 392,041 |
| | 1997 | 9,900 | 36.28 | 7.41 | 3.29 | 359,196 | 87,504 | - | 630,888 |
| | 1998 | 11,861 | 23.74 | 7.88 | 3.04 | 281,628 | 172,534 | - | 390,722 |
| | 1999 | 12,318 | 15.16 | 7.25 | 3.55 | 186,684 | 133,942 | - | 239,426 |
| | 2000 | 16,692 | 28.54 | 6.38 | 3.97 | 476,319 | 174,552 | - | 778,086 |
| | 2001 | 13,328 | 40.12 | 8.00 | 3.44 | 534,702 | 33,840 | - | 1,035,565 |
| | 2002 | 15,221 | 23.52 | 6.95 | 3.54 | 358,009 | 179,811 | - | 536,206 |
| | 2003 | 17,627 | 21.11 | 7.91 | 4.18 | 372,186 | 255,519 | - | 488,854 |
| | 2004 | 12,209 | 12.59 | 5.10 | 2.94 | 153,766 | 88,743 | - | 218,790 |
| | 2005 | 12,353 | 20.55 | 7.00 | 3.90 | 253,837 | 144,478 | - | 363,196 |
| | 2006 | 11,616 | 38.68 | 12.61 | 3.29 | 449,351 | 183,569 | - | 715,134 |
| | 2007 | 9,536 | 24.95 | 8.09 | 4.01 | 237,882 | 94,337 | - | 381,427 |
| | 2008 | 9,359 | 18.45 | 8.21 | 2.57 | 172,655 | 73,100 | - | 272,210 |
| | 2009 | 10,856 | 18.26 | 8.62 | 3.74 | 198,224 | 93,397 | - | 303,052 |
| | 2010 | 9,763 | 10.30 | 11.93 | 1.93 | 100,562 | 62,208 | - | 138,915 |
| | 2011 | 10,728 | 19.49 | 6.62 | 4.59 | 209,039 | 90,600 | - | 327,478 |
| | 2012 | 9,369 | 15.17 | 9.78 | 2.32 | 142,145 | 61,829 | - | 222,462 |
| | 2013 | 8,867 | 15.55 | 5.71 | 3.43 | 137,838 | 82,795 | - | 192,881 |
| | 2014 | 7,984 | 11.17 | 5.99 | 3.07 | 89,216 | 56,084 | - | 122,348 |
| | 2015 | 6,688 | 15.15 | 8.05 | 2.50 | 101,292 | 16,261 | - | 186,322 |
| 2016 | 8,064 | 17.54 | 7.81 | 3.12 | 141,443 | 52,808 | - | 230,078 | |
| 2017 | 9,432 | 11.17 | 4.70 | 3.79 | 105,371 | 50,853 | - | 159,889 | |
| 2018 | 6,609 | 11.90 | 4.05 | 3.16 | 78,646 | 13,738 | - | 143,553 | |
| 2019 | 8,536 | 12.54 | 5.21 | 3.25 | 107,014 | 55,615 | - | 158,413 | |
| 2020 | 8,553 | 17.84 | 6.28 | 2.90 | 152,596 | 55,216 | - | 249,977 | |
| 2021 | 9,124 | 12.04 | 6.00 | 3.65 | 109,842 | 68,514 | - | 151,169 | |
| 2022 | 8,563 | 12.17 | 7.17 | 2.58 | 104,180 | 44,122 | - | 164,238 | |
| 2023 | 6,371 | 10.54 | 4.28 | 2.90 | 67,150 | 18,187 | - | 116,112 | |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-------------|------|-------------------|---------------------|------------------|----------------|---------------|---|---|-----------|
| | | | | | | | | | |
| Dove | 1986 | 73,973 | 28.00 | 6.25 | 4.48 | 2,071,048 | 1,771,207 | – | 2,370,889 |
| | 1987 | 78,325 | 25.13 | 5.91 | 4.25 | 1,968,139 | 1,668,916 | – | 2,267,362 |
| | 1988 | 71,966 | 23.74 | 5.96 | 3.98 | 1,708,665 | 1,475,536 | – | 1,941,794 |
| | 1989 | 59,044 | 20.66 | 4.99 | 4.14 | 1,219,640 | 1,049,482 | – | 1,389,799 |
| | 1990 | 65,583 | 26.72 | 5.66 | 4.86 | 1,752,372 | 1,464,888 | – | 2,039,856 |
| | 1991 | 60,142 | 24.43 | 5.53 | 4.69 | 1,469,351 | 1,276,161 | – | 1,662,541 |
| | 1992 | 61,828 | 23.26 | 5.18 | 4.80 | 1,437,806 | 1,249,094 | – | 1,626,519 |
| | 1993 | 48,706 | 19.64 | 5.33 | 4.33 | 956,451 | 825,859 | – | 1,087,044 |
| | 1994 | 61,483 | 22.66 | 5.50 | 4.37 | 1,393,209 | 1,157,469 | – | 1,628,949 |
| | 1995 | 59,598 | 17.52 | 4.54 | 4.14 | 1,044,286 | 900,397 | – | 1,188,176 |
| | 1996 | 64,959 | 18.05 | 4.71 | 4.56 | 1,172,345 | 1,016,774 | – | 1,327,916 |
| | 1997 | 60,666 | 18.78 | 4.70 | 4.58 | 1,139,192 | 1,016,289 | – | 1,262,095 |
| | 1998 | 62,562 | 23.97 | 5.12 | 5.98 | 1,499,400 | 1,307,724 | – | 1,691,076 |
| | 1999 | 69,527 | 20.32 | 5.04 | 4.68 | 1,413,132 | 1,254,042 | – | 1,572,222 |
| | 2000 | 75,116 | 26.04 | 6.01 | 4.71 | 1,956,043 | 1,672,467 | – | 2,239,619 |
| | 2001 | 69,507 | 20.25 | 5.11 | 4.65 | 1,407,192 | 1,240,641 | – | 1,573,742 |
| | 2002 | 73,379 | 24.60 | 5.48 | 4.96 | 1,804,942 | 1,570,543 | – | 2,039,340 |
| | 2003 | 69,844 | 25.31 | 5.89 | 4.83 | 1,767,431 | 1,432,089 | – | 2,102,773 |
| | 2004 | 65,621 | 23.34 | 5.36 | 5.00 | 1,531,717 | 1,314,727 | – | 1,748,707 |
| | 2005 | 53,430 | 23.30 | 5.88 | 5.07 | 1,244,858 | 1,067,456 | – | 1,422,260 |
| | 2006 | 61,700 | 25.72 | 5.50 | 5.36 | 1,586,916 | 1,323,873 | – | 1,849,959 |
| | 2007 | 53,470 | 21.47 | 5.78 | 4.67 | 1,147,814 | 944,320 | – | 1,351,307 |
| | 2008 | 49,537 | 21.95 | 5.03 | 5.14 | 1,087,404 | 925,280 | – | 1,249,528 |
| | 2009 | 57,945 | 23.31 | 5.59 | 4.75 | 1,350,721 | 1,160,476 | – | 1,540,966 |
| | 2010 | 48,976 | 23.58 | 4.91 | 5.08 | 1,154,651 | 803,429 | – | 1,505,873 |
| | 2011 | 49,670 | 21.04 | 4.67 | 5.12 | 1,044,986 | 888,392 | – | 1,201,580 |
| | 2012 | 50,505 | 24.37 | 5.21 | 5.02 | 1,230,761 | 898,432 | – | 1,563,089 |
| | 2013 | 57,392 | 25.77 | 4.97 | 4.90 | 1,479,101 | 1,075,013 | – | 1,883,189 |
| | 2014 | 59,297 | 22.39 | 4.98 | 5.18 | 1,327,749 | 1,184,961 | – | 1,469,966 |
| | 2015 | 45,330 | 23.49 | 5.10 | 4.97 | 1,064,832 | 918,750 | – | 1,210,915 |
| | 2016 | 58,569 | 23.49 | 4.83 | 5.68 | 1,375,710 | 898,531 | – | 1,852,889 |
| | 2017 | 62,619 | 30.24 | 6.43 | 7.43 | 1,893,421 | 1,241,116 | – | 2,545,727 |
| | 2018 | 52,193 | 19.35 | 4.48 | 5.11 | 1,009,704 | 824,468 | – | 1,194,940 |
| | 2019 | 70,118 | 18.42 | 4.78 | 4.60 | 1,291,703 | 1,026,624 | - | 1,556,781 |
| | 2020 | 69,298 | 16.79 | 4.64 | 4.12 | 1,163,628 | 1,003,776 | - | 1,323,480 |
| | 2021 | 69,614 | 16.66 | 4.11 | 4.53 | 1,160,011 | 944,747 | - | 1,375,275 |
| | 2022 | 66,361 | 36.66 | 5.03 | 7.59 | 2,433,064 | 1,107,221 | - | 3,758,906 |
| | 2023 | 45,550 | 20.54 | 4.39 | 4.90 | 935,548 | 748,146 | - | 1,122,950 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-----------------|------|-------------------------|---------------------------|------------------------|----------------------|------------------|--|---|---------|
| Pheasant | 1986 | 20,043 | 4.12 | 4.16 | 0.99 | 82,652 | 60,345 | – | 104,959 |
| | 1987 | 19,348 | 3.01 | 3.83 | 0.79 | 58,277 | 46,072 | – | 70,482 |
| | 1988 | 16,429 | 3.27 | 3.35 | 0.98 | 53,769 | 40,807 | – | 66,731 |
| | 1989 | 15,819 | 3.00 | 3.56 | 0.84 | 47,458 | 37,129 | – | 57,787 |
| | 1990 | 16,280 | 2.89 | 3.21 | 1.07 | 46,978 | 33,790 | – | 60,166 |
| | 1991 | 13,775 | 2.95 | 4.01 | 0.94 | 40,586 | 30,920 | – | 50,253 |
| | 1992 | 16,478 | 4.00 | 4.71 | 1.05 | 65,912 | 47,535 | – | 84,288 |
| | 1993 | 18,787 | 3.55 | 5.19 | 0.97 | 66,658 | 54,001 | – | 79,315 |
| | 1994 | 16,441 | 2.96 | 3.71 | 0.94 | 48,638 | 36,766 | – | 60,510 |
| | 1995 | 17,131 | 3.13 | 4.37 | 0.90 | 53,566 | 38,927 | – | 68,205 |
| | 1996 | 13,690 | 2.84 | 3.80 | 0.98 | 38,922 | 27,664 | – | 50,179 |
| | 1997 | 15,195 | 3.89 | 4.36 | 1.17 | 59,170 | 47,167 | – | 71,173 |
| | 1998 | 13,946 | 3.86 | 4.24 | 1.02 | 53,830 | 39,450 | – | 68,210 |
| | 1999 | 18,203 | 4.06 | 5.20 | 1.15 | 73,907 | 59,268 | – | 88,546 |
| | 2000 | 22,592 | 5.32 | 7.14 | 0.91 | 120,203 | 86,005 | – | 154,401 |
| | 2001 | 16,194 | 4.52 | 4.42 | 0.94 | 73,233 | 37,037 | – | 109,429 |
| | 2002 | 14,740 | 3.89 | 4.55 | 1.41 | 57,358 | 35,876 | – | 78,840 |
| | 2003 | 20,621 | 4.76 | 4.77 | 1.26 | 98,114 | 77,301 | – | 118,927 |
| | 2004 | 21,823 | 3.79 | 3.38 | 1.36 | 82,713 | 65,053 | – | 100,373 |
| | 2005 | 19,348 | 5.02 | 3.87 | 1.56 | 97,037 | 72,896 | – | 121,178 |
| | 2006 | 17,047 | 4.17 | 3.65 | 1.30 | 71,053 | 52,350 | – | 89,756 |
| | 2007 | 18,391 | 4.39 | 3.54 | 1.37 | 80,783 | 63,519 | – | 98,046 |
| | 2008 | 18,072 | 4.25 | 4.61 | 1.18 | 76,807 | 60,512 | – | 93,102 |
| | 2009 | 18,924 | 6.06 | 3.81 | 1.63 | 114,725 | 83,682 | – | 145,769 |
| | 2010 | 19,366 | 4.57 | 3.82 | 1.39 | 88,440 | 65,260 | – | 111,621 |
| | 2011 | 12,344 | 3.86 | 3.48 | 1.20 | 47,613 | 34,745 | – | 60,481 |
| | 2012 | 11,711 | 2.29 | 3.14 | 0.91 | 26,789 | 18,965 | – | 34,614 |
| | 2013 | 10,640 | 3.26 | 3.45 | 1.08 | 34,661 | 25,063 | – | 44,259 |
| | 2014 | 10,887 | 2.64 | 2.95 | 1.09 | 28,741 | 20,824 | – | 36,658 |
| | 2015 | 10,616 | 3.20 | 2.95 | 1.27 | 33,950 | 26,496 | – | 41,404 |
| | 2016 | 13,157 | 3.67 | 3.62 | 1.39 | 48,241 | 32,215 | – | 61,268 |
| | 2017 | 11,790 | 3.36 | 3.31 | 1.19 | 39,039 | 18,774 | – | 60,351 |
| | 2018 | 10,506 | 4.29 | 4.26 | 1.12 | 45,076 | 23,812 | – | 66,340 |
| | 2019 | 12,398 | 3.70 | 3.77 | 1.73 | 45,871 | 28,523 | - | 63,220 |
| | 2020 | 9,868 | 1.84 | 3.95 | 0.78 | 18,202 | 12,739 | - | 23,664 |
| | 2021 | 12,842 | 3.37 | 2.68 | 1.76 | 43,256 | 21,086 | | 65,425 |
| | 2022 | 10,436 | 2.00 | 3.57 | 1.05 | 20,872 | 12,367 | | 29,376 |
| | 2023 | 6,211 | 3.92 | 3.54 | 1.01 | 24,342 | 13,455 | | 35,228 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|--------------|-------------|--------------------------|----------------------------|-------------------------|-----------------------|----------------------|--|---|-----------|
| Quail | 1986 | 110,960 | 24.43 | 7.06 | 3.46 | 2,711,186 | 2,352,252 | – | 3,070,119 |
| | 1987 | 120,517 | 26.90 | 7.51 | 3.58 | 3,242,080 | 2,800,473 | – | 3,683,687 |
| | 1988 | 97,651 | 20.61 | 7.08 | 2.91 | 2,012,172 | 1,701,565 | – | 2,322,779 |
| | 1989 | 92,465 | 23.57 | 7.05 | 3.34 | 2,179,840 | 1,805,160 | – | 2,554,520 |
| | 1990 | 93,026 | 24.26 | 7.46 | 3.04 | 2,256,571 | 1,892,142 | – | 2,621,000 |
| | 1991 | 98,268 | 32.98 | 9.85 | 3.35 | 3,240,764 | 2,846,242 | – | 3,635,286 |
| | 1992 | 94,079 | 35.38 | 8.58 | 3.86 | 3,328,404 | 2,861,486 | – | 3,795,323 |
| | 1993 | 90,733 | 22.19 | 8.31 | 2.60 | 2,013,098 | 1,778,982 | – | 2,247,214 |
| | 1994 | 84,089 | 27.44 | 9.35 | 2.64 | 2,307,057 | 1,976,583 | – | 2,637,532 |
| | 1995 | 68,646 | 14.42 | 6.86 | 2.15 | 990,118 | 836,199 | – | 1,144,036 |
| | 1996 | 72,743 | 18.18 | 7.14 | 2.58 | 1,322,260 | 1,141,940 | – | 1,502,580 |
| | 1997 | 60,551 | 24.66 | 8.01 | 2.96 | 1,493,212 | 1,256,216 | – | 1,730,208 |
| | 1998 | 60,477 | 17.34 | 6.83 | 2.54 | 1,048,878 | 894,731 | – | 1,203,026 |
| | 1999 | 59,263 | 17.35 | 7.54 | 2.20 | 1,028,316 | 836,071 | – | 1,220,561 |
| | 2000 | 53,243 | 21.50 | 8.61 | 2.75 | 1,144,868 | 930,191 | – | 1,359,544 |
| | 2001 | 38,838 | 9.43 | 6.46 | 1.71 | 366,289 | 291,121 | – | 441,458 |
| | 2002 | 49,507 | 15.58 | 6.51 | 2.41 | 771,218 | 645,620 | – | 896,815 |
| | 2003 | 50,221 | 17.44 | 6.68 | 2.66 | 875,614 | 665,353 | – | 1,085,875 |
| | 2004 | 42,577 | 24.03 | 6.62 | 3.31 | 1,023,086 | 834,117 | – | 1,212,056 |
| | 2005 | 41,524 | 20.66 | 6.64 | 3.25 | 857,856 | 681,772 | – | 1,033,939 |
| | 2006 | 34,395 | 16.85 | 5.82 | 2.64 | 579,436 | 421,911 | – | 736,962 |
| | 2007 | 28,949 | 13.32 | 5.61 | 2.63 | 385,467 | 282,172 | – | 488,762 |
| | 2008 | 31,142 | 15.28 | 7.34 | 2.58 | 475,850 | 373,848 | – | 577,852 |
| | 2009 | 30,659 | 12.25 | 5.55 | 2.22 | 375,653 | 289,321 | – | 461,985 |
| | 2010 | 28,169 | 13.61 | 5.94 | 2.53 | 383,265 | 232,279 | – | 534,251 |
| | 2011 | 17,341 | 6.30 | 5.67 | 1.37 | 109,186 | 75,774 | – | 142,599 |
| | 2012 | 16,396 | 7.75 | 5.60 | 1.69 | 127,067 | 89,421 | – | 164,713 |
| | 2013 | 14,187 | 8.23 | 5.36 | 1.80 | 116,719 | 80,308 | – | 153,130 |
| | 2014 | 20,758 | 12.43 | 4.96 | 2.71 | 258,081 | 208,869 | – | 307,293 |
| | 2015 | 20,276 | 20.19 | 6.02 | 3.42 | 409,284 | 276,416 | – | 542,152 |
| | 2016 | 29,072 | 17.57 | 6.34 | 2.87 | 510,807 | 372,263 | – | 649,351 |
| | 2017 | 30,655 | 14.33 | 5.91 | 2.95 | 439,291 | 341,199 | – | 537,384 |
| | 2018 | 21,352 | 9.56 | 6.18 | 1.58 | 204,108 | 147,507 | – | 260,710 |
| | 2019 | 24,389 | 6.54 | 5.95 | 1.71 | 159,415 | 116,162 | - | 202,668 |
| | 2020 | 20,833 | 7.70 | 5.32 | 1.74 | 160,460 | 81,143 | - | 239,778 |
| | 2021 | 21,966 | 8.85 | 6.87 | 2.41 | 194,376 | 102,825 | | 285,927 |
| | 2022 | 17,928 | 9.66 | 5.54 | 2.4 | 173,214 | 100,868 | | 245,560 |
| | 2023 | 10,989 | 12.05 | 4.94 | 3.03 | 132,371 | 90,982 | | 174,360 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|------------------------------|-------------|----------------------------------|------------------------------------|---------------------------------|-------------------------------|--------------------------|--|---|-----------|
| Cottontail Rabbit | 1986 | 73,560 | 10.70 | 7.07 | 1.51 | 787,052 | 658,305 | – | 915,798 |
| | 1987 | 78,558 | 14.37 | 7.39 | 1.94 | 1,128,714 | 678,501 | – | 1,578,926 |
| | 1988 | 66,181 | 9.38 | 8.45 | 1.11 | 621,080 | 512,259 | – | 729,902 |
| | 1989 | 49,686 | 9.24 | 7.23 | 1.28 | 459,203 | 370,984 | – | 547,423 |
| | 1990 | 57,909 | 9.24 | 7.17 | 1.57 | 534,898 | 431,376 | – | 638,420 |
| | 1991 | 53,746 | 12.00 | 7.6 | 1.77 | 645,201 | 488,080 | – | 802,322 |
| | 1992 | 44,786 | 8.49 | 5.84 | 1.81 | 280,260 | 320,761 | – | 439,759 |
| | 1993 | 35,903 | 8.99 | 7.15 | 1.47 | 322,714 | 256,101 | – | 389,326 |
| | 1994 | 39,219 | 7.89 | 6.94 | 1.45 | 309,469 | 249,874 | – | 369,063 |
| | 1995 | 37,761 | 7.01 | 5.95 | 1.38 | 264,812 | 222,666 | – | 306,957 |
| | 1996 | 43,351 | 8.56 | 6.37 | 1.58 | 370,963 | 305,406 | – | 436,520 |
| | 1997 | 31,772 | 10.37 | 7.88 | 1.62 | 329,463 | 264,429 | – | 396,497 |
| | 1998 | 36,625 | 9.95 | 7.92 | 1.53 | 364,426 | 293,158 | – | 435,695 |
| | 1999 | 35,311 | 7.42 | 6.04 | 1.46 | 261,880 | 195,480 | – | 328,280 |
| | 2000 | 45,616 | 9.25 | 7.24 | 1.80 | 422,095 | 356,135 | – | 488,055 |
| | 2001 | 31,959 | 13.45 | 7.25 | 1.78 | 429,797 | 221,176 | – | 638,417 |
| | 2002 | 31,403 | 8.39 | 7.35 | 1.51 | 263,397 | 194,256 | – | 332,538 |
| | 2003 | 30,598 | 8.85 | 10.62 | 1.46 | 270,869 | 221,939 | – | 319,800 |
| | 2004 | 21,975 | 10.01 | 8.55 | 1.40 | 219,907 | 146,217 | – | 293,596 |
| | 2005 | 23,962 | 12.09 | 6.61 | 1.71 | 289,772 | 111,813 | – | 467,730 |
| | 2006 | 21,572 | 14.81 | 8.58 | 1.59 | 319,483 | 169,745 | – | 469,222 |
| | 2007 | 18,391 | 7.76 | 8.81 | 1.39 | 142,700 | 94,777 | – | 190,624 |
| | 2008 | 19,202 | 6.78 | 8.59 | 1.39 | 130,217 | 92,611 | – | 167,824 |
| | 2009 | 25,672 | 7.47 | 7.01 | 1.53 | 191,643 | 149,663 | – | 233,623 |
| | 2010 | 20,167 | 6.90 | 7.29 | 1.50 | 139,247 | 101,532 | – | 176,961 |
| | 2011 | 18,957 | 7.81 | 8.67 | 1.30 | 147,982 | 113,594 | – | 182,371 |
| | 2012 | 16,981 | 6.89 | 6.45 | 1.26 | 116,966 | 86,617 | – | 147,315 |
| | 2013 | 17,089 | 7.43 | 6.21 | 1.27 | 126,944 | 75,628 | – | 178,261 |
| | 2014 | 19,596 | 8.04 | 6.21 | 1.53 | 157,648 | 120,011 | – | 195,284 |
| | 2015 | 16,667 | 6.49 | 5.73 | 1.72 | 108,119 | 83,309 | – | 132,929 |
| | 2016 | 19,098 | 7.16 | 8.27 | 1.66 | 136,762 | 107,591 | – | 165,933 |
| | 2017 | 17,030 | 7.10 | 5.67 | 1.72 | 120,887 | 83,517 | – | 158,257 |
| | 2018 | 13,726 | 4.44 | 6.25 | 0.97 | 60,986 | 41,210 | – | 80,761 |
| | 2019 | 18,698 | 5.88 | 6.85 | 1.19 | 109,852 | 71,755 | – | 147,949 |
| | 2020 | 16,886 | 6.71 | 8.31 | 1.04 | 113,313 | 50,795 | – | 175,832 |
| | 2021 | 18,586 | 4.91 | 6.13 | 1.09 | 91,178 | 50,407 | | 131,950 |
| | 2022 | 11,506 | 6.24 | 12.88 | 1.07 | 71,777 | 26,745 | | 116,808 |
| | 2023 | 9,715 | 3.69 | 3.05 | 1.31 | 35,835 | 19,471 | | 52,199 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-------------------|------|-------------------|---------------------|------------------|----------------|---------------|---|---|---------|
| Jackrabbit | 1986 | 6,612 | 7.06 | 6.97 | 1.01 | 46,698 | 5,716 | - | 87,681 |
| | 1987 | 7,926 | 4.62 | 6.35 | 0.73 | 36,598 | 8,927 | - | 64,269 |
| | 1988 | 2,314 | 4.00 | 3.50 | 1.14 | 9,256 | 1,850 | - | 16,662 |
| | 1989 | 2,005 | 0.78 | 7.44 | 0.10 | 1,560 | 128 | - | 2,991 |
| | 1990 | 2,326 | 3.00 | 3.67 | 0.67 | 6,977 | 1,541 | - | 12,413 |
| | 1991 | 2,583 | 7.71 | 5.71 | 0.88 | 19,924 | 0 | - | 41,977 |
| | 1992 | 1,268 | 4.89 | 8.89 | 0.41 | 6,197 | 0 | - | 17,124 |
| | 1993 | 2,227 | 4.12 | 5.75 | 0.95 | 9,185 | 2,580 | - | 15,790 |
| | 1994 | 1,199 | 1.14 | 1.86 | 0.67 | 1,370 | 0 | - | 3,318 |
| | 1995 | 603 | 2.20 | 1.60 | 1.20 | 1,327 | 0 | - | 3,644 |
| | 1996 | 805 | 0.50 | 21.67 | 0.33 | 403 | 0 | - | 942 |
| | 1997 | 1,151 | 2.60 | 3.20 | 1.01 | 2,993 | 1,481 | - | 4,505 |
| | 1998 | 912 | 6.29 | 12.29 | 0.54 | 5,735 | 666 | - | 10,804 |
| | 1999 | 1,506 | 2.00 | 3.82 | 0.83 | 3,011 | 432 | - | 5,590 |
| | 2000 | 1,151 | 3.38 | 7.13 | 0.54 | 3,885 | 0 | - | 9,411 |
| | 2001 | 1,433 | 2.10 | 7.10 | 0.40 | 3,010 | 856 | - | 5,163 |
| | 2002 | 1,762 | 1.09 | 3.55 | 0.47 | 1,923 | 490 | - | 3,355 |
| | 2003 | 998 | 1.50 | 5.17 | 0.41 | 1,497 | 3 | - | 2,990 |
| | 2004 | 1,679 | 4.55 | 3.91 | 1.41 | 7,630 | 3,779 | - | 11,482 |
| | 2005 | 1,191 | 4.13 | 7.25 | 0.94 | 4,911 | 1,056 | - | 8,767 |
| | 2006 | 1,961 | 7.08 | 8.08 | 1.19 | 13,879 | 0 | - | 28,118 |
| | 2007 | 1,533 | 6.44 | 2.78 | 3.00 | 9,877 | 2,315 | - | 17,438 |
| | 2008 | 1,291 | 5.00 | 12.13 | 1.64 | 6,454 | 1,673 | - | 11,236 |
| | 2009 | 2,054 | 29.00 | 15.57 | 1.29 | 59,559 | 0 | - | 127,281 |
| | 2010 | 1,601 | 3.30 | 4.70 | 0.66 | 5,282 | 443 | - | 10,120 |
| | 2011 | 882 | 27.33 | 26.67 | 1.75 | 24,100 | 0 | - | 66,544 |
| | 2012 | 1,025 | 0.43 | 3.86 | 0.29 | 439 | 0 | - | 1,036 |
| | 2013 | 1,773 | 1.55 | 6.18 | 0.46 | 2,741 | 427 | - | 5,054 |
| | 2014 | 1,524 | 0.89 | 3.72 | 0.28 | 1,364 | 0 | - | 2,945 |
| | 2015 | 849 | 5.56 | 4.11 | 0.92 | 4,718 | 0 | - | 10,113 |
| | 2016 | 1,061 | 3.20 | 6.60 | 0.94 | 3,395 | 0 | - | 6,961 |
| | 2017 | 1,310 | 3.60 | 9.20 | 0.77 | 4,716 | 0 | - | 10,016 |
| | 2018 | 1,186 | 3.43 | 2.67 | 1.68 | 4,067 | 1,249 | - | 6,885 |
| | 2019 | 1,016 | 0.50 | 1.50 | 0.25 | 508 | 0 | - | 1,399 |
| | 2020 | 1,316 | 2.60 | 11.67 | 1.07 | 3,421 | 1,508 | - | 5,334 |
| | 2021 | 1,014 | 1.50 | 3.00 | 0.70 | 1,521 | 710 | | 2,332 |
| | 2022 | 803 | 0.33 | 2.67 | 0.33 | 268 | 0 | | 792 |
| | 2023 | 319 | 0.50 | 1.00 | 0.50 | 159 | 0 | | 471 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|---------------------|------|-------------------------|---------------------------|------------------------|----------------------|------------------|--|---|---------|
| Swamp Rabbit | 1986 | 8,885 | 7.53 | 7.37 | 1.02 | 66,948 | 36,672 | - | 97,224 |
| | 1987 | 12,122 | 3.85 | 7.62 | 0.51 | 46,622 | 30,227 | - | 63,016 |
| | 1988 | 10,876 | 4.23 | 9.02 | 0.47 | 46,049 | 32,353 | - | 59,744 |
| | 1989 | 12,032 | 4.13 | 10.22 | 0.40 | 49,686 | 31,287 | - | 68,084 |
| | 1990 | 9,535 | 5.68 | 8.80 | 0.70 | 54,187 | 23,908 | - | 84,466 |
| | 1991 | 10,454 | 7.45 | 10.60 | 0.96 | 77,852 | 41,742 | - | 113,962 |
| | 1992 | 8,028 | 9.75 | 10.21 | 1.28 | 78,305 | 35,583 | - | 121,027 |
| | 1993 | 9,045 | 7.31 | 9.32 | 0.83 | 66,101 | 43,944 | - | 88,259 |
| | 1994 | 7,535 | 6.11 | 7.57 | 0.96 | 46,069 | 28,701 | - | 63,438 |
| | 1995 | 7,721 | 5.95 | 8.22 | 0.78 | 45,965 | 27,923 | - | 64,007 |
| | 1996 | 10,737 | 3.66 | 6.21 | 0.69 | 39,324 | 23,196 | - | 55,452 |
| | 1997 | 5,641 | 6.33 | 8.53 | 0.81 | 35,686 | 19,760 | - | 51,612 |
| | 1998 | 7,560 | 5.76 | 10.19 | 0.90 | 43,533 | 29,328 | - | 57,738 |
| | 1999 | 6,980 | 5.80 | 10.24 | 0.93 | 40,512 | 27,075 | - | 53,950 |
| | 2000 | 5,036 | 3.94 | 8.29 | 0.69 | 19,858 | 12,309 | - | 27,407 |
| | 2001 | 7,309 | 4.36 | 9.24 | 0.83 | 31,867 | 21,768 | - | 41,966 |
| | 2002 | 4,486 | 3.57 | 9.39 | 0.78 | 16,022 | 8,368 | - | 23,676 |
| | 2003 | 5,820 | 9.91 | 19.11 | 0.68 | 57,690 | 23,946 | - | 91,433 |
| | 2004 | 3,357 | 6.36 | 5.33 | 0.65 | 21,365 | 775 | - | 41,955 |
| | 2005 | 2,977 | 3.70 | 6.51 | 0.62 | 11,013 | 4,333 | - | 17,694 |
| | 2006 | 3,319 | 6.05 | 21.00 | 0.50 | 20,064 | 10,216 | - | 29,912 |
| | 2007 | 2,725 | 2.88 | 24.25 | 0.34 | 7,833 | 3,060 | - | 12,607 |
| | 2008 | 2,420 | 5.73 | 9.40 | 0.69 | 13,877 | 7,081 | - | 20,673 |
| | 2009 | 2,347 | 4.19 | 10.47 | 0.52 | 9,829 | 4,021 | - | 15,636 |
| | 2010 | 3,041 | 2.74 | 11.05 | 0.59 | 8,323 | 3,250 | - | 13,395 |
| | 2011 | 2,645 | 5.50 | 12.28 | 0.51 | 14,548 | 6,908 | - | 22,188 |
| | 2012 | 2,489 | 3.24 | 9.00 | 0.69 | 8,051 | 4,072 | - | 12,031 |
| | 2013 | 2,418 | 8.20 | 8.27 | 0.92 | 19,829 | 3,520 | - | 36,138 |
| | 2014 | 2,250 | 5.35 | 6.30 | 0.91 | 12,048 | 5,338 | - | 18,758 |
| | 2015 | 1,592 | 2.14 | 4.69 | 0.61 | 3,412 | 945 | - | 5,879 |
| | 2016 | 2,334 | 2.40 | 7.64 | 0.67 | 5,602 | 966 | - | 10,238 |
| | 2017 | 2,358 | 11.86 | 13.50 | 1.13 | 27,960 | 4,020 | - | 51,899 |
| | 2018 | 1,695 | 1.90 | 3.80 | 0.45 | 3,220 | 0 | - | 6,630 |
| | 2019 | 3,455 | 4.47 | 5.38 | 0.95 | 15,446 | 2,473 | - | 28,419 |
| | 2020 | 2,851 | 1.46 | 5.92 | 0.41 | 4,167 | 1,667 | - | 6,667 |
| | 2021 | 4,055 | 0.36 | 9.36 | 0.18 | 9,585 | - | - | 19,911 |
| | 2022 | 2,408 | 4.11 | 7 | 0.82 | 9,901 | 413 | - | 19,388 |
| | 2023 | 796 | 2.00 | 2.60 | 0.93 | 1,593 | 0 | - | 4,011 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|---------------------|-------------|--------------------------|----------------------------|-------------------------|-----------------------|----------------------|--|---|-----------|
| Fox Squirrel | 1986 | 57,856 | 10.95 | 8.68 | 1.26 | 633,526 | 523,349 | – | 743,704 |
| | 1987 | 73,662 | 12.67 | 11.22 | 1.13 | 933,602 | 727,904 | – | 1,139,300 |
| | 1988 | 65,718 | 11.65 | 9.22 | 1.26 | 765,706 | 604,072 | – | 927,340 |
| | 1989 | 59,489 | 13.61 | 9.89 | 1.38 | 809,727 | 673,544 | – | 945,910 |
| | 1990 | 54,187 | 11.30 | 10.98 | 1.25 | 612,342 | 463,989 | – | 760,695 |
| | 1991 | 49,934 | 12.43 | 9.66 | 1.37 | 620,849 | 467,251 | – | 774,448 |
| | 1992 | 38,167 | 12.49 | 9.09 | 1.58 | 476,593 | 371,000 | – | 582,186 |
| | 1993 | 37,156 | 12.82 | 9.27 | 1.55 | 476,486 | 391,293 | – | 561,679 |
| | 1994 | 41,788 | 15.73 | 11.18 | 1.64 | 657,300 | 507,640 | – | 806,959 |
| | 1995 | 45,000 | 12.09 | 8.22 | 1.69 | 544,221 | 444,539 | – | 643,902 |
| | 1996 | 53,551 | 11.84 | 10.43 | 1.60 | 633,976 | 527,694 | – | 740,258 |
| | 1997 | 42,248 | 12.05 | 10.75 | 1.50 | 509,281 | 416,914 | – | 601,648 |
| | 1998 | 46,661 | 14.73 | 11.74 | 1.80 | 687,108 | 560,613 | – | 813,604 |
| | 1999 | 41,607 | 10.67 | 9.26 | 1.40 | 444,038 | 366,757 | – | 521,319 |
| | 2000 | 46,911 | 11.79 | 8.85 | 1.66 | 553,236 | 447,442 | – | 659,029 |
| | 2001 | 39,411 | 16.40 | 11.30 | 1.46 | 646,228 | 344,774 | – | 947,681 |
| | 2002 | 41,336 | 9.07 | 9.93 | 1.42 | 374,769 | 316,121 | – | 433,418 |
| | 2003 | 41,906 | 11.57 | 12.71 | 1.27 | 484,749 | 406,934 | – | 562,564 |
| | 2004 | 34,489 | 13.13 | 12.61 | 1.34 | 452,690 | 264,873 | – | 640,507 |
| | 2005 | 38,249 | 12.26 | 10.17 | 1.60 | 469,002 | 388,729 | – | 549,276 |
| | 2006 | 36,054 | 21.85 | 13.33 | 1.57 | 787,745 | 188,944 | – | 1,386,546 |
| | 2007 | 32,355 | 9.53 | 11.12 | 1.25 | 308,390 | 254,067 | – | 362,713 |
| | 2008 | 32,433 | 10.85 | 12.95 | 1.43 | 351,926 | 287,011 | – | 416,841 |
| | 2009 | 33,593 | 11.99 | 12.54 | 1.40 | 402,825 | 308,350 | – | 497,299 |
| | 2010 | 32,011 | 14.69 | 13.51 | 1.44 | 470,188 | 147,961 | – | 792,414 |
| | 2011 | 31,448 | 14.49 | 11.23 | 1.30 | 455,624 | 157,811 | – | 753,437 |
| | 2012 | 31,181 | 10.67 | 11.70 | 1.25 | 332,649 | 257,327 | – | 407,971 |
| | 2013 | 29,180 | 7.53 | 8.47 | 1.26 | 219,821 | 178,286 | – | 261,355 |
| | 2014 | 29,975 | 9.27 | 12.21 | 1.27 | 277,823 | 226,013 | – | 329,634 |
| | 2015 | 28,132 | 7.29 | 9.11 | 1.10 | 205,010 | 167,161 | – | 242,858 |
| | 2016 | 30,557 | 11.09 | 9.71 | 1.20 | 338,809 | 220,525 | – | 457,093 |
| | 2017 | 29,607 | 10.42 | 9.17 | 1.24 | 271,535 | 209,442 | – | 333,627 |
| | 2018 | 29,486 | 8.27 | 10.98 | 1.34 | 243,960 | 174,411 | – | 313,508 |
| | 2019 | 38,209 | 6.55 | 9.61 | 0.96 | 250,209 | 201,602 | - | 298,816 |
| | 2020 | 27,412 | 9.85 | 13.74 | 1.25 | 269,921 | 185,521 | - | 354,322 |
| | 2021 | 36,159 | 9.77 | 13.65 | 1.71 | 353,164 | 262,357 | | 443,972 |
| | 2022 | 33,716 | 7.5 | 10.98 | 1.14 | 253,003 | 162,547 | | 343,459 |
| | 2023 | 16,404 | 7.72 | 8.23 | 1.59 | 126,571 | 89,927 | | 163,214 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|----------------------|------|-------------------------|---------------------------|------------------------|----------------------|------------------|--|---|-----------|
| Gray Squirrel | 1986 | 45,458 | 10.87 | 10.14 | 1.07 | 494,258 | 383,057 | - | 605,459 |
| | 1987 | 53,149 | 14.36 | 11.93 | 1.20 | 763,199 | 573,765 | - | 952,633 |
| | 1988 | 39,570 | 9.27 | 9.85 | 0.94 | 367,002 | 259,805 | - | 474,199 |
| | 1989 | 43,002 | 17.21 | 11.08 | 1.55 | 740,162 | 288,418 | - | 1,191,906 |
| | 1990 | 41,164 | 11.53 | 12.78 | 1.10 | 474,664 | 307,081 | - | 642,246 |
| | 1991 | 38,742 | 14.04 | 10.31 | 1.30 | 543,981 | 381,217 | - | 706,745 |
| | 1992 | 26,759 | 12.21 | 10.44 | 1.37 | 326,601 | 246,865 | - | 406,338 |
| | 1993 | 28,667 | 12.39 | 9.73 | 1.46 | 355,138 | 284,629 | - | 425,647 |
| | 1994 | 28,943 | 16.20 | 12.47 | 1.49 | 468,741 | 334,001 | - | 603,482 |
| | 1995 | 33,056 | 10.58 | 8.42 | 1.37 | 349,744 | 278,775 | - | 420,714 |
| | 1996 | 43,082 | 12.56 | 10.35 | 1.44 | 541,144 | 417,513 | - | 664,776 |
| | 1997 | 34,074 | 13.58 | 11.73 | 1.48 | 462,653 | 340,049 | - | 585,256 |
| | 1998 | 36,886 | 15.80 | 12.22 | 1.67 | 582,978 | 429,766 | - | 736,191 |
| | 1999 | 32,984 | 11.24 | 8.67 | 1.50 | 370,729 | 274,683 | - | 466,775 |
| | 2000 | 37,270 | 10.85 | 8.33 | 1.63 | 404,395 | 323,112 | - | 485,678 |
| | 2001 | 32,102 | 27.64 | 11.68 | 1.70 | 887,334 | 131,722 | - | 1,642,946 |
| | 2002 | 32,524 | 12.85 | 8.08 | 1.69 | 417,797 | 305,531 | - | 530,062 |
| | 2003 | 34,257 | 11.84 | 11.25 | 1.39 | 405,759 | 323,635 | - | 487,883 |
| | 2004 | 28,080 | 15.57 | 13.15 | 1.54 | 437,241 | 258,660 | - | 615,822 |
| | 2005 | 29,915 | 21.27 | 10.78 | 2.63 | 636,397 | 321,275 | - | 951,519 |
| | 2006 | 30,020 | 31.32 | 13.64 | 1.72 | 940,381 | 149,264 | - | 1,731,497 |
| | 2007 | 25,713 | 25.25 | 12.29 | 1.45 | 649,304 | 0 | - | 1,319,893 |
| | 2008 | 28,238 | 12.94 | 13.51 | 1.56 | 365,319 | 282,518 | - | 448,120 |
| | 2009 | 29,633 | 10.19 | 10.68 | 1.16 | 301,836 | 226,912 | - | 376,759 |
| | 2010 | 27,209 | 12.87 | 12.19 | 1.22 | 350,176 | 255,386 | - | 444,967 |
| | 2011 | 24,982 | 15.96 | 10.43 | 1.37 | 398,673 | 105,095 | - | 692,250 |
| | 2012 | 23,569 | 12.77 | 12.01 | 1.31 | 300,979 | 225,288 | - | 376,670 |
| | 2013 | 21,603 | 8.19 | 9.27 | 1.12 | 176,882 | 131,725 | - | 222,039 |
| | 2014 | 24,822 | 11.41 | 12.23 | 1.32 | 277,823 | 226,013 | - | 329,634 |
| | 2015 | 24,629 | 8.82 | 9.56 | 1.11 | 217,124 | 175,438 | - | 258,811 |
| | 2016 | 27,799 | 11.02 | 12.02 | 1.48 | 306,471 | 212,971 | - | 399,970 |
| | 2017 | 24,890 | 12.13 | 10.80 | 1.34 | 301,797 | 211,694 | - | 391,900 |
| | 2018 | 25,927 | 7.39 | 10.91 | 1.12 | 191,475 | 139,676 | - | 243,275 |
| | 2019 | 35,364 | 7.86 | 9.69 | 1.16 | 277,919 | 223,162 | - | 332,675 |
| | 2020 | 25,658 | 9.96 | 10.95 | 1.26 | 255,462 | 180,211 | - | 330,714 |
| | 2021 | 36,497 | 11.84 | 11.11 | 1.15 | 432,109 | 307,380 | | 556,839 |
| | 2022 | 29,434 | 25.44 | 10.95 | 2.74 | 748,704 | - | | 1,592,058 |
| | 2023 | 17,041 | 9.77 | 9.40 | 1.62 | 166,555 | 96,237 | | 236,873 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|---------------------------------|------|-------------------|---------------------|------------------|----------------|---------------|---|---|--------|
| Turkey: Fall^a | 1986 | 25,607 | 0.42 | 4.56 | 0.09 | 10,755 | . | - | . |
| | 1987 | 24,568 | 0.39 | 3.99 | 0.10 | 9,589 | . | - | . |
| | 1988 | 21,057 | 0.24 | 3.34 | 0.07 | 5,054 | . | - | . |
| | 1989 | 18,199 | 0.30 | 4.08 | 0.07 | 5,460 | . | - | . |
| | 1990 | 19,574 | 0.24 | 3.92 | 0.10 | 4,698 | . | - | . |
| | 1991 | 20,049 | 0.34 | 3.68 | 0.19 | 6,817 | . | - | . |
| | 1992 | 16,247 | 0.35 | 3.33 | 0.20 | 5,687 | . | - | . |
| | 1993 | 12,664 | 1.10 | 4.11 | 0.27 | 13,930 | . | - | . |
| | 1994 | 11,746 | 0.21 | 6.21 | 0.10 | 2,467 | . | - | . |
| | 1995 | 13,150 | 0.19 | 9.28 | 0.08 | 2,557 | 1,571 | - | 3,543 |
| | 1996 | 19,863 | 0.22 | 6.81 | 0.10 | 4,429 | 3,092 | - | 5,766 |
| | 1997 | 17,267 | 0.26 | 6.78 | 0.14 | 4,434 | 3,214 | - | 5,653 |
| | 1998 | 17,596 | 0.27 | 5.13 | 0.15 | 4,763 | 3,429 | - | 6,096 |
| | 1999 | 21,625 | 0.25 | 4.59 | 0.15 | 5,406 | 3,392 | - | 6,880 |
| | 2000 | 20,434 | 0.26 | 4.49 | 0.13 | 5,217 | 3,741 | - | 6,693 |
| | 2001 | 21,354 | 0.22 | 5.99 | 0.11 | 4,617 | 3,196 | - | 6,038 |
| | 2002 | 27,557 | 0.35 | 5.27 | 0.16 | 9,669 | 7,692 | - | 11,646 |
| | 2003 | 27,605 | 0.26 | 6.79 | 0.14 | 7,151 | 5,305 | - | 8,996 |
| | 2004 | 28,690 | 0.34 | 5.06 | 0.18 | 9,614 | 7,673 | - | 11,555 |
| | 2005 | 22,920 | 0.37 | 4.40 | 0.20 | 8,483 | 6,730 | - | 10,237 |
| | 2006 | 22,628 | 0.28 | 6.99 | 0.13 | 6,336 | 4,705 | - | 7,967 |
| | 2007 | 16,688 | 0.21 | 8.88 | 0.12 | 3,576 | 2,213 | - | 4,939 |
| | 2008 | 20,977 | 0.20 | 8.28 | 0.07 | 4,195 | 2,747 | - | 5,643 |
| | 2009 | 22,444 | 0.32 | 7.11 | 0.14 | 7,188 | 5,523 | - | 8,853 |
| | 2010 | 20,967 | 0.26 | 8.67 | 0.12 | 5,442 | 3,862 | - | 7,022 |
| | 2011 | 16,753 | 0.32 | 9.31 | 0.15 | 5,290 | 3,855 | - | 6,726 |
| | 2012 | 17,860 | 0.25 | 9.77 | 0.08 | 4,538 | 3,153 | - | 5,924 |
| | 2013 | 16,927 | 0.20 | 6.46 | 0.08 | 3,385 | 2,084 | - | 4,687 |
| | 2014 | 20,467 | 0.27 | 7.12 | 0.12 | 5,600 | 4,336 | - | 6,865 |
| | 2015 | 12,421 | 0.19 | 9.27 | 0.10 | 2,421 | 1,529 | - | 3,313 |
| | 2016 | 20,372 | 0.22 | 8.83 | 0.12 | 4,429 | 2,703 | - | 6,155 |
| | 2017 | 21,484 | 0.26 | 10.71 | 0.16 | 5,640 | 3,555 | - | 7,724 |
| | 2018 | 17,793 | 0.21 | 6.60 | 0.12 | 3,764 | 2,361 | - | 5,167 |
| | 2019 | 17,885 | 0.27 | 6.87 | 0.11 | 4,878 | 2,298 | - | 7,457 |
| | 2020 | 18,860 | 0.12 | 6.25 | 0.06 | 2,193 | 908 | - | 3,478 |
| | 2021 | 17,235 | 0.14 | 6.29 | 0.09 | 2,366 | 722 | - | 4,009 |
| | 2022 | 13,914 | 0.2 | 6.48 | 1.14 | 2,783 | 1,255 | - | 4,311 |
| | 2023 | 8,919 | 0.18 | 5.38 | 1.59 | 1,622 | 712 | - | 2,531 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-----------------------------------|------|-------------------------|---------------------------|------------------------|----------------------|------------------|--|---|--------|
| Turkey: Spring^a | 1986 | 31,632 | 0.56 | 5.35 | 0.10 | 17,714 | . | - | . |
| | 1987 | 30,909 | 0.55 | 5.62 | 0.10 | 17,000 | . | - | . |
| | 1988 | 30,082 | 0.40 | 5.18 | 0.08 | 12,033 | . | - | . |
| | 1989 | 45,244 | 0.58 | 6.00 | 0.10 | 27,146 | . | - | . |
| | 1990 | 32,391 | 0.45 | 6.02 | 0.12 | 14,576 | . | - | . |
| | 1991 | 32,564 | 0.46 | 6.12 | 0.13 | 14,980 | . | - | . |
| | 1992 | 34,226 | 0.58 | 5.40 | 0.18 | 19,851 | . | - | . |
| | 1993 | 28,667 | 0.52 | 5.66 | 0.16 | 14,906 | . | - | . |
| | 1994 | 29,102 | 0.43 | 5.60 | 0.15 | 12,514 | . | - | . |
| | 1995 | 43,190 | 0.48 | 5.64 | 0.14 | 20,751 | 17,509 | - | 23,992 |
| | 1996 | 46,706 | 0.38 | 6.41 | 0.09 | 17,582 | 14,337 | - | 20,826 |
| | 1997 | 45,011 | 0.38 | 6.08 | 0.10 | 17,196 | 14,349 | - | 20,044 |
| | 1998 | 44,315 | 0.46 | 5.40 | 0.13 | 20,393 | 16,967 | - | 23,818 |
| | 1999 | 47,903 | 0.45 | 5.71 | 0.14 | 21,549 | 18,012 | - | 25,087 |
| | 2000 | 49,502 | 0.49 | 5.89 | 0.14 | 24,390 | 20,678 | - | 28,102 |
| | 2001 | 53,456 | 0.48 | 5.15 | 0.15 | 25,866 | 22,072 | - | 29,659 |
| | 2002 | 64,407 | 0.50 | 5.97 | 0.13 | 32,123 | 27,553 | - | 36,694 |
| | 2003 | 73,502 | 0.56 | 5.7 | 0.14 | 41,241 | 36,135 | - | 46,347 |
| | 2004 | 63,027 | 0.54 | 6.00 | 0.14 | 33,879 | 29,532 | - | 38,225 |
| | 2005 | 58,490 | 0.62 | 6.23 | 0.17 | 36,463 | 31,824 | - | 41,102 |
| | 2006 | 66,075 | 0.63 | 6.20 | 0.17 | 41,485 | 36,636 | - | 46,334 |
| | 2007 | 61,984 | 0.50 | 6.86 | 0.11 | 30,992 | 26,092 | - | 35,893 |
| | 2008 | 56,799 | 0.55 | 6.97 | 0.14 | 31,142 | 26,628 | - | 35,657 |
| | 2009 | 65,720 | 0.57 | 6.65 | 0.13 | 37,407 | 32,609 | - | 42,206 |
| | 2010 | 54,578 | 0.47 | 5.83 | 0.12 | 25,769 | 21,519 | - | 30,018 |
| | 2011 | 56,283 | 0.51 | 6.23 | 0.12 | 28,954 | 24,701 | - | 33,207 |
| | 2012 | 52,554 | 0.42 | 5.21 | 0.13 | 22,251 | 18,760 | - | 25,743 |
| | 2013 | 49,331 | 0.45 | 5.17 | 0.12 | 22,394 | 18,527 | - | 26,261 |
| | 2014 | 51,894 | 0.38 | 5.32 | 0.11 | 19,835 | 17,385 | - | 22,286 |
| | 2015 | 41,296 | 0.45 | 5.34 | 0.14 | 18,781 | 16,019 | - | 21,543 |
| | 2016 | 57,083 | 0.48 | 5.20 | 0.16 | 27,460 | 22,091 | - | 32,830 |
| | 2017 | 52,925 | 0.51 | 5.42 | 0.17 | 26,865 | 21,248 | - | 32,483 |
| | 2018 | 49,651 | 0.43 | 4.99 | 0.13 | 21,425 | 17,595 | - | 25,255 |
| | 2019 | 63,005 | 0.33 | 5.29 | 0.10 | 20,864 | 16,615 | - | 25,112 |
| | 2020 | 59,210 | 0.31 | 5.42 | 0.09 | 18,338 | 13,945 | - | 22,730 |
| | 2021 | 78,063 | 0.23 | 5.42 | 0.09 | 18,067 | 13,045 | - | 23,089 |
| | 2022 | 56,193 | 0.21 | 4.99 | 0.09 | 12,002 | 8,880 | - | 15,125 |
| | 2023 | 33,286 | 0.27 | 4.67 | 0.12 | 9,122 | 7,104 | - | 11,139 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-----------------|------|-------------------|---------------------|------------------|----------------|---------------|---|---|--------|
| Woodcock | 1986 | 3,513 | 2.00 | 5.69 | 0.35 | 7,025 | 2,978 | - | 11,073 |
| | 1987 | 3,030 | 2.92 | 3.17 | 0.92 | 8,858 | 4,968 | - | 12,748 |
| | 1988 | 694 | 2.67 | 5.00 | 0.53 | 1,851 | 0 | - | 3,828 |
| | 1989 | 2,451 | 3.27 | 6.91 | 0.47 | 8,021 | 1,907 | - | 14,135 |
| | 1990 | 2,093 | 3.44 | 8.11 | 1.32 | 7,209 | 976 | - | 13,443 |
| | 1991 | 984 | 2.25 | 4.25 | 0.81 | 2,214 | 814 | - | 3,613 |
| | 1992 | 563 | 1.25 | 5.00 | 0.58 | 704 | 0 | - | 1,749 |
| | 1993 | 974 | 1.57 | 2.00 | 0.66 | 1,531 | 223 | - | 2,839 |
| | 1994 | 514 | 0.33 | 0.67 | 0.50 | 171 | 0 | - | 507 |
| | 1995 | 603 | 1.60 | 5.00 | 0.65 | 965 | 0 | - | 1,996 |
| | 1996 | 537 | 1.50 | 20.75 | 0.21 | 805 | 126 | - | 1,484 |
| | 1997 | 1,036 | 18.89 | 5.11 | 2.79 | 19,570 | 0 | - | 40,238 |
| | 1998 | 782 | 1.00 | 3.00 | 0.85 | 782 | 222 | - | 1,342 |
| | 1999 | 821 | 3.67 | 4.83 | 0.89 | 3,011 | 947 | - | 5,075 |
| | 2000 | 1,151 | 2.00 | 6.88 | 0.73 | 2,302 | 213 | - | 4,391 |
| | 2001 | 1,003 | 1.00 | 3.43 | 0.26 | 1,003 | 0 | - | 2,360 |
| | 2002 | 801 | 2.80 | 2.00 | 1.10 | 2,243 | 0 | - | 5,113 |
| | 2003 | 665 | 1.25 | 1.00 | 1.25 | 831 | 506 | - | 1,157 |
| | 2004 | 305 | 2.50 | 1.00 | 2.50 | 763 | 464 | - | 1,062 |
| | 2005 | 595 | 1.75 | 14.25 | 0.81 | 1,042 | 750 | - | 1,334 |
| | 2006 | 302 | 1.00 | 1.00 | 1.00 | 302 | 302 | - | 302 |
| | 2007 | 341 | 0.50 | 1.50 | 0.50 | 170 | 0 | - | 504 |
| | 2008 | 323 | 0.50 | 2.50 | 0.50 | 161 | 0 | - | 475 |
| | 2009 | 733 | 0.60 | 2.80 | 0.45 | 440 | 88 | - | 792 |
| | 2010 | 640 | 0 | 1.50 | 0 | 0 | 0 | - | 0 |
| | 2011 | 588 | 1.50 | 2.50 | 0.45 | 882 | 0 | - | 1,879 |
| | 2012 | 878 | 2.17 | 5.67 | 0.56 | 1,903 | 401 | - | 3,405 |
| | 2013 | 1,128 | 0.29 | 1.00 | 0.33 | 322 | 0 | - | 954 |
| | 2014 | 435 | 1.00 | 2.17 | 0.42 | 435 | 0 | - | 975 |
| | 2015 | 106 | 2.00 | 2.00 | 1.00 | 212 | . | - | . |
| | 2016 | 1,273 | 1.00 | 4.40 | 0.40 | 1,273 | 254 | - | 2,292 |
| | 2017 | 1,048 | 3.33 | 1.67 | 1.67 | 1,747 | 0 | - | 10,340 |
| | 2018 | 508 | 0.33 | 3.67 | 0.17 | 169 | 0 | - | 502 |
| | 2019 | 610 | 1.33 | 1.00 | 1.33 | 813 | 0 | - | 1,867 |
| | 2020 | 1,096 | 2.80 | 2.40 | 1.00 | 3,070 | 0 | - | 6,358 |
| | 2021 | 338 | 1.00 | 1.00 | 1.00 | 338 | . | - | . |
| | 2022 | 803 | 0 | 2 | 0 | - | - | - | - |
| | 2023 | 159 | 0.00 | 1.00 | 0.00 | - | - | - | - |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | | |
|----------------|---------------|-------------------------|---------------------------|------------------------|----------------------|------------------|--|--------|---------|--------|
| Coyote | 2003 | 19,623 | 5.08 | 22.11 | 0.44 | 99,611 | 57,158 | – | 142,063 | |
| | 2004 | 17,092 | 4.79 | 19.30 | 0.48 | 81,918 | 55,526 | – | 108,311 | |
| | 2005 | 15,329 | 17.76 | 29.20 | 0.52 | 272,210 | 0 | – | 567,975 | |
| | 2006 | 17,198 | 8.70 | 32.63 | 0.47 | 149,649 | 57,916 | – | 241,381 | |
| | 2007 | 21,797 | 4.65 | 15.56 | 0.45 | 101,321 | 75,585 | – | 127,056 | |
| | 2008 | 16,943 | 9.50 | 25.53 | 0.48 | 161,037 | 45,366 | – | 276,708 | |
| | 2009 | 23,618 | 5.14 | 20.00 | 0.16 | 121,485 | 90,980 | – | 151,991 | |
| | 2010 | 23,208 | 5.94 | 21.67 | 0.50 | 137,966 | 87,223 | – | 188,709 | |
| | 2011 | 25,864 | 5.59 | 27.04 | 0.44 | 144,455 | 85,406 | – | 203,504 | |
| | 2012 | 31,181 | 4.86 | 24.40 | 0.53 | 151,661 | 120,863 | – | 182,458 | |
| | 2013 | 26,117 | 6.86 | 21.22 | 0.45 | 179,270 | 89,781 | – | 268,758 | |
| | 2014 | 20,830 | 8.84 | 21.68 | 0.62 | 184,036 | 39,004 | – | 329,069 | |
| | 2015 | 18,684 | 5.81 | 19.81 | 0.48 | 108,587 | 83,305 | – | 133,870 | |
| | 2016 | 22,918 | 8.36 | 20.40 | 0.53 | 191,621 | 103,249 | – | 279,993 | |
| | 2017 | 18,602 | 8.12 | 26.09 | 0.64 | 151,074 | 95,992 | – | 206,156 | |
| | 2018 | 18,471 | 4.04 | 22.76 | 0.49 | 74,574 | 54,695 | – | 94,454 | |
| | 2019 | 28,454 | 5.23 | 23.45 | 0.49 | 148,915 | 80,452 | – | 217,377 | |
| | 2020 | 26,316 | 6.04 | 21.20 | 0.60 | 158,991 | 106,275 | – | 211,706 | |
| | 2021 | 33,118 | 5.76 | 28.02 | 0.50 | 190,853 | 127,234 | – | 254,471 | |
| | 2022 | 28,632 | 20.96 | 41.26 | 0.7 | 600,174 | 221,810 | – | 978,537 | |
| | 2023 | 19,430 | 7.64 | 22.09 | 0.61 | 148,435 | 86,214 | – | 210,656 | |
| | Bobcat | 2003 | 7,650 | 1.93 | 16.00 | 0.22 | 14,800 | 6,817 | – | 22,783 |
| | | 2004 | 7,173 | 1.06 | 12.96 | 0.16 | 7,630 | 3,702 | – | 11,559 |
| 2005 | | 8,781 | 1.90 | 15.14 | 0.16 | 16,669 | 8,636 | – | 24,701 | |
| 2006 | | 9,051 | 2.50 | 23.95 | 0.20 | 22,628 | 14,734 | – | 30,523 | |
| 2007 | | 9,706 | 1.51 | 17.16 | 0.18 | 14,645 | 9,647 | – | 19,642 | |
| 2008 | | 8,229 | 1.76 | 15.80 | 0.25 | 14,522 | 7,258 | – | 21,786 | |
| 2009 | | 10,415 | 1.44 | 14.17 | 0.21 | 14,963 | 8,225 | – | 21,701 | |
| 2010 | | 12,164 | 1.57 | 14.01 | 0.25 | 19,138 | 12,287 | – | 25,990 | |
| 2011 | | 10,581 | 1.15 | 16.06 | 0.13 | 12,220 | 7,650 | – | 16,789 | |
| 2012 | | 10,101 | 1.52 | 17.93 | 0.13 | 15,371 | 7,449 | – | 23,293 | |
| 2013 | | 9,673 | 0.93 | 20.49 | 0.14 | 9,028 | 5,751 | – | 12,305 | |
| 2014 | | 7,621 | 1.44 | 19.83 | 0.13 | 10,950 | 7,075 | – | 14,826 | |
| 2015 | | 6,263 | 0.97 | 16.53 | 0.09 | 6,047 | 3,297 | – | 8,798 | |
| 2016 | | 10,186 | 1.63 | 22.48 | 0.13 | 16,552 | 6,665 | – | 26,439 | |
| 2017 | | 8,122 | 3.52 | 18.73 | 0.30 | 28,559 | 14,809 | – | 42,308 | |
| 2018 | | 5,931 | 1.77 | 19.79 | 0.20 | 10,506 | 2,718 | – | 18,295 | |
| 2019 | | 7,723 | 1.84 | 13.11 | 0.27 | 14,194 | 6,332 | – | 22,056 | |
| 2020 | | 8,333 | 1.50 | 15.16 | 0.13 | 12,500 | 5,296 | – | 19,704 | |
| 2021 | | 10,476 | 1.26 | 19.21 | 0.17 | 13,179 | 5,745 | – | 20,614 | |
| 2022 | | 9,098 | 1 | 20.27 | 0.19 | 9,098 | 5,275 | – | 12,921 | |
| 2023 | | 5,734 | 1.59 | 17.40 | 0.16 | 9,143 | 2,529 | – | 15,757 | |
| Raccoon | | 2003 | 9,146 | 7.26 | 24.36 | 0.49 | 66,439 | 45,639 | – | 87,239 |
| | | 2004 | 8,088 | 8.87 | 20.65 | 0.44 | 71,705 | 47,872 | – | 95,538 |
| | 2005 | 8,930 | 8.12 | 23.95 | 0.42 | 72,480 | 51,955 | – | 93,005 | |
| | 2006 | 6,939 | 8.30 | 23.26 | 0.83 | 57,627 | 40,533 | – | 74,721 | |
| | 2007 | 8,174 | 8.66 | 24.15 | 0.77 | 70,781 | 46,919 | – | 94,644 | |
| | 2008 | 7,261 | 8.39 | 22.82 | 0.39 | 60,895 | 38,468 | – | 83,322 | |
| | 2009 | 9,682 | 8.02 | 24.09 | 0.66 | 77,607 | 57,094 | – | 98,119 | |
| | 2010 | 9,123 | 8.63 | 25.80 | 0.52 | 78,746 | 55,681 | – | 101,812 | |
| | 2011 | 11,022 | 8.42 | 24.05 | 0.62 | 92,789 | 72,481 | – | 113,097 | |
| | 2012 | 9,515 | 8.20 | 25.18 | 0.71 | 78,026 | 56,244 | – | 99,808 | |
| | 2013 | 9,189 | 8.26 | 24.89 | 0.73 | 75,932 | 52,288 | – | 99,576 | |
| | 2014 | 9,290 | 8.22 | 21.83 | 0.62 | 76,402 | 61,077 | – | 91,727 | |
| | 2015 | 6,157 | 9.38 | 21.63 | 0.62 | 57,751 | 39,867 | – | 75,634 | |

| | | | | | | | | | |
|--|------|--------|-------|-------|------|---------|---------|---|---------|
| | 2016 | 6,791 | 10.53 | 30.55 | 0.67 | 71,513 | 46,088 | - | 96,938 |
| | 2017 | 8,122 | 9.79 | 22.56 | 0.63 | 79,481 | 50,182 | - | 108,780 |
| | 2018 | 6,948 | 6.58 | 23.08 | 0.68 | 45,682 | 32,232 | - | 59,132 |
| | 2019 | 10,365 | 4.82 | 31.25 | 0.58 | 49,923 | 32,778 | - | 67,067 |
| | 2020 | 10,088 | 8.93 | 29.52 | 0.62 | 90,131 | 62,886 | - | 117,377 |
| | 2021 | 14,531 | 10.42 | 42.67 | 0.64 | 151,395 | 91,879 | - | 210,910 |
| | 2022 | 14,985 | 14.25 | 30.11 | 0.86 | 213,601 | 135,311 | - | 291,892 |
| | 2023 | 8,760 | 11.98 | 25.84 | 0.87 | 104,953 | 64,147 | - | 145,758 |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|-----------------|------|-------------------|---------------------|------------------|----------------|---------------|---|---|--------|
| Beaver | 2003 | 3,326 | 3.00 | 6.15 | 0.72 | 9,978 | 4,733 | - | 15,223 |
| | 2004 | 1,984 | 5.85 | 39.23 | 0.54 | 11,598 | 4,233 | - | 18,963 |
| | 2005 | 2,381 | 5.06 | 17.13 | 0.63 | 12,055 | 4,464 | - | 19,647 |
| | 2006 | 2,112 | 4.93 | 39.86 | 0.53 | 10,409 | 2,379 | - | 18,439 |
| | 2007 | 1,873 | 5.91 | 20.73 | 0.53 | 11,069 | 1,174 | - | 20,963 |
| | 2008 | 1,775 | 7.18 | 17.55 | 0.77 | 12,747 | 3,629 | - | 21,866 |
| | 2009 | 2,347 | 4.13 | 20.13 | 1.14 | 9,682 | 1,562 | - | 17,802 |
| | 2010 | 2,561 | 6.56 | 15.06 | 0.50 | 16,806 | 1,301 | - | 32,310 |
| | 2011 | 2,792 | 2.67 | 48.28 | 0.32 | 7,446 | 5,022 | - | 9,869 |
| | 2012 | 2,049 | 6.29 | 30.43 | 0.50 | 12,882 | 1,682 | - | 24,082 |
| | 2013 | 2,741 | 4.18 | 36.29 | 0.26 | 11,446 | 0 | - | 23,156 |
| | 2014 | 3,048 | 3.68 | 12.45 | 0.43 | 11,227 | 7,440 | - | 15,014 |
| | 2015 | 1,911 | 4.28 | 39.72 | 0.44 | 8,174 | 3,118 | - | 13,230 |
| | 2016 | 2,971 | 2.86 | 20.71 | 0.45 | 8,488 | 5,768 | - | 11,208 |
| | 2017 | 3,144 | 5.18 | 12.20 | 0.52 | 16,292 | 7,273 | - | 25,311 |
| | 2018 | 1,017 | 1.20 | 13.83 | 0.31 | 1,220 | 244 | - | 2,196 |
| | 2019 | 2,642 | 3.86 | 37.79 | 0.94 | 10,191 | 3,271 | - | 17,110 |
| | 2020 | 1,974 | 6.89 | 19.00 | 0.53 | 13,596 | 4,583 | - | 22,610 |
| | 2021 | 5,407 | 3.56 | 57.19 | 0.41 | 19,262 | 11,960 | - | 26,564 |
| | 2022 | 4,281 | 4.93 | 14.73 | 0.54 | 21,121 | 9,242 | - | 33,001 |
| | 2023 | 1,911 | 8.42 | 13.83 | 0.60 | 16,086 | 3,090 | - | 29,082 |
| Gray Fox | 2003 | 831 | 1.20 | 12.80 | 0.12 | 998 | 0 | - | 2,578 |
| | 2004 | 916 | 2.17 | 12.83 | 0.35 | 1,984 | 418 | - | 3,550 |
| | 2005 | 1,637 | 1.27 | 11.45 | 0.35 | 2,084 | 1,208 | - | 2,959 |
| | 2006 | 1,509 | 0.40 | 24.40 | 0.15 | 603 | 121 | - | 1,086 |
| | 2007 | 1,873 | 0.91 | 18.91 | 0.05 | 1,703 | 547 | - | 2,859 |
| | 2008 | 1,291 | 1.88 | 27.38 | 0.10 | 2,420 | 482 | - | 4,359 |
| | 2009 | 1,614 | 1.09 | 25.73 | 0.10 | 1,760 | 596 | - | 2,925 |
| | 2010 | 1,601 | 2.80 | 26.70 | 0.30 | 4,482 | 2,298 | - | 6,665 |
| | 2011 | 1,176 | 0.38 | 11.13 | 0.03 | 441 | 19 | - | 862 |
| | 2012 | 1,464 | 1.30 | 21.90 | 0.04 | 1,903 | 300 | - | 3,506 |
| | 2013 | 1,935 | 0.75 | 13.64 | 0.15 | 1,451 | 0 | - | 3,076 |
| | 2014 | 1,234 | 1.53 | 20.00 | 0.18 | 1,887 | 934 | - | 2,840 |
| | 2015 | 1,274 | 2.00 | 17.18 | 0.21 | 2,548 | 0 | - | 5,559 |
| | 2016 | 2,334 | 0.55 | 30.18 | 0.03 | 1,273 | 0 | - | 2,702 |
| | 2017 | 1,572 | 1.17 | 16.67 | 0.13 | 1,834 | 364 | - | 3,305 |
| | 2018 | 678 | 2.00 | 15.75 | 0.13 | 1,356 | 0 | - | 2,890 |
| | 2019 | 1,219 | 0.50 | 27.17 | 0.09 | 610 | 0 | - | 1,426 |
| | 2020 | 658 | 2.00 | 1.00 | 2.50 | 1,316 | 26 | - | 2,605 |
| | 2021 | 2,028 | 0.17 | 14.33 | 0.17 | 338 | - | - | 1,000 |
| | 2022 | 803 | 4.5 | 24 | 0.22 | 3,612 | 0 | - | 9,393 |
| | 2023 | 637 | 0.50 | 20.25 | 0.26 | 319 | 0 | - | 679 |
| Red Fox | 2007 | 851 | 0.40 | 21.40 | 0.04 | 341 | 0 | - | 1,008 |
| | 2008 | 484 | 1.00 | 12.67 | 0.43 | 484 | 0 | - | 1,032 |
| | 2009 | 1,027 | 0.67 | 31.86 | 0.20 | 685 | 14 | - | 1,355 |
| | 2010 | 320 | 0.50 | 36.00 | 0.01 | 160 | 0 | - | 474 |

| | | | | | | | | | |
|--|------|-------|------|-------|------|-------|-----|---|-------|
| | 2011 | 735 | 0 | 10.20 | 0 | 0 | 0 | - | 0 |
| | 2012 | 1,610 | 0.64 | 20.64 | 0.23 | 1,025 | 255 | - | 1,795 |
| | 2013 | 1,290 | 0.13 | 14.88 | 0.01 | 161 | 0 | - | 477 |
| | 2014 | 653 | 0.44 | 15.44 | 0.04 | 290 | 0 | - | 600 |
| | 2015 | 743 | 0.43 | 24.29 | 0.03 | 319 | 24 | - | 613 |
| | 2016 | 1,061 | 0.60 | 12.60 | 0.06 | 637 | 0 | - | 1,468 |
| | 2017 | 1,048 | 0 | 23.00 | 0 | 0 | 0 | - | - |
| | 2018 | 847 | 0.25 | 10.80 | 0.02 | 212 | 0 | - | 627 |
| | 2019 | 406 | 0 | 1.00 | 0 | 0 | 0 | - | 0 |
| | 2020 | 658 | 0.67 | 60.00 | 0.01 | 439 | 9 | - | 868 |
| | 2021 | 1,690 | 0.40 | 16.00 | 0.01 | 676 | - | - | 2,001 |
| | 2022 | 803 | 0 | 24 | 0 | - | - | - | - |
| | 2023 | 159 | 0.00 | 1.00 | 0.00 | | | | |

Table A3. Continued.

| | Year | Number Of Hunters | Mean Bag Per Hunter | Mean Days Hunted | Mean Daily Bag | Total Harvest | 95% Confidence Interval for Total Harvest | | |
|--------------------|------|-------------------|---------------------|------------------|----------------|---------------|---|---|-------|
| River Otter | 2007 | 170 | 0 | 10.00 | 0 | 0 | . | - | . |
| | 2008 | 645 | 1.50 | 8.75 | 1.02 | 968 | 336 | - | 1,601 |
| | 2009 | 293 | 1.00 | 50.00 | 0.10 | 293 | 0 | - | 868 |
| | 2010 | 320 | 0.50 | 3.00 | 0.10 | 160 | 0 | - | 474 |
| | 2011 | 588 | 0.75 | 14.75 | 0.03 | 441 | 0 | - | 992 |
| | 2012 | 0 | 0 | 0 | 0 | 0 | . | - | . |
| | 2013 | 967 | 0.50 | 24.67 | 0.01 | 484 | 0 | - | 1,131 |
| | 2014 | 581 | 0.88 | 21.13 | 0.08 | 508 | 172 | - | 844 |
| | 2015 | 318 | 1.67 | 21.67 | 0.08 | 531 | 0 | - | 1,081 |
| | 2016 | 1,273 | 0.40 | 22.00 | 0.02 | 509 | 0 | - | 1,508 |
| | 2017 | 786 | 1.50 | 6.00 | 0.27 | 1,179 | 409 | - | 1,949 |
| | 2018 | 169 | . | 42.00 | . | . | . | - | . |
| | 2019 | 1,016 | 1.60 | 7.20 | 0.47 | 1,626 | 0 | - | 3,362 |
| | 2020 | 219 | 1.00 | 1.00 | 1.00 | 219 | . | - | . |
| | 2021 | 1,014 | 1.67 | 16.00 | 0.08 | 1,690 | - | - | 4,078 |
| | 2022 | 803 | 1.5 | 10.5 | 0.55 | 1,204 | 562 | - | 1,846 |
| | 2023 | 478 | 1.00 | 25.67 | 0.03 | 478 | 0 | - | 1,018 |

^aConfidence intervals for turkey harvest estimates were not available for 1986-1994. A correction factor was applied to the turkey estimates during those years, but it was evaluated in 1996 and deemed inappropriate. The harvest estimates for turkey prior to 1995 were recalculated without the correction factor but confidence intervals could not be calculated.

^bFor estimates of bear, elk, pronghorn, and prairie chicken during years when those seasons were open, please see previous federal aid reports on the Wildlife Department website. This data was most recently collected in 2014 and does not pertain to data within this report.

Table A4. Mean number of days deer hunters participated in each deer season in Oklahoma, 1997-2023. All resident and nonresident licensed deer hunters included in 2022-2023 numbers.

| Year | <u>Total</u> Mean Days^a | <u>Archery</u> Mean Days | <u>Muzzleloader</u> Mean Days | <u>Youth</u> Mean Days | <u>Rifle</u> Mean Days | <u>Holiday</u> Mean Days^b |
|-------------|---|---|--|---------------------------------------|---------------------------------------|---|
| 1997 | 15.1 | . | . | . | . | N/A |
| 1998 | 14.5 | . | . | . | . | N/A |
| 1999 | 15.4 | . | . | . | . | N/A |
| 2000 | 16.0 | . | . | . | . | N/A |
| 2001 | 16.2 | . | . | . | . | . |
| 2002 | 16.8 | . | . | . | . | . |
| 2003 | 19.1 | 18.6 | 4.7 | 1.9 | 6.5 | 2.1 |
| 2004 | 16.8 | 16.4 | 4.6 | 1.9 | 6.1 | 2.1 |
| 2005 | 16.6 | 16.5 | 4.5 | 1.8 | 6.0 | 2.1 |
| 2006 | 18.3 | 18.3 | 4.6 | 2.0 | 6.1 | 2.0 |
| 2007 | 17.3 | 17.9 | 4.7 | 1.8 | 6.3 | 2.5 |
| 2008 | 17.4 | 17.8 | 4.7 | 2.1 | 6.1 | 2.3 |
| 2009 | 17.9 | 17.7 | 4.6 | 2.1 | 6.3 | 2.3 |
| 2010 | 18.3 | 18.2 | 4.6 | 2.1 | 6.1 | 2.8 |
| 2011 | 18.4 | 18.6 | 4.7 | 2.2 | 6.2 | 2.8 |
| 2012 | 17.8 | 18.0 | 4.7 | 2.1 | 6.3 | 2.8 |
| 2013 | 17.7 | 16.7 | 4.5 | 2.0 | 5.9 | 2.9 |
| 2014 | 17.8 | 17.8 | 4.6 | 2.2 | 5.9 | 2.8 |
| 2015 | 19.1 | 18.9 | 4.6 | 2.2 | 6.0 | 2.7 |
| 2016 | 16.4 | 17.9 | 4.3 | 2.2 | 5.6 | 2.6 |
| 2017 | 17.7 | 16.7 | 4.6 | 2.6 | 6.1 | 2.1 |
| 2018 | 17.8 | 18.3 | 4.7 | 2.2 | 5.8 | 2.7 |
| 2019 | 16.1 | 17.7 | 4.4 | 1.8 | 5.6 | 2.6 |
| 2020 | 17.4 | 18.6 | 4.4 | 2.6 | 5.8 | 2.7 |
| 2021 | 16.4 | 16.4 | 4.5 | 1.9 | 5.9 | 3.5 |
| 2022 | 16.4 | 16.7 | 4.3 | 2.3 | 5.8 | 3.3 |
| 2023 | 15.5 | 16.9 | 4.3 | 2.3 | 5.7 | 2.9 |

^aNumber of days of deer hunting was collected as one aggregate variable in years 1997-2002. In years 2003-present, number of days of deer hunting was collected by season and summed to calculate total mean days.

^bHoliday antlerless deer gun season began in 2001.

Table A5. Mean number of deer harvested by deer hunters in each deer season in Oklahoma, 2001-2023. All resident and nonresident licensed deer hunters included in 2022-2023 numbers.

| Year | Total: All-Seasons | | | Archery | | Primitive | | Youth | | Rifle | | Holiday |
|------|--------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|------------------|
| | Mean Number Deer | Mean Number Bucks | Mean Number Does | Mean Number Bucks | Mean Number Does | Mean Number Bucks | Mean Number Does | Mean Number Bucks | Mean Number Does | Mean Number Bucks | Mean Number Does | Mean Number Does |
| 2001 | 0.91 | 0.46 | 0.46 | 0.13 | 0.21 | 0.22 | 0.16 | N/A | N/A | 0.27 | 0.20 | 0.21 |
| 2002 | 0.93 | 0.53 | 0.48 | 0.16 | 0.23 | 0.18 | 0.17 | N/A | N/A | 0.28 | 0.19 | 0.23 |
| 2003 | 0.98 | 0.49 | 0.49 | 0.19 | 0.19 | 0.20 | 0.17 | N/A | 0.32 | 0.29 | 0.22 | 0.22 |
| 2004 | 0.89 | 0.50 | 0.39 | 0.20 | 0.19 | 0.22 | 0.19 | N/A | 0.23 | 0.29 | 0.16 | 0.16 |
| 2005 | 0.84 | 0.45 | 0.39 | 0.13 | 0.18 | 0.20 | 0.15 | N/A | 0.42 | 0.29 | 0.18 | 0.17 |
| 2006 | 1.04 | 0.54 | 0.50 | 0.15 | 0.22 | 0.23 | 0.20 | N/A | 0.37 | 0.34 | 0.21 | 0.22 |
| 2007 | 0.86 | 0.47 | 0.39 | 0.14 | 0.19 | 0.20 | 0.13 | 0.18 | 0.30 | 0.28 | 0.18 | 0.22 |
| 2008 | 0.94 | 0.44 | 0.50 | 0.16 | 0.28 | 0.16 | 0.15 | 0.20 | 0.26 | 0.29 | 0.23 | 0.26 |
| 2009 | 0.92 | 0.45 | 0.47 | 0.17 | 0.28 | 0.20 | 0.13 | 0.23 | 0.15 | 0.27 | 0.22 | 0.24 |
| 2010 | 0.89 | 0.44 | 0.45 | 0.15 | 0.24 | 0.17 | 0.13 | 0.31 | 0.16 | 0.28 | 0.22 | 0.20 |
| 2011 | 0.95 | 0.47 | 0.48 | 0.20 | 0.26 | 0.17 | 0.17 | 0.17 | 0.23 | 0.31 | 0.23 | 0.19 |
| 2012 | 0.87 | 0.46 | 0.41 | 0.17 | 0.24 | 0.21 | 0.14 | 0.24 | 0.23 | 0.28 | 0.18 | 0.21 |
| 2013 | 0.72 | 0.36 | 0.35 | 0.16 | 0.18 | 0.17 | 0.13 | 0.12 | 0.08 | 0.20 | 0.17 | 0.16 |
| 2014 | 0.78 | 0.40 | 0.39 | 0.18 | 0.23 | 0.16 | 0.12 | 0.17 | 0.16 | 0.25 | 0.18 | 0.17 |
| 2015 | 0.74 | 0.39 | 0.35 | 0.16 | 0.22 | 0.19 | 0.12 | 0.10 | 0.22 | 0.24 | 0.15 | 0.14 |
| 2016 | 0.81 | 0.42 | 0.39 | 0.19 | 0.27 | 0.13 | 0.11 | 0.16 | 0.16 | 0.30 | 0.19 | 0.20 |
| 2017 | 0.92 | 0.51 | 0.41 | 0.18 | 0.23 | 0.22 | 0.11 | 0.44 | 0.23 | 0.32 | 0.21 | 0.19 |
| 2018 | 0.87 | 0.46 | 0.41 | 0.19 | 0.26 | 0.20 | 0.14 | 0.21 | 0.20 | 0.31 | 0.18 | 0.20 |
| 2019 | 0.79 | 0.46 | 0.32 | 0.22 | 0.21 | 0.25 | 0.12 | 0.28 | 0.19 | 0.28 | 0.16 | 0.15 |
| 2020 | 0.91 | 0.49 | 0.42 | 0.23 | 0.24 | 0.25 | 0.12 | 0.20 | 0.44 | 0.30 | 0.21 | 0.18 |
| 2021 | 0.85 | 0.47 | 0.38 | 0.25 | 0.24 | 0.20 | 0.12 | 0.28 | 0.29 | 0.32 | 0.19 | 0.22 |
| 2022 | 1.01 | 0.49 | 0.51 | 0.27 | 0.36 | 0.17 | 0.16 | 0.10 | 0.24 | 0.36 | 0.23 | 0.34 |
| 2023 | 0.90 | 0.46 | 0.44 | 0.26 | 0.25 | 0.20 | 0.09 | 0.18 | 0.17 | 0.33 | 0.24 | 0.38 |

Crow

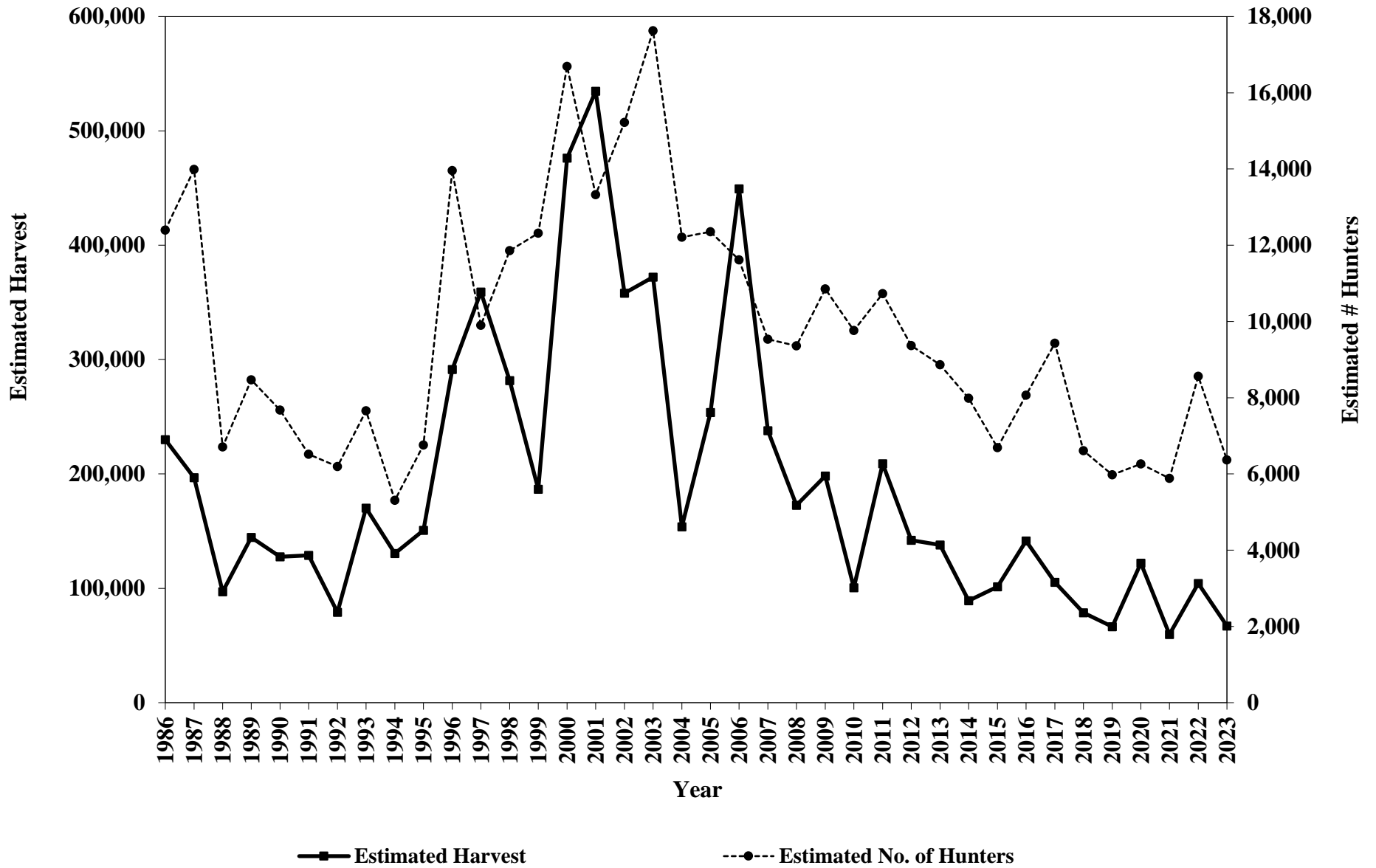


Figure A1. Statewide trends in estimated crow harvest and estimated number of crow hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Mourning Dove

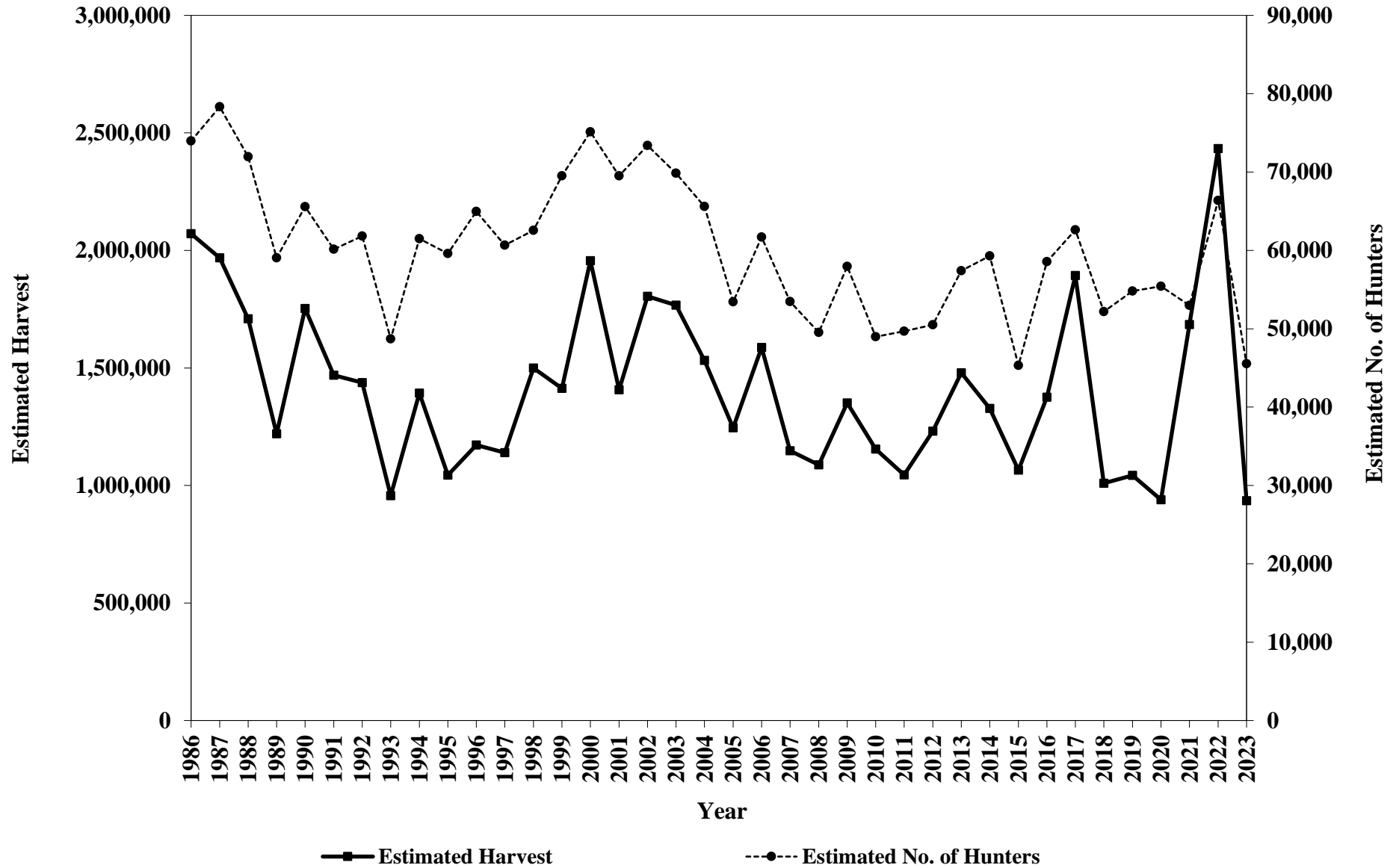


Figure A2. Statewide trends in estimated mourning dove harvest and estimated number of mourning dove hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Ring-necked Pheasant

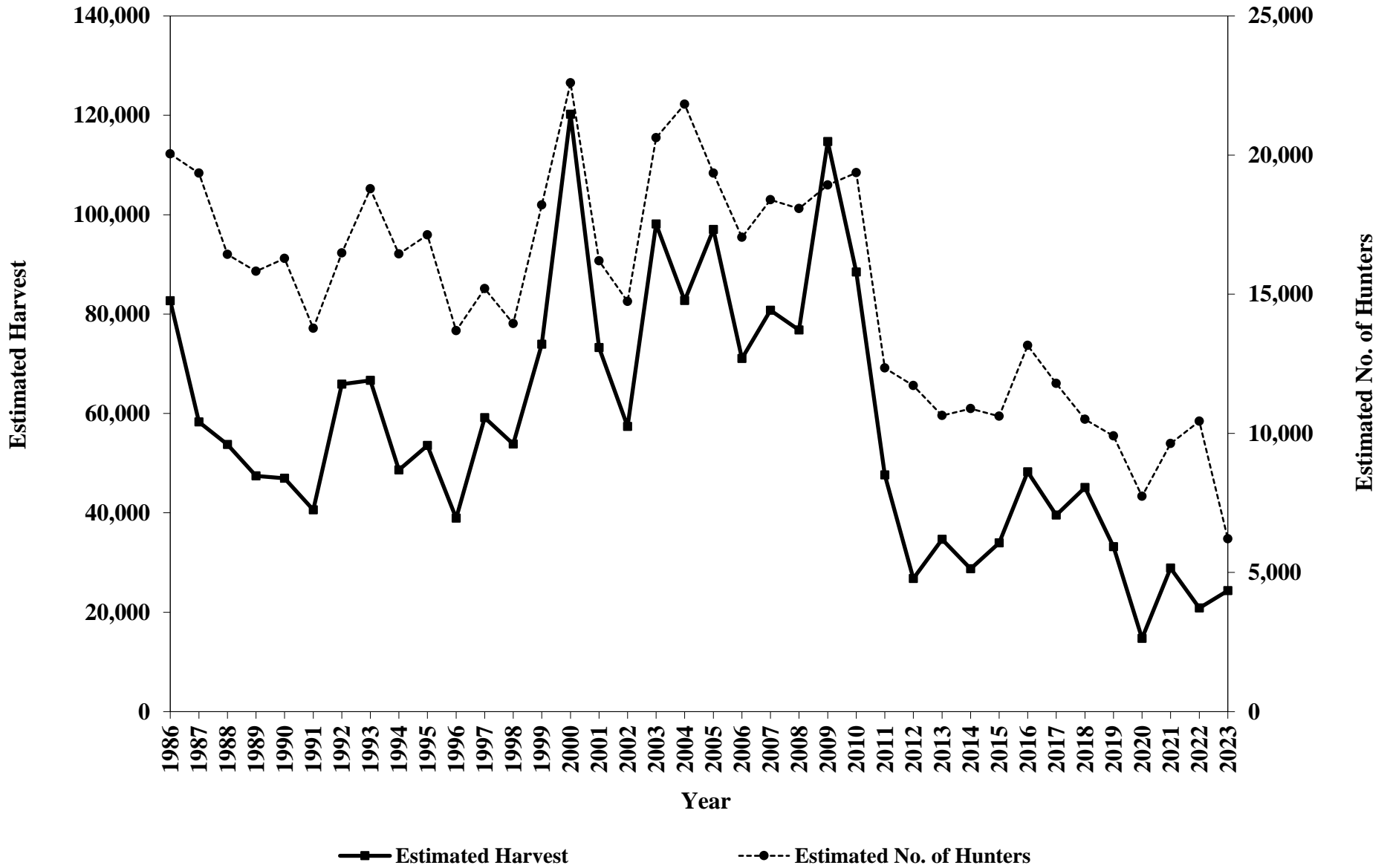


Figure A3. Statewide trends in estimated ring-necked pheasant harvest and estimated number of ring-necked pheasant hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Quail

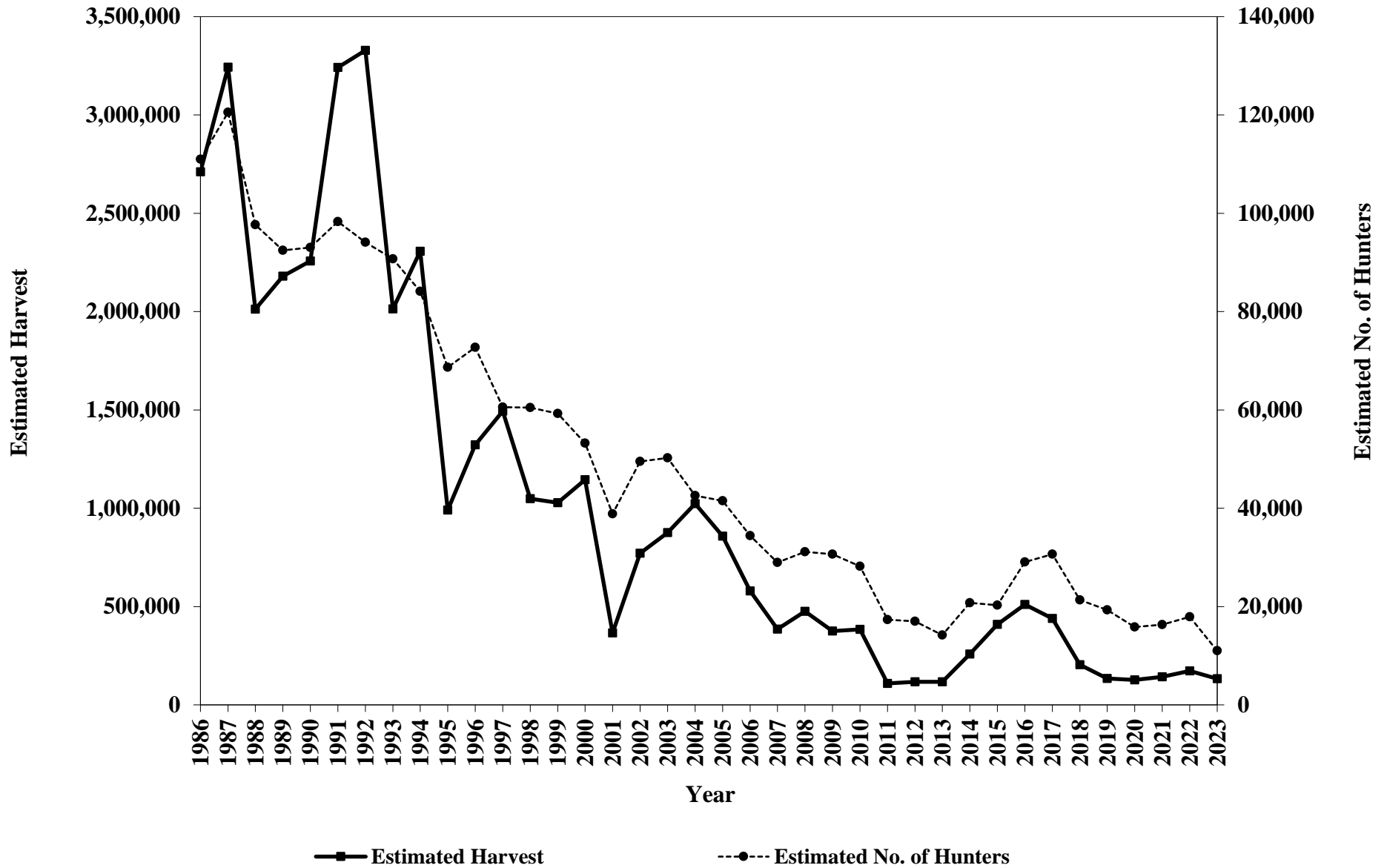


Figure A4. Statewide trends in estimated quail harvest and estimated number of quail hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Cottontail Rabbit

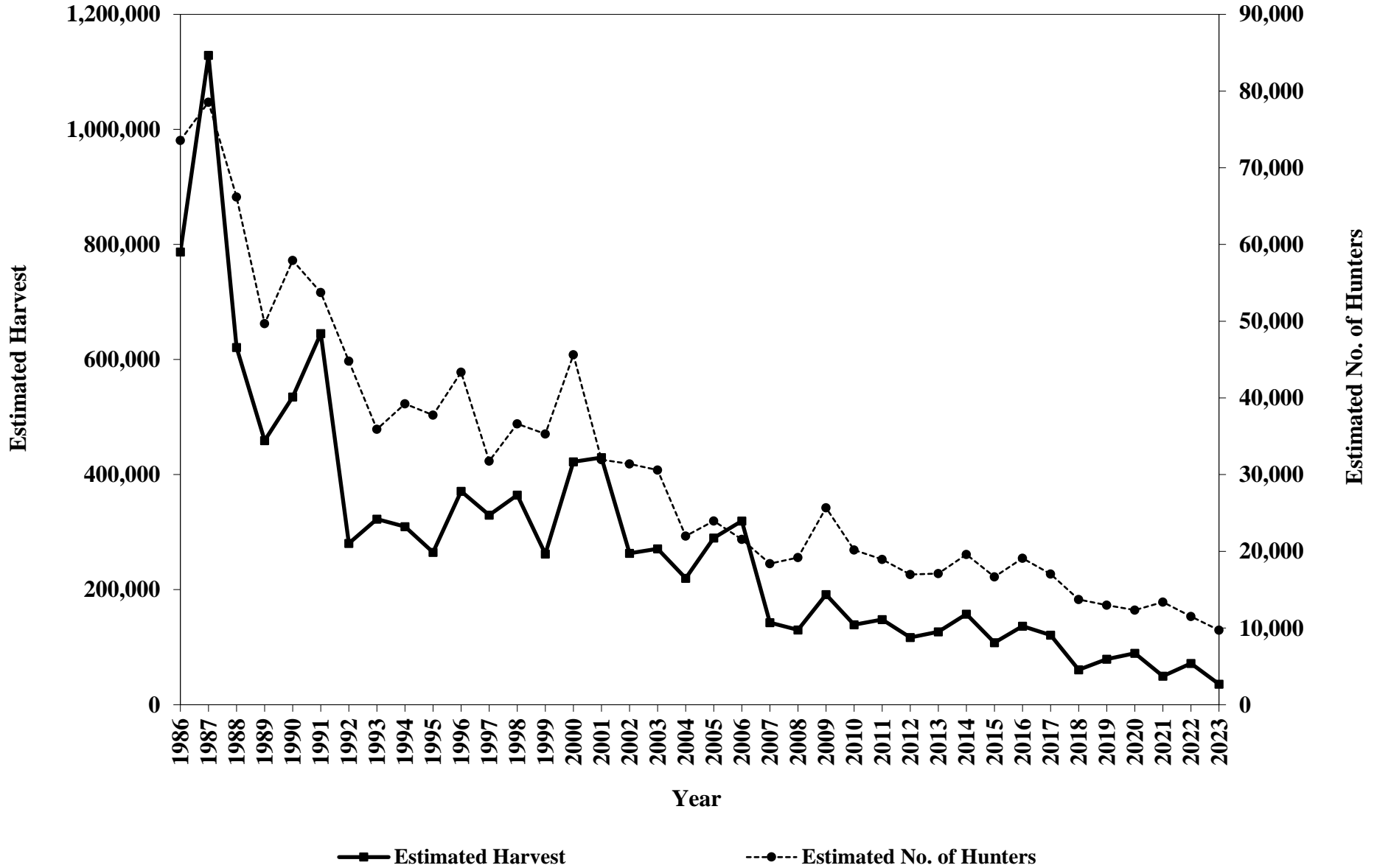


Figure A5. Statewide trends in estimated cottontail rabbit harvest and estimated number of cottontail rabbit hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Jackrabbit

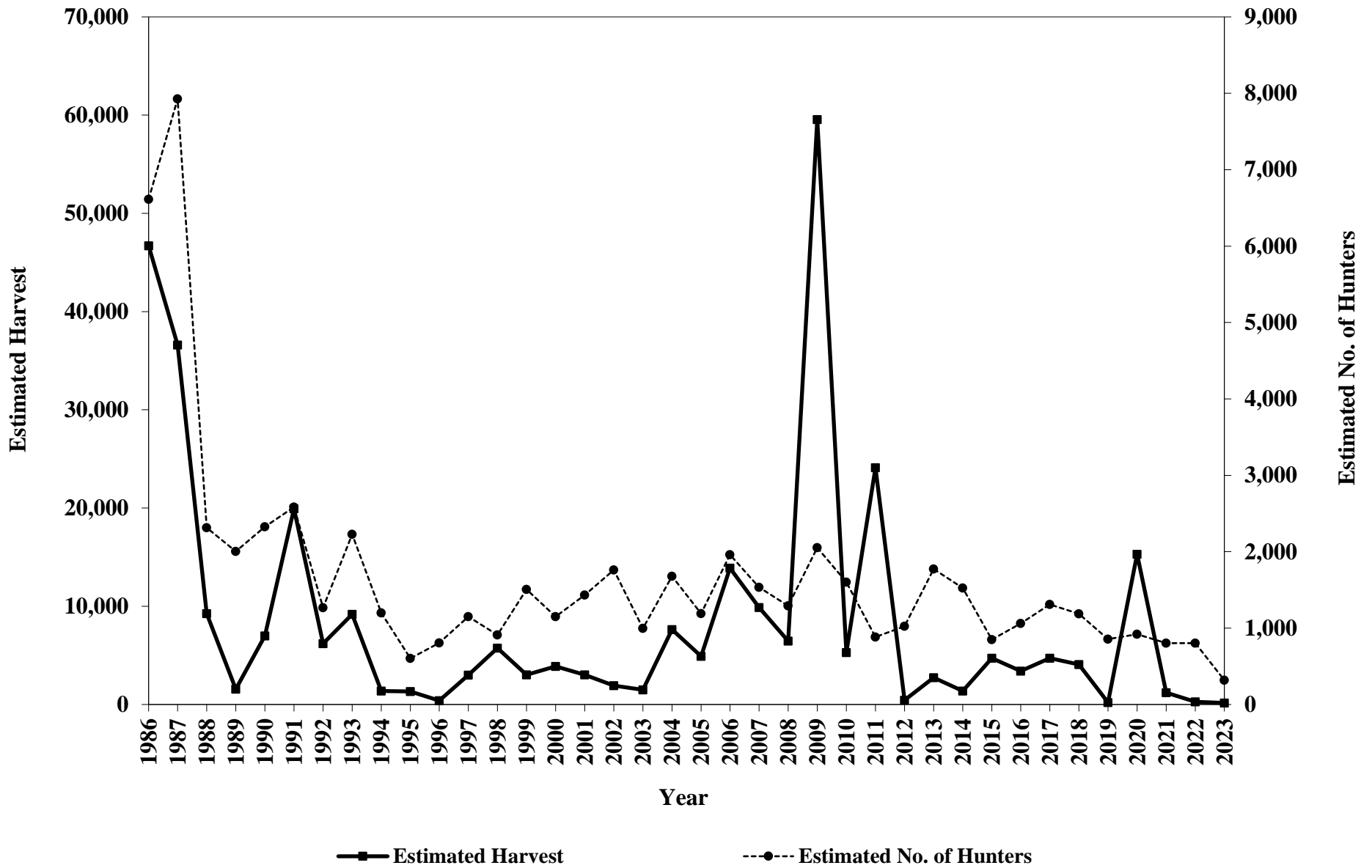


Figure A6. Statewide trends in estimated jackrabbit harvest and estimated number of jackrabbit hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Swamp Rabbit

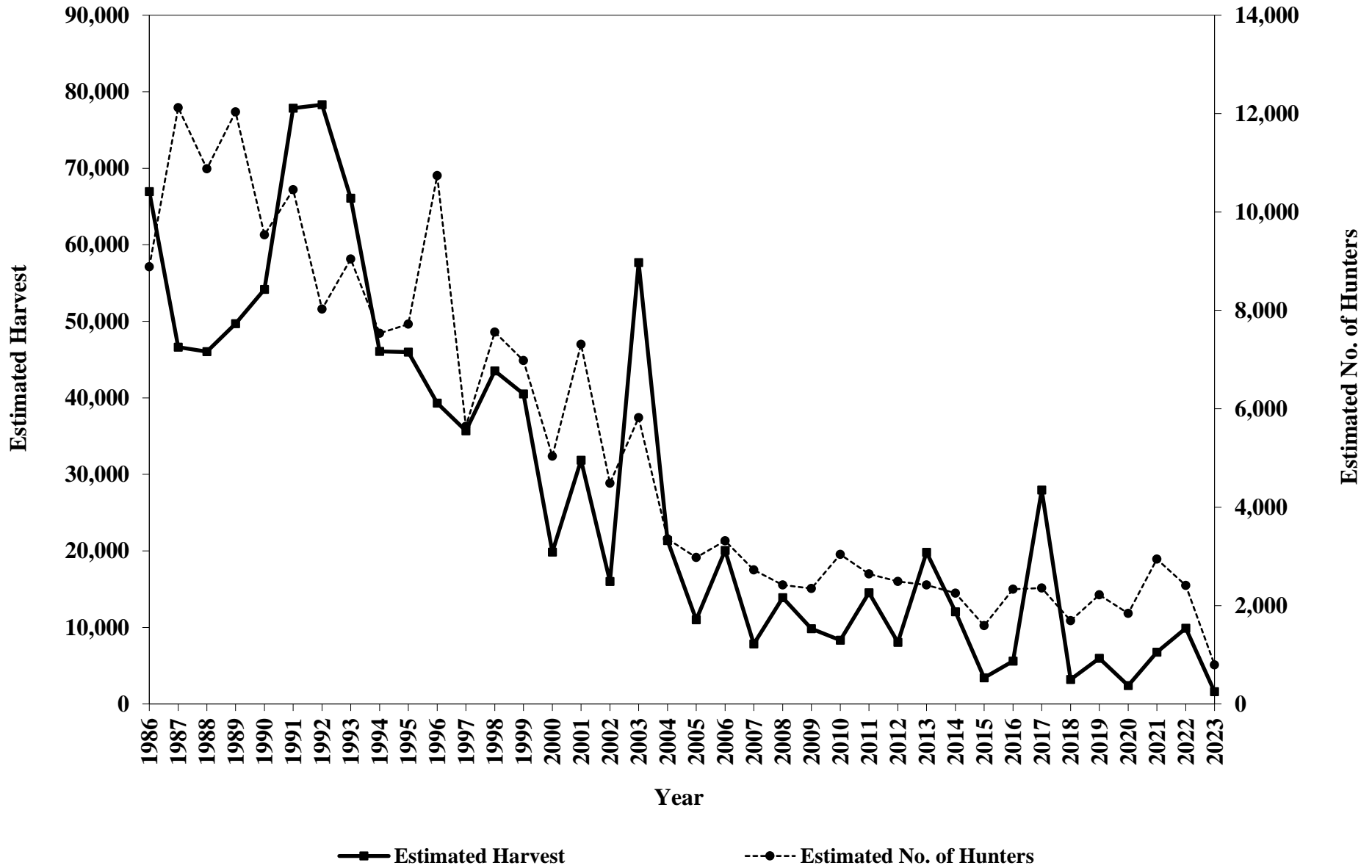


Figure A7. Statewide trends in estimated swamp rabbit harvest and estimated number of swamp rabbit hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Fox Squirrel

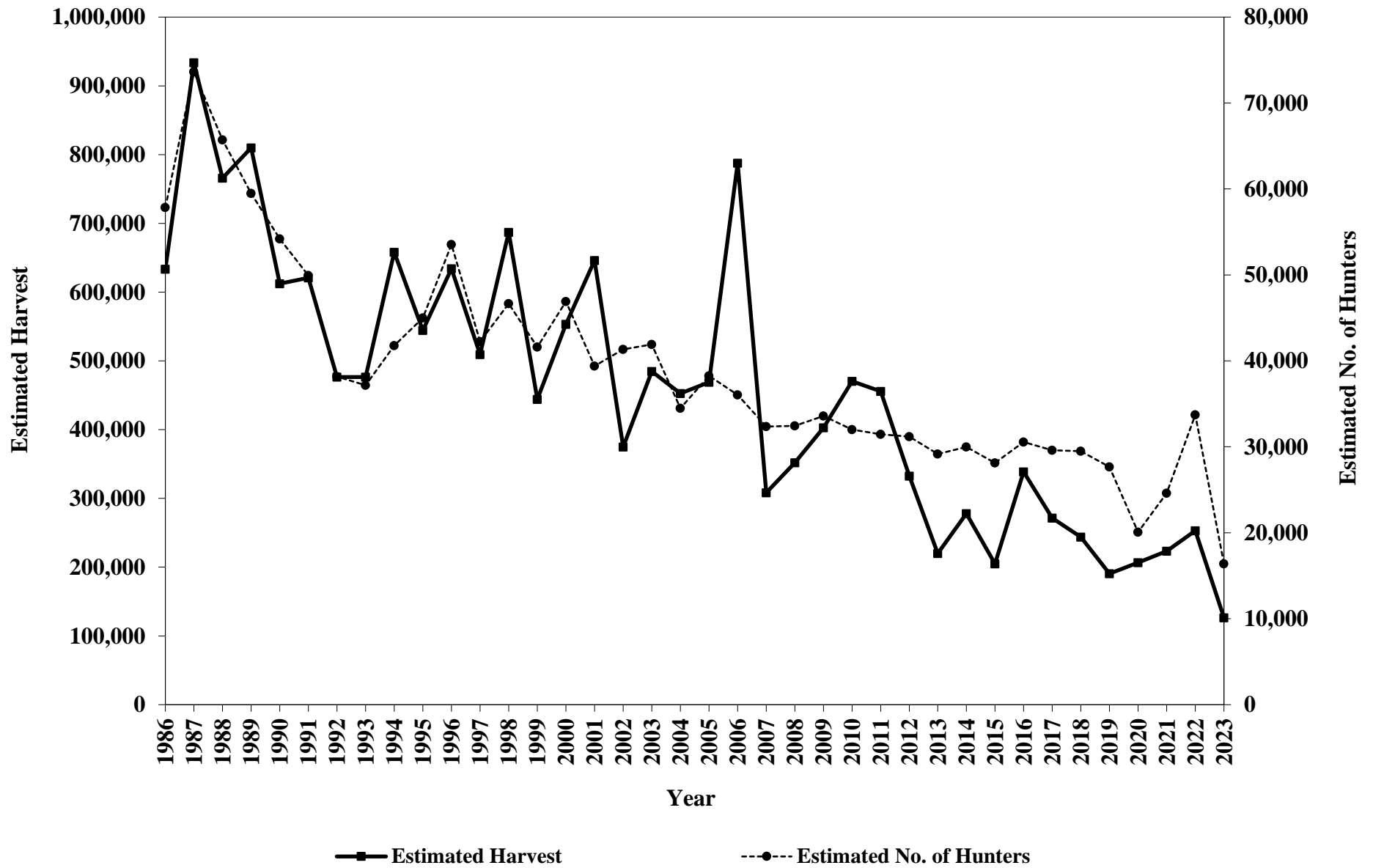


Figure A8. Statewide trends in estimated fox squirrel harvest and estimated number of fox squirrel hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Gray Squirrel

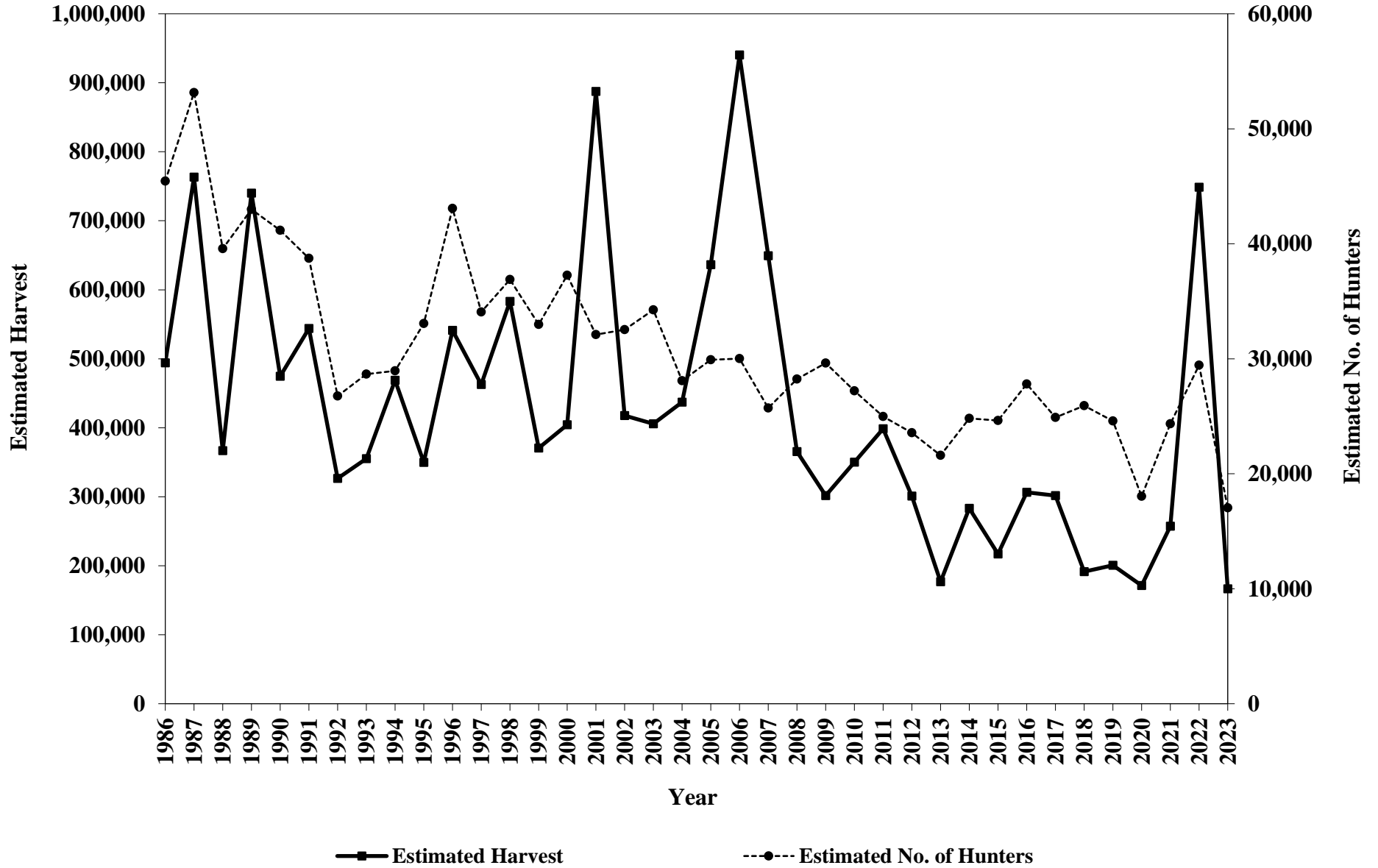


Figure A9. Statewide trends in estimated gray squirrel harvest and estimated number of gray squirrel hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Fall Turkey

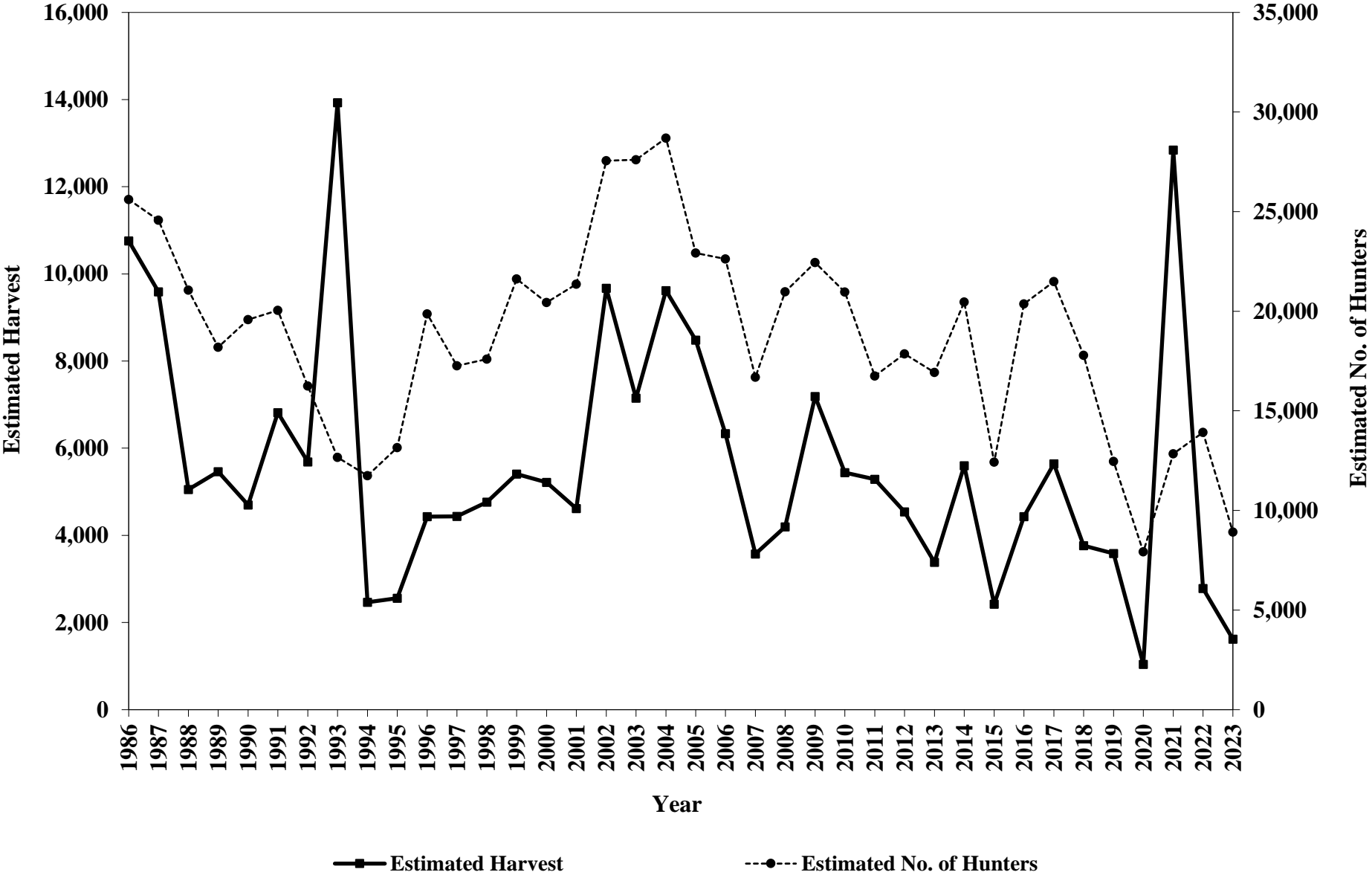


Figure A10. Statewide trends in estimated fall turkey harvest and estimated number of fall turkey hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Spring Turkey

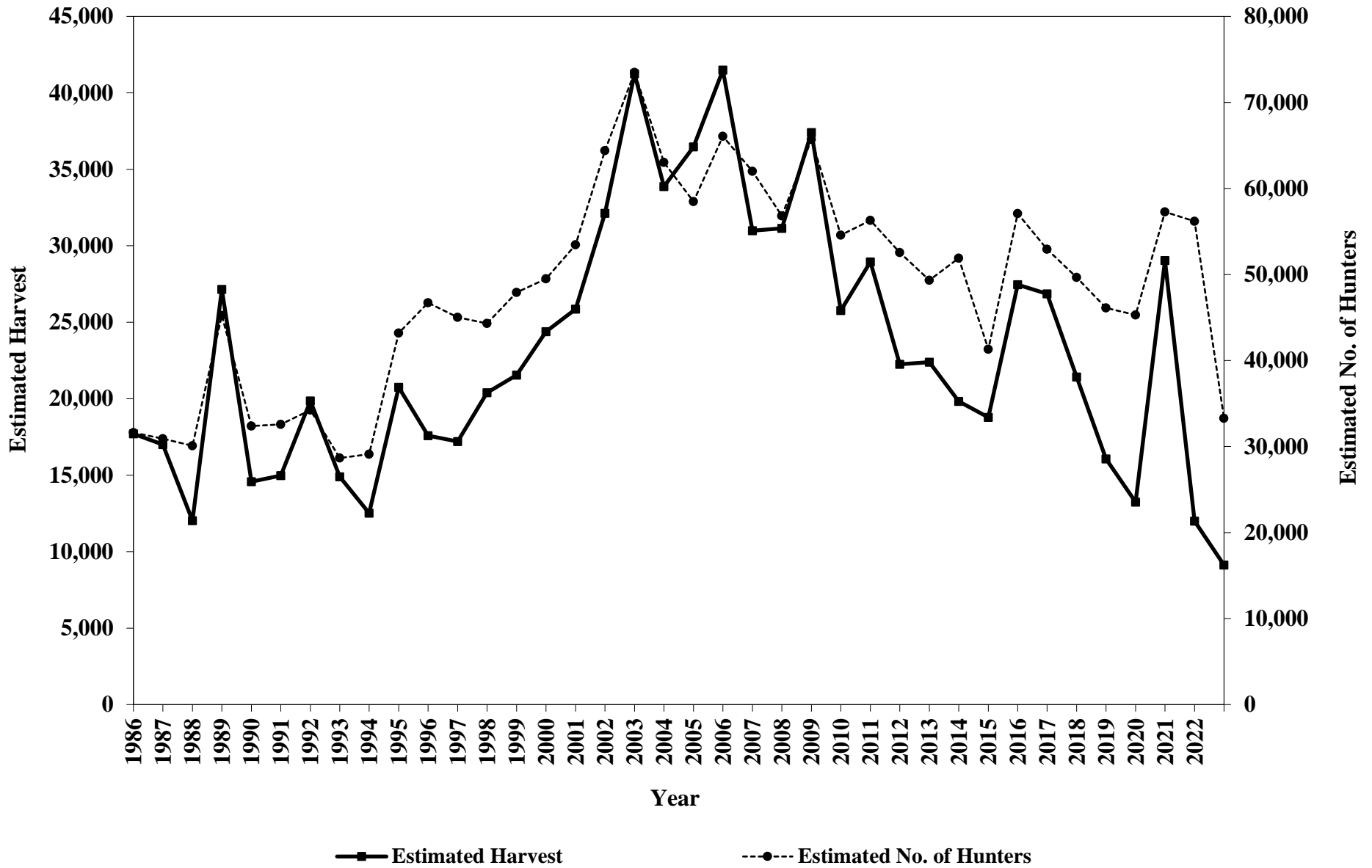


Figure A11. Statewide trends in estimated spring turkey harvest and estimated number of spring turkey hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

American Woodcock

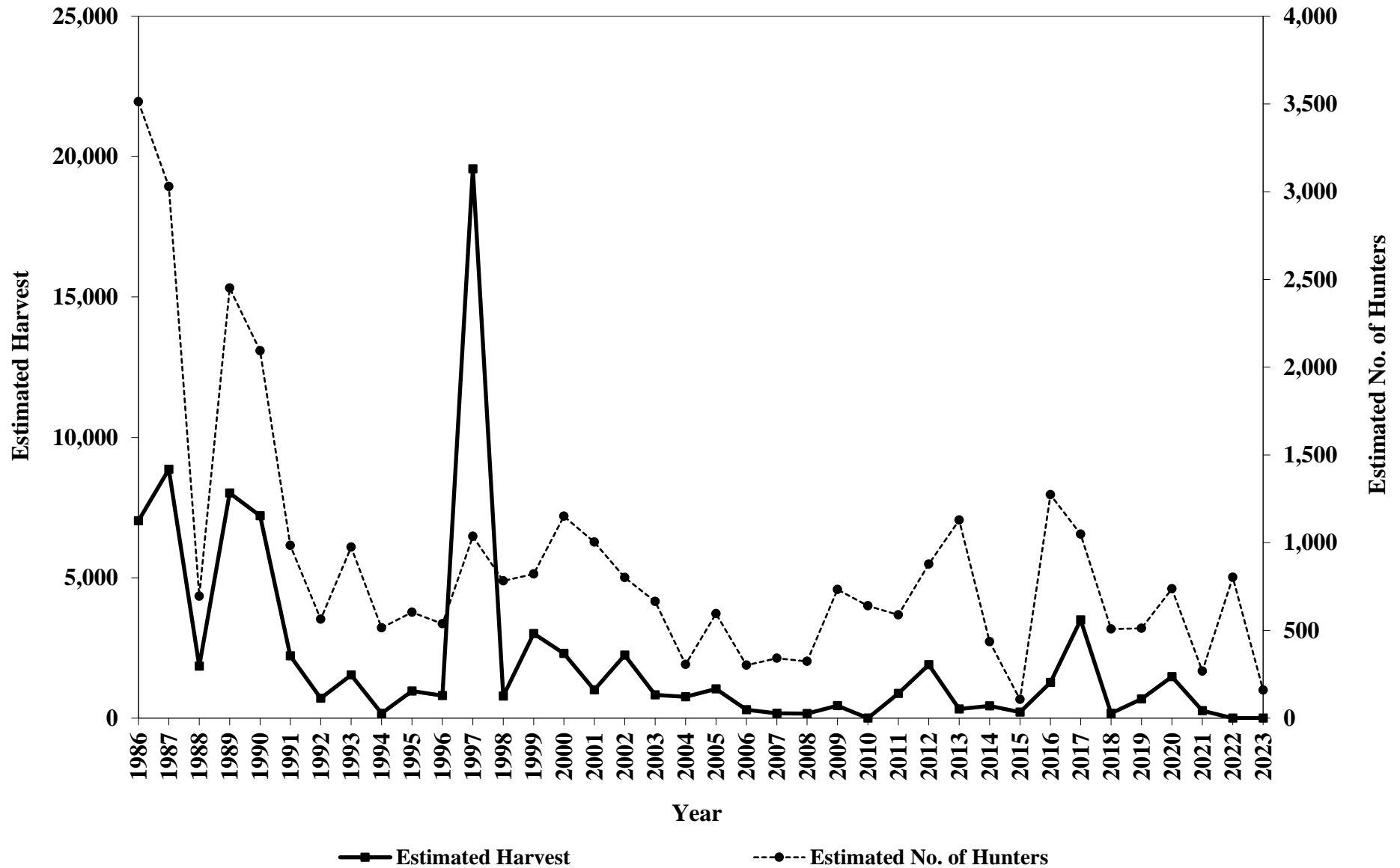


Figure A12. Statewide trends in estimated American woodcock harvest and estimated number of American woodcock hunters in Oklahoma, 1986-2023. All years displaying only resident license holders (senior, lifetime and annual).

Coyote

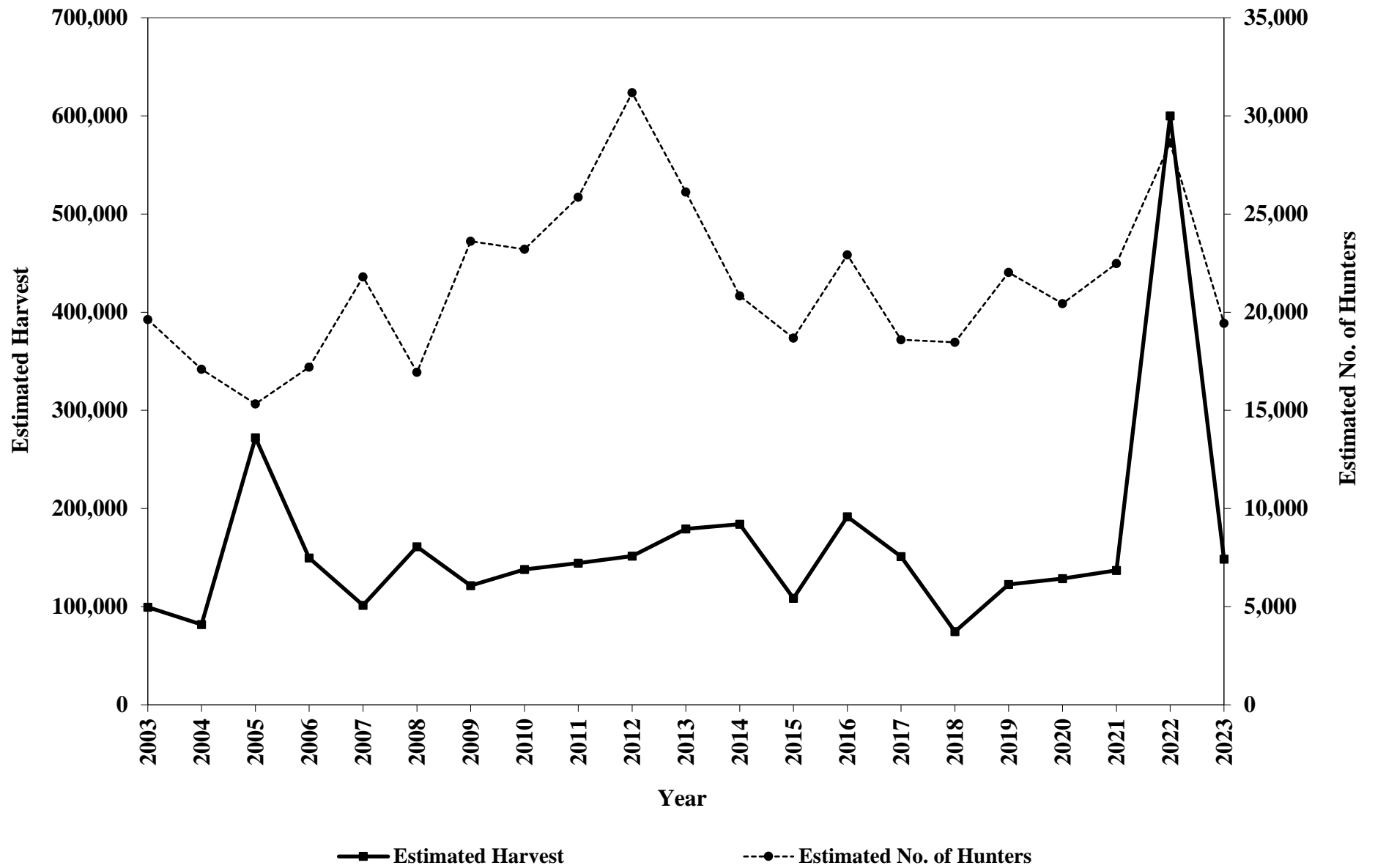


Figure A13. Statewide trends in estimated coyote harvest and estimated number of coyote hunters in Oklahoma, 2003-2023. All years displaying only resident license holders (senior, lifetime and annual).

Bobcat

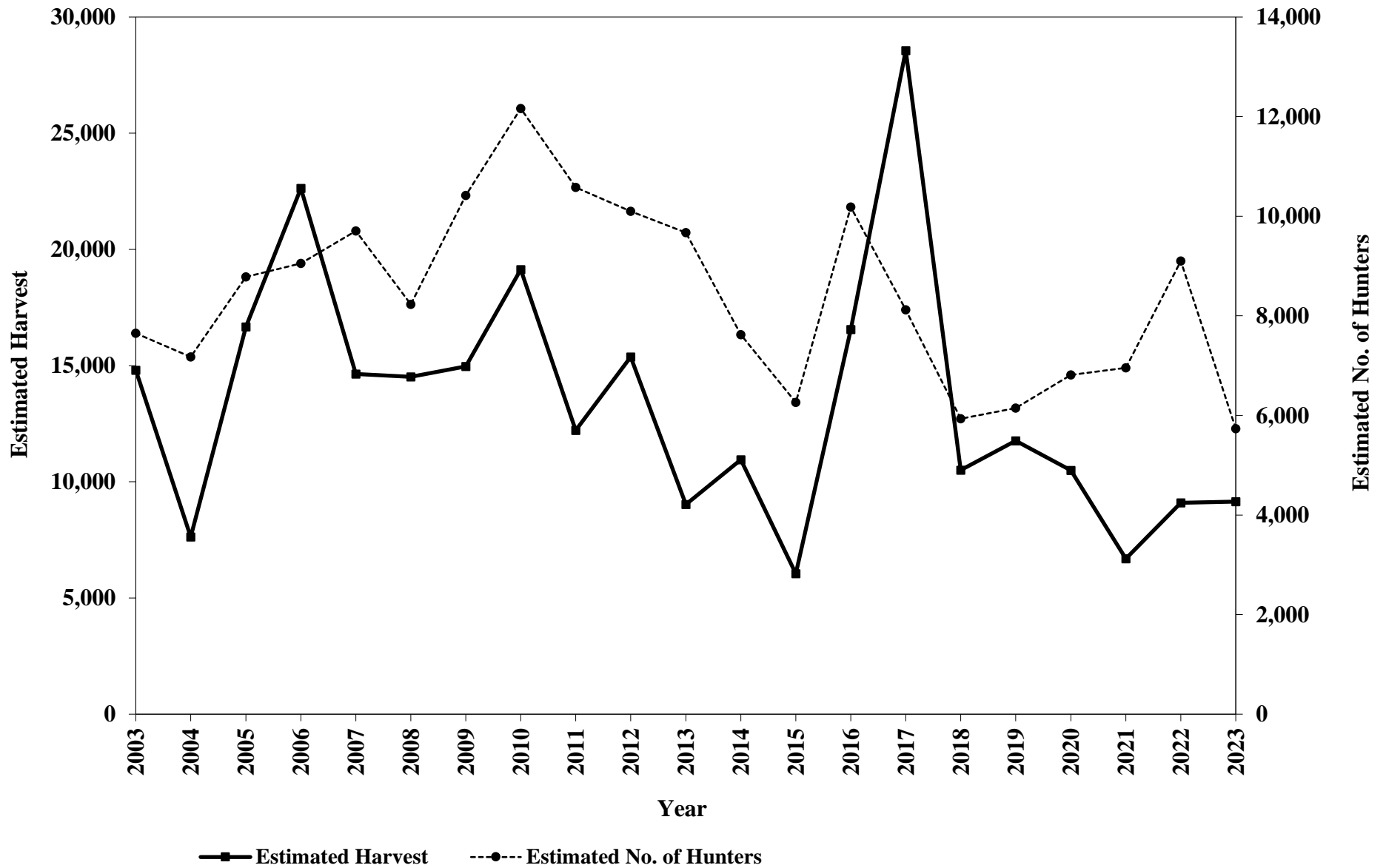


Figure A14. Statewide trends in estimated bobcat harvest and estimated number of bobcat hunters in Oklahoma, 2003-2023. All years displaying only resident license holders (senior, lifetime and annual).

Raccoon

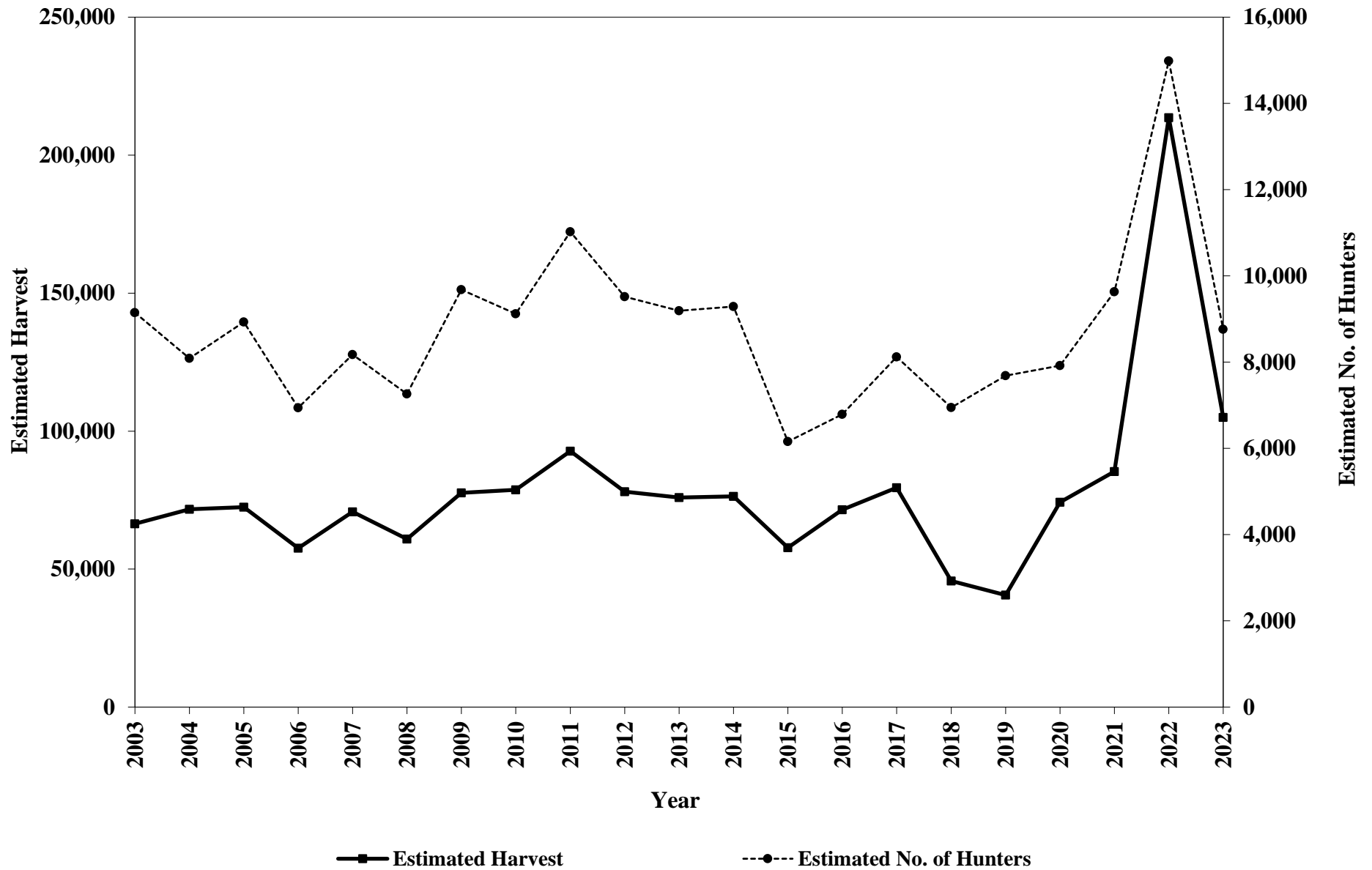


Figure A15. Statewide trends in estimated raccoon harvest and estimated number of raccoon hunters in Oklahoma, 2003-2023. All years displaying only resident license holders (senior, lifetime and annual).

Beaver

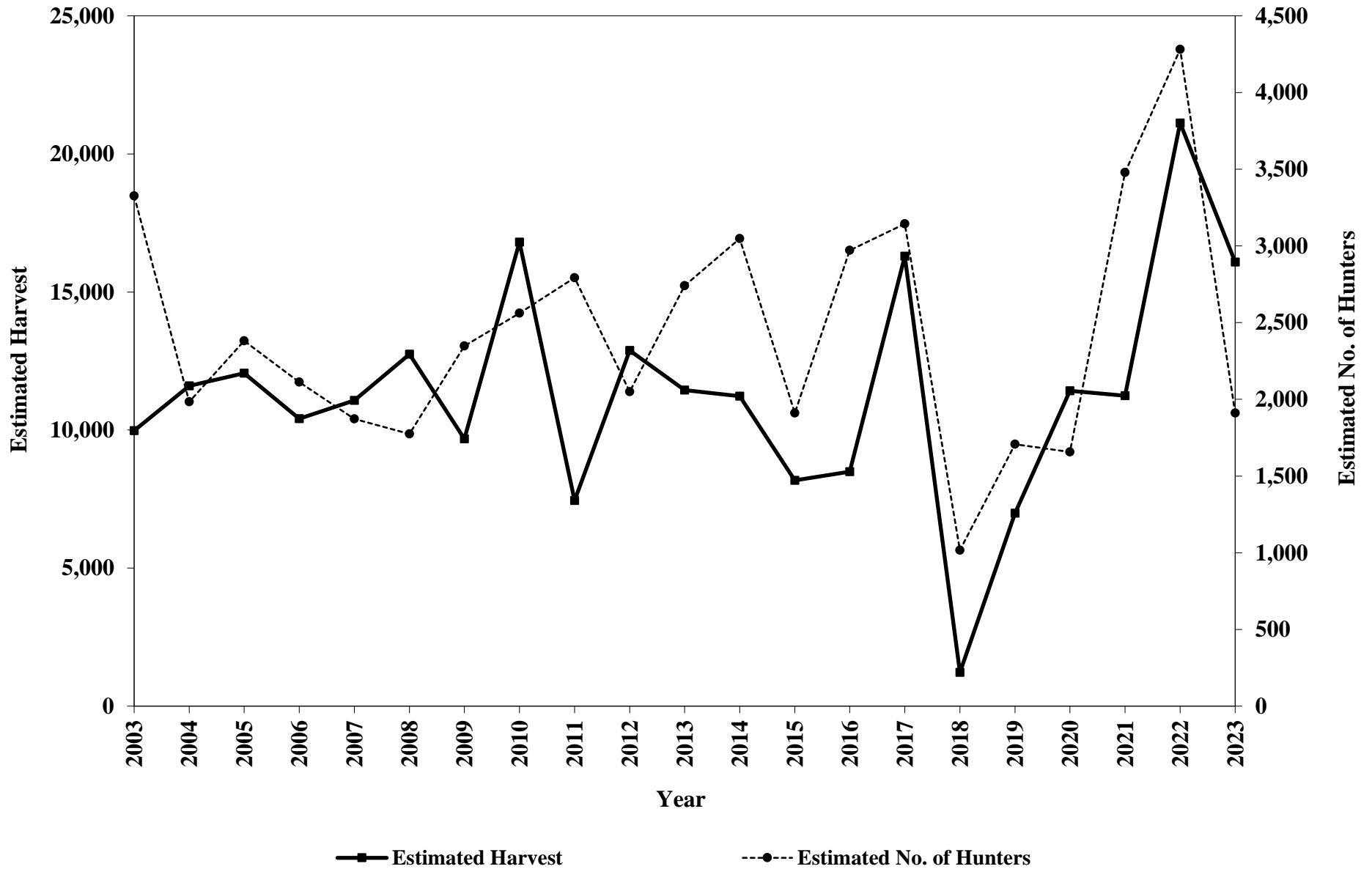


Figure A16. Statewide trends in estimated beaver harvest and estimated number of beaver hunters in Oklahoma, 2003-2023. All years displaying only resident license holders (senior, lifetime and annual).

Gray Fox

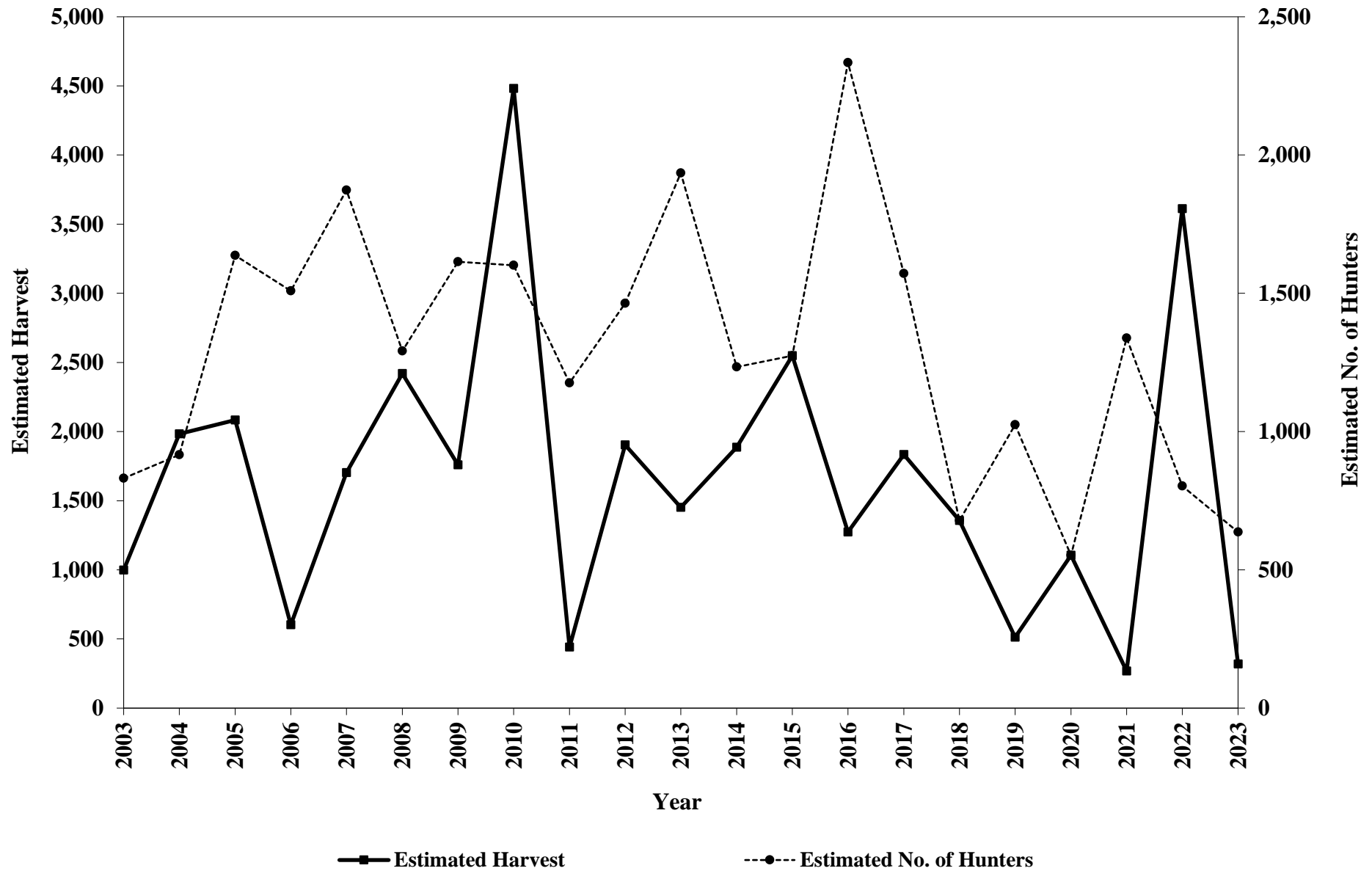


Figure A17. Statewide trends in estimated gray fox harvest and estimated number of gray fox hunters in Oklahoma, 2003-2023. All years displaying only resident license holders (senior, lifetime and annual).

Red Fox

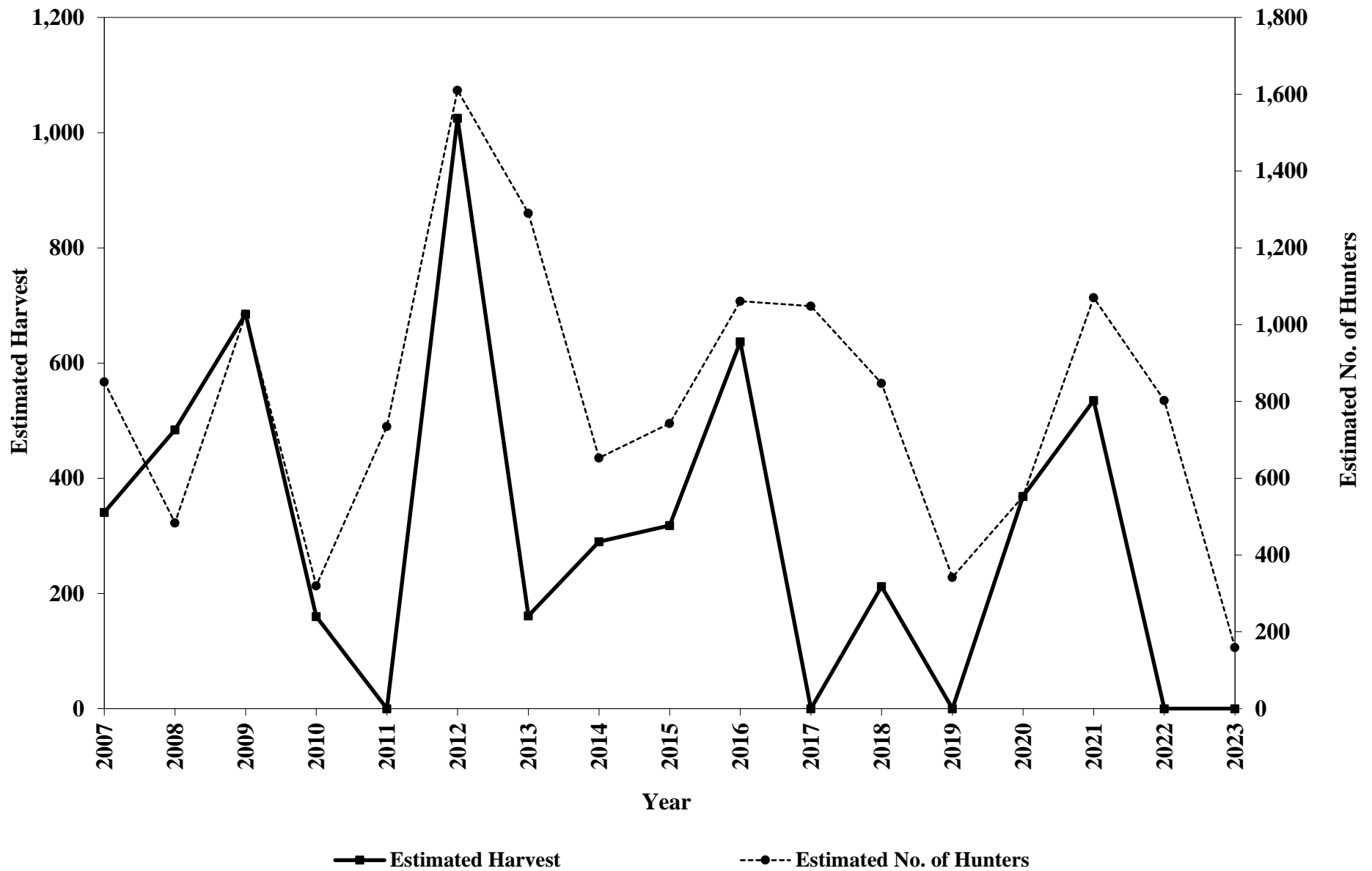


Figure A18. Statewide trends in estimated red fox harvest and estimated number of red fox hunters in Oklahoma, 2007-2023. All years displaying only resident license holders (senior, lifetime and annual).

River Otter

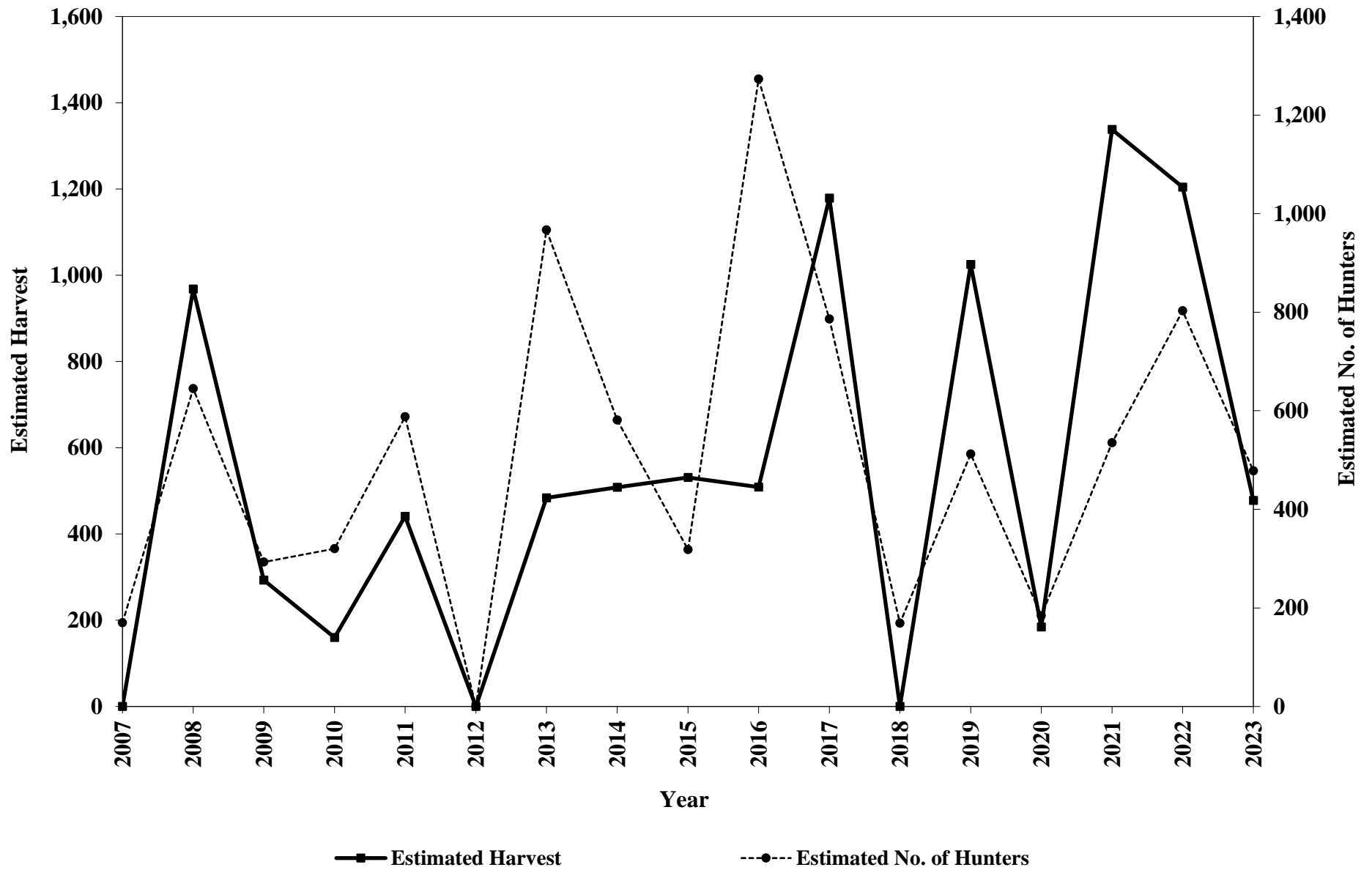


Figure A19. Statewide trends in estimated river otter harvest and estimated number of river otter hunters in Oklahoma, 2007-2023. All years displaying only resident license holders (senior, lifetime and annual).

Feral Swine

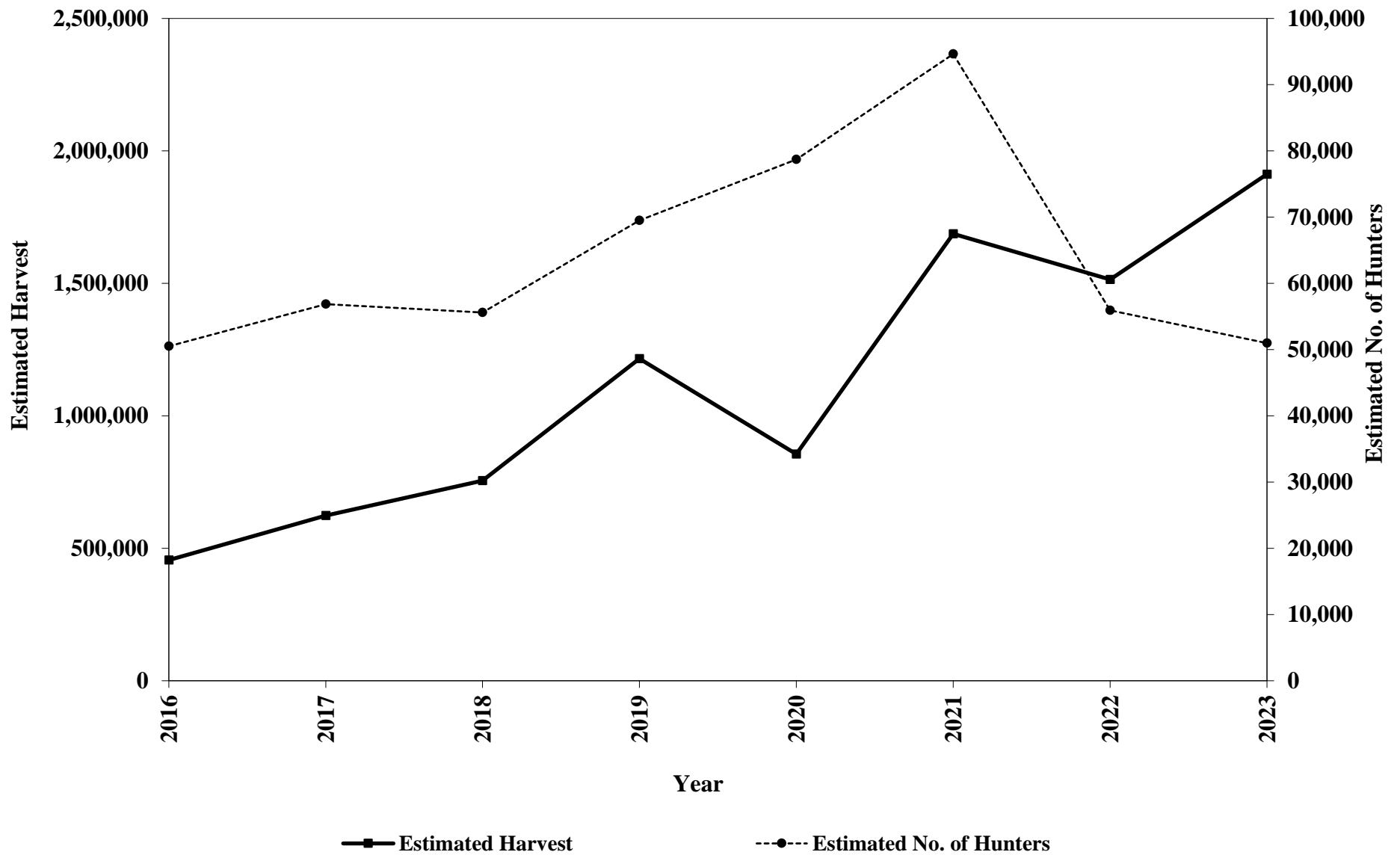


Figure A19. Statewide trends in estimated feral swine harvest and estimated number of feral swine hunters in Oklahoma, 2016-2023. (2019, 2020 & 2021 data includes tribal license holders.)

APPENDIX B

Human Dimensions Issues – Tables and Graphs

Table B1. Rate of participation in specific 2023 hunting seasons by all license holders, and by license type. (*Small sample size.)

| Hunting Season | Total Sample | | Participation by License Type | | | | | | | |
|-----------------------------|-----------------|---------|-------------------------------|---------|------------------|---------|-----------------|---------|-----------------|---------|
| | Participation | | Lifetime | | Annual/Five-Year | | Senior | | Non-Resident | |
| | Season <i>n</i> | Percent | Season <i>n</i> | Percent | Season <i>n</i> | Percent | Season <i>n</i> | Percent | Season <i>n</i> | Percent |
| Any Hunting | 1,765 | 60.3 | 693 | 66.2 | 452 | 69.2 | 92 | 15.0 | 528 | 85.7 |
| Deer (Overall) | 1,353 | 46.2 | 624 | 59.6 | 370 | 56.7 | 66 | 10.8 | 293 | 47.6 |
| Gun | 1,063 | 36.3 | 537 | 51.3 | 299 | 45.8 | 56 | 9.2 | 171 | 27.8 |
| Primitive Firearms | 405 | 13.8 | 294 | 28.1 | 78 | 11.9 | 23 | 3.8 | 10 | 1.6 |
| Archery | 751 | 25.6 | 376 | 35.9 | 197 | 30.2 | 26 | 4.2 | 152 | 24.7 |
| Special Antlerless | 271 | 9.3 | 168 | 16.0 | 74 | 11.3 | 14 | 2.3 | 15 | 2.4 |
| Youth Season | 46 | 1.6 | 22 | 2.1 | 15 | 2.3 | 0 | 0.0 | 8 | 1.3 |
| Turkey (Overall) | 293 | 10.0 | 179 | 17.1 | 53 | 8.1 | 11 | 1.8 | 50 | 8.1 |
| Spring Turkey | 257 | 8.8 | 159 | 15.2 | 42 | 6.4 | 8 | 1.3 | 48 | 7.8 |
| Fall Turkey | 59 | 2.0 | 37 | 3.5 | 14 | 2.1 | 5 | 0.8 | 3 | 0.5 |
| Dove | 320 | 10.9 | 173 | 16.5 | 95 | 14.5 | 18 | 2.9 | 34 | 5.5 |
| Feral Swine | 405 | 13.8 | 221 | 21.1 | 85 | 13.0 | 14 | 2.3 | 85 | 13.8 |
| Ducks | 365 | 12.5 | 109 | 10.4 | 82 | 12.6 | 7 | 1.1 | 167 | 27.1 |
| Geese | 217 | 7.4 | 62 | 5.9 | 46 | 7.0 | 3 | 0.5 | 106 | 17.2 |
| Squirrel (Overall) | 146 | 5.0 | 91 | 8.7 | 33 | 5.1 | 16 | 2.6 | 6 | 1.0 |
| Fox Squirrel | 105 | 3.6 | 70 | 6.7 | 23 | 3.5 | 10 | 1.6 | 2 | 0.3 |
| Gray Squirrel | 112 | 3.8 | 71 | 6.8 | 24 | 3.7 | 12 | 2.0 | 5 | 0.8 |
| Quail | 93 | 3.2 | 37 | 3.5 | 24 | 3.7 | 8 | 1.3 | 24 | 3.9 |
| Furbearers (Overall) | 167 | 5.7 | 105 | 10.0 | 41 | 6.3 | 4 | 0.7 | 17 | 2.8 |
| Coyote | 138 | 4.7 | 86 | 8.2 | 34 | 5.2 | 2 | 0.3 | 16 | 2.6 |
| Raccoon | 57 | 1.9 | 44 | 4.2 | 9 | 1.4 | 2 | 0.3 | 2 | 0.3 |
| Bobcat | 38 | 1.3 | 29 | 2.8 | 6 | 0.9 | 1 | 0.2 | 2 | 0.3 |
| Beaver* | 14 | 0.5 | 12 | 1.1 | 0 | 0.0 | 0 | 0.0 | 2 | 0.3 |
| Gray Fox* | 4 | 0.1 | 3 | 0.3 | 1 | 0.2 | 0 | 0.0 | 0 | 0.0 |
| Red Fox* | 1 | 0.0 | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Otter* | 5 | 0.2 | 3 | 0.3 | 0 | 0.0 | 0 | 0.0 | 2 | 0.3 |
| Rabbit (Overall) | 65 | 2.2 | 39 | 3.7 | 17 | 2.6 | 8 | 1.3 | 1 | 0.2 |
| Cottontail Rabbit | 62 | 2.1 | 38 | 3.6 | 16 | 2.5 | 7 | 1.1 | 1 | 0.2 |
| Swamp Rabbit* | 5 | 0.2 | 4 | 0.4 | 0 | 0.0 | 1 | 0.2 | 0 | 0.0 |
| Jackrabbit* | 2 | 0.1 | 0 | 0.0 | 1 | 0.2 | 1 | 0.2 | 0 | 0.0 |
| Pheasant | 49 | 1.7 | 15 | 1.4 | 22 | 3.4 | 2 | 0.3 | 10 | 1.6 |
| Crow | 41 | 1.4 | 28 | 2.7 | 9 | 1.4 | 3 | 0.5 | 1 | 0.2 |
| Woodcock* | 1 | 0.0 | 0 | 0.0 | 1 | 0.2 | 0 | 0.0 | 0 | 0.0 |

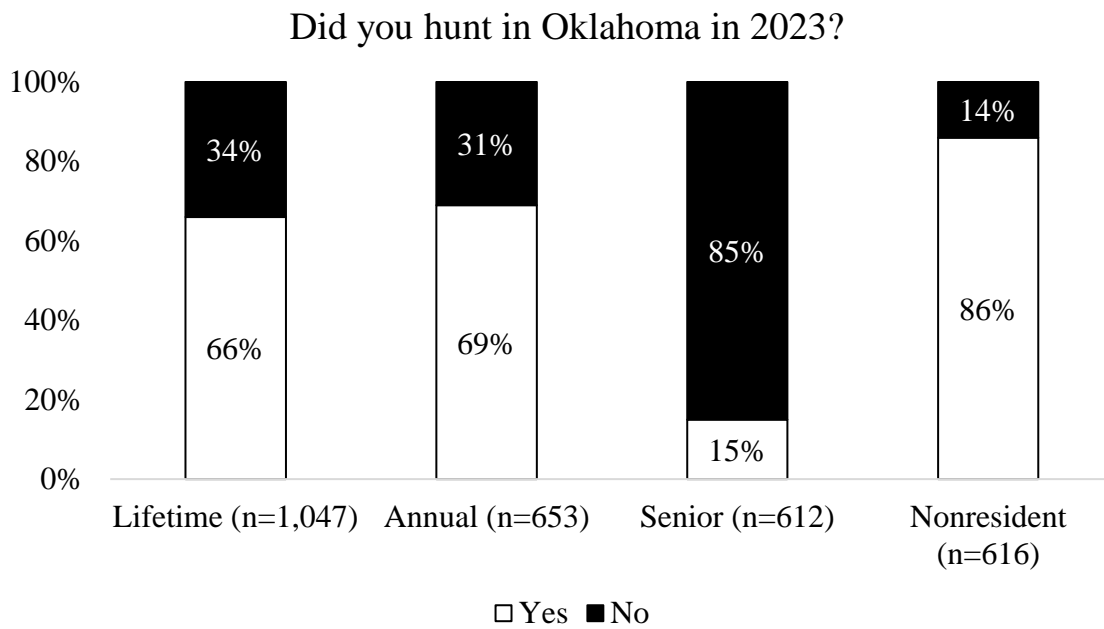


Figure B1. Distribution of hunting license holder participation in hunting activities during 2023, by license category. Both hunting and combination-hunting-and-fishing licenses were included in all license categories.

Type of Land Used for Hunting in Oklahoma during 2023, by Season

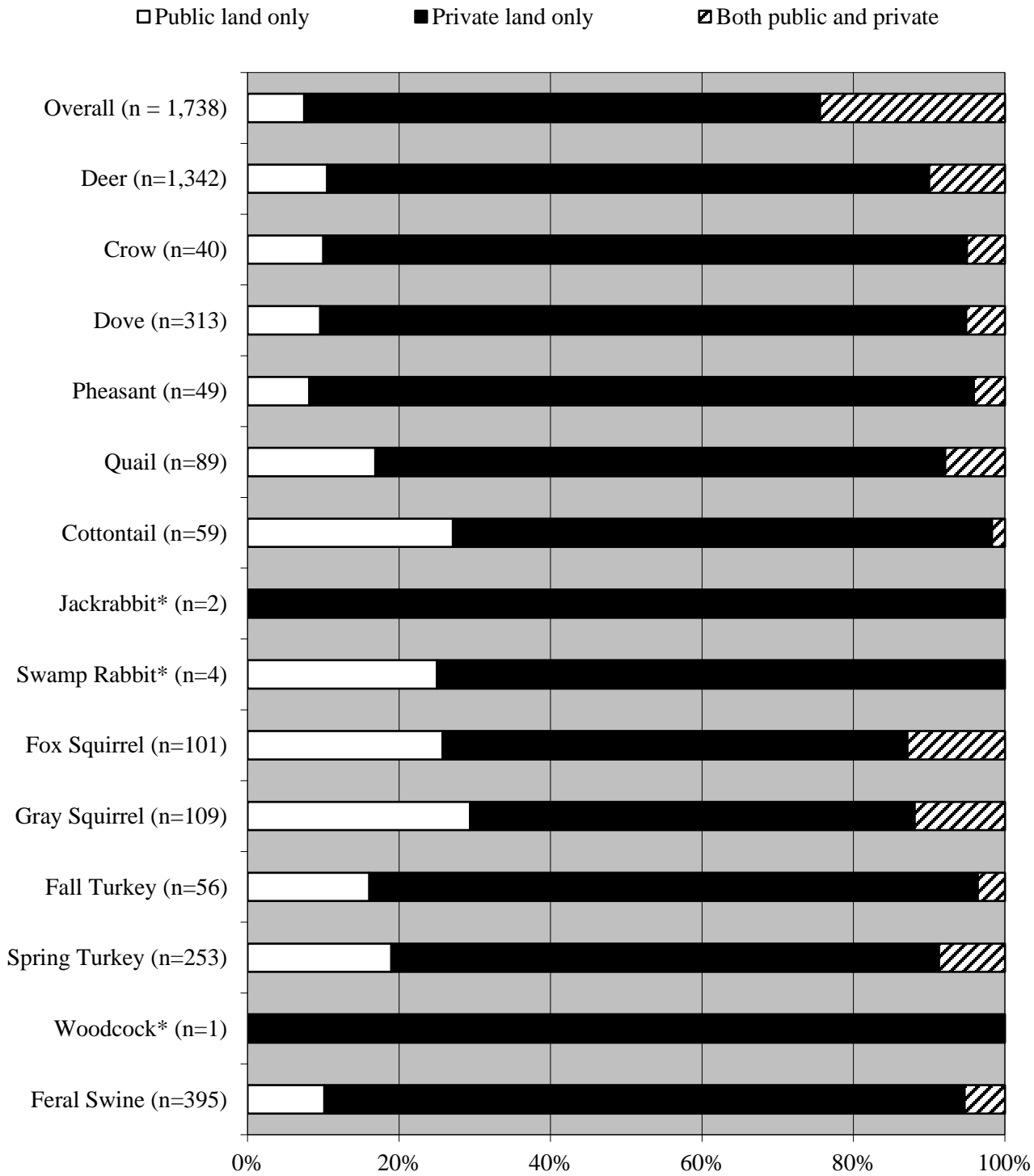


Figure B2. Distribution of land use for specific hunting seasons during 2023. Sample sizes and missing data vary for each species. *Small sample size. Displaying senior, annual, lifetime and nonresident licenses

[Asked of all active hunters:]

“Did you use public land for any portion of your hunting in Oklahoma during 2023? (n=1,765)”

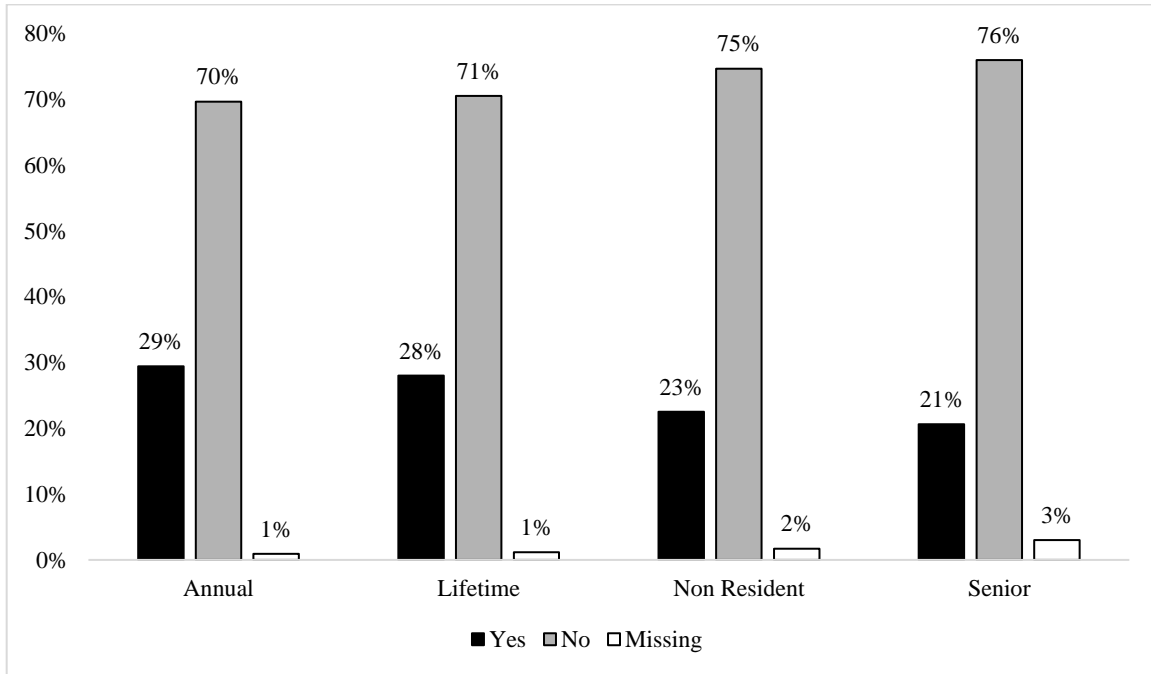


Figure B3. Distribution of hunting license holder use of public land during the 2023 hunting season.

Please check the box for each part of Oklahoma where you hunted on public land during 2023, based on the major highways:”

Active resident hunters 2023 (n = 1,237)

Active nonresident hunters 2023 (n = 528)

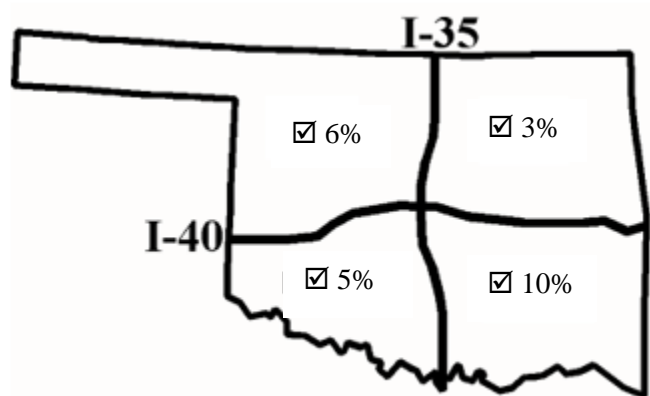
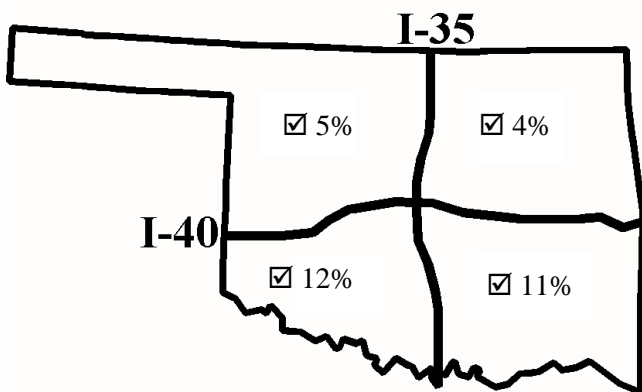


Figure B4. Use of public land located in each region, by active hunting license holders in 2023.

Participation in Specific Deer Seasons

2023-season deer hunters (n = 1,353)

(*Senior citizen license holders excluded for Youth Season as they could not possibly be an active hunter in the youth season.)

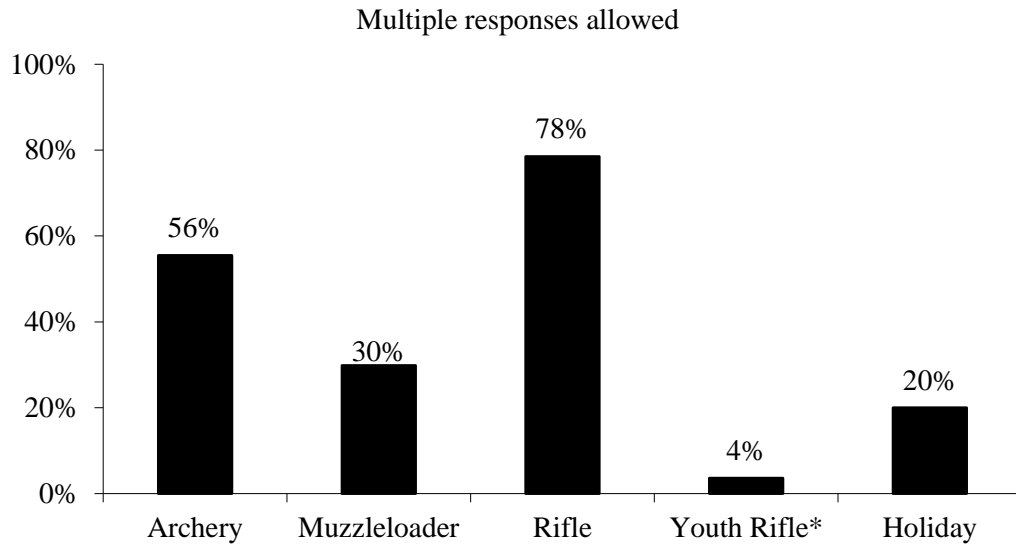


Figure B5. Participation in individual deer seasons, by 2023-season resident deer hunters. Displaying senior, annual, lifetime and nonresident licenses.

Patterns of Participation: Number of Deer Seasons

2023-season deer hunters (n = 1,341)

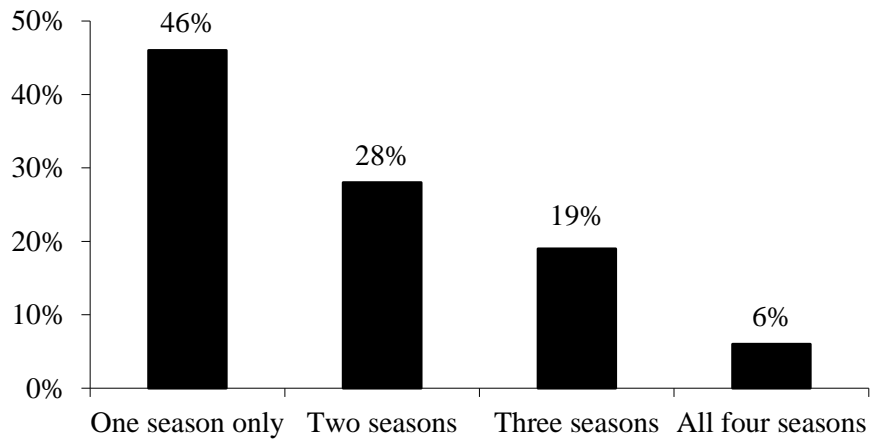


Figure B6. Number of deer seasons (archery, primitive, gun and holiday season; youth season excluded) participated in by 2023-season deer hunters. Displaying senior, annual, lifetime and nonresident licenses

Patterns of Participation: Specific Deer Seasons
2023-season deer hunters (n = 1,353)

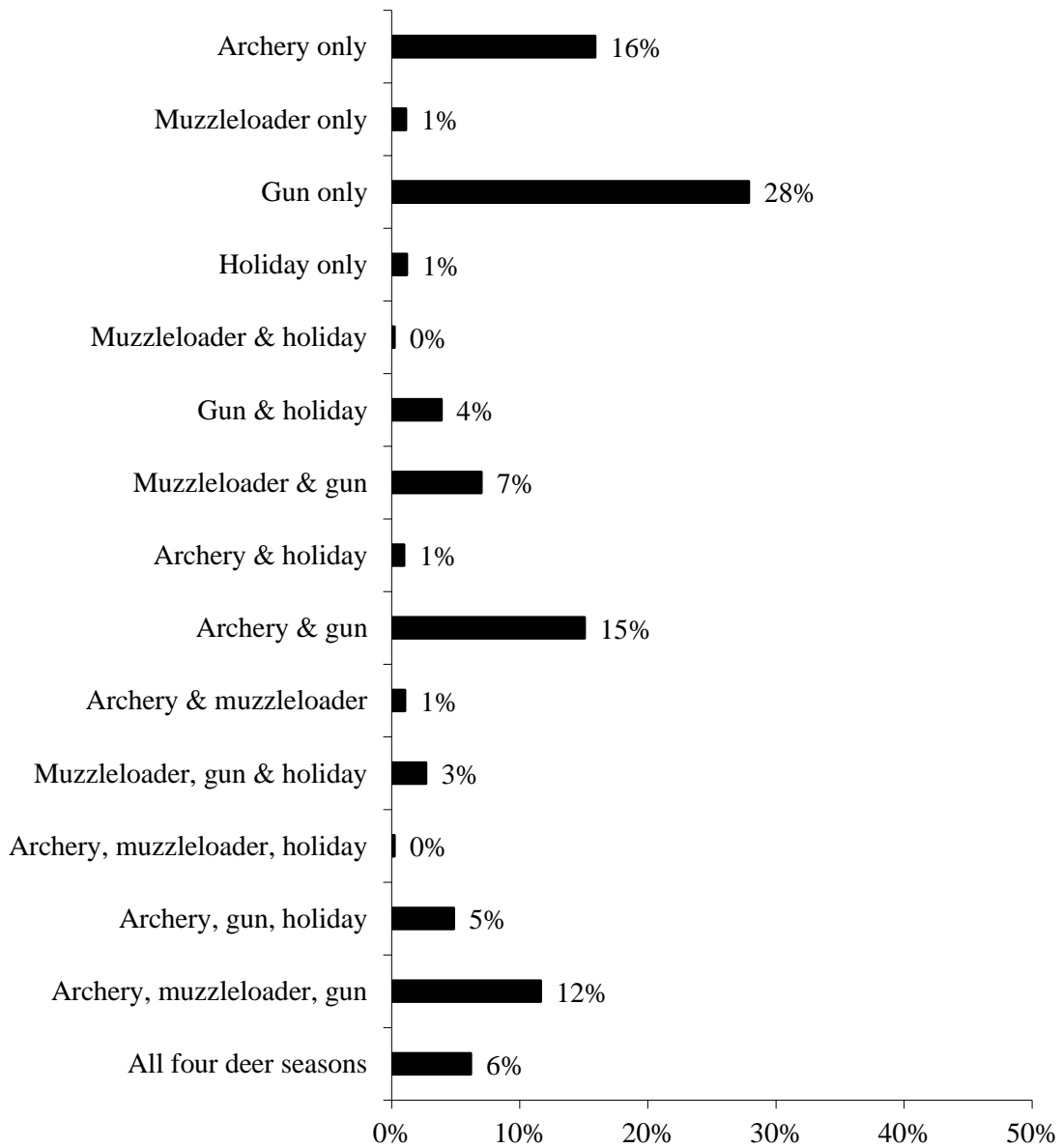


Figure B7. Specific deer seasons (archery, primitive, gun and holiday antlerless season; youth season excluded) participated in by 2023-season resident deer hunters. Displaying senior, annual, lifetime and nonresident licenses

Other Deer Hunting by Youth Season Participants

2023 youth deer season hunters (n = 46)

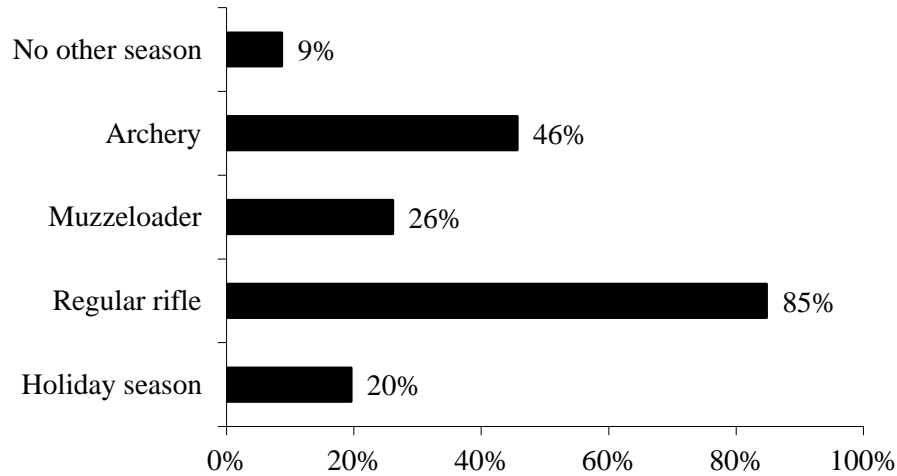


Figure B8. Participation in other deer seasons by 2023 youth deer season hunters. Displaying senior, annual, lifetime and nonresident licenses.

Total Number of Deer Harvested Per Hunter

2023-season deer hunters (n = 1,353)

- **Total Number of Bucks:** annual limit of 2 in archery, muzzleloader, gun & youth combined
- ▨ **Total Number of Does:** annual limit of 7 in archery, muzzleloader, gun, youth & the holiday antlerless season combined
- ▩ **Total Number of Deer:** annual limit of 7 in archery, muzzleloader, gun, youth & the holiday antlerless season combined

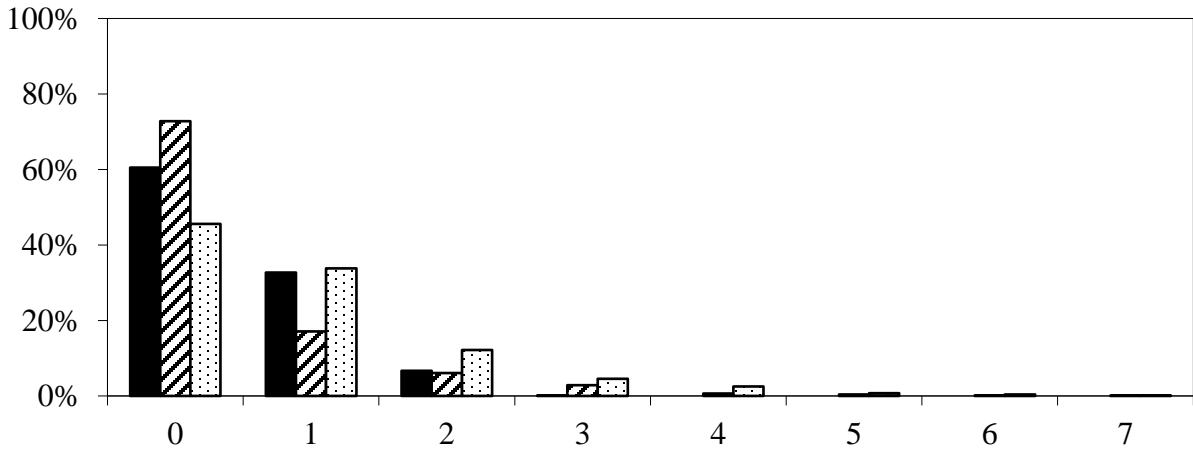


Figure B9. Total number of deer harvested per hunter across all 2023 seasons: archery, muzzleloader, gun, youth, and the holiday antlerless season. Displaying senior, annual, lifetime, and nonresident licenses

Reasons for Not Hunting by Inactive Hunting License Holders
Did not hunt in 2023, n=1,159, missing=45

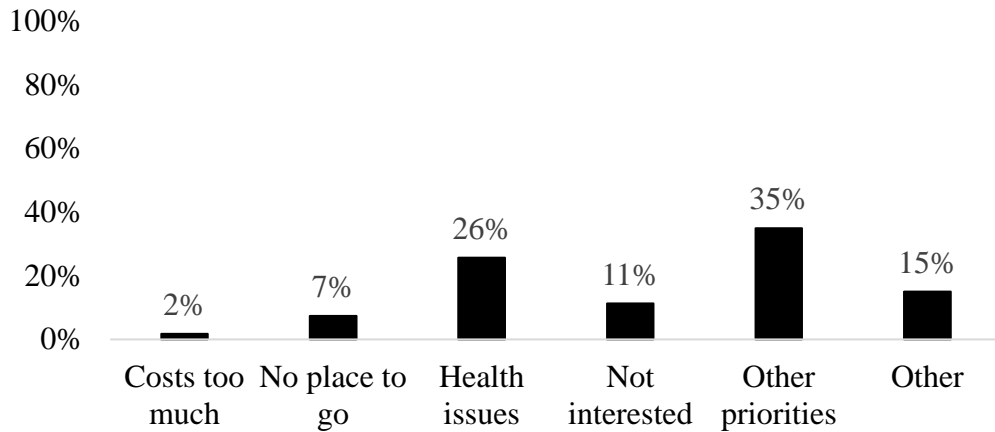


Figure B10. Barriers to hunting participation, by hunting license holders who were inactive in 2023. Displaying senior, annual, lifetime, and nonresident license holders

Satisfaction With Public Land Infrastructure
2023 public land users (n=464)

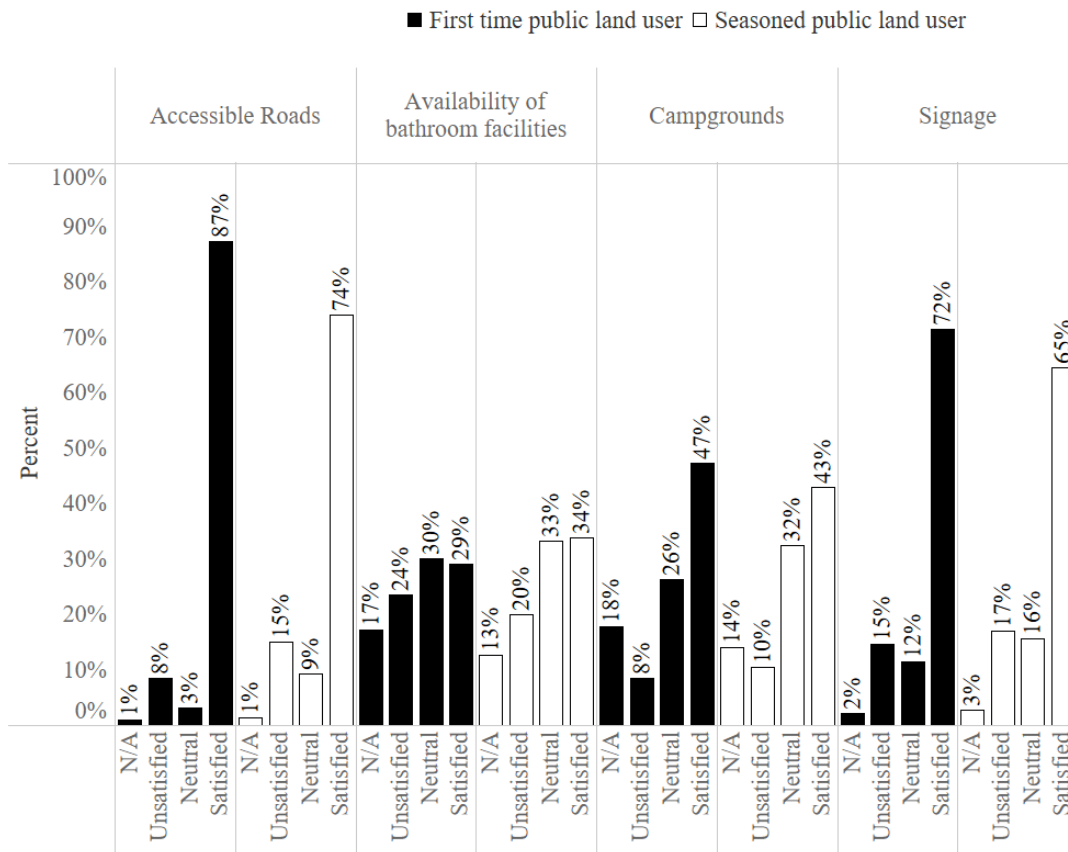


Figure B11. Satisfaction with various aspects of public lands comparing those who were first time public land users in 2023 (n=97) with those who were not first time public land users (n=367). Data displayed includes lifetime, annual, senior, and nonresident license types.

Table B2. Users of areas that ODWC leases from private owners to allow public access

| Type of private land available for Public Access | Percent of users selecting | Estimated number of hunters using |
|--|----------------------------|-----------------------------------|
| Oklahoma Land Access Program (OLAP) | 1.8% | 4,580 |
| Honobia Wildlife Management Area | 0.7% | 1,718 |
| Three Rivers Wildlife Management Area | 0.8% | 2,004 |
| None of the above | 92.9% | |
| Missing | 4.2% | |

Use of a Hunting Guide
2023 active hunters (n=1,748)

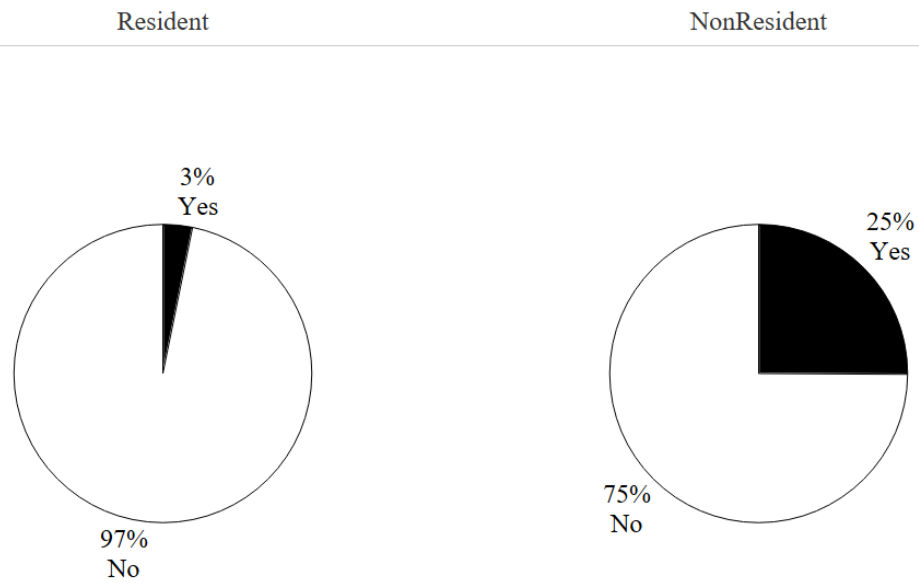


Figure B12. Use of a hunting guide in Oklahoma during the 2023 seasons separated by residents (n=1,226) and nonresidents (n=522)

Reduction in Antlered Deer Limit
Asked of all license holders; displaying responses of active deer hunters (n=1,338)

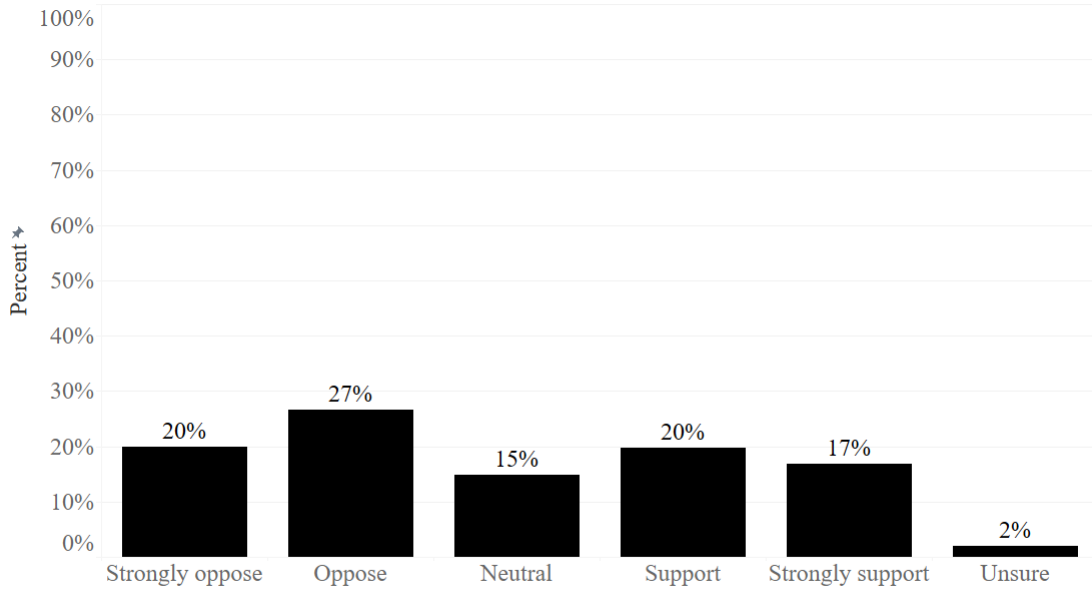


Figure B13. Response to a proposed reduction in the number of antlered deer allowed to be harvested over the course of the deer season. Responses displayed are active deer hunters holding lifetime, senior, annual nonresident licenses.

Access to Private Land
Displaying resident license holders (n=2,132)

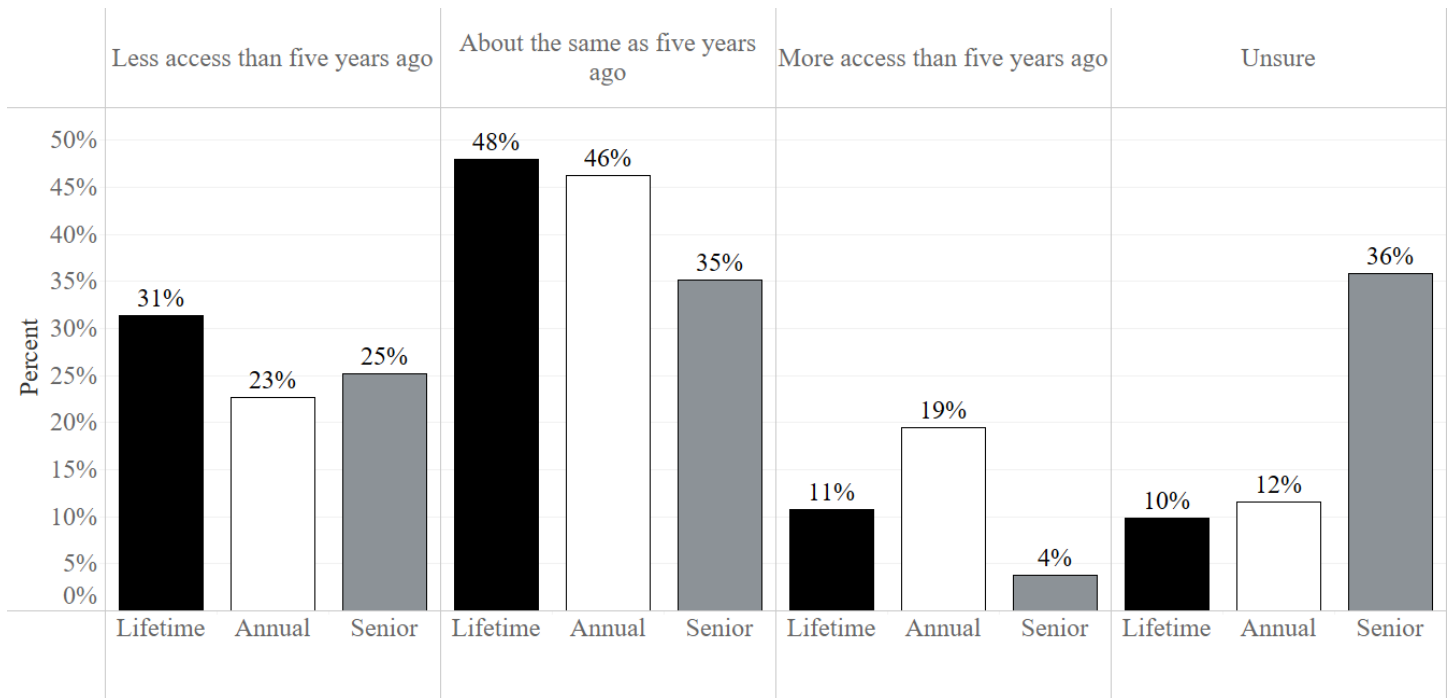


Figure B14. Access to private land for hunting based on resident license type of annual (n=612), lifetime (n=1,017), and senior (n=503)

Level of Approval of Trapping in Oklahoma
All resident license holders (n=2,175)

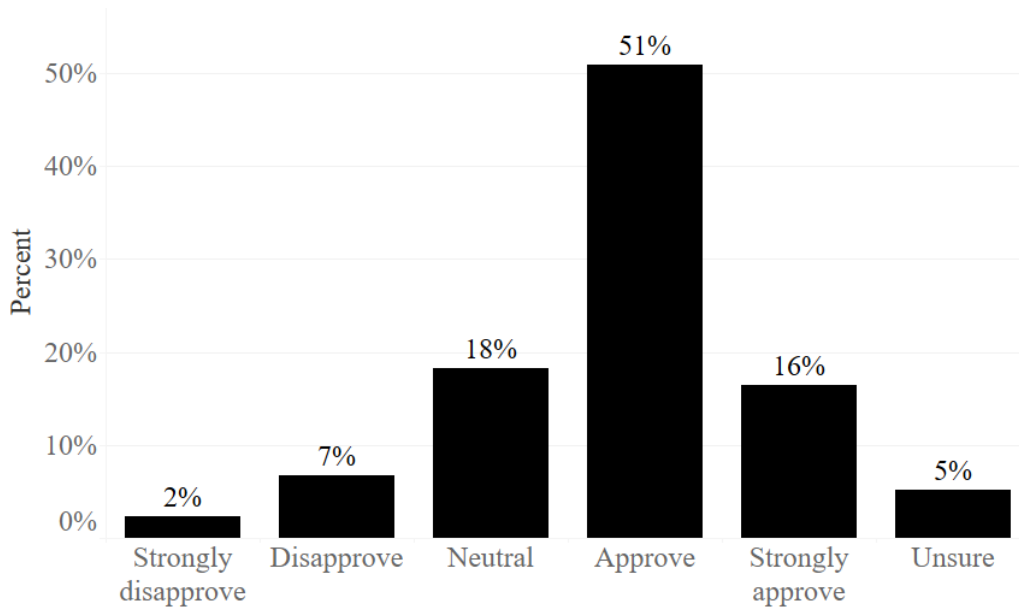
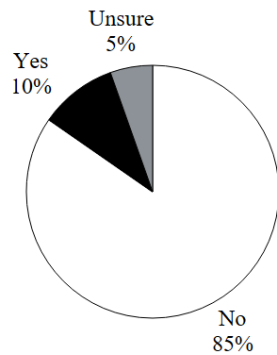


Figure B15. Level of approval to regulated trapping in Oklahoma, displaying resident license holders (annual, senior, lifetime)

Past Activity and Future Interest Related to Trapping
Resident license holders (n=2,295)

Gone trapping in the last five years



Interested in trapping in the future

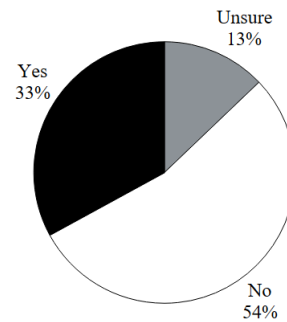


Figure B16. Respondents who have actively trapped in the last five years in Oklahoma (left) and those who would be interested in trapping in the future (right). Displaying only resident license types.

APPENDIX C

Survey Instrument and Reminder Postcard



2023-Season Game Harvest Survey



Please help the Wildlife Department by participating in this study, **even if you did not hunt last year!**

Congratulations, you are one of a few hunting license holders that the Oklahoma Department of Wildlife Conservation (ODWC) has selected for a very important survey. We are interested in learning about the seasons you hunted in 2023 (if any) and the game you harvested. We need your help with this survey even if you did not hunt. Your answers will help us improve wildlife conservation in Oklahoma. This survey is being conducted via mail and phone. Should we not receive your survey by mail we will begin contacting you via the phone number provided on your license holder information the first week of February.

As a token of our appreciation, upon receipt of your completed survey you will be entered to win one of twenty available annual subscriptions to *Outdoor Oklahoma* magazine. The survey should take no more than 15 minutes of your time. If you have any questions or would like a report of this study's findings, please contact Betsey York at (405) 521-4605 or betsey.york@odwc.ok.gov. Your help in this project is greatly appreciated, and we look forward to learning about your 2023 hunting experiences!

Sincerely,
Betsey York
Human Dimensions Specialist

1. Did you hunt in Oklahoma during 2023?

Yes → If yes, please continue with survey on the next page →

No → **1a. What was the main reason you did not hunt last year?**

Costs too much

No place to go

Health issues

Not interested

Other priorities

Other

If you did not hunt in 2023, please continue to question #31.

Public Land

2. Did you use public land for any portion of your hunting in Oklahoma during 2023?

(Public land might include wildlife management areas, wildlife refuges, U.S. Army Corps of Engineers land, state parks, city-owned land, OK Land Access Program (OLAP), etc.)

- No → If no, please go to question #7.
- Yes

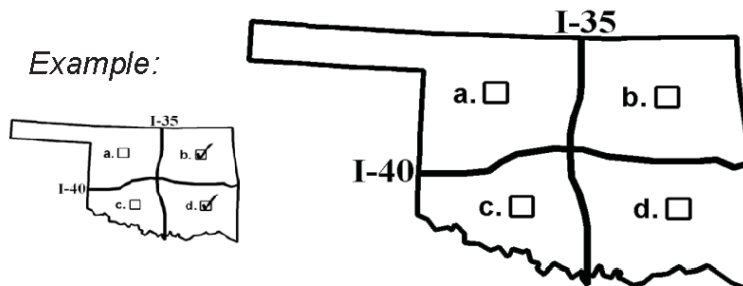
3. Was 2023 the first time you hunted on public land?

- Yes
- No

4. Considering all Oklahoma hunting seasons in 2023, how much of your hunting occurred on public vs. private land?

Total should equal: _____ % Public land
_____ % Private land
100%

5. Please check (☑) the box for each part of Oklahoma where you hunted on public land during 2023, based on the major interstates:



6. To what extent were you satisfied or unsatisfied with the following aspects of the public land you hunted on?

| | Very unsatisfied | Unsatisfied | Neutral | Satisfied | Very satisfied | Unsure/ Not applicable |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Accessible roads | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Availability of bathroom facilities | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Campgrounds | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Signage | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Hunting in Oklahoma During 2023

Please complete the box for each season you hunted in Oklahoma during 2023 (not others in your household or hunting party). If you are unsure about exact numbers, please estimate.

7. Quail



a. Did you hunt **quail** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt quail? _____

c. How many quail did you harvest? _____ Scaled quail
_____ Bobwhite
_____ Unsure of species
 None

d. County you hunted quail most often? _____
(If unsure, what town is closest?)

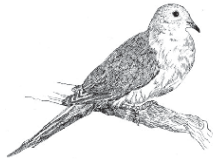
e. Land used for quail hunting? Public Private Both

If you hunted quail on public land at all during 2023:

f. How many days did you hunt quail on public land? _____

g. How many quail did you harvest on public land? _____

8. Dove



a. Did you hunt **dove** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt dove? _____

c. How many dove did you harvest? _____ None

d. County you hunted dove most often? _____
(If unsure, what town is closest?)

e. Land used for dove hunting? Public Private Both

If you hunted dove on public land at all during 2023:

f. How many days did you hunt dove on public land? _____

g. How many dove did you harvest on public land? _____

9. Pheasant



a. Did you hunt **pheasant** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt pheasant? _____

c. How many pheasant did you harvest? _____ None

d. County you hunted pheasant most often? _____
(If unsure, what town is closest?)

e. Land used for pheasant hunting? Public Private Both

If you hunted pheasant on public land at all during 2023:

f. How many days did you hunt pheasant on public land? _____

g. How many pheasant did you harvest on public land? _____

10. Woodcock



a. Did you hunt **woodcocks** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt woodcocks? _____

c. How many woodcocks did you harvest? _____ None

d. County you hunted woodcocks most often? _____
(If unsure, what town is closest?)

e. Land used for woodcock hunting? Public Private Both

If you hunted woodcocks on public land at all during 2023:

f. How many days did you hunt woodcocks on public land? _____

g. How many woodcocks did you harvest on public land? _____

11. Crow



a. Did you hunt **crows** in Oklahoma during 2023? Yes No

(If not, skip to next box.)

b. How many days did you hunt crows? _____

c. How many crows did you harvest? _____ None

d. County you hunted crows most often? _____
(If unsure, what town is closest?)

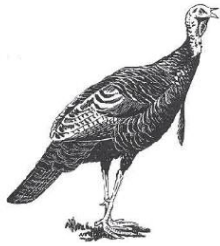
e. Land used for crow hunting? Public Private Both

If you hunted crows on public land at all during 2023:

f. How many days did you hunt crows on public land? _____

g. How many crows did you harvest on public land? _____

12. Spring Turkey



a. Did you hunt the **spring turkey season** in Oklahoma during 2023? Yes No

(If not, skip to next box.)

b. How many days did you hunt spring turkey? _____

c. Did you harvest a tom? Yes No

d. County you hunted spring turkey most often? _____
(If unsure, what town is closest?)

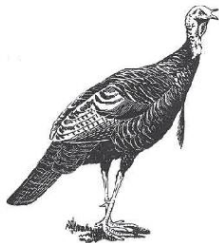
e. Land used for spring turkey hunting? Public Private Both

If you hunted turkey on public land at all during spring 2023:

f. How many days did you hunt spring turkey on public land? _____

g. Was your tom harvested on public land? Yes No

13. Fall Turkey



a. Did you hunt the **fall turkey season** in Oklahoma during 2023? Yes No

(If not, skip to next box.)

b. How many days did you hunt fall turkey? _____

c. Did you harvest a tom? Yes No

d. County you hunted fall turkey most often? _____
(If unsure, what town is closest?)

e. Land used for fall turkey hunting? Public Private Both

If you hunted turkey on public land at all during fall 2023:

f. How many days did you hunt fall turkey on public land? _____

g. Was your tom harvested on public land? Yes No

14. Gray Squirrel



a. Did you hunt **gray squirrels** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt gray squirrels? _____

c. How many gray squirrels did you harvest? _____ None

d. County you hunted gray squirrels most often? _____
(If unsure, what town is closest?)

e. Land used for gray squirrel hunting? Public Private Both

If you hunted gray squirrels on public land at all during 2023:

f. How many days did you hunt gray squirrels on public land? _____

g. How many gray squirrels did you harvest on public land? _____

15. Fox Squirrel



a. Did you hunt **fox squirrels** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt fox squirrels? _____

c. How many fox squirrels did you harvest? _____ None

d. County you hunted fox squirrels most often? _____
(If unsure, what town is closest?)

e. Land used for fox squirrel hunting? Public Private Both

If you hunted fox squirrels on public land at all during 2023:

f. How many days did you hunt fox squirrels on public land? _____

g. How many fox squirrels did you harvest on public land? _____

16. Cottontail Rabbit



a. Did you hunt **cottontail rabbits** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt cottontail rabbits? _____

c. How many cottontail rabbits did you harvest? _____ None

d. County you hunted cottontail rabbits most often? _____
(If unsure, what town is closest?)

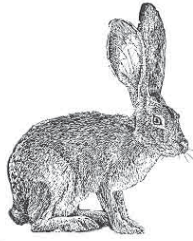
e. Land used for cottontail rabbit hunting? Public Private Both

If you hunted cottontail rabbits on public land at all during 2023:

f. How many days did you hunt cottontail rabbits on public land? _____

g. How many cottontail rabbits did you harvest on public land? _____

17. Jackrabbit



a. Did you hunt **jackrabbits** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt jackrabbits? _____

c. How many jackrabbits did you harvest? _____ None

d. County you hunted jackrabbits most often? _____
(If unsure, what town is closest?)

e. Land used for jackrabbit hunting? Public Private Both

If you hunted jackrabbits on public land at all during 2023:

f. How many days did you hunt jackrabbits on public land? _____

g. How many jackrabbits did you harvest on public land? _____

18. Swamp Rabbit



a. Did you hunt **swamp rabbits** in Oklahoma during 2023? Yes No
(If not, skip to next box.)

b. How many days did you hunt swamp rabbits? _____

c. How many swamp rabbits did you harvest? _____ None

d. County you hunted swamp rabbits most often? _____
(If unsure, what town is closest?)

e. Land used for swamp rabbit hunting? Public Private Both

If you hunted swamp rabbits on public land at all during 2023:

f. How many days did you hunt swamp rabbits on public land? _____

g. How many swamp rabbits did you harvest on public land? _____

19. Furbearers



a. Did you hunt or trap **furbearers** in Oklahoma during 2023?
 Yes No *(If not, skip to next box.)*

| b. Which did you hunt or trap? | c. How many days? | d. How many did you harvest? |
|--|-------------------|------------------------------|
| <input type="checkbox"/> Coyote | → _____ | → _____ |
| <input type="checkbox"/> Bobcat | → _____ | → _____ |
| <input type="checkbox"/> Raccoon | → _____ | → _____ |
| <input type="checkbox"/> Beaver | → _____ | → _____ |
| <input type="checkbox"/> Otter | → _____ | → _____ |
| <input type="checkbox"/> Gray fox | → _____ | → _____ |
| <input type="checkbox"/> Red fox | → _____ | → _____ |

20. Feral Swine (feral hogs, feral pigs, etc.)



- a. Did you target **feral swine** in Oklahoma during 2023 (including hunting and/or trapping)?
 Yes No *(If not, skip to next box.)*
- b. How many days did you target feral swine? _____
- c. How many feral swine did you harvest (all methods)? _____ None
- d. County you targeted feral swine most often? _____
(If unsure, what town is closest?)
- e. Land used for targeting feral swine? Public Private Both

If you targeted feral swine on public land at all during 2023:

- f. How many days did you target feral swine on public land? _____
- g. How many feral swine did you harvest on public land? _____

21. Migratory Game Birds



- a. Did you hunt ducks, geese or sandhill crane in Oklahoma during 2023?
 Yes No *(If not, skip to next box.)*
- | | | |
|---|-------------------|------------------------------|
| b. Which did you hunt? | c. How many days? | d. How many did you harvest? |
| <input type="checkbox"/> Ducks → | _____ → | _____ |
| <input type="checkbox"/> Geese → | _____ → | _____ |
| <input type="checkbox"/> Sandhill Crane → | _____ → | _____ |

Deer Hunting in 2023

22. Deer



- a. Did you hunt deer in Oklahoma during 2023?
 Yes No → *(If you did not hunt deer during 2023, please skip to question 28.)*
- b. County you hunted deer most often? _____
(If unsure, what town is closest?)
- c. Land used for deer hunting? Public Private Both

23. Deer: Archery Season

a. Did you hunt **deer** during **archery** season? (Oct. 1, 2023 - Jan. 15, 2024)

Yes No (If not, skip to next box.)

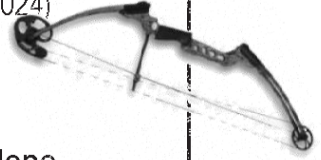
b. How many **days** did you hunt during archery? _____

c. Number of **bucks** harvested during archery? _____ None

d. Number of **does** harvested during archery? _____ None

If you targeted deer during archery on public land during 2023:

How many days did you target deer on public land during archery? _____



24. Deer: Muzzleloader Season

a. Did you hunt **deer** during **muzzleloader** season? (Oct. 8 – Nov. 5)

Yes No (If not, skip to next box.)

b. How many **days** did you hunt during muzzleloader? _____

c. Number of **bucks** harvested during muzzleloader? _____ None

d. Number of **does** harvested during muzzleloader? _____ None

If you targeted deer during muzzleloader on public land during 2023:

How many days did you target deer on public land during muzzleloader? _____



25. Deer: Youth Gun Season

a. Did you participate in the **youth deer gun** season in October as a **youth hunter**? (Oct. 20-22) (If not, skip to next box.)

Yes No

b. How many **days** did you hunt during youth season? _____

c. Number of **bucks** harvested during youth season? _____ None

d. Number of **does** harvest during youth season? _____ None

If you targeted deer during youth gun season on public land during 2023:

How many days did you target deer on public land during youth gun season? _____

26. Deer: Regular Gun Season



a. Did you hunt **deer** during the **regular gun** season? (Nov. 18 – Dec. 3)
 Yes No *(If not, skip to next box.)*

b. How many **days** did you hunt during gun season? _____

c. Number of **bucks** harvested during gun season? _____ None

d. Number of **does** harvest during gun season? _____ None

If you targeted deer during gun season on public land during 2023:
How many days did you target deer on public land during gun season? _____

27. Deer: Holiday Antlerless Gun Season

a. Did you hunt **deer** during the **holiday antlerless deer gun** season? (Dec. 18 - 31)
 Yes No

b. How many **days** did you hunt during holiday season? _____

c. How many does did you harvest? _____ None

If you targeted deer during holiday antlerless on public land during 2023:
How many days did you target deer on public land during holiday antlerless? _____

28. The Wildlife Department leases some land from private landowners to allow for public hunting access. Did you specifically hunt any of the following areas in 2023?

Check all that apply.

- Oklahoma Land Access Program (OLAP)
 - Honobia Wildlife Management Area
 - Three Rivers Wildlife Management Area
 - None of the above
-
-

29. Did you use the services of a hunting guide in Oklahoma in 2023?

- Yes No... please skip to question 31.

30. If yes, what species were you targeting while working with a guide?

Check all that apply.

- | | |
|--|---|
| <input type="checkbox"/> White Tailed Deer | <input type="checkbox"/> Coyote |
| <input type="checkbox"/> Turkey | <input type="checkbox"/> Feral hogs |
| <input type="checkbox"/> Upland game (quail, pheasant, small game) | <input type="checkbox"/> Ducks |
| <input type="checkbox"/> Mule Deer | <input type="checkbox"/> Geese |
| <input type="checkbox"/> Elk | <input type="checkbox"/> Sandhill Crane |
| <input type="checkbox"/> Pronghorn | <input type="checkbox"/> Other: _____ |

31. Would you support or oppose reducing the combined season antlered deer limit for all hunters from 2 antlered deer to 1 antlered deer?

The season combined bag limit would remain 6 deer, but a reduction to only one of which could be antlered.

- | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Strongly oppose | Oppose | Neutral | Support | Strongly support | Unsure |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

32. How has your access to private land for hunting changed over the last five years?

- More access than five years ago
 About the same as five years ago
 Less access than five years ago
 Unsure

More questions on back



33. In general, do you approve or disapprove of regulated trapping?

- Strongly disapprove Disapprove Neutral Approve Strongly approve Unsure
-

34. Have you gone trapping in Oklahoma in the last five years?

- Yes
 No
 Unsure

35. Are you interested in participating in trapping in Oklahoma in the future?

- Yes
 No
 Unsure

36. What species would you be most interested in attempting to trap?

Check all that apply.

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> I am not interested in trapping in the future | <input type="checkbox"/> Red Fox |
| <input type="checkbox"/> Coyote | <input type="checkbox"/> Gray Fox |
| <input type="checkbox"/> Beaver | <input type="checkbox"/> Bobcat |
| <input type="checkbox"/> Otter | <input type="checkbox"/> Feral Hogs |
| <input type="checkbox"/> Raccoon | <input type="checkbox"/> Other: _____ |

Thank you, your survey is complete. Please mail it back in the postage-paid envelope provided at your earliest convenience.

HUNTER SURVEY REMINDER

In the past few weeks, you received a survey from the Oklahoma Department of Wildlife Conservation. You were selected as part of a small pool of hunters in the state with a unique opportunity to shape how we manage your wildlife in Oklahoma. It should only take about 15 minutes out of your busy schedule to give us your ideas and concerns.

Even if you did not hunt in the last year, we want to hear from you!

And don't forget, when we receive your completed survey, your name will be entered into a drawing for one of 20 available 1-year subscriptions to Outdoor Oklahoma magazine. We look forward to receiving your completed survey.

Gratefully,
The Oklahoma Department of Wildlife Conservation



Questions? Contact Betsey York 405-521-4605, betsey.york@odwc.ok.gov