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Illinois Waterfowl Hunter Report: Harvest, Youth Hunts, and Zone Option Preferences



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WATERFOWL HUNTER REPORT:
Harvest, Youth Hunts, and Zone Option Preferences

JOB COMPLETION REPORT

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HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-28
STUDY 101
JOB NO. 101.3

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November 19, 2019

Federal Aid in Wildlife Restoration
W-112-R-28
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OBJECTIVE

To survey waterfowl (duck, goose, and coot) hunters annually to determine their activities, harvest, characteristics, attitudes, and opinions.

ABSTRACT

A total of 3,123 (36% response rate) Illinois waterfowl hunters returned usable questionnaires to the 2018-19 Illinois Waterfowl Hunter Survey. An estimated 40,047 adult waterfowl hunters spent 1 day or more afield during 2018-19, an increase of 7.6% from the 37,215 hunters in 2017-18. Waterfowl hunters spent 831,043 days afield, an increase of 13.5 % from the 732,166 days devoted during the 2017-18 license year. Total waterfowl harvest decreased 2.1 %, from 421,384 during 2017-18 to 412,402 during 2018-19. Duck harvest estimates for the regular duck season were as follows: 147,733 mallards (*Anas platyrhynchos*), 29,003 wood ducks (*Aix sponsa*), and 96,087 other ducks. A total of 23,326 teal (*Anas spp.*) were harvested during the September teal season. Goose hunters harvested 71,035 Canada geese (*Branta canadensis*) during the regular Canada goose season, a 9.9% decrease from the 78,850 Canada geese harvested during the 2017-18 regular goose season. Hunters harvested 13,165 Canada geese during the September Canada goose season, an 18.5% decrease from the previous year. During the Youth Waterfowl Hunting Season, 4,822 adults took 5,775 youths waterfowl hunting, a 0.9% increase in adult participation and a 10.6% decrease in youth participation from the 2017-18 Youth Waterfowl Hunting Season. Hunter preferences for season and zones, and satisfaction with the waterfowl seasons are also discussed.

METHODS

Mailings

A random sample of 6,000 waterfowl hunters was drawn from the population of Illinois State Waterfowl Stamp purchasers from the 2018-19 license year. An additional 3,000 hunters were selected from areas of concern in the central and south zones. Hunters' responses from the additional sample were used for analysis of questions regarding those zones but were not used in harvest data analysis. No pre-season diary for recording

hunting activity and waterfowl harvest was sent during the fall of 2018. On 05 May 2019, hunters were mailed a 12-page questionnaire (Appendix A), cover letter (Appendix B), and a postage-paid return envelope. The effective sample was reduced from 8,861 questionnaires to 8,038 due to 962 being returned as undeliverable. A thank you/reminder postcard (Appendix C) was sent to hunters on 21 May 2019. Non-respondents were mailed a second questionnaire and cover letter (Appendix D) on 06 June 2019, followed by a second postcard mailing on 26 June 2019. A third and final questionnaire and cover letter (Appendix E) were mailed to non-respondents on 19 July 2019. Coded data were entered and analyzed using SPSS 26.0 (SPSS Inc. 2019). Confidence intervals are presented where appropriate.

Statewide Estimates

Estimates of number of hunters, days afield, and waterfowl harvested were based on confirmed sales of 55,303 adult resident Illinois Migratory Waterfowl stamps (2017-18 series) and were computed following the procedures outlined below (Anderson et al. 1998), with slight modification. The correction factors for multiple stamp buyers (A_1) and stamp exempt hunters (A_2) were removed beginning with the estimates of 2016-17. The original formulas are presented for understanding how previous year's estimates were created.

The total number of active waterfowl hunters was estimated using the number of Illinois Migratory Waterfowl Stamps sold and adjusting for multiple-stamp buyers, non-hunting stamp buyers, and stamp-exempt hunters. The number of teal, duck, and goose hunters ($Hunt_{sp}$), days afield ($Days_{sp}$), birds crippled but not retrieved ($Crip_{sp}$) and harvest ($Harv_{sp}$) were calculated as follows:

$$Hunt_{sp} = Hunt_r \frac{L_t A_1 A_2}{n},$$

$$Days_{sp} = Days_r \frac{L_t A_1 A_2}{n},$$

$$Crip_{sp} = Crip_r \frac{L_t A_1 A_2}{n},$$

$$Harv_{sp} = Harv_r \frac{L_t A_1 A_2 A_3}{n}$$

Where:

$Hunt_r$ = number of respondents to the 2018-19 Illinois Waterfowl Hunter Survey who reported hunting for each species (adjustment for non-hunters is inherent),

L_t = total number of Illinois migratory Waterfowl Stamps sold in 2018-19,

A_1 = fixed reduction factor for multiple-stamp buyers (0.957; Anderson 1986),

A_2 = fixed expansion factor for stamp-exempt hunters (1.086; Anderson et al. 1998),

n = number of respondents to 2018-19 Illinois Waterfowl Hunter Survey who purchased a stamp,

$Days_r$ = total number of days spent hunting reported by respondents,

$Crip_r$ = total number of birds crippled but not retrieved reported by respondents,

$Harv_r$ = total harvest of each species reported by respondents,

A_3 = fixed reduction factor for reporting bias (0.501 for teal, ducks, and coots; Anderson 1985; 0.478 for geese; Anderson et al. 1996).

Confidence intervals for the estimated numbers of ducks, coots, and geese harvested were calculated by:

$$95\% \text{ CI } [Harv_{sp}] = \pm 2L_t \left(\frac{s}{\sqrt{n}} \right) \left(\frac{L_t - n}{L_t} \right)$$

Where s = standard deviation of total species harvest reported by respondents.

SEASON LENGTHS AND BAG LIMITS

Illinois incorporated a fourth waterfowl zone in 2011-12 for the regular waterfowl seasons and 2012-13 for the September goose season. The four zones are the North, Central, South Central, and South zones (Appendix G). The early (September) teal (*Anas spp.*) season length was 16 days with a daily bag of 6 teal and a possession limit of 18. Early (September) Canada goose (*Branta canadensis*) season length and start date (1 September) were the same for all four zones. Possession limit was 15 geese in the North and Central zones and 6 in the South Central and South zones. Hunters could hunt for 15 days statewide and could harvest 5 geese a day in the North and Central zones and 2 birds per day in the South Central and South zones. Length and daily

bag limit of the regular duck season did not change (60-day season/6-bird daily bag limit) in 2018-19. Basic daily bag limits were 6 ducks with a 18 possession limit, 5 mergansers with a 15 possession limit, and 15 coots with a 45 possession limit; individual species limits are in Appendix H. Regular Canada goose season remained unchanged (90 day/2-bird Canada goose season) in the North and Central zones. Regular Canada goose season length in the South Central and South zone was 82 days and 70 days, respectively. Daily bag limit was 2 for Canada and White-fronted Geese (*Anser albifrons*) and 1 for Brant geese (*Branta bernicla*). These species had a possession limit of 3 times the daily bag.

RESULTS

Waterfowl Harvest and Days Afield

We received 3,123 questionnaires that were considered usable, for an overall response rate of 36%. Of the 3,123 usable questionnaires, 2,103 (67.4%) respondents were part of the original sample of 6,000. This reduced sample will be used for harvest estimates to prevent bias due to oversampling Central and South Central Zone counties. Ninety-six percent of respondents indicated they had purchased an Illinois State Waterfowl Stamp for the 2018-19 season (Figure 1) and 1,470 (74.8%) of license purchasers reported hunting 1 day or more for waterfowl (Figure 2).

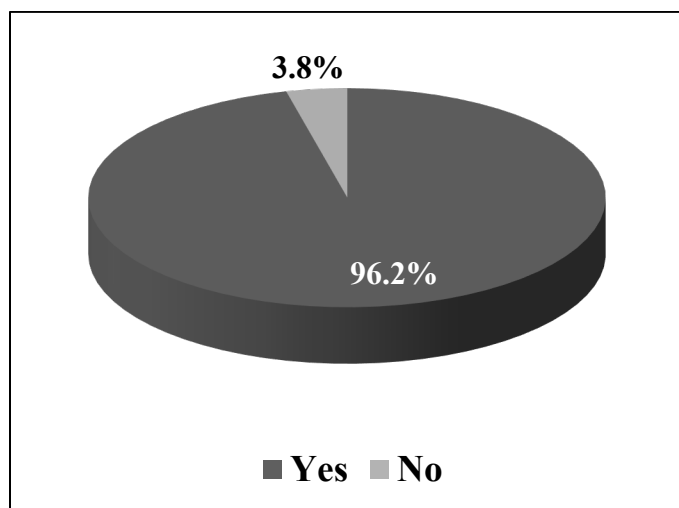


Figure 1. Percentage of hunters who purchased an Illinois State Waterfowl Stamp for the 2018-19 seasons ($n = 2,030$).

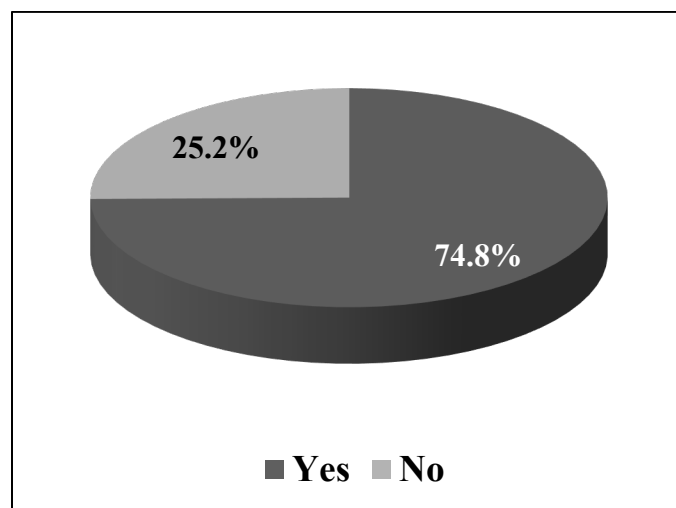


Figure 2. Percentage of license purchasers who hunted waterfowl (ducks, geese, or coots) in Illinois during the 2018-19 waterfowl hunting season ($n = 1,965$).

The number of waterfowl hunters increased from 37,215 during the 2017-18 season to 40,047 during the 2018-19 season, a 7.6% increase in the number of hunters (Figure 3 and Table 1). Hunters reported spending 831,043 days afield, an increase of 13.5% from the 732,166 days devoted during the 2017-18 license year. Total waterfowl harvest decreased 2.1%, from 421,384 during 2017-18 to 412,402 during the 2018-19 season (Table 1). Almost thirty-two percent of hunters hunted ducks only, 9.2% hunted geese only, and 58.9% hunted both ducks and geese (Figure 4 and Table 2).

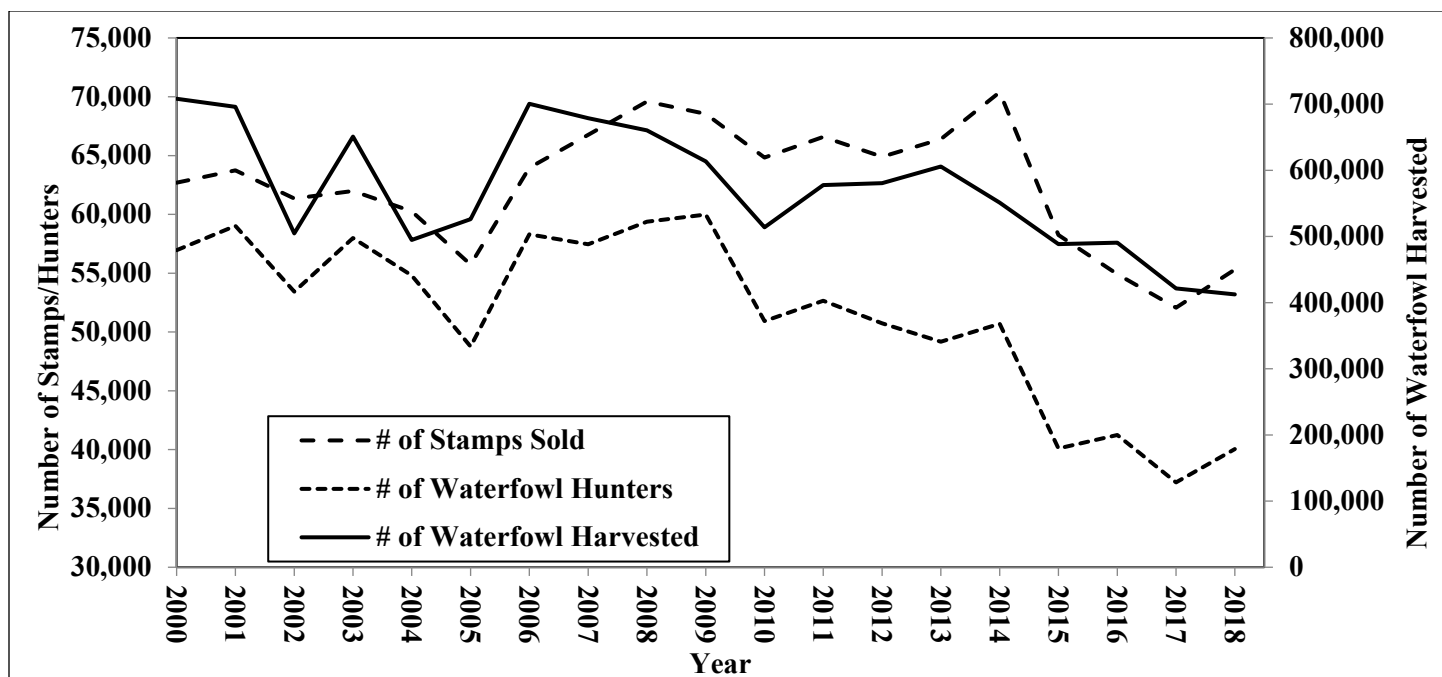


Figure 3. Number of stamps sold, waterfowl hunters, and waterfowl harvested in Illinois, 2000-2018.

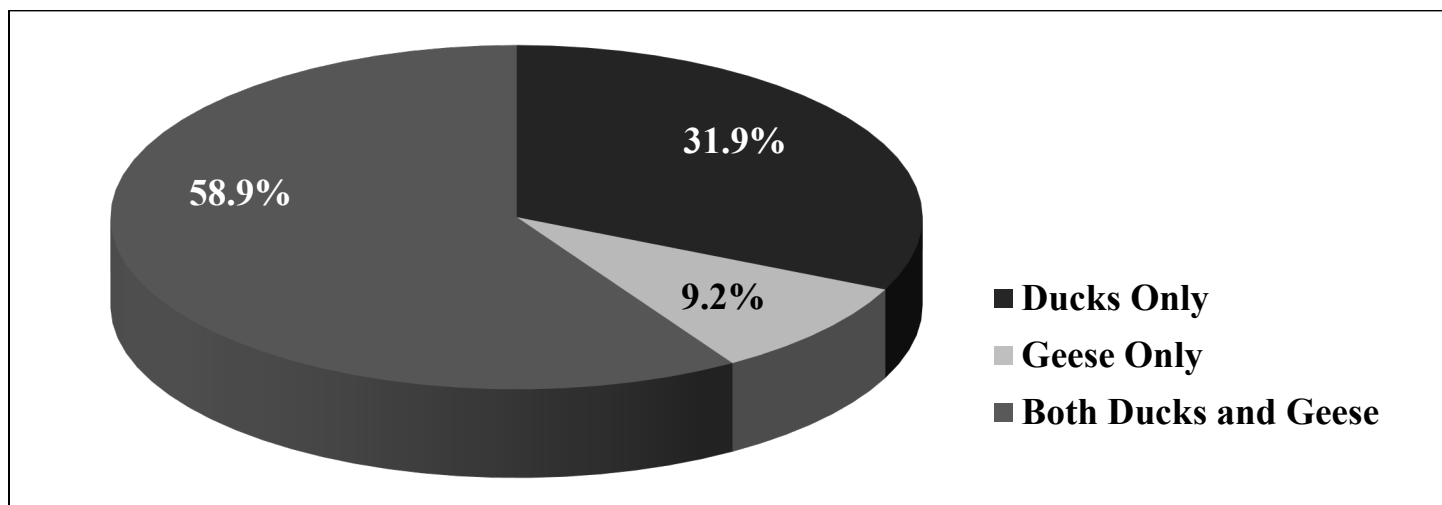


Figure 4. Percentage of hunters who hunted ducks, geese, or both during the 2018-19 Illinois waterfowl season.

September Teal Season

The number of early (September) teal season hunters increased 23.1% from 7,526 during 2017 to 9,263 during 2018 (Figure 5 and Table 3). Days afield increased 24.9% from 28,306 during 2017 to 35,344 during 2018. More teal hunters and increased days afield coincided with an increased teal harvest of 23,326 \pm 8,817 during the 2018 September teal season, a 54.9% increase from the 2017 harvest (15,062). The Central zone accounted for over one-half of teal hunters (55.2%), most of the teal harvested (56.4%), and half of teal hunter days afield (51.7%). The North Zone recorded the second-most days afield and hunters, but the second-most total teal were harvested in the South Central Zone (Table 4). Statewide, September season teal hunters averaged 3.81 days afield, and harvested an average of 0.66 teal per hunter per day and 2.52 teal per hunter for the season (Figure 6 and Table 5).

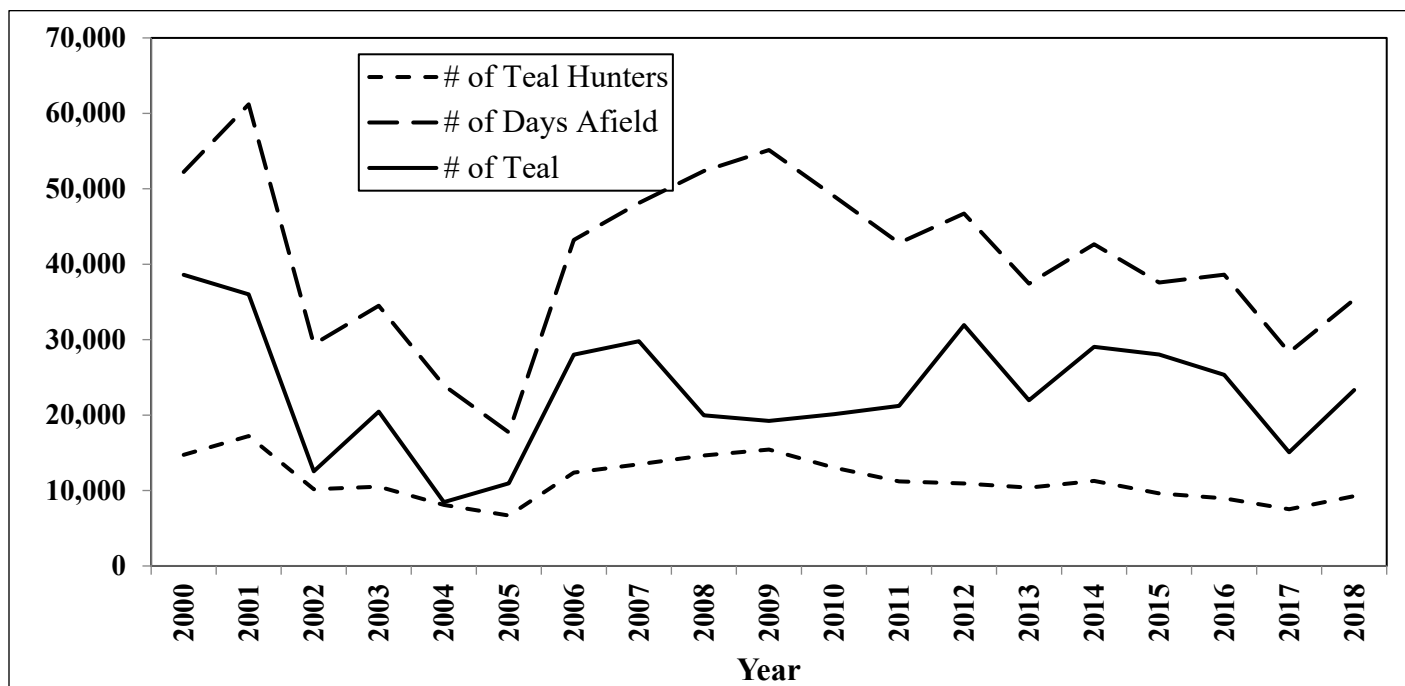


Figure 5. Number of teal harvested and hunter activity during the Illinois September teal season, from 2000-2018.

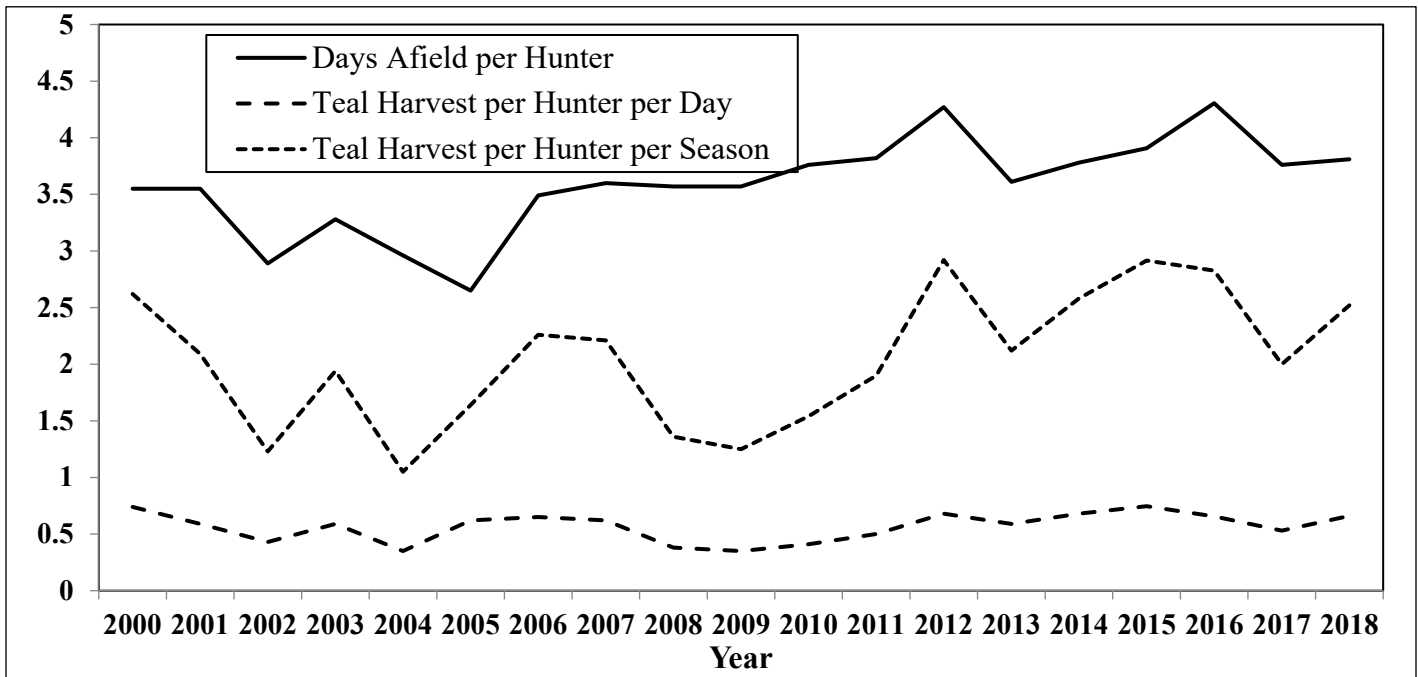


Figure 6. Rates of teal harvest and hunter activity during the Illinois September teal season from 2000-2018.

Youth Waterfowl Hunting

The Youth Waterfowl Season dates changed in all 4 zones; number of days to hunt remained unchanged from 2017 to 2018. Youth age 17 and under were able to hunt ducks, geese, and coots for two days one week prior to opening of the regular duck season in the North, Central, and South Central zones, but 12 days earlier in the South zone. Eight percent of those who purchased an Illinois waterfowl stamp took a youth hunting during the Youth Waterfowl Hunting Days (Figure 7). Number of adults who participated in the 2018 youth hunt increased 0.9% from 4,780 to 4,822 participants, but number of youth participants decreased 10.6% from 6,459 during 2017 to 5,775 youths during 2018 (Table 6). Forty percent (40.4%) of the hunting groups that participated in the 2018 youth waterfowl season had at least one youth who had never hunted ducks or geese before (Figure 8), and 16.1% of hunters indicated this was their first time accompanying a youth during the hunt (Figure 9). Harvest of ducks during the youth season decreased 10.0%, from 8,283 during 2017 to 7,452 during 2018, and geese declined from 1,464 to 729 from 2017 to 2018.

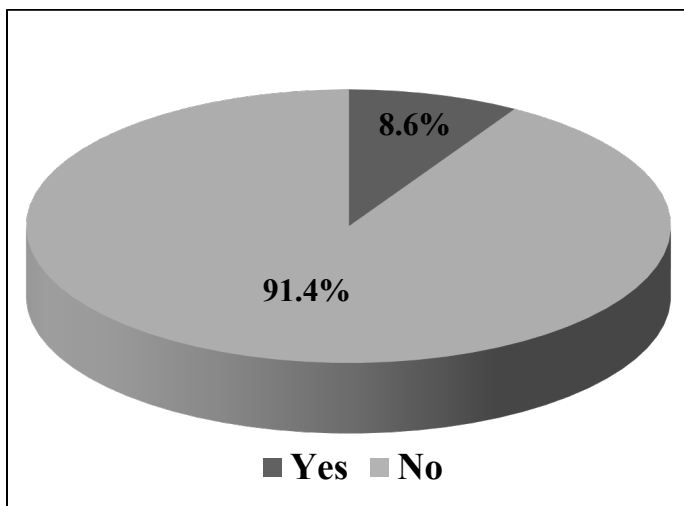


Figure 7. Percentage of hunters* who took a youth (less than 17 years old) hunting during the 2018 Youth Waterfowl Hunting Days ($n = 2,030$).

*Cases selected for those who indicated they purchased hunting license the 2018-19 Waterfowl seasons.

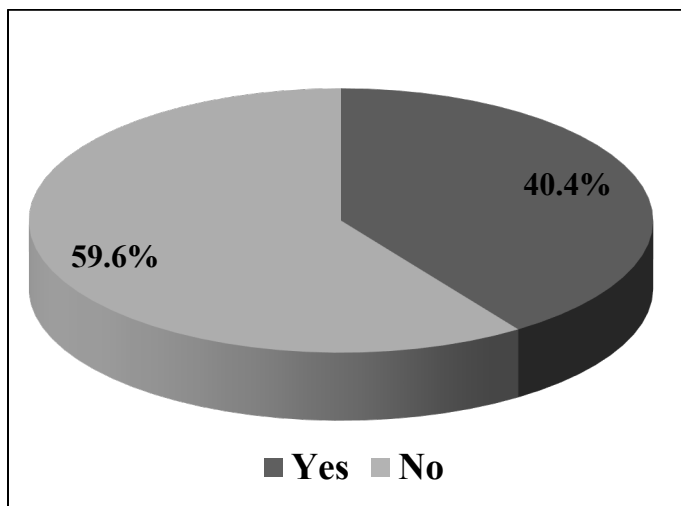


Figure 8. Percentage of hunters* who took a youth (less than 17 years old) hunting for the first time ($n = 171$).

*Cases selected for those who indicated they took a youth hunting during the 2018 Youth Waterfowl Hunting Days.

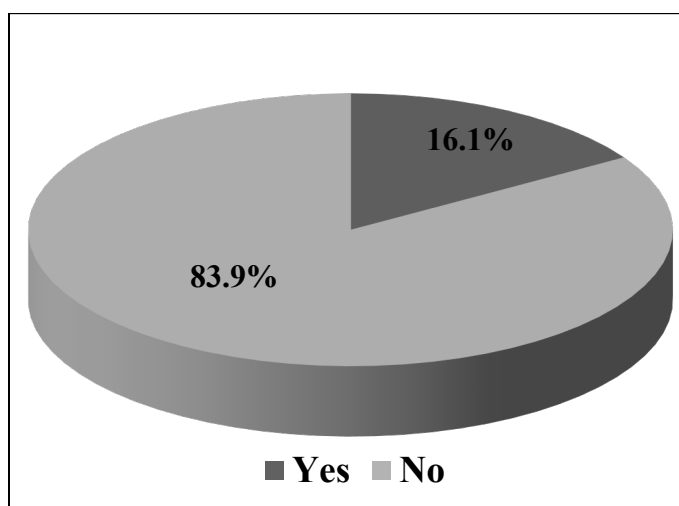


Figure 9. Percentage of hunters* for whom it was the first time to take a youth (less than 17 years) hunting. ($n = 174$).

*Cases selected for those who indicated they took a youth hunting during the 2018 Youth Waterfowl Hunting Days.

Twenty percent of respondents (20.7%) took a youth hunting during the regular duck or goose season; an additional 2.7% had a youth accompany them but did not hunt (Figure 10). Hunters were more likely to take youths hunting during the regular duck season than goose season (Figure 11).

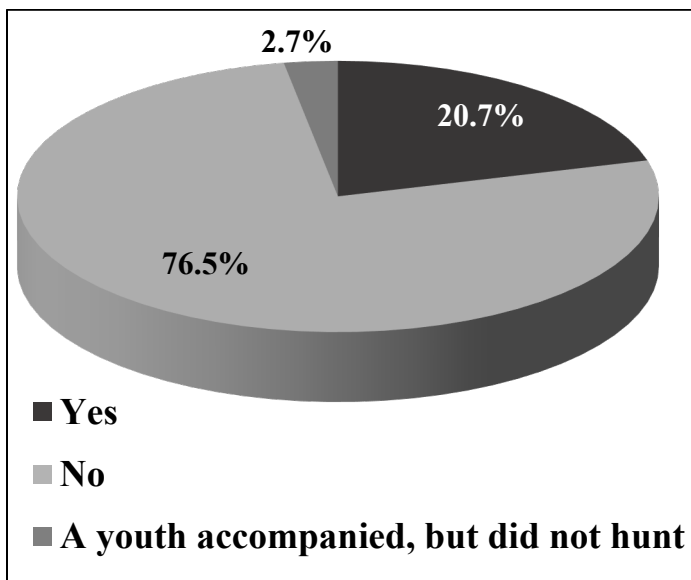


Figure 10. Percentage of hunters* who took a youth (<17 years of age) hunting during the 2018-19 regular duck or goose season in Illinois ($n = 1,138$).

*Cases selected for those who hunted for at least one day during the 2018-19 regular duck or goose season.

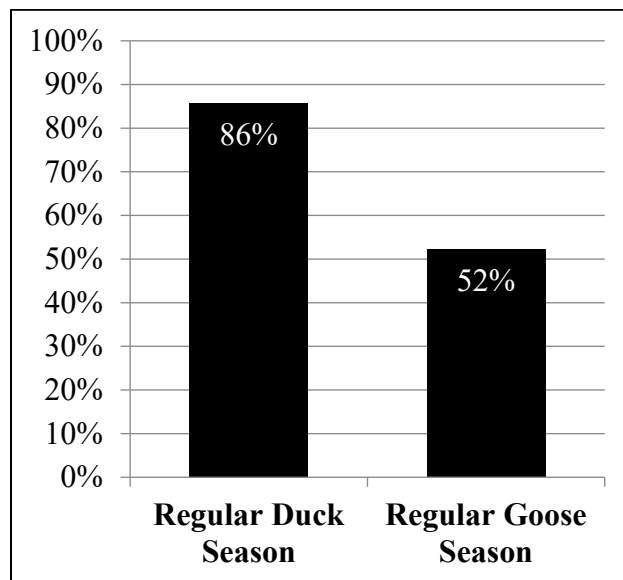


Figure 11. Seasons hunters* took a youth (<17 years of age) hunting during 2018-19 ($n = 247$).

*Cases selected for those who took youth hunting or had youth accompany them while hunting.

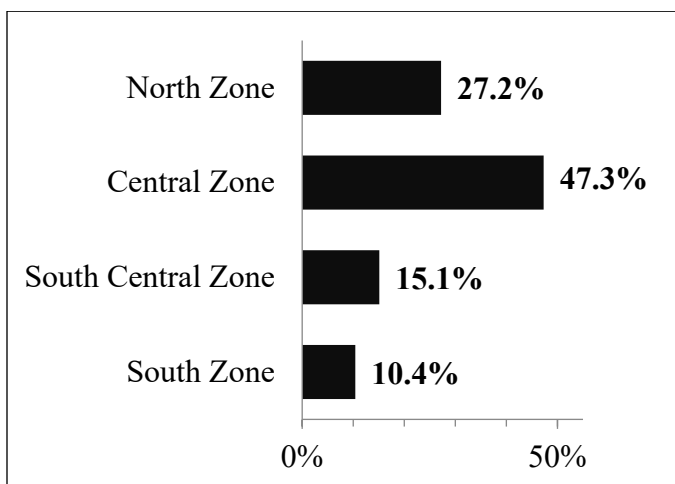


Figure 12. Zones hunters* hunted in most often during the 2018-19 duck season ($n = 1,248$).

*Cases selected for those who indicated they hunted for at least one day during the 2018-19 duck seasons.

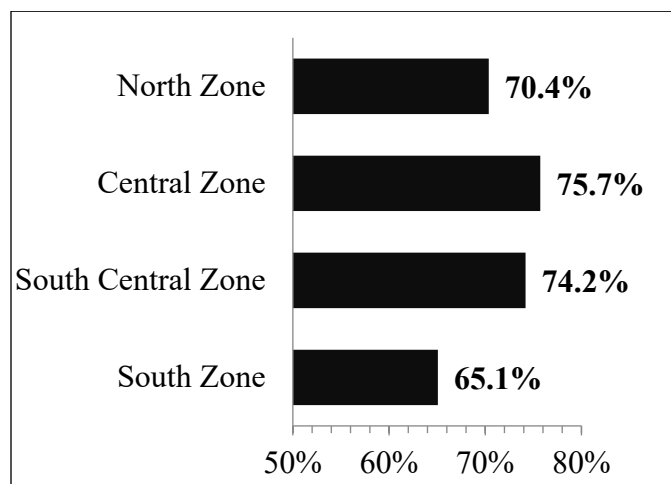


Figure 13. Percent of hunters* by zone that used Spinning wing decoys in duck season ($n = 1,231$).

*Cases selected for those who indicated they hunted for at least one day during the 2018-19 duck seasons.

Regular Duck Season

Number of duck hunters increased by 3,811 (12.7%) from 30,025 during the 2017-18 season to 33,836 in the 2018-19 season (Table 7). Duck hunters spent 464,327 days afield ($M = 13.72$) during the 2018-19 season, an increase of 17.8% from the 394,034 days reported during the 2017-18 season. Almost half (47.3%) of respondents hunted the Central Zone most often, followed by the North, South Central, and South zones

(Figure 12). Hunters in the Central Zone were also more likely to use spinning wing decoys during duck season (Figure 13).

Total duck harvest during 2018-19 was 272,823 down 1.8% from the 277,689 reported for 2017-18 (Table 7). Mallards (*Anas platyrhynchos*) comprised 49.1% of the total regular season duck harvest, whereas wood ducks (*Aix sponsa*) and other ducks accounted for 10.6% and 40.3%, respectively (Figure 14). Statewide mallard harvest in Illinois increased by 11,352 birds (8.3%) from 136,381 during the 2017-18 season to 147,733 during the 2018-19 season (Figure 15 and Table 7). Wood duck harvest decreased 369 (1.3%) from 29,372 during 2017-18 to 29,003 during 2018-19. The harvest of other ducks decreased 15,850 (14.4%) from 111,937 during 2017-18 to 96,087 during 2018-19, and statewide coot (*Fulica americana*) harvest increased from 1,544 during 2017-18 to 2,088 coots during 2018-19.

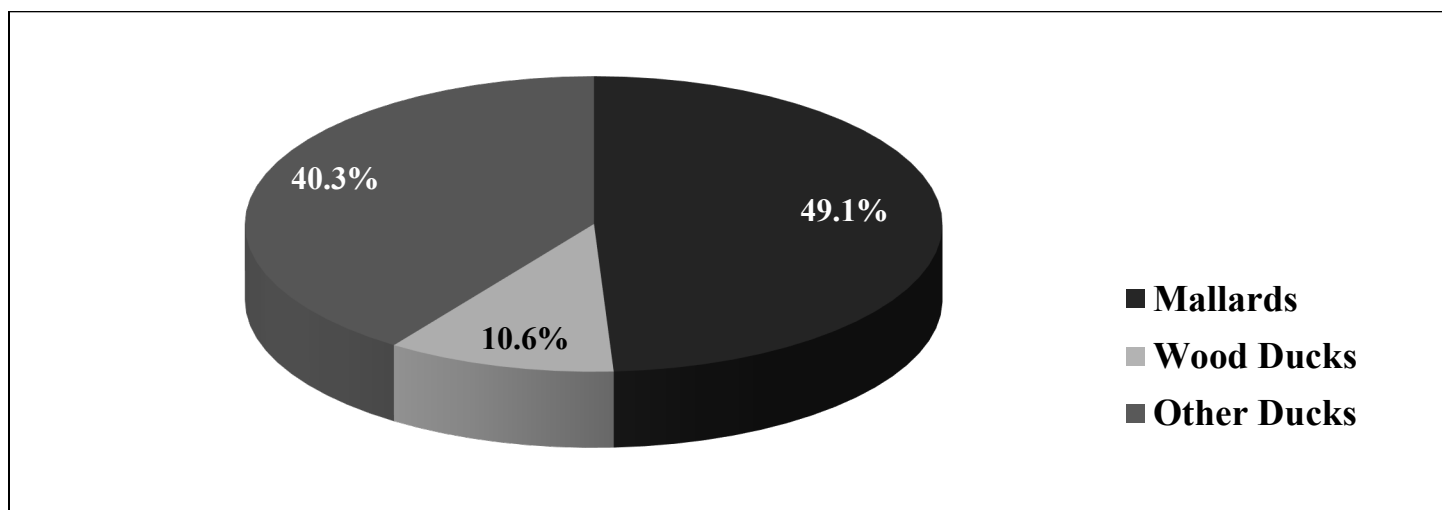


Figure 14. Proportion of Mallards, Wood, & Other Ducks harvested during the 2018-19 regular duck season.^a

^aProportions are by mallard, wood duck, and other ducks due to how hunters are asked to report their harvest. This order (mallard, wood duck, and other ducks) is not necessarily the order of the most-often harvested ducks in Illinois.

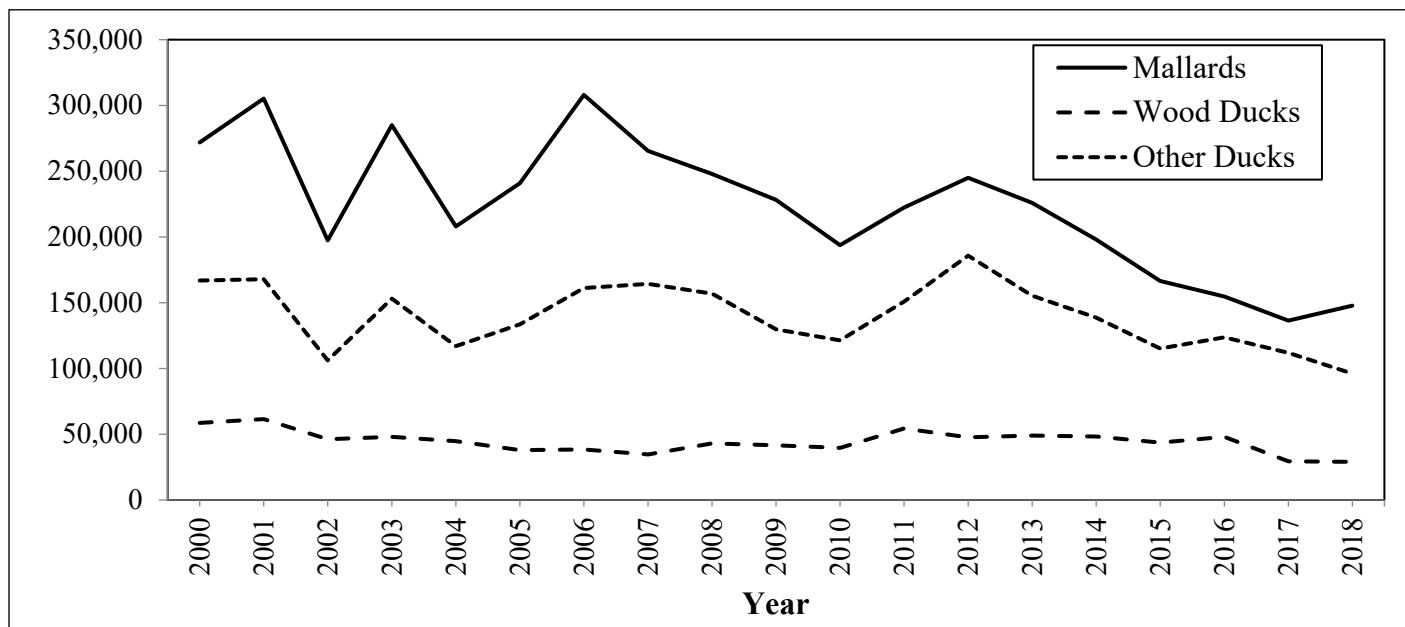


Figure 15. Illinois regular season duck harvest, 2000 – 2018.

The 2018-19 duck harvest is presented by waterfowl zones in Table 8. Across the four waterfowl zones, the greatest number of hunters, days afield, and ducks harvested occurred in the Central zone. The South zone had the highest daily success rate (harvest/hunter/day) at 0.59 ducks per day, whereas the South Central zone had the highest season success rate (harvest/hunter/season) at 7.93 ducks per season. Statewide, duck hunter daily success decreased to 0.59 ducks/day and hunter season success decreased from 9.25 in 2017-18 to 8.06 during 2018-19 (Table 9). Of duck hunters who reported hunting ≥ 1 day ($n = 1,242$), 33.8% hunted 5 days or less (Figure 16 and Table 10); 17.8% of duck hunters reported not harvesting any ducks, whereas 16.8% harvested more than 30 ducks.

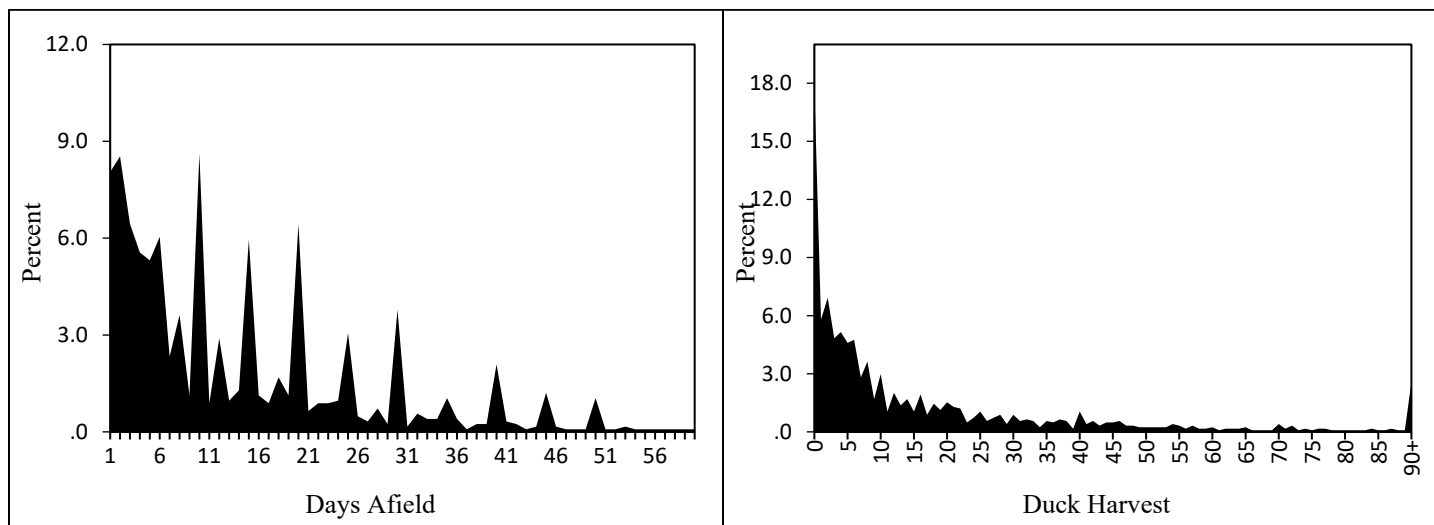


Figure 16. Distribution of days afield per hunter and ducks harvested per hunter for Illinois' during the 2018-19 regular duck season.

Early September Goose Season

An estimated 9,916 hunters participated in the early (September) Canada goose season in Illinois during the 2018 season, an increase of 7.5% from the 9,225 who participated during 2017 (Figure 17 and Table 11). Statewide, early goose season hunters spent 35,361 days afield in 2018, 4.6 more than in 2017 (33,817), and harvested approximately 13,165 Canada geese, a decrease from the 2017 (16,155) harvest by 18.5%. The Central zone accounted for the most hunters (54.0%), harvest (52.6%), and days afield (51%) (Figure 20, Table 11).

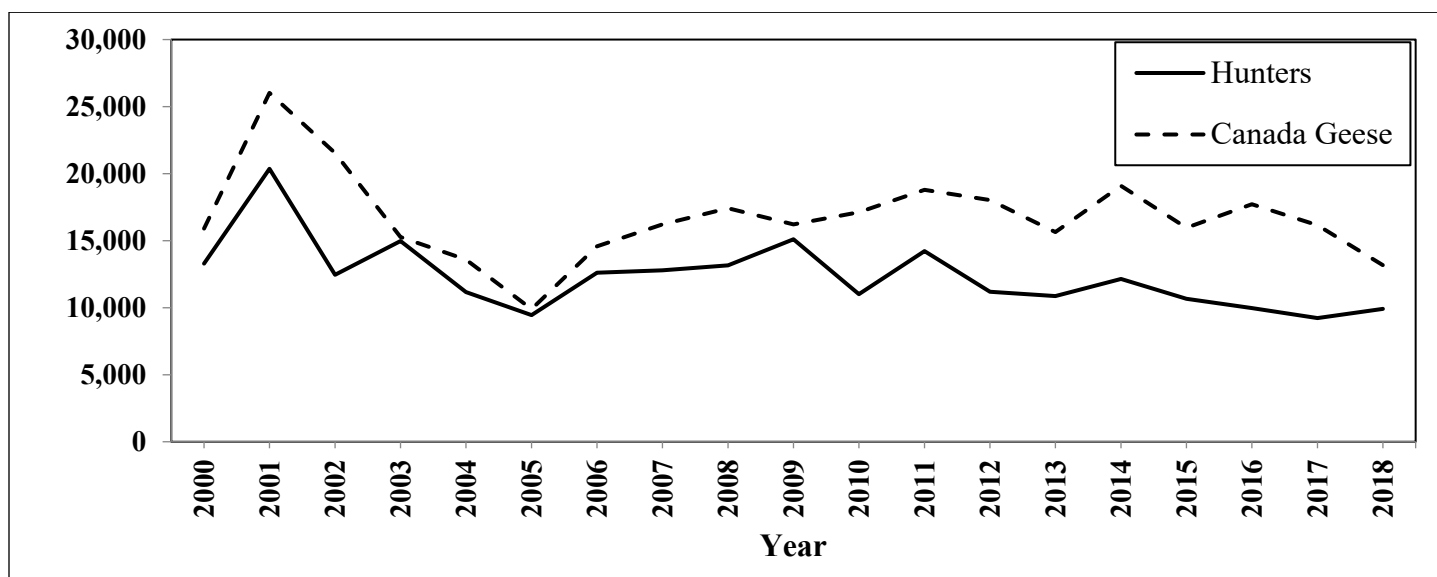


Figure 17. Early September Canada goose harvest and hunter activity, 2000-2018.

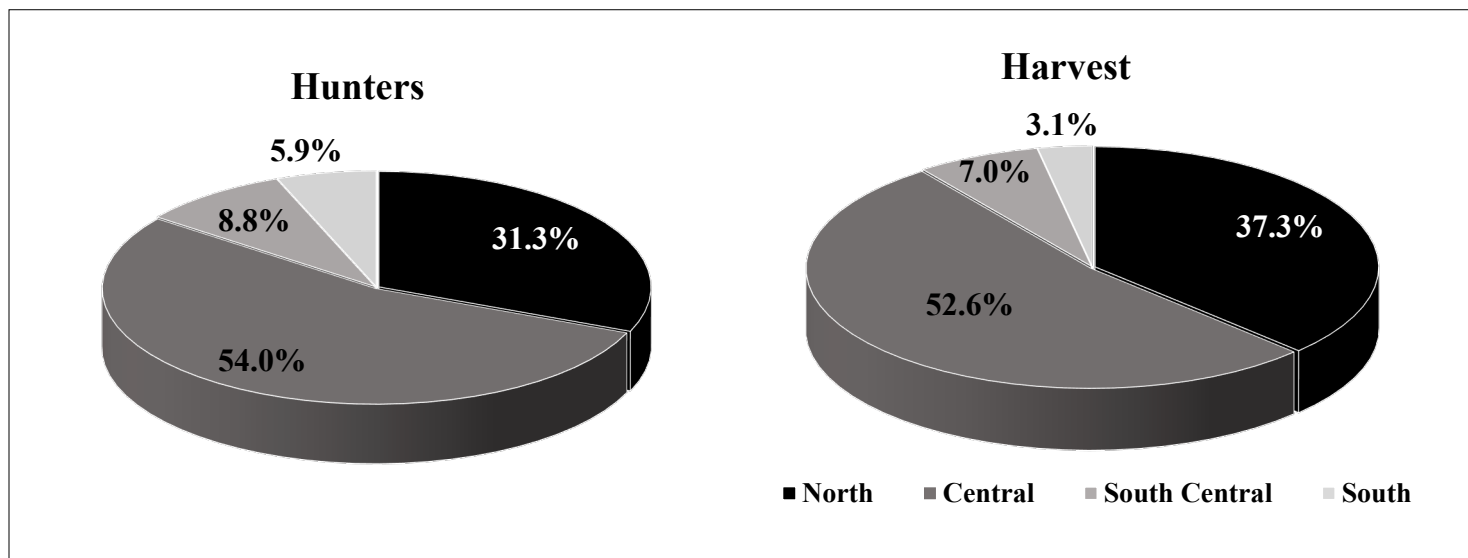


Figure 18. Early September Canada goose harvest and hunter activity by zone in Illinois during 2018.

Regular Canada Goose Season

Canada goose harvest during the 2018-19 regular goose season decreased 9.9% from 2017-18 (Table 12, Figure 19). An estimated 25,363 hunters spent 296,021 days afield and harvested 71,035 Canada geese during 2018-19. Number of goose hunters in Illinois increased 5.5% during 2018-19 compared to 2017-18, and number of days afield increased 7.3%. Hunters also harvested 21,578 other geese, of which 12,254 were light geese (snow, blue or Ross' geese) (*Chen caerulescens*) and 9,324 were white-fronted geese (*Anser albifrons*), for a total combined harvest of 92,613 geese (Table 12, Figure 20).

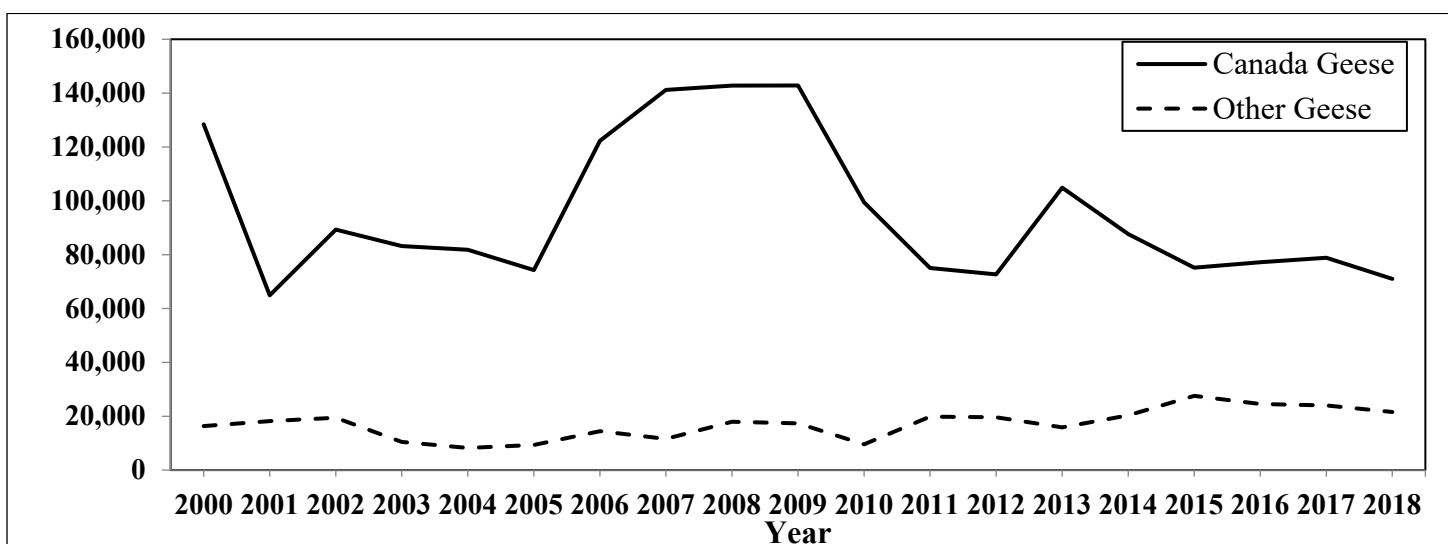


Figure 19. Goose harvest during Illinois' regular goose season from 2000-2018.

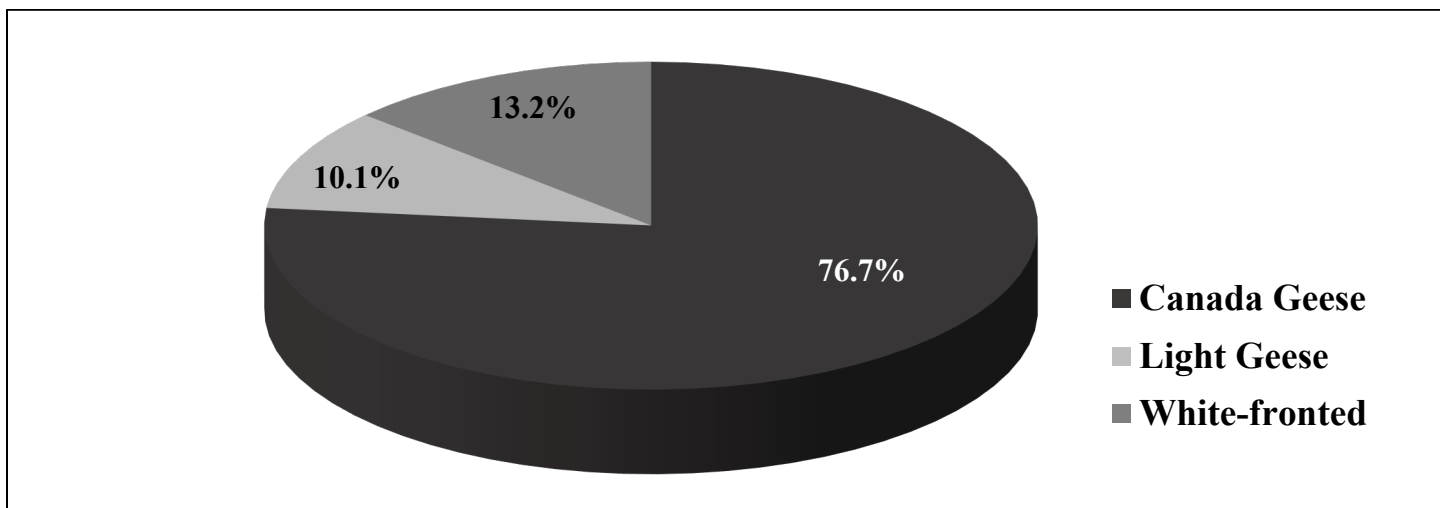


Figure 20. 2018-19 Illinois' regular Canada goose season harvest.

Goose hunters reported a mean of 11.67 days afield and mean harvest of 2.80 Canada geese and 0.24 geese per hunter per day; 41.5% of goose hunters harvested ≥ 5 geese (Figure 21 and Tables 13 and 14). The Central Zone led the state in the number of goose hunters (47.8%), days afield (48.1%), and Canada geese harvested (49.8%); the most white-fronted (58.0%) and light geese (40.2%) were also harvested in the Central Zone (Table 14). Harvest of Canada geese is summarized by zone and year (2016-17 through 2018-19) in Table 15.

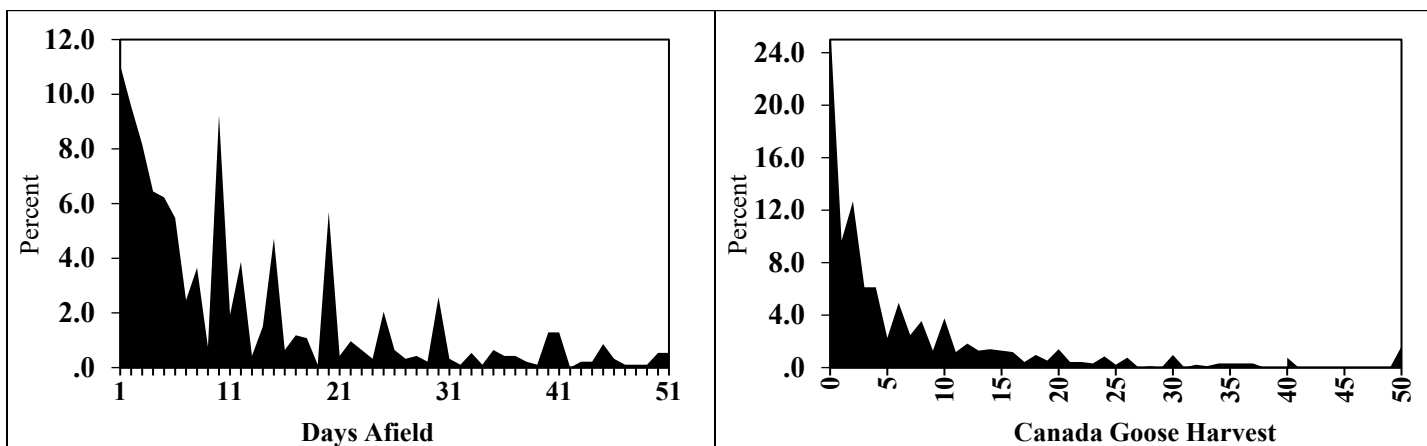


Figure 21. Distribution of days afield per hunter and geese harvested per hunter for Illinois' 2018-19 regular goose season.

Crippling Losses

Crippling losses (birds downed but not retrieved) during the 2018-19 regular season were estimated at 36,996 ducks and 5,558 geese (Table 16). These estimates, considered to be indices because they contain information about the relative number and are not actual number or abundance estimates, equate to 13.6 ducks and 6.0 geese lost per 100 harvested.

White-fronted/Specklebelly Goose Harvest

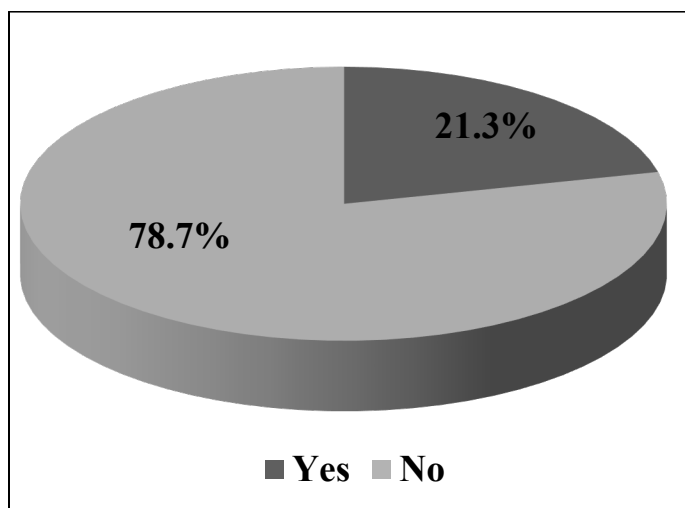


Figure 22. Proportion of hunters* who reported harvest of white-fronted (specklebelly) geese during the 2018-19 waterfowl hunting seasons ($n = 931$).

*Cases selected for those who indicated they hunted for at least one day during the 2018-19 goose seasons.

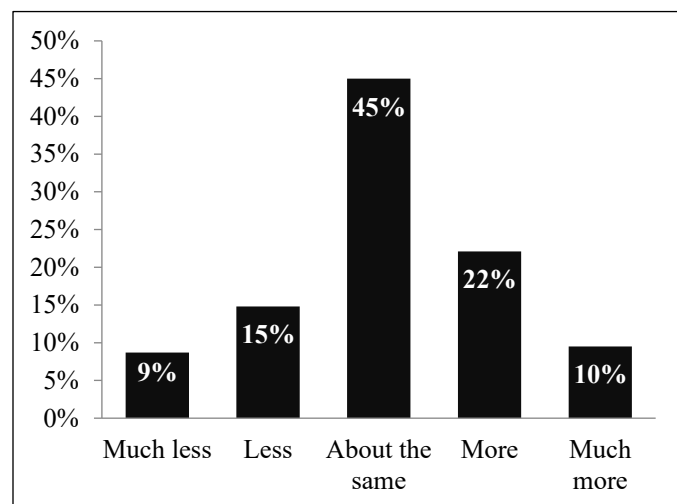


Figure 23. Comparison between the number of white-fronted geese hunters* seen in 2018-19 compared to the last 5 years ($n = 931$).

*Cases selected for those who hunted for at least one day during the 2018-19 regular goose season.

Twenty-one percent of those who hunted one day or more for geese during 2018-19 harvested white-fronted (specklebelly) geese (Figure 22). Forty-five percent of regular goose hunters saw more or much more white fronted geese as compared to five years ago (Figure 23). Fifty percent of regular goose hunters (49.8%) did not target or shoot at them and 26.2% did not target them but shot if they had the opportunity. Twenty percent of goose hunters (20.4%) used specklebelly calls and 21.9% used specklebelly decoys (Figure 24).

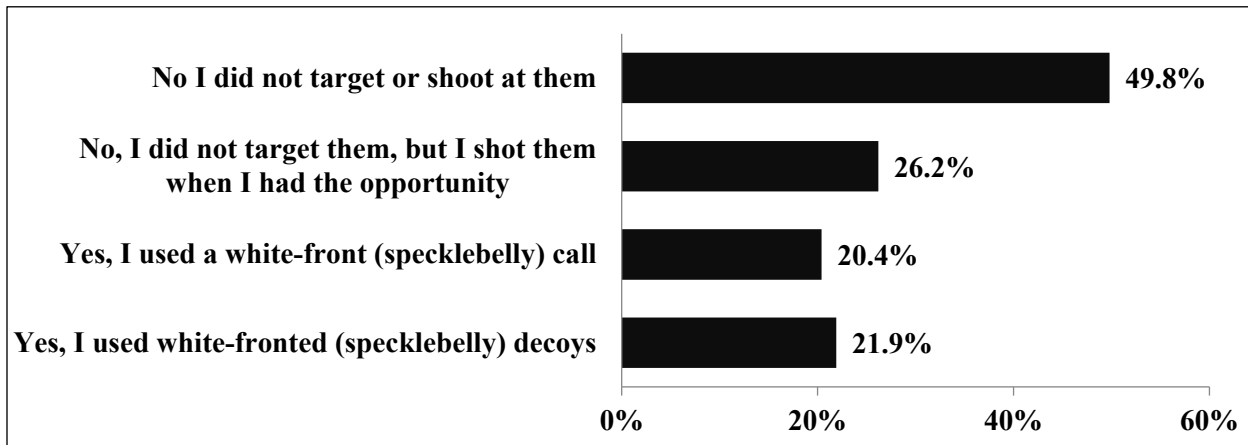


Figure 24. Proportion of hunters* who targeted white-fronted (specklebelly) geese during the Regular Goose Season ($n = 931$).

*Cases selected for those who hunted for at least one day during regular goose season.

Public Land Use and Hunting Preferences

Almost half (45.8%) of hunters had hunted on Illinois public lands during 2018-19. Among those who used public lands, public lands in the Central zone were most popular (Figure 26). Over half of the hunters on public lands had at least 1 hunt in a blind awarded through a lottery (Figure 27).

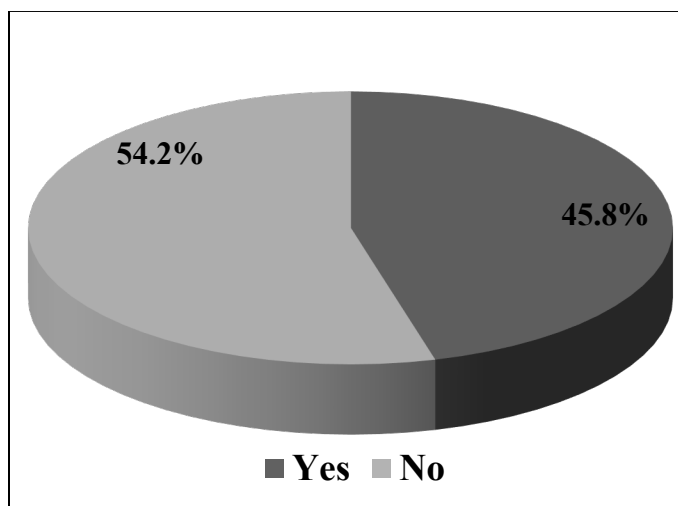


Figure 25. Percentage of hunters* who hunted on Illinois state public lands during 2018-19 ($n = 1,453$)

*Cases selected for those who indicated they hunted for at least 1 day during 2018-19.

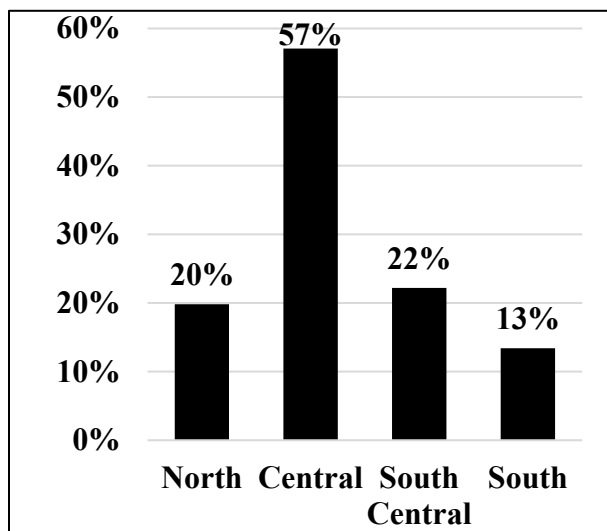


Figure 26. Zone in which public land hunted was located ($n = 681$).

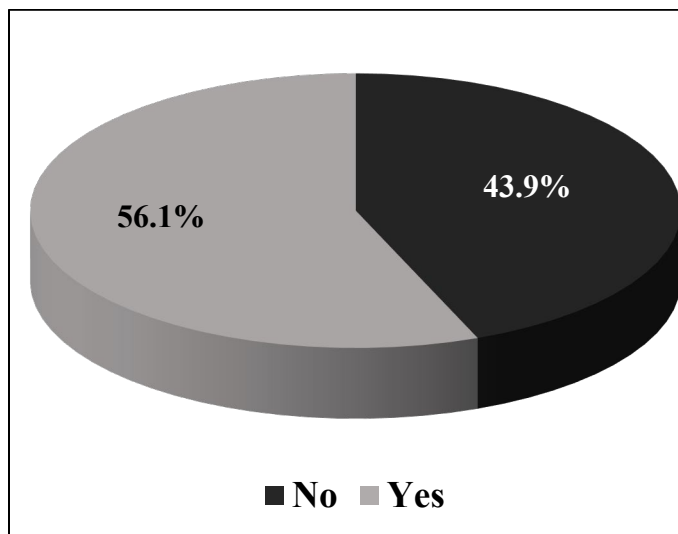


Figure 27. Percentage of waterfowl hunters whose public land use was in a blind awarded by lottery ($n = 656$).

Satisfaction with 2018-19 Duck and Goose Seasons

As a condition of implementing a four-zone structure, Illinois was required to collect information on hunter satisfaction in areas of the state impacted by waterfowl zone changes. The former South zone was divided into two zones with a goal of providing preferred season dates to most hunters in the South Central and South zones. South Central Zone duck hunters harvested the second highest average number of ducks per hunter per season ($M = 7.93$), an average of 0.06 fewer than Central zone hunters and 2.34 ducks per hunter per season more than hunters in the North zone, and 1.88 ducks per hunter per season more than hunters in the South zone. North zone duck hunters had the highest level of satisfaction for all but one aspect of the season. South Central zone hunters were the most satisfied with the “amount of time you spent duck hunting” and were the least satisfied zone with all other measures except “weather during duck season” (Table 17). South Central and South zone goose hunters harvested the fewest geese per hunter per season ($M = 1.14$ and $M = 1.19$, respectively). North zone goose hunters had the highest level of satisfaction with every measured aspect of the 2018-19 regular goose season, while South zone hunters had the lowest level of satisfaction with all aspects (Table 18).

Satisfaction with Season Timing and Zone Configuration

When asked about season timing, a majority of duck hunters in the South Central (56.3%), Central (53.0%), and South (52.2%) zones and thirty-nine percent of hunters in the North Zone reported that the 2018-19 duck season was timed “too early” (Figure 28 and Table 19). A majority of teal hunters and September Goose hunters in every zone reported those seasons were timed “about right.” A majority of goose hunters, across the North and South zones reported timing for the 2018-19 goose season was “about right.”

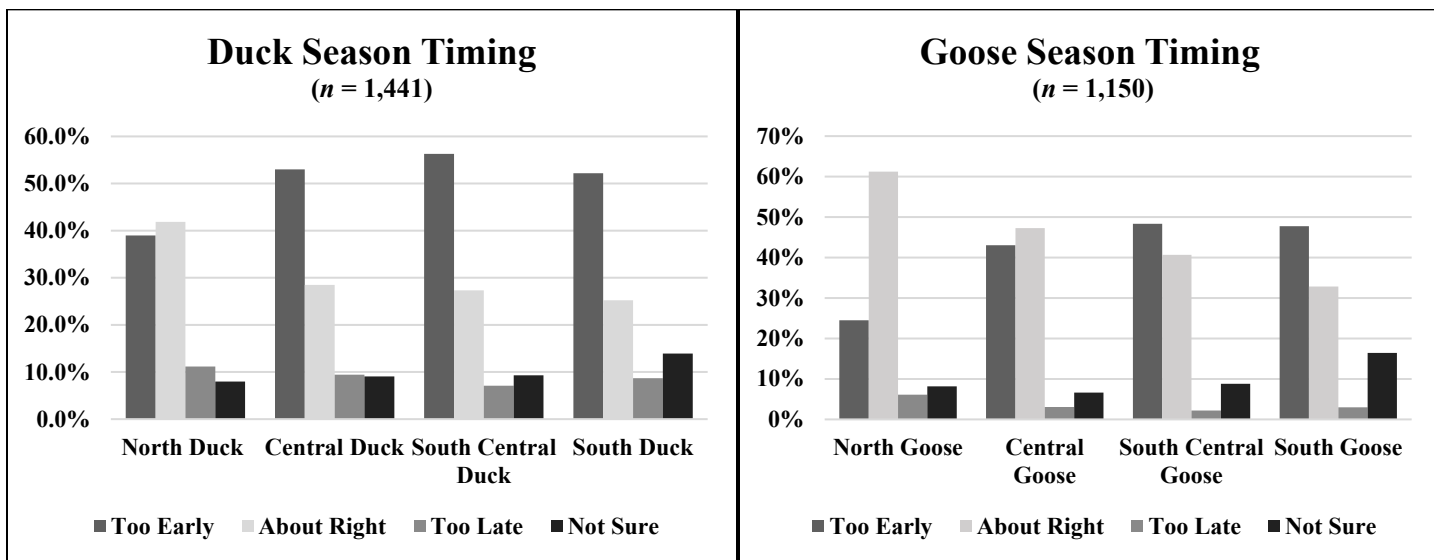


Figure 28. Duck and goose hunter* opinions about the timing of the 2018-19 waterfowl seasons.
 *Cases selected for those who hunted for at least one day in the corresponding season and zone.

When asked about the start dates for duck season in the zone intended to hunt most in 2019-20, 72% of South Zone hunters chose a start date no later than November 16 and 25% preferred always closing on January 31. The most popular response among North zone hunters was “Oct 19- Dec 17”. In the Central zone equal percentages (38%) of respondents preferred late October or early November as the start date. Almost one third of South Central hunters preferred a late November start date (Table 20). When considering the Duck zone structure for 2021-2025 most hunters in the North, Central, and South zones selected “I do not have a preference” from the options provided. Most South Central hunters would prefer “three duck zones with 2 season segments (2-way split) in one, two or all zones” followed by “I do not have a preference.” Keeping the

current 4-zone structure and reconfiguring the zones was least popular among North and Central Zone hunters. Similarly, a three-zone structure was least preferred among South Central and South Zone hunters (Table 21).

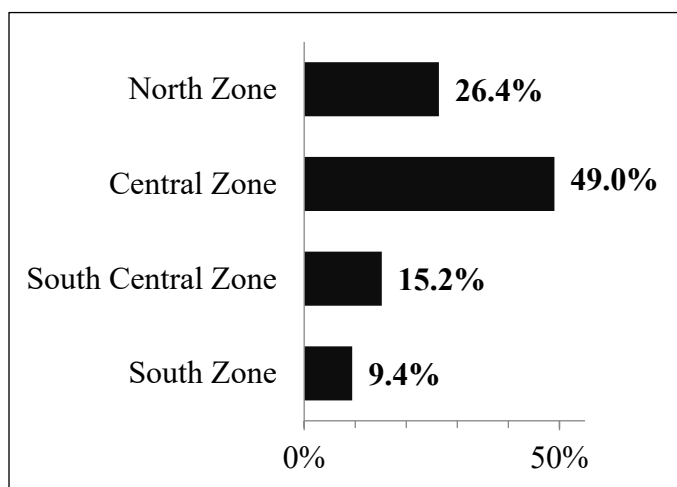


Figure 29. Zones hunters intend to hunt most often during the 2019-2020 duck season ($n = 1,759$).

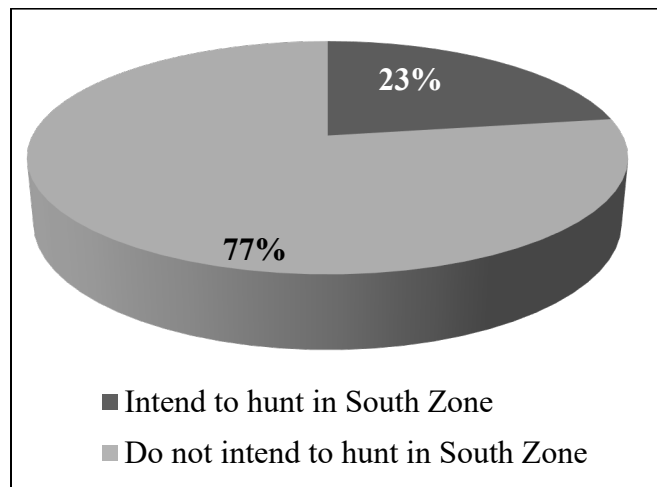


Figure 30. Percent of hunters who intend to hunt in South Zone at least one day ($n = 1,662$).

Most hunters intended to do the majority of their hunting in the Central zone in 2019-20 (Figure 29). Though 9.4% of hunters planned to hunt primarily in the South zone, 23% of hunters intend to hunt at least one day in the South zone (Figure 30). Hunters that expressed an intention to hunt in the South zone were asked a series of follow-up questions to determine preferences toward maximizing duck hunting days in January for the South zone. Almost fifty percent (49.3%) of prospective South zone hunters would prefer “Opening to maximize the number of January hunting days.” Hunters did not have a clear preference for how January days are maximized though 43.1% indicated “I want January days maximized but have no preference as to how it is accomplished. Of hunters wanting maximized days, 23.6 prefer opening on a Saturday to maximize days as compared to 14.4% opening on a Thursday (Table 23).

When asked about the current zone lines, hunters were predominately satisfied. Hunters in the North and Central zones had the greatest percent of hunters satisfied with the current zone lines. More than 25% of South Central hunters were dissatisfied with all the lines that border their zone with the border between the South and South Central zones being the least favored. Similarly, a quarter of South zone hunters dislike the borders around their zone. At least 40% of South Central and South Zone hunters are satisfied with the current

boundaries (Table 24). Most waterfowl hunters (88.5%) felt their county was located in the proper zone (Figure 31). Will, Grundy, Fayette, Madison, Franklin, St Clair, and Randolph were the counties hunters identified most often as being in the wrong zones and with the exception of St Clair, at least fifty percent of hunters in each county believe they are located in the correct zone. Most of those unhappy with the current zone of Will county preferred to be in the Central Zone and dissatisfied Perry county hunters unanimously preferred the South Zone (Table 25).

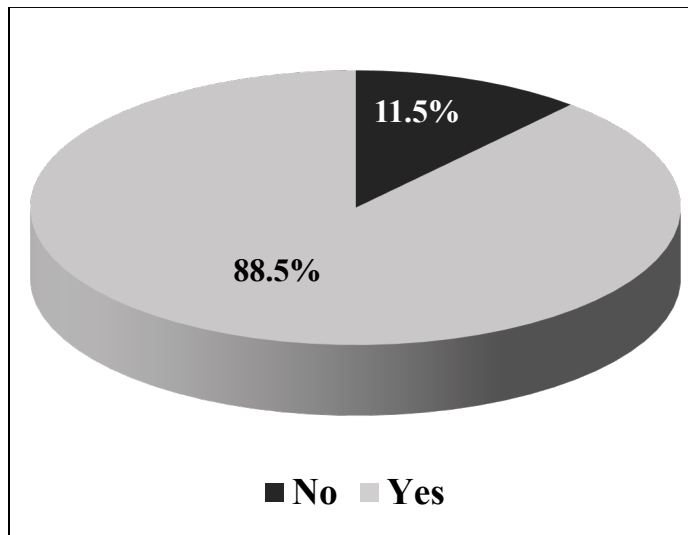


Figure 31. Percentage of waterfowl hunters that feel the county they hunt most often is in the correct zone ($n = 1,761$).

Regulations and Zone Delineation Central and South Central Zone Hunter Satisfaction

Concern regarding the boundary lines among the Central zone and South Central zone was expressed to Illinois Department of Natural Resources. To better understand current levels of satisfaction along with concerns about the current zone lines and regulations in these areas an additional sample was drawn. An additional 100 questionnaires were sent to waterfowl hunters in each of the targeted counties. Those who spent at least one day hunting in a targeted county are designated as “hunters of concern” for the zone in which they had hunted. Those who hunted in multiple zones or counties, unless noted otherwise, were placed in the zone or county they hunted most often. Targeted counties in the Central zone include: Bond, Champaign, Christian,

Clark, Coles, Cumberland, Dewitt, Douglas, Edgar, Effingham, Fayette, Ford, Grundy, Iroquois, Kankakee, LaSalle, Livingston, Logan, Macon, Macoupin, Madison, McLean, Montgomery, Moultrie, Piatt, Sangamon, Shelby, Vermillion, Will, & Woodford. Those who spent at least one day afield in Franklin, Hamilton, Jackson, Perry, Randolph, Saline, Union, White, & Williamson were designated as “South Central Zone hunters of concern”.

The attitudes of these hunters were compared to hunters of the rest of the Central and South Central zone hunters. Only hunters who spent at least one day afield in the Central or South Central zone were included in the analysis. When determining if a hunter was a Central or South zone hunter, those who had hunted in both zones were recoded as a hunter of the zone they hunted most often. Hunters of concern spent days afield in every zone, and their efforts were similar to the other hunters in the corresponding zones. Hunters in the Central zone counties of concern were more likely to feel timing of waterfowl seasons were “too early” as compared to the rest of Central zone hunters (Table 26). South Central hunters of concern were less likely to select timing was “Too late” as compared to the rest of South Central zone hunters, but both groups felt that the timing was “Too early”. To better understand the satisfaction with zone timing, hunters’ opinions of zone timing were examined by the county they hunted most often (Table 27). The counties that had the largest percentage of hunters feeling timing was “Too Early” were Kankakee (84%), Grundy (82%), Coles (80%), Livingston (78%), and Dewitt (76%). South zone hunters in White (83%), Perry (80%), Randolph (73%), and Franklin (61%) felt that the season had been timed too early.

When comparing the satisfaction with the zone lines among groups of concern the results were similar to those discussed earlier. Most hunters were satisfied with the current zone line and a plurality exists. The line between the South Central and South zones caused the highest level of dissatisfaction among South Central hunters (Table 28). Central hunters of concern were more dissatisfied than other Central zone hunters, but over 50% were still satisfied with the lines.

When asked about zoning options, “other central zone hunters” were more likely to have no preference than any other group (Table 29). When removing no preference from consideration all groups indicated a preference for three zones with 2 segments in one two or all zones. The non-targeted South Central zone hunters were the most interested in this option. A reconfigured four zone was least chosen by both groups of Central zone hunters. A plurality exists regarding zone structure preference and “no change” has the highest percentage of votes among most hunters.

Most hunters in the sample were satisfied with the current zone lines or were “neither satisfied or dissatisfied”. However, there exists a group that does want a change back to three duck zones with two-way splits. Central zone hunters of concern prefer a 2-way split, are dissatisfied with the current timing of seasons, and are mostly satisfied with the current lines. Similarly, South Central hunters prefer a 2-way split and are very dissatisfied with season timing and with the current zone lines. A clear plurality exists making recommendations difficult. The findings presented here are consistent to those reported by Miller and Alessi (2012); they found hunters in the South Central zone harvested more birds, but were less satisfied and had higher expectations than hunters in other zones. Data from the 2018-19 waterfowl harvest support this same perspective, as hunters in the South Central reported the greatest success per effort during duck season but the least satisfaction with the number of ducks seen and that migrated through.

Hunter Attitudes toward Presented Zone Change Options

To address the concerns of hunters, meet their expectations, and stay within the confine of federal regulations two new zone structures are proposed. These proposed zone changes are completely exploratory and are an attempt to address the needs of the areas of concern. They are completely independent of one another and one, both, or none could be adopted based on hunter support. Option 1 would change the eastern half of the Central zone and combine it with South Central zone (Appendix A, pg. 62). Option 2 would expand the South zone and some counties that are currently in the South Central zone would become part of that zone (Appendix A, pg. 64). Hunters were asked to identify their preference for each option, level of satisfaction, and whether the

lines should move. The current zone structure splits many counties along the border lines into two different zones. Additionally, most hunters can and do hunt in multiple counties each year. The results of a county level analysis, if not properly considered, can be biased by hunters that are counted multiple times. To address this issue county level analysis of Option 1 and Option 2 were based on the question “In which county do you hunt waterfowl most often”.

Among the counties of concern in central zone, Kankakee, Edgar, and Montgomery had at least 50% of hunters prefer Option 1 to “No change”, Coles, and Dewitt whereas Woodford, Effingham, and Ford had at least 50% prefer “No change” (Table 30). Eleven counties preferred “No change”, and “No preference” and “Option 1” both had nine counties each. When considering the sample size of each county there a plurality still exists. Among South Central hunters in counties of concern all counties preferred “No change” over Option 1. When examining the preferences of duck hunters, those who hunted at least one day in a county of concern preferred “Option 1” (Table 31). Those who hunted in other counties within the Central zone preferred “No Change”. Hunters in South Central counties of concern chose “No preference” (48.0%) or “No change” (37.6%).

Satisfaction with the proposed zone line was like preference in that the majority of hunters chose “Neither satisfied or dissatisfied” (Table 32). A majority of hunters in Champaign, Vermillion, and Kankakee expressed satisfaction with the line, whereas more hunters in the South Central counties of concern expressed dissatisfied than satisfied. A lack of satisfaction or dissatisfaction with the proposed is also supported by the majority of duck hunters, regardless of zone, preferring that option (Table 33). A similar consensus is noticeable with regards to whether the line should move east, west, or not move (Table 34). Most central zone hunters of concern would prefer that the line not move, most hunters in South central chose that option as well, though hunters in White, Williamson, and Randolph would prefer the line move west. This preference is also noted in the examination of duck hunters (Table 35) as hunters in the South Central counties of concern would prefer seeing the line move west. A significant number of duck hunters in counties that are not of concern in Central zone would like for the line to move east.

Option 2 was preferred over No change in all counties of concern in the South Central zone except for Randolph and White (Table 36). Hunters in Hamilton county were evenly split (40%) between the two choices. Duck hunters in the counties of concern also preferred Option 2 to “No Change” whereas South Central in the remaining counties preferred “No Change” over Option 2 (Table 37). Hunters in Hamilton county expressed the most dissatisfaction with the new line (Table 38) and were the only county to have a greater percentage of hunters dissatisfied than satisfied. This trend was not repeated among duck hunters, who mostly chose “Neither satisfied or dissatisfied” (Table 39). No county had a majority that wanted to see the Option 2 zone line move south and hunters in Perry, Williamson, and Hamilton prefer the line move north (Table 40). The percentage of duck hunters in counties of concern who preferred moving the line north (41%) was slightly lower than that of those who preferred “No change” (Table 41). Hunters in the remaining South Central zone counties preferred the line moving north and hunters in the south zone preferred “No change”.

Pre-duck season hunting

It would be possible to change the timing of the youth waterfowl hunting days, currently they begin about one week before the beginning of duck season in each zone. Hunters were asked how satisfied they are with the current timing of Youth Waterfowl Hunting days. Hunters that participated in the Youth Waterfowl Hunting days (Figure 32) were more dissatisfied with its timing than were those who did not participate (Figure 33). When asked to select their preferred timing, most participants (57%) and non-participants (66%) preferred keeping the current timing. When asked when Military days should occur, forty-three percent of hunters preferred they overlap with Youth Waterfowl Days, one-third preferred they occur before duck season but not overlap with Youth Waterfowl Days, and one-quarter wanted them to occur after duck season closed.

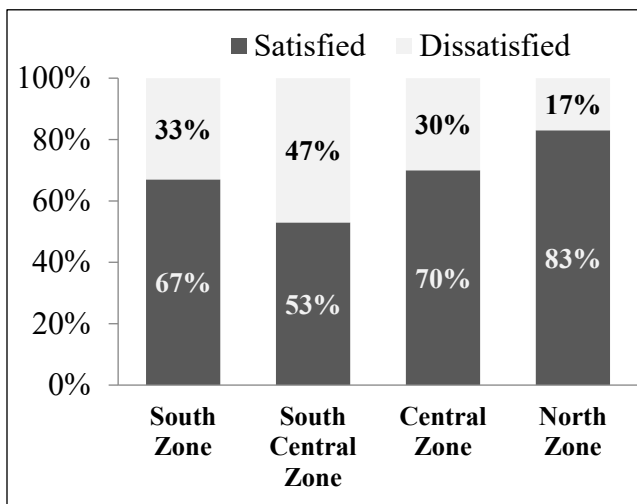


Figure 32. Percent of Waterfowl Youth Hunting Days participants satisfied with its timing ($n = 160$).

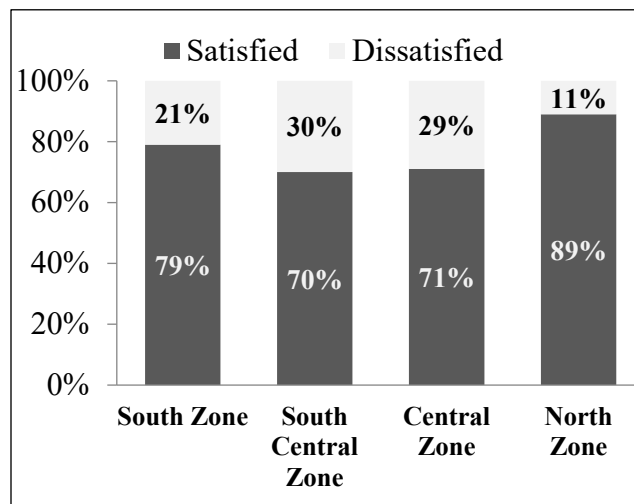


Figure 33. Percent of Waterfowl Youth Hunting Days non-participants satisfied with its timing ($n = 1,053$).

Hunter Characteristics

Respondents who hunted waterfowl during the 2018-19 waterfowl season hunted waterfowl in Illinois for a mean of 25.9 years. These hunters averaged 48.9 years of age and started at the age of 20.1. The counties with most respondents were Madison (5.9%), Cook (5.0%), Will (5.0%), Williamson (3.8%), and Tazewell (3.5%). Females comprised 3.0% of survey respondents and 1.4% of those who hunted during the 2018-19 waterfowl hunting seasons (Figure 34). Most respondents (95.6%) hunted waterfowl in Illinois before this season (Figure 35). Over half (52.0%) of respondents reported they hunt waterfowl every year in Illinois, whereas 7% reported that they never hunted waterfowl in Illinois (Figure 36). Thirteen percent of hunters are veterans of the US Armed Forces, less than one percent are on active duty, less than one percent are serving but not on active duty, and the majority (86.0%) have never served.

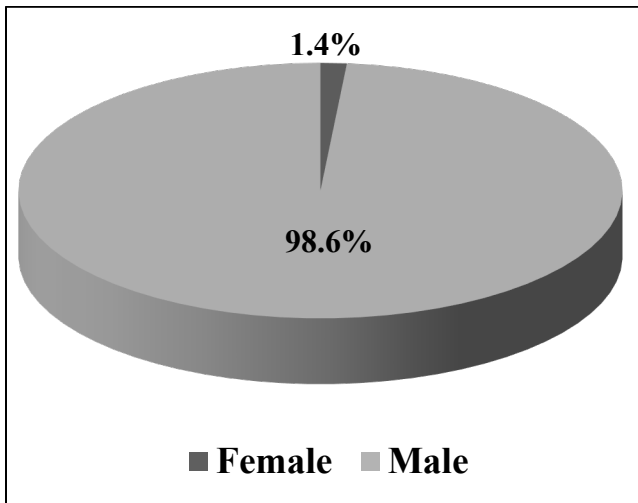


Figure 34. Gender distribution of respondents who hunted* waterfowl during one of the 2018-19 waterfowl seasons (*n* = 1,467).

*Cases selected for those who indicated they hunted for at least one day or more during the 2018-19 waterfowl seasons.

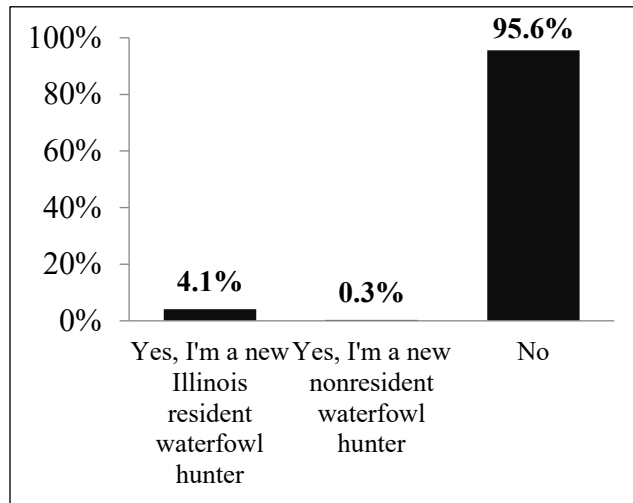


Figure 35. Number of hunters* whose first time hunting waterfowl in Illinois was during one of the 2018-19 waterfowl seasons (*n* = 1,451).

*Cases selected for those who indicated they hunted for at least one day during the 2018-19 waterfowl seasons.

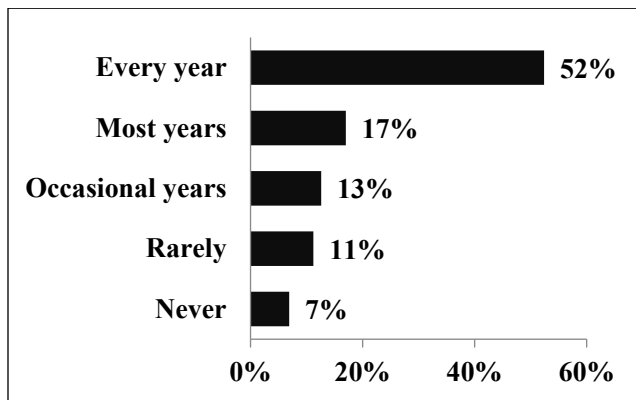


Figure 36. How often respondents hunt waterfowl in Illinois (*n* = 2,078).

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Table 1. Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest in Illinois from 2006 through 2018 hunting seasons.

Season ^a (Year)	Stamps Purchased	Estimated Hunters	Estimated Days Hunted	Estimated Harvest ^b
2006	63,965	58,302	1,194,801	700,571
2007	66,765	57,454	1,150,304	678,623
2008	69,590	59,379	1,175,243	660,306
2009	68,549	59,987	1,222,980	613,335
2010	64,828	50,936	985,075	513,882
2011	66,581	52,660	1,147,037	577,654
2012	64,896	50,740	1,155,346	580,557
2013	66,394	49,170	1,052,728	605,720
2014	70,391	50,698	982,193	550,946
2015	58,247	40,104	795,289	488,321
2016	54,920	41,242	870,721	490,463
2017	52,069	37,215	732,166	421,384
2018	55,303	40,047	831,043	412,402

^a Full listing for harvest 1981-Present can be found in Appendix F.

^b Teal, ducks, coots, and geese combined, and including September Teal and Canada goose seasons and youth hunt.

Table 2. The percentage of waterfowl hunters who hunted exclusively ducks, exclusively geese, or both ducks and geese in Illinois from 2006 through 2018 seasons.

Season ^a (Year)	Hunted Ducks Only	Hunted Geese Only	Hunted Both Ducks and Geese	Duck Hunters	Goose Hunters
2006	28.8%	13.5%	57.7%	86.5%	71.2%
2007	27.7%	12.2%	60.1%	87.8%	72.3%
2008	25.9%	10.6%	63.5%	89.4% ^b	74.1% ^b
2009	27.5%	8.4%	64.1%	91.6% ^b	72.5% ^b
2010	25.0%	13.1%	61.9%	86.9% ^b	75.0% ^b
2011	20.7%	18.3%	61.0%	81.7%	79.3%
2012	29.4%	9.8%	60.8%	90.2%	70.6%
2013	30.2%	9.8%	60.0%	90.2%	69.8%
2014	30.8%	10.9%	58.3%	89.1%	69.2%
2015	28.3%	8.6%	63.0%	91.3%	71.6%
2016	29.3%	8.2%	62.5%	91.8%	70.7%
2017	29.8%	12.3%	57.8%	87.6%	70.1%
2018	31.9%	9.2%	58.9%	90.8%	68.1%

^a 1981-2018 information can be located in Appendix F.

^b 2008-2010 numbers changed to reflect responses in the sample.

Table 3. Summary of Teal harvest and hunter activity during September Teal season (Illinois, 2006-18).

Season ^a (Year)	Estimated Hunters	Estimated Days Hunted	Estimated Teal Harvest
2006	12,378	43,223	28,016
2007	13,478	48,115	29,800
2008	14,652	52,365	19,981
2009	15,436	55,139	19,222 ± 7,372
2010	13,038	49,038	20,127 ± 9,332
2011	11,221	42,811	21,227 ± 7,993
2012	10,944	46,719	31,942 ± 11,740
2013	10,378	37,431	21,967 ± 7,169
2014	11,282	42,635	29,058 ± 10,909
2015	9,615	37,574	28,031 ± 9,911
2016	8,969	38,610	25,346 ± 9,296
2017	7,526	28,306	15,062 ± 5,480
2018	9,263	35,334	23,326 ± 8,817

^a1981-2018 information can be located in Appendix F.

Table 4. Teal harvest and hunter activity by zones during September Teal season (Illinois, 2018).

	<i>n</i>	Estimated Hunters ^a	Estimated Days Hunted	Estimated Teal Harvested
North Zone	86	2,343	8,990	4,299
Central Zone	181	4,931	18,280	12,284
South Central Zone	60	1,635	6,130	6,265
South Zone	22	599	1,934	478
Unknown	-	-	-	-

^aThe number of individual teal hunters in the state is less than the sum of duck hunters from the categories above because some hunted in more than one zone.

Table 5. Rates of Teal harvest and hunter activity during September Teal season (Illinois, 2006-2018).

Season ^a (Year)	Season Length/ Bag Limit	Days Hunted Per Hunter	Teal Harvest per Hunter	
			Per Day	Per Season
2006	16/4	3.49	0.65	2.26
2007	16/4	3.60	0.62	2.21
2008	16/4	3.57	0.38	1.36
2009	16/4	3.57	0.35	1.25
2010	16/4	3.76	0.41	1.54
2011	16/4	3.82	0.50	1.90
2012	16/4	4.27	0.68	2.92
2013	16/6	3.61	0.59	2.12
2014	16/6	3.78	0.68	2.58
2015	16/6	3.91	0.75	2.92
2016	16/6	4.31	0.66	2.83
2017	16/6	3.76	0.53	2.00
2018	16/6	3.81	0.66	2.52

^a1981-2018 information can be located in Appendix F.

Table 6. Waterfowl harvest and hunter activity during Youth Waterfowl Hunting Days, 2006-2018.

Season ^a (Year)	Adult Participation	Youth Participation	Days Hunting	Mean		Ducks/ Youth/Day	Total Coots	Coots/ Youth/ Day	Total Geese	Geese/ Youth/ Day
				Youths/ Hunting Party	Total Ducks					
2006	5,447	8,024	11,903	1.48	9,863	0.83	133	0.01	732	0.06
2007	6,259	8,981	14,356	1.60	9,141	0.64	850	0.06	1,701	0.12
2008	6,402	9,878	14,799	1.50	10,380	0.70	241	0.02	1,466	0.10
2009	7,073	9,772	15,922	1.63	11,229	0.71	599	0.04	2,396	0.15
2010	5,471	7,452	11,828	1.59	9,156	0.77	419	0.04	1,420	0.12
2011	6,325	8,642	14,059	1.63	9,569	0.68	1,333	0.09	1,318	0.09
2012	7,825	10,001	52,448 ^b	1.27	8,147 ^c	0.41	503 ^c	0.03	1,064 ^c	0.05
2013	8,438	8,639	19,136	1.02	12,715	1.33	359	0.04	2,065	0.23
2014	6,405	8,572	13,798	1.33	9,004	1.30	192	0.03	929	0.14
2015	4,718	6,291	9,873	1.33	8,171	1.65	117	0.02	571	0.12
2016	4,398	5,921	8,553	1.34	6,731	1.57	139	0.03	927	0.23
2017	4,780	6,459	9,956	1.35	8,283	1.66	89	0.02	1464	0.32
2018	4,822	5,775	8,663	1.20	7,452	1.72	205	0.05	729	0.18

^a1996 - 2017 information can be located in Appendix F.

^bResults include youth hunts during the regular season and the 2-day Youth Waterfowl Hunting Days.

^cResults are a 2-day estimate based on the mean number harvested by youth from the entire season

Table 7. Summary of duck and coot harvest and hunter activity during the regular duck season (Illinois 2006-2018).

Season (Year) ^a	Hunters	Days Afield	Number of Ducks					Total	Coots
			Mallards	Wood Ducks	Canvasback	Other Ducks			
2006	50,437	658,881	308,000	38,366	5,927	155,171	507,464	3,065	
2007	49,114	600,614	265,369	34,628	5,925	158,444	464,366	3,771	
2008	50,683	600,574	247,895	43,051	--- ^b	156,849	447,795	2,266	
2009	49,648	626,832	228,211	41,549	--- ^b	129,795	399,555 ± 69,698	3,904 ± 3,342	
2010	43,450	499,758	193,758	39,611	--- ^b	121,375	354,859 ± 60,571	1,770 ± 2,435	
2011	46,619	632,712	222,405	54,294	--- ^b	150,786	427,484 ± 66,551	4,327 ± 2,663	
2012	43,444	630,233	244,988	47,623	--- ^b	185,776	478,387 ± 50,294	4,133 ± 3,536	
2013	43,653	563,961	225,873	49,001	--- ^b	155,306	430,179 ± 29,431	2,143 ± 4,031	
2014	44,019	525,114	197,997	48,216	4,820	133,795	384,828 ± 39,741	4,681 ± 3,311	
2015	36,499	496,656	166,506	43,655	4,437	115,182	329,780 ± 34,835	3,185 ± 1,960	
2016	34,386	459,029	154,698	47,986	6,794	123,928	333,406 ± 37,408	4,424 ± 1,338	
2017	30,025	394,034	136,381	29,372	3,642	108,295	277,689 ± 24,826	1,544 ± 921	
2018	33,836	464,327	147,733	29,003	5,200	90,887	272,823 ± 28,512	2,088 ± 1,764	

^a1981-2018 information can be located in Appendix F.

^bHunters were not asked to distinguish Canvasback from Other Ducks and are included in Other Ducks for this year.

Table 8. Duck harvest and hunter activity by waterfowl zones and selected areas during the regular duck season (Illinois 2018-19).

Zone	<i>n</i>	Hunters ^a	Estimated Days Hunted	Estimated Ducks Harvested	Days Hunted/ Hunter	Ducks/ Hunter/ Day	Ducks/ Hunter/ Season
North	363	9,889	105,076	55,236	10.63	0.53	5.59
Central	642	17,490	227,233	139,831	12.99	0.62	7.99
South Central	222	6,048	81,102	47,948	13.41	0.59	7.93
South	181	4,931	50,917	29,809	10.33	0.59	6.05
Unknown	0	0	0	0	-	-	-
Statewide	1242	33,836	464,327	272,823	13.72	0.59	8.06

^aThe number of individual duck hunters in the state is less than the sum of duck hunters from the categories above because some hunted in more than one zone.

Table 9. Rates of duck harvest and hunter activity during the regular duck season (Illinois 2006-2018).

Season ^a (Year)	Season Length/ Bag Limit	Days Afield/ Hunter	Duck Harvest/Hunter ^b	
			Per Day	Per Season
2006	60/6(4,2)	13.06	0.77	10.06
2007	60/6(4,2)	12.23	0.77	9.45
2008	60/6(4,2)	11.85	0.75	8.84
2009	60/6(4,2)	12.63	0.64	8.05
2010	60/6(4,2)	11.50	0.71	8.17
2011	60/6(4,2)	13.57	0.68	9.17
2012	60/6(4,2)	14.51	0.76	11.01
2013	60/6(4,2)	12.92	0.76	9.85
2014	60/6(4,2)	11.93	0.73	8.74
2015	60/6(4,2)	13.61	0.66	9.01
2016	60/6(4,2)	13.35	0.73	9.70
2017	60/6(4,2)	13.12	0.70	9.25
2018	60/6(4,2)	13.72	0.59	8.06

^a1981-2018 information can be located in Appendix F.

^bExcludes ducks harvested coincidentally while goose hunting.

Table 10. Distribution of the number of days afield and number of ducks harvested in 2018-19.

	Days Hunting Ducks (%)	Number of Ducks Harvested (%)
0	---	17.8%
1-5	33.8%	27.3%
6-10	21.8%	15.9%
11-15	12.0%	7.2%
16-20	11.3%	6.8%
21-25	5.6%	4.8%
26-30	5.6%	3.5%
>30	10.0%	16.8%

*Number of ducks harvested was calculated by taking responses and applying the correction factor (Anderson 1985).

Table 11. Canada goose harvest and hunter activity during the early September Canada goose season (Illinois 2006-2018).

	Year ^a	Statewide	Waterfowl Zone				Unknown
			North	Central	South Central	South	
Hunters ^b	2006	12,609	4,848	6,607		1,154	0
	2007	12,788	4,723	6,413		1,652	0
	2008	13,157	4,934	6,690		1,533	0
	2009	15,102	5,232	8,089		1,781	0
	2010	11,015	3,918	5,813		1,285	0
	2011	14,214	4,625	7,889		1,700	0
	2012	11,192 ^b	4,601	5,928	1,161	249	0
	2013	10,865 ^b	3,646	6,076	681	462	0
	2014	12,147	4,153	6,679	934	554	0
	2015	10,659	3,226	6,104	1,075	443	0
	2016	9,973	3,324	5,125	1,316	381	0
	2017	9,225	2,746	5,472	849	296	0
	2018	9,916	3,187	5,503	899	599	0
Days Afield	2006	42,444	16,735	22,621		3,088	0
	2007	41,549	14,169	22,080		5,300	0
	2008	45,637	17,305	23,174		5,158	0
	2009	51,318	19,591	26,048		5,678	0
	2010	39,019	15,929	19,236		3,854	0
	2011	49,306	16,832	27,441		5,033	0
	2012	39,589	17,079	18,613	3,524	373	0
	2013	40,955	12,323	24,816	2,042	1,774	0
	2014	44,919	16,300	23,844	3,288	1,488	0
	2015	38,744	13,505	21,191	2,404	1,645	0
	2016	41,935	14,925	20,950	4,883	1,177	0
	2017	33,817	9,442	19,714	3,595	1,067	0
	2018	35,361	12,777	18,035	2,779	1,771	0
Canada Geese	2006	14,578	6,771	6,717		1,090	0
	2007	16,207	6,057	8,645		1,505	0
	2008	17,419	7,343	8,951		1,125	0
	2009	16,212	6,101	8,336		1,774	0
	2010	17,115	7,967	7,859		1,289	0
	2011	18,790	6,339	10,874		1,577	0
	2012	18,028	8,557	7,664	1,599	228	0
	2013	15,644	5,165	9,271	523	685	0
	2014	19,089	7,527	9,015	1,770	777	0
	2015	15,693	4,233	8,587	2,147	726	0
	2016	17,711	7,895	7,780	1,539	497	0
	2017	16,155	4,154	10,282	1,199	510	20
	2018	13,165	4,909	6,928	925	404	0

^a1981-2018 information can be located in Appendix F.

^bLess than the sum of hunters in individual zones because some hunters hunted more than 1 zone.

Table 12. Summary of goose harvest and hunter activity during the regular goose season (Illinois 2006 through 2018).

Season ^a (Year)	Hunters	Days Afield	Number of Geese		
			Canada Geese	Other Geese	Total
2006	41,521	438,350	122,294 (1,338)	14,426 (869)	136,720 (2,207)
2007	43,046	445,670	141,205 (404)	11,582 (55)	152,787 (459)
2008	44,404	461,868	142,806 (590)	17,956 (0)	160,762 (590)
2009	44,601	473,769	142,836 (585)	17,382 (355)	160,218 (940) ± 36,569
2010	36,803	385,432	99,422 (534)	9,594 (46)	109,016 (580) ± 22,523
2011	36,996	411,380	75,061 (618)	19,862 (33)	94,923 (651) ± 22,387
2012	34,034	386,356	72,682 (0)	19,597 (0)	92,280 (0) ± 19,570
2013	33,809	391,246	104,887 (0)	15,859 (0)	120,746 (0) ± 12,775
2014	34,226	369,179	87,672 (50)	20,313 (0)	107,985 (50) ± 15,517
2015	31,280	330,482	75,198 (0)	27,576 (0)	102,774 (0) ± 17,608
2016	26,490	312,725	77,216 (0)	24,563 (0)	101,779 (0) ± 18,215
2017	24,039	276,009	78,850 (0)	27,637 (0)	106,486 (0) ± 14,607
2018	25,363	296,021	71,035 (0)	21,578 (0)	92,613 (0) ± 16,720

Numbers in parentheses represent the number of geese harvested while duck hunting.

^a1981-2018 information can be located in Appendix F.

Table 13. Distribution of the number of days afield and number of geese harvested.

	Days Hunting Geese (%)	Number of Geese Harvested ^a (%)
0	---	26.3%
1-5	41.5%	36.8%
6-10	21.6%	16.0%
11-15	12.5%	7.0%
16-20	8.7%	4.5%
21-25	4.4%	2.3%
26-30	4.2%	1.9%
>30	7.2%	5.2%

^aTotal is less than 100 due to rounding.

Table 14. Goose harvest and hunter activity by zones, regular season (Illinois 2018-19).

Zone	Hunters	Days Afield	Estimated Goose Harvest				Total Days Hunted/ Hunter	Total Geese/ Hunter/ Day	Total Geese/ Hunter/ Season
			Canada Geese	White-Fronted Geese	Snow/Blue Geese ^b	Total Geese			
North	8,854	100,662	29,352	286	586	30,224	11.37	0.29	3.32
Central	13,077	142,589	35,407	5,404	3,724	44,536	10.90	0.25	2.71
South Central	3,051	30,458	3,490	2,696	6,498	12,684	9.98	0.11	1.14
South	2,343	22,312	2,787	938	1,445	5,170	9.52	0.12	1.19
Unknown	-	-	-	-	-	-	-	-	-
Statewide	25,363	296,021	71,035	9,324	12,254	92,613	11.67	0.24	2.80

^aLess than the sum of hunters in individual zones because some hunters hunted more than 1 zone.

^bHarvest estimates include Ross' geese.

Table 15. Canada goose harvest by zone during the regular goose season, three-year trend (Illinois 2016-17 through 2018-19).

Zone	2016-17	2017-18	2018-19	3-Year Mean	S.D.
North	29,347	17,723	29,352	25,474	6,713
Central	38,699	45,302	35,407	39,803	5,039
South Central	5,413	10,141	3,490	6,348	3,423
South	3,757	5,684	2,787	4,076	1,475
Unknown	-	-	-	-	-
Statewide	77,216	78,850	71,035	75,700	4,122

Table 16. Summary of the number of ducks and geese crippled (Illinois 2006 - 2018 regular seasons).

Season ^a (Year)	Estimated Ducks		Estimated Geese	
	Total	Per 100 Bagged	Total	Per 100 Bagged
2006	83,648	16.5	14,110	10.3
2007	77,914	16.8	16,627	10.9
2008	74,044	16.5	14,166	8.8
2009	67,718	16.9	12,245	7.6
2010	57,388	16.2	9,217	8.5
2011	64,268	15.0	6,937	7.3
2012	71,054*	14.9*	10,452*	11.3*
2013	59,064	13.7	8,847	7.3
2014	51,909	13.5	7,856	7.3
2015	47,442	14.4	7,622	7.4
2016	43,666	13.1	6,149	5.6
2017	37,491	13.5	6,657	6.3
2018	36,996	13.6	5,558	6.0

^a1981-2018 information can be located in Appendix F.

*Amended from 2012-13 report.

Table 17. Illinois duck hunters' levels of satisfaction with various aspects of the 2018-19 duck seasons.

	Zone	Very Dissatisfied (%)	Dissatisfied (%)	Unsure (%)	Satisfied (%)	Very Satisfied (%)	\bar{x} (S.D.) ^a
Number of ducks you saw	North <i>n</i> = 321	15.9%	30.5%	28.3%	21.2%	4.0%	2.67(1.10)
	Central <i>n</i> = 566	27.7%	33.4%	22.3%	15.0%	1.6%	2.29(1.08)
	South Central <i>n</i> = 180	46.7%	32.8%	13.3%	6.1%	1.1%	1.82(0.96)
	South <i>n</i> = 123	35.8%	34.1%	22.0%	7.3%	0.8%	2.03(0.97)
Mid-season matched peak of migration	North <i>n</i> = 308	20.1%	30.8%	33.4%	13.3%	2.3%	2.47(1.03)
	Central <i>n</i> = 553	30.6%	35.6%	23.9%	9.0%	0.9%	2.14(0.98)
	South Central <i>n</i> = 177	45.8%	33.9%	14.7%	4.5%	1.1%	1.81(0.93)
	South <i>n</i> = 119	42.9%	33.6%	16.8%	6.7%	0.0%	1.87(0.93)
Amount of shooting you got in	North <i>n</i> = 315	21.3%	31.1%	27.3%	17.5%	2.9%	2.50(1.10)
	Central <i>n</i> = 559	28.3%	36.7%	20.4%	13.8%	0.9%	2.22(1.03)
	South Central <i>n</i> = 178	43.3%	32.0%	15.2%	9.0%	0.6%	1.92(1.00)
	South <i>n</i> = 122	33.6%	33.6%	23.8%	9.0%	0.0%	2.08(0.97)
Number of ducks that migrated through areas you hunted	North <i>n</i> = 317	19.2%	35.0%	24.3%	18.0%	3.5%	2.51(1.10)
	Central <i>n</i> = 559	26.5%	40.8%	21.5%	10.0%	1.3%	2.19(0.98)
	South Central <i>n</i> = 179	46.4%	30.7%	17.3%	5.0%	0.6%	1.83(0.93)
	South <i>n</i> = 122	33.6%	37.7%	19.7%	7.4%	1.6%	2.06(0.99)
Amount of time you spent duck hunting	North <i>n</i> = 318	13.8%	23.9%	30.5%	26.1%	5.7%	2.86(1.12)
	Central <i>n</i> = 555	13.2%	23.6%	30.3%	27.4%	5.6%	2.89(1.12)
	South Central <i>n</i> = 178	15.2%	20.8%	29.2%	27.0%	7.9%	2.92(1.18)
	South <i>n</i> = 121	22.3%	23.1%	28.1%	20.7%	5.8%	2.64(1.20)
Number of ducks you harvested	North <i>n</i> = 318	24.5%	31.8%	24.5%	16.7%	2.5%	2.41(1.10)
	Central <i>n</i> = 557	32.7%	32.9%	18.9%	14.5%	1.1%	2.18(1.08)
	South Central <i>n</i> = 180	43.9%	33.9%	10.6%	10.0%	1.7%	1.92(1.05)
	South <i>n</i> = 121	38.0%	31.4%	19.8%	10.7%	0.0%	2.03(1.01)
Weather during duck season	North <i>n</i> = 318	16.7%	19.5%	41.2%	20.1%	2.5%	2.72(1.04)
	Central <i>n</i> = 558	16.1%	26.9%	38.7%	16.8%	1.4%	2.61(0.99)
	South Central <i>n</i> = 179	23.5%	22.9%	33.5%	19.0%	1.1%	2.51(1.08)
	South <i>n</i> = 122	27.9%	25.4%	31.1%	15.6%	0.0%	2.34(1.05)

^a1= Very Dissatisfied, 5= Very Satisfied

*Cases selected for those who hunted ≥ 1 day for ducks during the 2018-19 regular duck season.

Table 18. Illinois goose hunters' levels of satisfaction with various aspects of the 2018-19 goose seasons.

		Very Dissatisfied (%)	Dissatisfied (%)	Unsure (%)	Satisfied (%)	Very Satisfied (%)	\bar{X} (S.D.) ^a
Number of geese you saw	North <i>n</i> = 299	7.0%	10.7%	26.1%	40.8%	15.4%	3.47(1.09)
	Central <i>n</i> = 426	19.2%	22.8%	29.6%	24.6%	3.8%	2.71(1.15)
	South Central <i>n</i> = 95	38.9%	25.3%	18.9%	11.6%	5.3%	2.19(1.22)
	South <i>n</i> = 72	38.9%	38.9%	11.1%	5.6%	5.6%	2.00(1.11)
Mid-season matched peak of migration	North <i>n</i> = 292	9.2%	17.8%	32.5%	32.9%	7.5%	3.12(1.08)
	Central <i>n</i> = 421	22.1%	30.9%	30.4%	15.0%	1.7%	2.43(1.04)
	South Central <i>n</i> = 93	36.6%	32.3%	18.3%	9.7%	3.2%	2.11(1.11)
	South <i>n</i> = 71	40.8%	36.6%	15.5%	4.2%	2.8%	1.92(1.00)
Amount of shooting you got in	North <i>n</i> = 295	15.6%	27.1%	22.4%	26.8%	8.1%	2.85(1.21)
	Central <i>n</i> = 424	26.9%	31.8%	25.7%	13.7%	1.9%	2.32(1.07)
	South Central <i>n</i> = 93	39.8%	30.1%	17.2%	10.8%	2.2%	2.05(1.10)
	South <i>n</i> = 71	38.0%	33.8%	19.7%	7.0%	1.4%	2.00(1.00)
Number of geese that migrated through areas you hunted	North <i>n</i> = 296	7.1%	18.9%	32.4%	32.4%	9.1%	3.18(1.07)
	Central <i>n</i> = 425	20.9%	34.4%	22.8%	19.3%	2.6%	2.48(1.10)
	South Central <i>n</i> = 93	39.8%	31.2%	14.0%	11.8%	3.2%	2.08(1.14)
	South <i>n</i> = 70	38.6%	41.4%	12.9%	4.3%	2.9%	1.91(0.97)
Amount of time you spent goose hunting	North <i>n</i> = 296	10.8%	23.6%	28.0%	32.4%	5.1%	2.97(1.10)
	Central <i>n</i> = 421	12.6%	20.7%	35.9%	26.1%	4.8%	2.90(1.07)
	South Central <i>n</i> = 93	18.3%	22.6%	30.1%	23.7%	5.4%	2.75(1.17)
	South <i>n</i> = 72	26.4%	16.7%	30.6%	23.6%	2.8%	2.60(1.19)
Number of geese you harvested	North <i>n</i> = 296	21.3%	26.0%	20.9%	27.4%	4.4%	2.68(1.21)
	Central <i>n</i> = 418	28.9%	28.2%	24.6%	17.5%	0.7%	2.33(1.09)
	South Central <i>n</i> = 93	41.9%	26.9%	20.4%	10.8%	0.0%	2.00(1.03)
	South <i>n</i> = 71	43.7%	36.6%	11.3%	8.5%	0.0%	1.85(0.94)
Weather during goose season	North <i>n</i> = 294	10.2%	16.7%	41.5%	26.9%	4.8%	2.99(1.02)
	Central <i>n</i> = 421	15.9%	25.9%	38.5%	18.3%	1.4%	2.63(1.00)
	South Central <i>n</i> = 92	21.7%	21.7%	37.0%	18.5%	1.1%	2.55(1.06)
	South <i>n</i> = 72	26.4%	15.3%	43.1%	12.5%	2.8%	2.50(1.10)

^a1= Very Dissatisfied, 5= Very Satisfied

*Cases selected for those who hunted ≥ 1 day for geese during the 2018-19 regular goose season.

Table 19. Hunter* opinions of the timing of 2018-19 waterfowl seasons**.

Season	<i>n</i>	Too Early (%)	About Right (%)	Too Late (%)	Not Sure (%)
North Teal	81	21.0%	58.0%	8.6%	12.3%
Central Teal	169	16.0%	72.8%	5.9%	5.3%
South Central Teal	54	27.8%	55.6%	5.6%	11.1%
South Teal	19	26.3%	57.9%	0.0%	15.8%
Teal Combined	323	19.8%	65.3%	6.2%	8.7%
North Sept. Goose	108	22.2%	65.7%	2.8%	9.3%
Central Sept. Goose	180	13.9%	73.3%	2.8%	10.0%
South Central Sept. Goose	29	24.1%	69.0%	0.0%	6.9%
South Sept. Goose	22	0.0%	86.4%	0.0%	13.6%
Sept. Goose Combined	339	16.5%	71.4%	2.4%	9.7%
North Reg. Duck	313	39.0%	41.9%	11.2%	8.0%
Central Reg. Duck	551	53.0%	28.5%	9.4%	9.1%
South Central Reg. Duck	183	56.3%	27.3%	7.1%	9.3%
South Reg. Duck	115	52.2%	25.2%	8.7%	13.9%
Reg. Duck Combined	1162	49.7%	31.6%	9.5%	9.3%
North Reg. Goose	294	24.5%	61.2%	6.1%	8.2%
Central Reg. Goose	423	43.0%	47.3%	3.1%	6.6%
South Central Reg. Goose	91	48.4%	40.7%	2.2%	8.8%
South Reg. Goose	67	47.8%	32.8%	3.0%	16.4%
South Reg. Combined	875	37.7%	50.2%	4.0%	8.1%

*Cases selected for those that indicated they hunted at least 1 day during the corresponding zone/season in 2018-19.

**Zone determined by zone hunted in most often for species in 2018-19 season.

Table 20. Duck hunter preferred duck season dates by zone intended to hunt in 2019-20.

Preferred Season Dates	North (n = 433)	Central (n = 803)	South Central (n = 246)	South (n = 152)
No Preference	12%	13%	9%	14%
Oct. 5 - Dec. 3	6%	2%	1%	0%
Oct. 12 - Dec. 10	10%	3%	0%	0%
Oct. 19 - Dec. 17	23%	8%	2%	1%
Oct. 26 - Dec. 24	20%	19%	5%	1%
Nov. 2 - Dec. 31	15%	19%	7%	3%
Nov. 9 - Jan. 7	6%	16%	18%	4%
Nov. 16 - Jan. 14	4%	9%	10%	5%
Nov. 23 - Jan. 21	1%	6%	30%	25%
Dec. 7 - Jan. 28	2%	2%	9%	22%
Always close Jan. 31	3%	4%	10%	25%

Table 21. Duck hunter zoning option preferences for 2021 through 2025 by Duck zone intended to hunt most.

	North Zone (n = 141)	Central Zone (n = 315)	South Central (n = 161)	South Zone (n = 104)	Total (n = 1,187)
Three duck zones with no split seasons.	12.9%	12.6%	9.1%	10.0%	11.9%
Three duck zones with 2 season segments (2-way split) in one, two, or all zones	15.9%	28.7%	38.7%	25.0%	26.5%
Four duck zones (no change from current system).	14.2%	12.2%	12.4%	20.0%	13.6%
Keep a 4-zone structure but reconfigure the current zone configuration.	9.4%	7.2%	10.8%	11.7%	8.8%
I do not have a preference.	47.6%	39.3%	29.0%	33.3%	39.3%

*Cases selected for those that indicated they hunted 1 day or more for DUCKS in the corresponding zone.

Table 22. Percentage of hunters who preferred indicated season structure among those who intend to hunt at least one day in the South zone.

<i>n</i> = 361	%
Opening to maximize number of January hunting days	49.3%
Opening on Thanksgiving, no change.	31.0%
Opening on the Saturday following Thanksgiving.	19.7%

Restricted to those who intend to hunt at least one day in the South Zone during 2019-20.

Table 23. Percentage of hunters who preferred the indicated season structure to maximize number of January hunting days.

<i>n</i> = 174	%
Opening duck season on Saturday that ensures duck season closes as close to Jan. 31.	23.6%
Opening duck season on Thursday that ensures duck season closes as close to Jan. 31.	14.4%
Opening duck season on Dec. 3, to maximize the number of total Jan. days.	14.9%
I want Jan. days maximized but have no preference to how it is accomplished.	43.1%
I do not care about maximizing January days.	4.0%

Restricted to those who intend to hunt at least one day in the South Zone during 2019-20 and wanted to maximize number of days in January.

Table 24. Illinois waterfowl hunter satisfaction with current zone lines

Zone line	Hunters	<i>n</i>	Dissatisfied %	Neither %	Satisfied %
North/Central Zones line	North hunters	364	24%	16%	60%
	Central hunters	848	13%	27%	60%
Central/South Central Zones line	Central hunters	850	15%	28%	57%
	South Central hunters	292	26%	23%	50%
Central/South Zones line	Central hunters	804	14%	29%	57%
	South hunters	189	25%	31%	43%
South Central/South Zones line	South Central hunters	327	38%	17%	45%
	South hunters	263	30%	22%	48%

1= Very Dissatisfied to 5= Very Satisfied,

*Cases selected for those that indicated they hunted 1 day or more for Waterfowl.

Table 25. Preferred zone placement for hunters who feel their county is in the wrong zone.

County	# of hunters dissatisfied with zone	Preferred zone location				# of hunters who hunt this county most often
		North	Central	South Central	South	
Will	25	17%	79%	4%	0%	99
Grundy	15	13%	53%	33%	0%	59
Fayette	12	0%	0%	50%	50%	52
Madison	11	9%	0%	82%	9%	41
Perry	11	0%	0%	0%	100%	31
Franklin	9	0%	0%	11%	89%	23
St. Clair	9	0%	0%	22%	78%	18
Randolph	8	0%	0%	38%	63%	22
Clinton	7	0%	0%	0%	100%	31
Williamson	7	0%	0%	14%	86%	38
Jackson	6	0%	0%	0%	100%	26
Monroe	6	0%	17%	83%	0%	15
Putnam	6	0%	100%	0%	0%	17
Bureau	5	0%	100%	0%	0%	23
Jefferson	5	0%	0%	0%	100%	24
LaSalle	5	40%	40%	0%	20%	40
Montgomery	5	0%	0%	100%	0%	14
Shelby	5	0%	0%	80%	20%	18
Jersey	4	0%	0%	100%	0%	28
Kankakee	4	0%	67%	33%	0%	37
Saline	4	0%	0%	0%	100%	13
Kendall	3	0%	100%	0%	0%	21

Table 26. Hunters of concern: opinions of the timing of 2018-19 waterfowl seasons.

Season	<i>n</i>	Too Early (%)	About Right (%)	Too Late (%)	Not Sure (%)
CZ of Concern	681	64.2%	21.7%	6.8%	7.2%
CZ no Concern	350	41.7%	35.7%	10.3%	12.3%
SCZ of Concern	302	59.9%	23.5%	5.6%	10.9%
SCZ no Concern	53	56.6%	18.9%	13.2%	11.3%

Table 27. Duck hunters of concern: opinions of duck season dates timing.

County	<i>n</i>	Too Early	About Right	Too Late	Not Sure
Bond	16	56%	19%	6%	19%
Champaign	10	70%	20%	10%	0%
Christian	7	71%	14%	14%	0%
Clark	22	73%	18%	0%	9%
Coles	15	80%	13%	0%	7%
Cumberland	12	50%	25%	8%	17%
Dewitt	66	76%	9%	6%	9%
Douglas	11	36%	55%	0%	9%
Edgar	17	71%	12%	6%	12%
Effingham	5	60%	0%	20%	20%
Fayette	84	42%	40%	8%	10%
Ford	10	20%	80%	0%	0%
Grundy	72	82%	13%	4%	1%
Iroquois	19	53%	21%	11%	16%
Kankakee	50	84%	12%	4%	0%
LaSalle	37	41%	46%	8%	5%
Livingston	18	78%	17%	6%	0%
Logan	11	45%	45%	9%	0%
Macon	18	50%	17%	22%	11%
Macoupin	19	37%	26%	16%	21%
Madison	41	54%	22%	12%	12%
McLean	15	60%	27%	7%	7%
Montgomery	25	68%	24%	0%	8%
Moultrie	36	53%	39%	6%	3%
Piatt	5	40%	60%	0%	0%
Sangamon	14	50%	50%	0%	0%
Shelby	48	54%	27%	2%	17%
Vermillion	25	72%	28%	0%	0%
Will	86	70%	20%	7%	3%
Woodford	50	54%	36%	2%	8%
Franklin	36	61%	28%	3%	8%
Hamilton	11	45%	18%	9%	27%
Jackson	34	56%	26%	6%	12%
Perry	45	80%	9%	0%	11%
Randolph	37	73%	22%	0%	5%
Saline	20	40%	35%	10%	15%
Union	59	41%	36%	10%	14%
White	24	83%	8%	0%	8%
Williamson	48	58%	27%	4%	10%

Table 28. Illinois waterfowl hunter satisfaction with current zone lines

Zone line	<i>n</i>	Dissatisfied	Neither	Satisfied	
	Central Zone of Concern	587	17.9%	27.3%	54.9%
Central/South Central Zones line	Central Zone no Concern	327	9.2%	29.7%	61.2%
	South Central Zone of Concern	201	29.9%	29.9%	40.3%
	South Central Zone of no Concern	47	25.5%	27.7%	46.8%
Central/South Zones line	Central Zone of Concern	562	16.9%	29.4%	53.7%
	Central Zone no Concern	302	7.3%	30.8%	61.9%
	South hunters	24	16.7%	20.8%	62.5%
South Central/South Zones line	South Central Zone of Concern	299	40.1%	18.7%	41.1%
	South Central Zone of no Concern	49	40.8%	18.4%	40.8%
	South hunters	46	21.7%	21.7%	56.5%

1= Very Dissatisfied to 5= Very Satisfied condensed to scale of 3,

*Cases selected for those that indicated they hunted 1 day or more for waterfowl.

Table 29. Duck hunters* of concern: zoning option preferences for 2021 through 2025

	CZ of concern <i>n</i> = 698	Other CZ hunters <i>n</i> = 360	SCZ of concern <i>n</i> = 309	Other SCZ hunters <i>n</i> = 56
Three duck zones with no split seasons.	11.6%	11.9%	9.4%	12.5%
Three duck zones with 2 season segments (2-way split) in one, two, or all zones.	33.4%	22.8%	28.8%	41.1%
Four duck zones (no change from current system).	12.9%	13.6%	17.5%	10.7%
Keep a 4-zone structure but reconfigure the current zone configuration.	9.7%	5.6%	13.3%	10.7%
I do not have a preference.	32.4%	46.1%	31.1%	25.0%

*Cases selected for those that indicated they hunted 1 day or more for DUCKS in the corresponding zone.

Table 30. Option #1 zone change preference of hunters^a of concern

County	<i>n</i>	Option #1	No Change	No preference
Bond	16	47%	26%	26%
Champaign	10	46%	15%	38%
Christian	7	36%	18%	45%
Clark	22	32%	26%	42%
Coles	15	31%	31%	38%
Cumberland	12	17%	17%	67%
Dewitt	66	37%	20%	44%
Douglas	11	28%	22%	50%
Edgar	17	57%	5%	38%
Effingham	5	13%	50%	38%
Fayette	84	33%	41%	26%
Ford	10	13%	50%	38%
Grundy	72	43%	27%	30%
Iroquois	19	44%	26%	30%
Kankakee	50	57%	11%	31%
LaSalle	37	19%	42%	39%
Livingston	18	24%	12%	64%
Logan	11	27%	40%	33%
Macon	18	27%	40%	33%
Macoupin	19	27%	40%	33%
Madison	41	27%	40%	33%
McLean	15	0%	25%	75%
Montgomery	25	50%	43%	7%
Moultrie	36	32%	36%	32%
Piatt	5	33%	33%	33%
Sangamon	14	24%	43%	33%
Shelby	48	41%	28%	31%
Vermillion	25	39%	21%	39%
Will	86	38%	19%	44%
Woodford	50	21%	52%	27%
Franklin	36	13%	39%	48%
Hamilton	11	29%	29%	43%
Jackson	34	14%	30%	57%
Perry	45	16%	30%	54%
Randolph	37	14%	43%	43%
Saline	20	17%	58%	25%
Union	59	10%	27%	63%
White	24	18%	23%	59%
Williamson	48	13%	37%	50%

^aThose who indicated this county is where they hunt waterfowl most often

Table 31. Option #1 zone change preference for duck hunters.

	<i>n</i>	Option #1	Do not change	I have no preference
North Zone hunters	94	17.0%	18.1%	64.9%
CZ of Concern	604	40.9%	30.1%	29.0%
CZ no Concern	299	14.0%	42.5%	43.5%
SCZ of Concern	229	14.4%	37.6%	48.0%
SCZ no Concern	47	23.4%	42.6%	34.0%
South Zone	28	7.1%	46.4%	46.4%

Table 32. Option #1 satisfaction with new zone line among South Central Zone hunters^a

County	<i>n</i>	Dissatisfied	Neither	Satisfied
Bond	18	22%	44%	33%
Champaign	11	18%	27%	55%
Christian	11	0%	45%	55%
Clark	25	20%	48%	32%
Coles	15	13%	53%	33%
Cumberland	13	15%	77%	8%
Dewitt	76	9%	50%	41%
Douglas	18	11%	67%	22%
Edgar	24	8%	33%	58%
Effingham	9	22%	56%	22%
Fayette	85	29%	41%	29%
Ford	16	13%	63%	25%
Grundy	83	13%	52%	35%
Iroquois	28	21%	39%	39%
Kankakee	56	7%	38%	55%
Lasalle	38	29%	53%	18%
Livingston	29	7%	66%	28%
Logan	13	23%	38%	38%
Macon	13	23%	38%	38%
Macoupin	13	23%	38%	38%
Madison	13	23%	38%	38%
McLean	7	0%	100%	0%
Montgomery	29	28%	24%	48%
Moultrie	49	29%	43%	29%
Piatt	6	33%	33%	33%
Sangamon	22	14%	64%	23%
Shelby	60	12%	42%	47%
Vermillion	34	6%	38%	56%
Will	105	13%	57%	30%
Woodford	52	31%	42%	27%
Franklin	31	39%	55%	6%
Hamilton	13	31%	54%	15%
Jackson	44	23%	59%	18%
Perry	43	30%	63%	7%
Randolph	37	35%	46%	19%
Saline	21	10%	81%	10%
Union	58	16%	71%	14%
White	25	12%	72%	16%
Williamson	49	29%	57%	14%

^aThose who indicated this county is where they hunt waterfowl most often

Table 33. Option #1 satisfaction with new zone line among duck hunters.

	<i>n</i>	Dissatisfied	Neither	Satisfied
North Zone hunters	197	11.2%	72.1%	16.8%
CZ of Concern	647	19.0%	42.2%	38.8%
CZ no Concern	340	27.9%	56.8%	15.3%
SCZ of Concern	278	26.6%	61.9%	11.5%
SCZ no Concern	50	32.0%	44.0%	24.0%
South Zone	44	15.9%	68.2%	15.9%

Table 34. Option #1 zone line movement preference for hunters of concern^a.

County	<i>n</i>	East	Do not move	West
Bond	13	15%	77%	8%
Champaign	8	13%	63%	25%
Christian	9	0%	78%	22%
Clark	16	0%	75%	25%
Coles	13	0%	92%	8%
Cumberland	7	0%	100%	0%
Dewitt	64	9%	67%	23%
Douglas	11	9%	82%	9%
Edgar	20	0%	80%	20%
Effingham	8	25%	75%	0%
Fayette	60	18%	72%	10%
Ford	14	14%	79%	7%
Grundy	60	8%	70%	22%
Iroquois	23	13%	65%	22%
Kankakee	42	7%	76%	17%
Lasalle	25	16%	56%	28%
Livingston	23	13%	65%	22%
Logan	12	25%	42%	33%
Macon	12	25%	42%	33%
Macoupin	12	25%	42%	33%
Madison	12	25%	42%	33%
McLean	16	19%	63%	19%
Montgomery	28	25%	57%	18%
Moultrie	35	23%	54%	23%
Piatt	5	40%	60%	0%
Sangamon	16	38%	38%	25%
Shelby	48	13%	67%	21%
Vermillion	25	16%	72%	12%
Will	80	38%	19%	44%
Woodford	48	21%	52%	27%
Franklin	12	17%	67%	17%
Hamilton	3	67%	0%	33%
Jackson	25	36%	48%	16%
Perry	19	11%	58%	32%
Randolph	22	27%	32%	41%
Saline	5	0%	80%	20%
Union	19	0%	74%	26%
White	22	18%	23%	59%
Williamson	38	13%	37%	50%

^aThose who indicated this county is where they hunt waterfowl most often

Table 35. Option #1 zone line movement preference for duck hunters.

	<i>n</i>	East	Do not move	West
North Zone hunters	56	26.8%	64.3%	8.9%
CZ of Concern	500	17.2%	63.0%	19.8%
CZ no Concern	261	28.0%	53.6%	18.4%
SCZ of Concern	123	17.9%	56.1%	26.0%
SCZ no Concern	33	30.3%	51.5%	18.2%
South Zone	13	23.1%	76.9%	-

Table 36. Option #2 zone change preference of South Central Zone hunters^a of concern

County	<i>n</i>	Option #2	No Change	No Preference
Franklin	34	41%	32%	26%
Hamilton	10	40%	40%	20%
Jackson	40	50%	28%	23%
Perry	41	56%	24%	20%
Randolph	31	32%	35%	32%
Saline	16	38%	31%	31%
Union	50	42%	28%	30%
White	26	23%	42%	35%
Williamson	43	44%	30%	26%

^aThose who indicated this county is where they hunt waterfowl most often

Table 37. Option #2 zone change preference for duck hunters.

	<i>n</i>	Option 2	No Change	No Preference
North Zone	63	17%	16%	67%
Central Zone (Special Concern)	421	22%	34%	44%
Central Zone (Remainder)	215	13%	27%	60%
South Central Zone (Special Concern)	262	43%	34%	23%
South Central Zone (Remainder)	42	29%	45%	26%
South Zone	43	33%	28%	40%

Table 38. Option #2 satisfaction with new zone line among South Central Zone hunters^a

County	<i>n</i>	Dissatisfied	Neither	Satisfied
Franklin	33	24%	39%	36%
Hamilton	10	60%	30%	10%
Jackson	38	18%	32%	50%
Perry	42	26%	29%	45%
Randolph	38	24%	39%	37%
Saline	16	19%	38%	44%
Union	57	12%	40%	47%
White	25	20%	52%	28%
Williamson	51	29%	35%	35%

^aThose who indicated this county is where they hunt waterfowl most often

Table 39. Option #2 satisfaction with new zone line among duck hunters.

	<i>n</i>	Dissatisfied	Neither	Satisfied
North Zone	185	11%	72%	17%
Central Zone (Special Concern)	560	19%	42%	39%
Central Zone (Remainder)	299	28%	57%	15%
South Central Zone (Special Concern)	277	27%	62%	12%
South Central Zone (Remainder)	50	32%	44%	24%
South Zone	43	16%	68%	16%

Table 40. Option #2 zone line movement preference for South Central Zone hunters^a

County	<i>n</i>	North	No Change	South
Franklin	27	41%	41%	19%
Hamilton	11	91%	9%	0%
Jackson	36	36%	50%	14%
Perry	37	57%	27%	16%
Randolph	31	45%	45%	10%
Saline	14	36%	50%	14%
Union	46	30%	63%	7%
White	22	27%	55%	18%
Williamson	43	47%	44%	9%

^aThose who indicated this county is where they hunt waterfowl most often

Table 41. Option #2 zone line movement preference for duck hunters.

	<i>n</i>	North	No Change	South
North Zone	43	30%	58%	12%
Central Zone (Special Concern)	336	29%	61%	10%
Central Zone (Remainder)	144	23%	70%	7%
South Central Zone (Special Concern)	241	41%	44%	14%
South Central Zone (Remainder)	48	48%	42%	10%
South Zone	38	39%	55%	5%

Appendix A

Illinois Waterfowl Hunter Survey 2018-19 Season



Paul B Johnson ©



Illinois Department of Natural Resources
Division of Wildlife Resources
&
The Illinois Natural History Survey



The Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Illinois Compiled Statutes, The Wildlife Code, Chapter 520. Disclosure of information is voluntary. This study is funded by the federal Wildlife Restoration Fund through your purchase of sporting arms and ammunition.

THANK YOU FOR YOUR COOPERATION!

All of your responses will be kept confidential.

Please return this survey in the postage-paid return envelope provided.

Section 1. Waterfowl Hunting in Illinois. Please provide the following information so that Illinois Department of Natural Resources (IDNR) waterfowl biologists may better understand hunters in Illinois.

1. Did you purchase an Illinois State Waterfowl Stamp for the 2018-19 seasons?

Yes No

2. Which of the following best describes how often you hunt **waterfowl** (ducks, geese, or coots) in Illinois?

Every year Most years Occasional years Rarely Never

If you never hunt waterfowl in Illinois, please go to Section 7 on the back cover. ←

3. Did you hunt waterfowl in Illinois during the 2018-19 waterfowl hunting seasons?

Yes No (If "No," please go to Section 3)

3a. Was the 2018-19 Illinois waterfowl season your **first** time hunting waterfowl in Illinois?

No Yes (new Illinois resident hunter) Yes (new nonresident hunter)

Please refer to the zone map on the back of the included cover letter to answer question 3b.

3b. In which of the following zones did you hunt **waterfowl MOST often**? (Please select **one**)

North Zone Central Zone South Central Zone South Zone

4. Did you use a spinning-wing decoy to **hunt ducks** in Illinois during the 2018-19 season?

Yes No

5. Did you hunt waterfowl on Illinois state public land during the 2018-19 seasons?

Yes No

5a. If "Yes," in what zone(s) did you hunt waterfowl on public land? (Please check all that apply)

North Zone Central Zone South Central Zone South Zone

5b. Did any of your hunts on public lands use a blind awarded through a lottery?

Yes No

6. How does the number of white-fronted (specklebelly) geese you saw this year compare to the last 5 years?

Much less Less About the same More Much more

7. Did you target white-fronted (specklebelly) geese during the Regular Goose Season? (Please check all that apply)

Yes, I used white-fronted (specklebelly) decoys

Yes, I used a white-fronted (specklebelly) call

No, I did not target them, but I shot at them when I had the opportunity

No, I did not target or shoot at them

Section 2. Waterfowl Harvest in Illinois. Please provide the following information so that IDNR waterfowl biologists may estimate waterfowl harvest, conserve waterfowl populations, and provide hunting opportunities in Illinois. **If you did not hunt waterfowl in Illinois during the 2018-19 seasons, please go to Section 3.**

1. Please report your hunting effort and harvest in Illinois between September 2018 and January 31st, 2019 in the following tables.

- Include only **your personal effort and harvest** (DO NOT include harvests for party)
- Count part of 1 day as 1 whole day.
- Only report days hunted in the table for the species you targeted that day.

a. September Teal Season (DO NOT include harvest after September.)

Zone hunted	County hunted	Total days hunted	Teal harvested	Teal downed but not retrieved

b. September Canada Goose Season (DO NOT include harvest after September.)

Zone hunted	County hunted	Total days hunted	Geese harvested	Geese downed but not retrieved

c. Regular Duck Season (DO NOT include harvest from September.)

Zone hunted	County hunted	Total days hunted	Mallards harvested	Wood ducks harvested	Canvas-backs harvested	Other ducks harvested	Coots harvested	Ducks downed but not retrieved

d. Regular Goose Season (DO NOT include harvest from September or Conservation Order Light Goose season that occurs after regular goose season closes.)

Zone hunted	County hunted	Total days hunted	Canada geese harvested	White-fronted (Specklebelly) geese harvested	Snow/Blue/Ross' geese harvested	Geese downed but not retrieved

Section 3. Youth Hunts. Please answer the following questions about mentoring youth hunters in Illinois. Please note: “Youths” are defined as hunters **17 years of age or younger**.

1. Did you take a youth (17 years old or younger) hunting during the **2018 Youth Waterfowl Hunting Days**?

_____ Yes _____ No (If “No,” Please go to question 2)

1a. If “Yes,” was this **at least one youth’s first time** duck or goose hunting? _____ Yes _____ No

1b. Was this **YOUR** first time accompanying a youth during the **Youth Waterfowl Hunting Days**?

_____ Yes _____ No

1c. Please report information for each youth that hunted during the **2018 Youth Waterfowl Hunting Days**.

(North Zone: **Oct. 13-14**, Central Zone: **Oct. 20-21**, South Central Zone: **Nov. 3-4**, South Zone: **Nov. 10-11**)

Enter **0** if the youth did not harvest any ducks, geese, or coots.

	Age	Number of Days hunted	County hunted	Mallards harvested	Wood ducks harvested	Other ducks harvested	Geese harvested	Coots harvested
Youth 1								
Youth 2								
Youth 3								
Youth 4								

2. Did you take a youth hunting during the 2018-19 **regular** duck or goose seasons in Illinois?

_____ Yes (If “Yes,” please check which season(s)): _____ Regular Duck _____ Regular Goose

_____ No

_____ A youth accompanied me hunting, but they did not hunt

Section 4. Satisfaction and zone timing. The following questions will tell us about your satisfaction with the **most recent duck and/or goose season(s)**.

1. Please rate your **SATISFACTION with the most recent duck season(s) you hunted in Illinois** by circling the number that best matches your response. **If you did not hunt ducks during 2018-19, please go to question 2.**

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
REGULAR DUCK SEASON					
Number of ducks you saw	1	2	3	4	5
Mid-season matched peak of duck migration	1	2	3	4	5
Amount of shooting you got in	1	2	3	4	5
Number of ducks migrating through areas you hunted	1	2	3	4	5
Amount of time you spent duck hunting	1	2	3	4	5
Number of ducks you harvested	1	2	3	4	5
Season start date allowed the season to match migration	1	2	3	4	5
Weather during duck season	1	2	3	4	5

2. Please rate your **SATISFACTION with the most recent goose season(s) you hunted in Illinois** by circling the number that best matches your response. **If you did not hunt geese during 2018-19, please go to question 3.**

REGULAR GOOSE SEASON	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Number of geese you saw	1	2	3	4	5
Mid-season matched peak of goose migration	1	2	3	4	5
Amount of shooting you got in	1	2	3	4	5
Number of geese that migrated through areas you hunted	1	2	3	4	5
Amount of time you spent goose hunting	1	2	3	4	5
Number of geese you harvested	1	2	3	4	5
Season start date allowed the season to match migration	1	2	3	4	5
Weather during goose season	1	2	3	4	5

3. Do you feel the dates of the 2018-19 waterfowl hunting seasons were too early, about right, or too late in the zone where you hunted most often? (Please circle **one number for each season.**)

	Too early	About right	Too late	I am not sure	I did not hunt this season.
Teal season (<i>September only</i>)	1	2	3	4	5
September Canada Goose Season (<i>September only</i>)	1	2	3	4	5
Duck Season	1	2	3	4	5
Canada Goose Season	1	2	3	4	5

4. Please select your preferred 2019-20 **Duck season** dates for the zone you intend to hunt in most often during the 2019-20 duck season. The 2018-19 duck season dates were as follows: North Zone: **Oct. 20 – Dec. 18**, Central Zone: **Oct. 27 – Dec. 25** South Central Zone: **Nov. 10 – Jan. 8**, South Zone: **Nov. 22 – Jan. 20**.

Please select **ONLY ONE** Duck Season start date

<input type="checkbox"/> Oct. 5 – Dec. 3	<input type="checkbox"/> Nov. 2 – Dec. 31	<input type="checkbox"/> Dec. 7 – Jan. 28
<input type="checkbox"/> Oct. 12 – Dec. 10	<input type="checkbox"/> Nov. 9 – Jan. 7	<input type="checkbox"/> Always Close Jan. 31
<input type="checkbox"/> Oct. 19 – Dec. 17	<input type="checkbox"/> Nov. 16 – Jan. 14	<input type="checkbox"/> No Preference
<input type="checkbox"/> Oct. 26 – Dec. 24	<input type="checkbox"/> Nov. 23 – Jan. 21	

5. Are you satisfied with the current length of the September Goose Season? Yes No

5a. How supportive would you be of shortening the 15-day September Canada Goose season to a 9-day season to allow the addition of **six** days of Regular Canada Goose hunting in the North and Central zones?

Extremely Unsupportive	Very Unsupportive	Unsupportive	Neither	Supportive	Very Supportive	Extremely Supportive
1	2	3	4	5	6	7

5b. How supportive would you be of overlapping the September Canada Goose and September Teal season if doing so meant September Canada Goose would only last 9 days and open on a Saturday later in September?

Extremely Unsupportive	Very Unsupportive	Unsupportive	Neither	Supportive	Very Supportive	Extremely Supportive
1	2	3	4	5	6	7

6. Are you satisfied with the current timing of Youth Waterfowl Hunting days? Yes No

6a. Which of the following would you prefer for the timing of the Youth Waterfowl Hunting days?

- Youth Waterfowl Days should occur 2 weeks **before** duck opener, though there may be fewer ducks.
- Keep the current timing, Youth Waterfowl Days should occur 1 week **before** duck opener.
- Youth Waterfowl Days should occur 1 week **after** duck season closes, though the Conservation Order may be later in the South Zone.

Section 5. Regulations and Zone Delineation. Please answer the following question concerning your season date preferences and the position of current and future zone lines.

1. In which zone do you **intend** to hunt **DUCKS** most often during the 2019-20 duck hunting season?

North Zone Central Zone South Central Zone South Zone

1a. Do you intend to hunt in the South zone at least one day? Yes (Go to 1b) No (Skip to #2)

1b. To avoid a conflict with gun deer season, the South Duck Zone has recently opened on Thanksgiving. However, the season could open later and last further into January but with fewer total goose hunting days. Which structure do you prefer?

- Opening to maximize number January hunting days (If so, go to 1c.)
- Opening on Thanksgiving, no change (If so, go to #2.)
- Opening on the Saturday following Thanksgiving (If so, go to #2)

1c. To maximize the total number of South Zone duck hunting days in January, IDNR has several options. Open the season on Dec 3rd regardless of day of the week and have fewer weekend hunting days but maximized January days OR open on the Thursday or Saturday that allows the season to close closest to Jan 31. Which opening date structure do you prefer?

- Opening duck season on the Saturday that ensures duck season closes as close to Jan 31 as possible.
- Opening duck season on the Thursday that ensures duck season closes as close to Jan 31 as possible.
- Opening duck season on Dec 3. to maximize the number of total January days, but lose some weekend hunting days.
- I want January days maximized but have no preference to how it is accomplished.
- I do not care about maximizing January days.

Please refer to the zone map on the back of the included cover letter to answer questions 2 - 4.

2. Using the table below, please indicate your satisfaction with the current Illinois Waterfowl Zone lines.

Zone line between...	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied	I do not hunt these zones
North and Central Zones	1	2	3	4	5	0
Central and South Central Zones	1	2	3	4	5	0
Central and South Zones	1	2	3	4	5	0
South Central and South Zones	1	2	3	4	5	0

3. In which county do you hunt waterfowl most often? _____ County

3a. Do you feel this county is located in the correct zone? _____ Yes _____ No

3b. If no, in which zone do you feel this county should be placed?

_____ North Zone _____ Central Zone _____ South Central Zone _____ South Zone

4. Currently Illinois has a continuous duck season with 4 duck hunting zones. The next opportunity to change zone options will be for the period **2021 through 2025**. The U.S. Fish and Wildlife Service likely will allow the following duck season zoning options. Which option do you prefer for Illinois for the period 2021 through 2025?

Please choose ONE response.

_____ Three duck zones with no split seasons.

_____ Three duck zones with 2 season segments (2-way split) in one, two, or all zones.

_____ Four duck zones (Split season prohibited by U.S. Fish and Wildlife Service, no change from current system).

_____ Keep a 4-zone structure but reconfigure the current zone configuration.

_____ I do not have a preference.

5. New federal legislation, if signed into law, will create 2 special waterfowl hunting days for veterans and members of the Armed Forces on active duty. These days must occur outside the regular duck season but can overlap with existing youth waterfowl days. Which of the following would you prefer for the timing of these days?

_____ The Military days should overlap with Youth Waterfowl Days.

_____ The Military days should occur before regular duck season but not overlap with Youth Waterfowl Days.

_____ The Military days should occur after the close of each zones' regular duck season. (This may change the timing of Spring Light Goose Conservation Order in the South Zone.)

Section 6. Hunting regulations & proposed new zone lines. Please answer the following question concerning the position of future zone lines.

New zone structures are proposed. Proposed changes would not start until 2021-22, and these changes are currently exploratory. Please refer to the **PROPOSED Zone Maps** on the opposite pages when answering the following questions. These options are independent of one another and one or both could be adopted.

Option 1 – This proposed change would expand the South Central Zone by combining the eastern half of the Central Zone with the South Central Zone. This new zone would be Zone 3, and the remainder of the Central Zone would become Zone 2. The boundary between Zones 2 and 3 follows Interstate 39 to Interstate 55 to Route 4 to Route 161 to Route 158 to Route 159 to Route 3. (West of line is Zone 2 and East of line is Zone 3).

Option 2 – This proposed change would expand the South Zone by combining part of it with the South Central Zone. This expanded zone would be Zone 4, and the remainder of the South Central Zone would be Zone 3. The boundary between Zones 3 and 4 follows Interstate 70 to Route 45 to Route 14 to Route 148 to Route 154 to Route 4 to Route 150. (North or West of line is Zone 3 and South or East of line is Zone 4).

Please refer to the Option 1 map opposite this page to answer questions 1-3.

1. A change to the current zone lines has been proposed that would combine the east half of the Central Zone with the South Central Zone (Option 1). This new zone would be called Zone 3 and open around 2 weeks after the current Central Zone's dates, maintaining the current South Central Zone's dates. The remainder of the Central Zone would be called Zone 2 and continue to open around the current Central Zone dates. Please select which of the following best describes your preference.

Option 1. The boundary follows Interstate 39 to Interstate 55 to Route 4 to Route 161 to Route 158 to Route 159 to Route 3. (West of line is Zone 2 and East of line is Zone 3). The border between Zone 3 and Zone 4 could use the current South Central Zone/South Zone boundary OR Option 2.

Do not change the boundary line of the Central and South Central Zones.

I have no preference on the location of this boundary.

I do not hunt these areas.

2. Please use the table below to indicate your level of satisfaction with the proposed new Zone 2 and Zone 3 line.

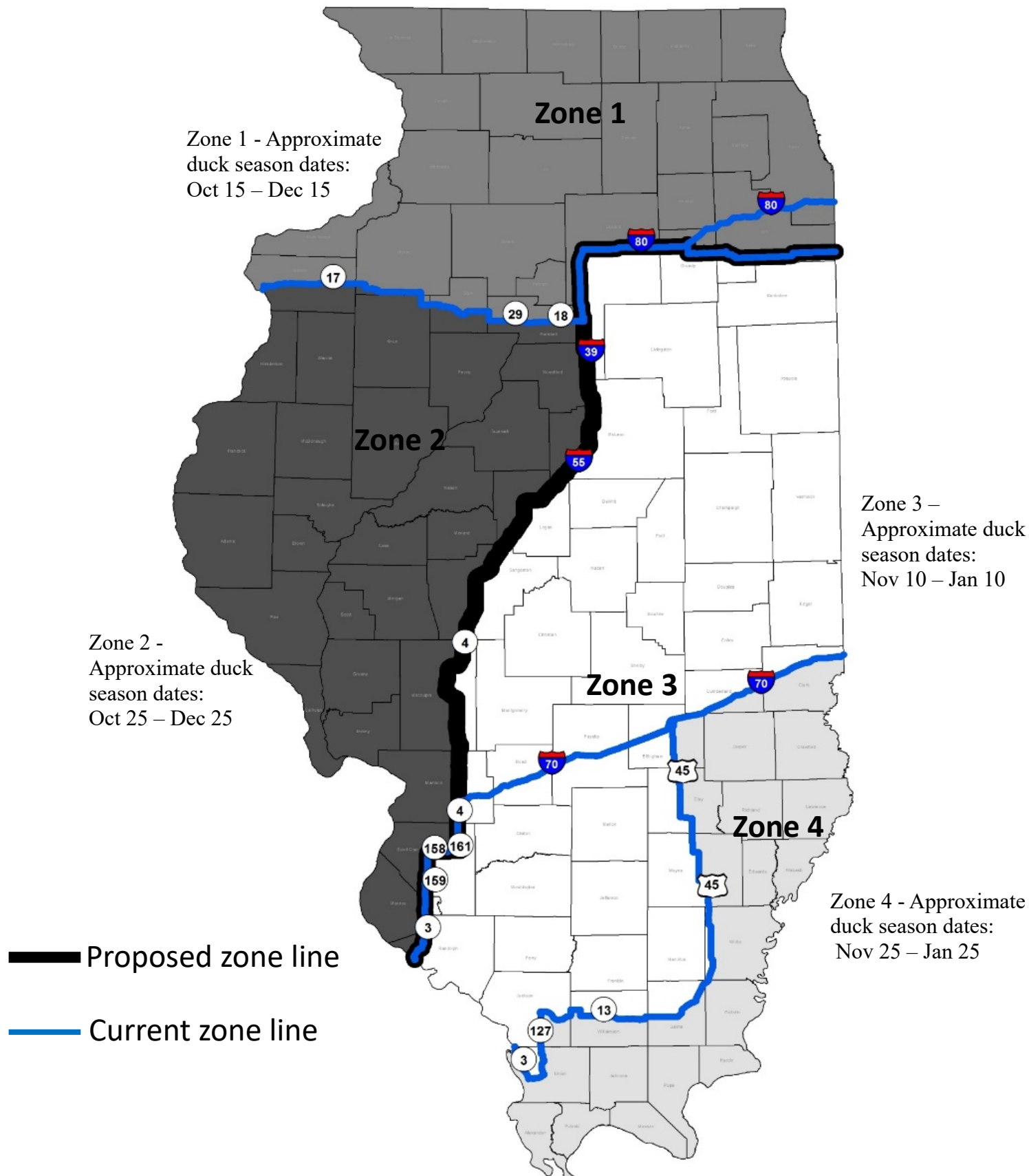
Extremely dissatisfied	Very Dissatisfied	Dissatisfied	Neither dissatisfied or satisfied	Satisfied	Very Satisfied	Extremely Satisfied
1	2	3	4	5	6	7

3. If the proposed boundary line running north-south dividing the Central Zone was not fixed but could move east to west, use the table below to indicate how you feel the **proposed** Option 1 zone line should move east to west.

Proposed zone line between...	I do not hunt these areas	Significantly Farther East	Slightly Farther East	The line should stay as proposed	Slightly Farther West	Significantly Farther West
Zone 2 and Zone 3	0	1	2	3	4	5

OPTION 1: Change to Central Zone and South Central Zone

The boundary between Zone 2 and Zone 3 follows Interstate 39 to Interstate 55 to Route 4 to Route 161 to Route 158 to Route 159 to Route 3. (West of line is Zone 2 and East of line is Zone 3.)



Please refer to the Option 2 map opposite this page to answer questions 4-6.

4. A change to the current zone lines has been proposed that would expand the South zone by combining part of it with the South Central Zone (Option 2). The expanded South zone would become Zone 4 and the remainder of the South Central zone would be Zone 3. Zone 3 could be only the remainder of the South Central Zone or could be combined with the eastern half of the Central Zone, Option 1, if preferred. Please select which of the following best describes your preference.

- Option 2. The boundary follows Interstate 70 to Route 45 to Route 14 to Route 148 to Route 154 to Route 4 to Route 150.
- Do not change the boundary line of the South Central and South Zones.
- I have no preference on the location of this boundary.
- I do not hunt these areas.

5. Please use the table below to indicate your level of satisfaction with the **proposed** Zone 3 and Zone 4 line.

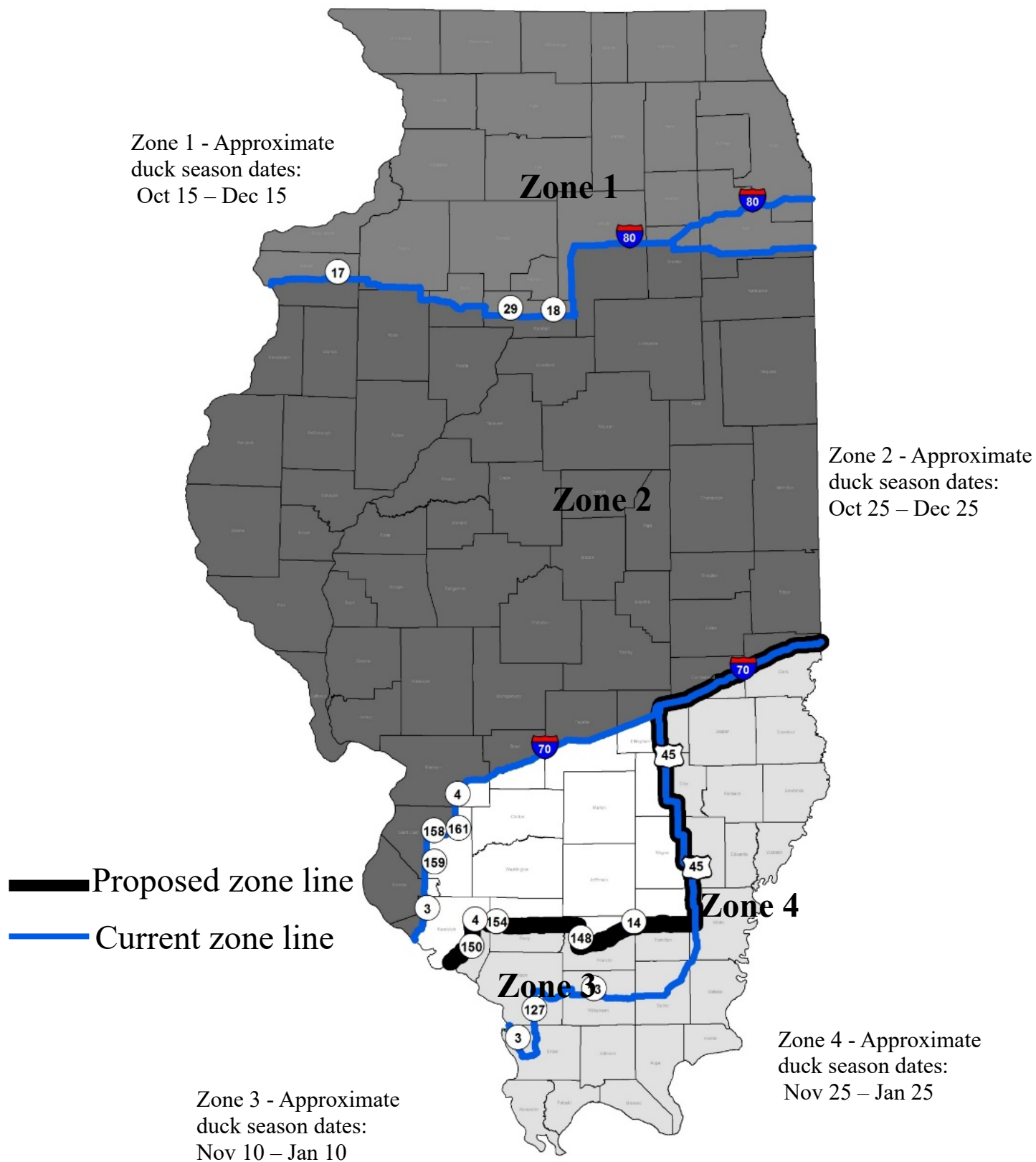
Extremely dissatisfied	Very Dissatisfied	Dissatisfied	Neither dissatisfied or satisfied	Satisfied	Very Satisfied	Extremely Satisfied
1	2	3	4	5	6	7

6. If the proposed boundary running east-west between the South-Central and South Zones was not fixed but could move north or south, use the table below to indicate how you feel the **proposed** Option 2 zone line should move north or south.

Proposed zone line between...	I do not hunt these zones	Significantly Farther North	Slightly Farther North	The line should stay as proposed	Slightly Farther South	Significantly Farther South
Zone 3 (South Central) and Zone 4 (South Zone)	0	1	2	3	4	5

OPTION 2: Change to South Central Zone and South Zone

The boundary between Zone 3 and Zone 4 follows Interstate 70 to Route 45 to Route 14 to Route 148 to Route 154 to Route 4 to Route 150. (North or West of line is Zone 3 and South or East of line is Zone 4.)



Section 7. Background Information. The following questions allow us to understand more about the people involved in waterfowl hunting in Illinois. All responses are kept confidential.

1. How many years have you hunted waterfowl in Illinois? _____ Years
2. At what age did you first hunt waterfowl? _____ Years-old
3. What is your county of residence? _____ County (If nonresident, please include state)
4. Please give your age. _____ Years
5. What is your gender? _____ Male _____ Female
6. What is your military status? (Please check one)
 - _____ I am a veteran of the U.S. Armed Forces.
 - _____ I am currently on active duty in the U.S. military.
 - _____ I am currently serving in the U.S. military but not on active duty.
 - _____ I have never served in the U.S. military

Comments



THANK YOU FOR YOUR TIME AND ASSISTANCE!

Please return this survey in the postage-paid envelope provided.

The Illinois Department of Natural Resources receives federal assistance and therefore must comply with federal anti-discrimination laws. In compliance with the Illinois Human Rights Act, the Illinois Constitution, Title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act as amended, and the U.S. Constitution, the Illinois Department of Natural Resources does not discriminate on the basis of race, color, sex, national origin, age, or disability. If you believe you have been discriminated against in any program, activity, or facility, please contact the Equal Employment Opportunity Officer, Department of Natural Resources, One Natural Resources Way, Springfield, IL 62701-1787, (217) 782-7616 or the Officer of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

Appendix B

ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

Dear Waterfowl Hunter,

Your name was randomly selected from a list of 2018 Illinois Harvest Information Program (HIP) registrants. We are asking you to provide information about your activities during the 2018-19 waterfowl hunting seasons in Illinois. **Even if you did not hunt ducks or geese in Illinois during the 2018-19 seasons, we need to hear from you and we ask that you take a few minutes to complete and return the enclosed questionnaire.**

We have included the Illinois waterfowl zone map on the back of this letter if you need it to determine the zone(s) you hunted.

This study, jointly conducted by the Illinois Department of Natural Resources and the Illinois Natural History Survey, is an effort to learn about waterfowl hunting activities in Illinois. Results of this study will help waterfowl managers make decisions to improve hunting opportunities and to better manage Illinois' duck and goose populations. **Your responses are voluntary and completely confidential.** By responding you will help us more effectively manage waterfowl and hunting in Illinois.

If you do not wish to participate, please return the blank questionnaire so we can remove you from our mailing list.

You may access the results of this and other studies of hunters and hunting in Illinois at <http://www.inhs.illinois.edu/programs/hd/>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <http://dnr.state.il.us/orc/wildliferesources/>.

If you have questions regarding this study, please call us at (217) 244-5121.

Sincerely,

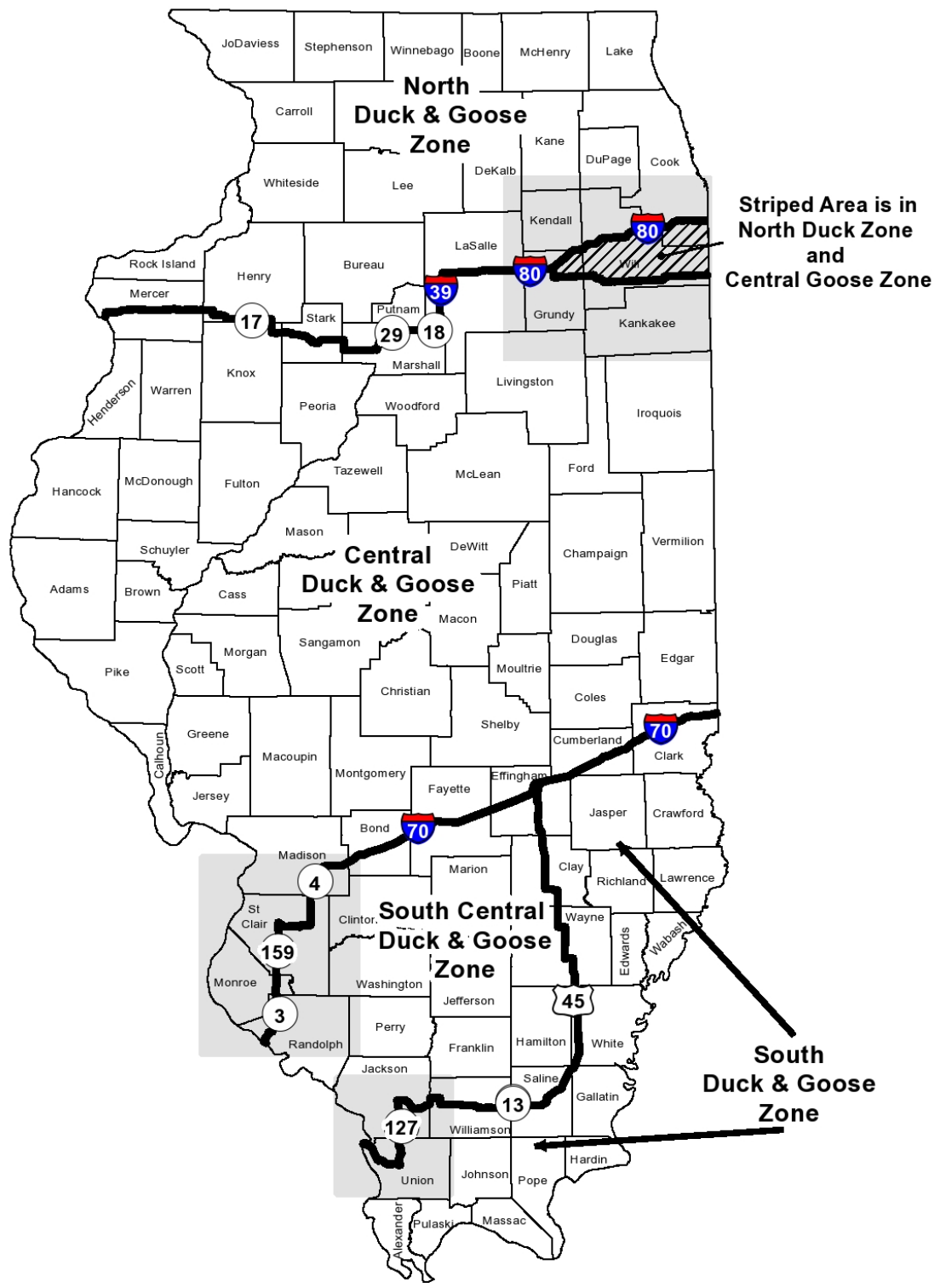
A handwritten signature in black ink, appearing to read "Craig A. Miller", with a long horizontal line extending to the right.

Craig A. Miller
Human Dimensions Research Program



Paul B Johnson ©

Please refer to the graphics on this page to answer questions about Illinois waterfowl zones.



Appendix C

Dear Waterfowl Hunter,

Recently you were mailed a questionnaire about your waterfowl hunting activities in Illinois. We have not yet received your response. **If you have already returned the questionnaire, we thank you. If you have not returned the questionnaire, please do so as soon as possible. Your input is very important!**

Your name and address will be deleted from our mailing list when your questionnaire is received. Thank you for your cooperation.

Appendix D



ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

Dear Waterfowl Hunter,

Your name was randomly selected from the list of 2018 Illinois Harvest Information Program (HIP) registrants. We recently mailed you a questionnaire regarding your hunting experiences in Illinois during the 2018-19 waterfowl season. If you have already returned the questionnaire, we thank you.

If you have not returned your completed questionnaire, please do so as soon as possible. We have enclosed another copy for your use. **The information you and other selected hunters provide will help waterfowl managers make decisions to improve hunting opportunities and to better manage Illinois' duck and goose populations.** Your responses are voluntary and completely confidential.

Even if you did not hunt ducks or geese in Illinois during the 2018-19 seasons, we need to hear from you and we ask that you take a few minutes to complete and return the enclosed questionnaire. A postage paid envelope is provided for you to return the questionnaire to us.

If you do not wish to participate, please return the blank questionnaire so we can remove your name from our mailing list.

You may access the results of this and other studies of hunters and hunting in Illinois at <http://www.inhs.illinois.edu/programs/hd/>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <http://dnr.state.il.us/orc/wildliferesources/>.

If you have questions regarding this study, please call us at (217) 244-5121.

Thank you for helping with this important study.

Sincerely,

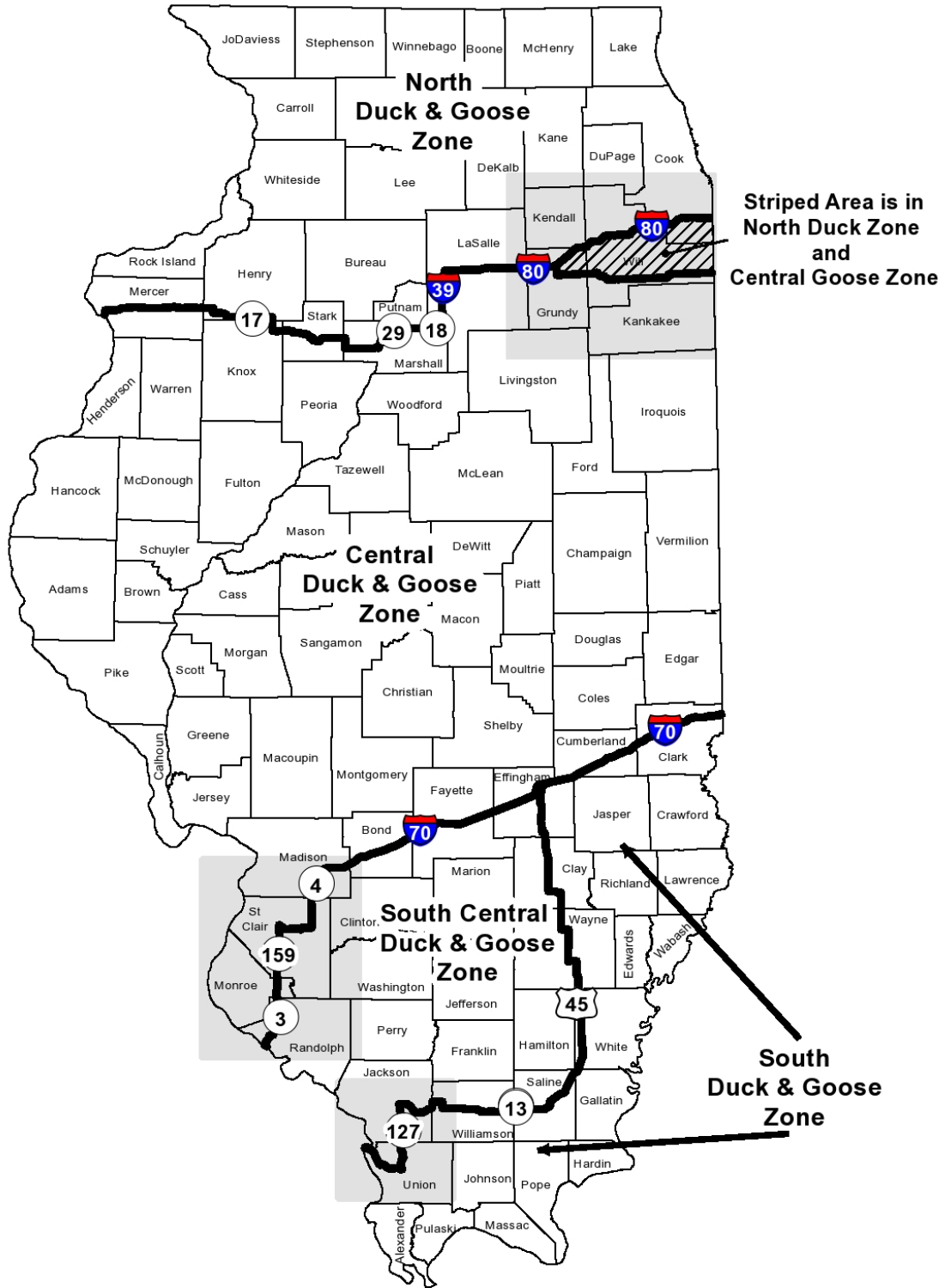
A handwritten signature in black ink, appearing to read "Craig A. Miller".

Craig A. Miller
Human Dimensions Research Program



Paul B Johnson ©

Please refer to the graphics on this page to answer questions about Illinois waterfowl zones.



Appendix E

ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

Dear Waterfowl Hunter,

Your name was randomly selected from the list of 2018 Illinois Harvest Information Program (HIP) registrants. We recently mailed you a questionnaire regarding your hunting experiences in Illinois during the 2018-19 waterfowl season. If you have already returned the questionnaire, we thank you.

If you have not returned your completed questionnaire, please do so as soon as possible. We have enclosed another copy for your use. **The information you and other selected hunters provide will help waterfowl managers make decisions to improve hunting opportunities and to better manage Illinois' duck and goose populations.** Your responses are voluntary and completely confidential. A postage paid envelope is provided for you to return the questionnaire to us.

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If you have questions regarding this study, please call us at (217) 244-5121.

Thank you for helping with this important study.

Sincerely,

A handwritten signature in black ink, appearing to read "Craig A. Miller".

Craig A. Miller
Human Dimensions Research Program

Human Dimensions Research Program



Paul B Johnson ©

Please refer to the graphics on this page to answer questions about Illinois waterfowl zones.

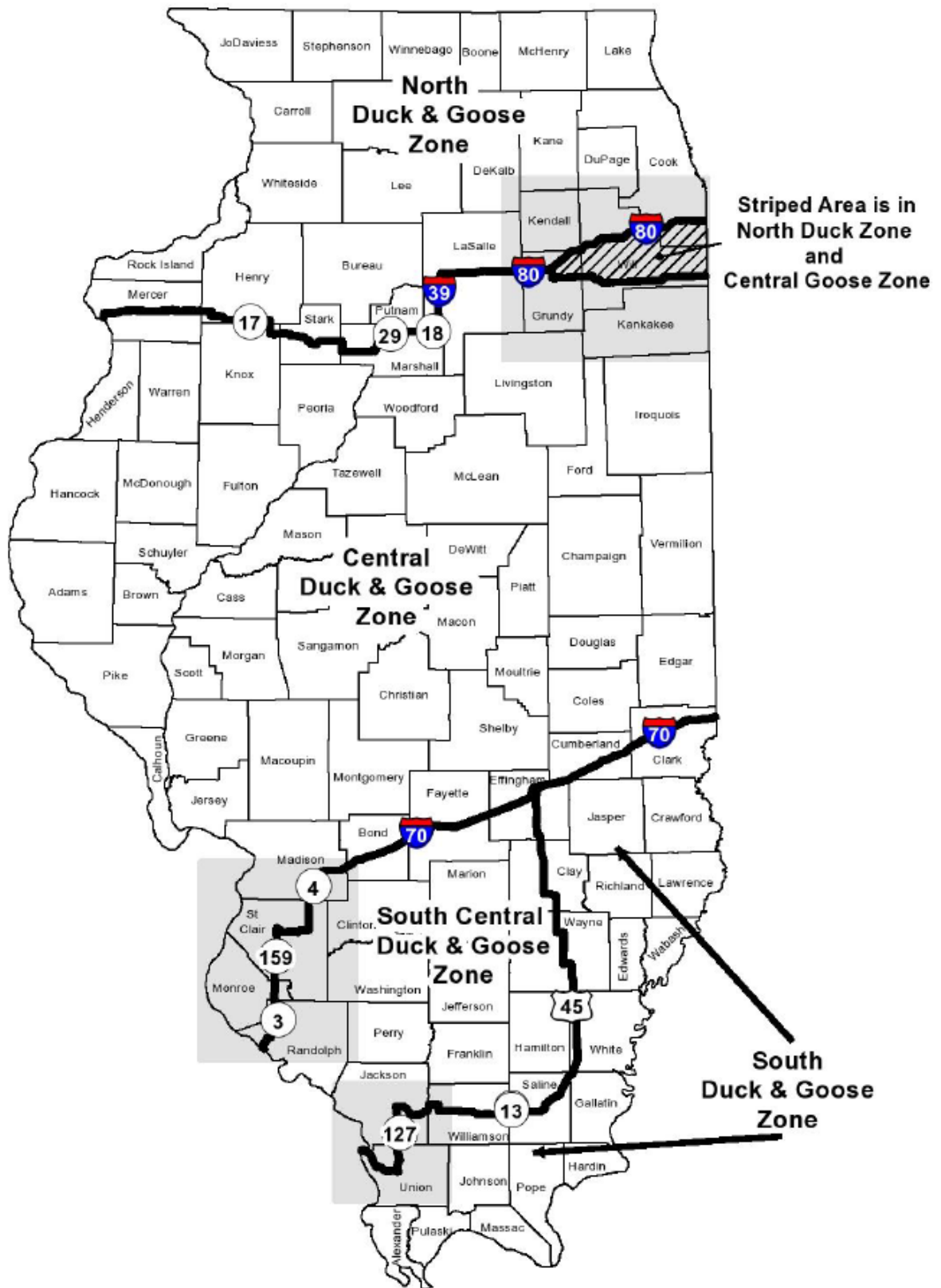


Table F-1. Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest in Illinois from 1981 through 2018 hunting seasons.

Season (Year)	Stamps Purchased	Estimated Hunters	Estimated Days Hunted	Estimated Waterfowl Harvested ^a
1981	61,929	63,652	874,730	413,264
1982	57,691	58,766	795,807	392,897
1983	56,162	58,240	815,523	475,601
1984	55,250	56,533	748,390	420,357
1985	55,670	56,899	699,113	392,253
1986	59,734	61,876	887,446	467,164
1987	58,803 (5,550) ^b	60,371	814,918	354,194
1988 ^c	53,498 (4,350)	53,450	644,056	264,316
1989 ^c	55,693 (3,570)	55,709	749,033	322,359
1990 ^c	55,009 (2,390)	55,152	708,391	270,796
1991 ^c	58,421 (2,130)	59,038	855,279	406,854
1992	51,261 (1,395)	51,274	714,550	292,535
1993	50,976 (995)	51,340	682,498	326,446
1994	57,543 (955)	53,226	816,185	332,803
1995	60,564 (665)	55,454	884,328	498,854
1996	62,417 (545)	56,956	836,793	376,248
1997	59,961 (480)	54,715	881,030	401,236
1998	54,550 (450)	50,288	795,561	471,072
1999	63,782 (350)	58,003	1,472,301	783,195
2000	62,701 (330)	56,954	1,115,076	708,092
2001	63,745 (300)	59,029	1,337,297	695,790
2002	61,345 (1,520)	53,428	1,054,047	504,616
2003	61,991 (260)	57,985	1,251,974	650,906
2004	60,264	54,803	1,083,910	494,775
2005	55,734	48,772	868,299	526,221
2006	63,965	58,302	1,194,801	700,571
2007	66,765	57,454	1,150,304	678,623
2008	69,590	59,379	1,175,243	660,306
2009	68,549	59,987	1,222,980	613,335
2010	64,828	50,936	985,075	513,882
2011	66,581	52,660	1,147,037	577,654
2012	64,896	50,740	1,155,346	580,557
2013	66,394	49,170	1,052,728	605,720
2014	70,391	50,698	982,193	550,946
2015	58,247	40,104	795,289	488,321
2016	54,920	41,242	870,721	490,463
2017	52,069	37,215	732,166	421,384
2018	55,303	40,047	831,043	412,402

^aTeal, ducks, coots, and geese combined, and including September Teal and Canada goose seasons and youth hunt.

The U.S. Fish and Wildlife Service suspended the September Teal season in 1988 through 1991.

^bStamps purchased for commercial art purposes. These stamps were not included in the numbers to the left.

^cEstimates of waterfowl hunters and days afield for these years reduced to 92.48% - 96.48% of the original estimates. Estimates of waterfowl (Teal, ducks, Coots, and geese combined) harvested reduced to 94.54% - 97.74 of original estimates. See Anderson and Williamson (1994) for explanation.

Table F-2. The percentage of regular season waterfowl hunters who hunted exclusively ducks, exclusively geese, or both ducks and geese in Illinois from 1981 through 2018 seasons.

Season (Year)	Hunted Ducks Only	Hunted Geese Only	Hunted Both Ducks and Geese	Duck Hunters	Goose Hunters
1981	63.0%	14.1%	22.9%	85.9%	37.0%
1982	59.1%	11.1%	29.8%	88.9%	40.9%
1983	55.0%	13.4%	31.6%	86.6%	45.0%
1984	60.3%	12.1%	27.6%	87.9%	39.7%
1985	61.1%	9.7%	29.2%	90.3%	38.9%
1986	51.0%	13.4%	35.6%	86.6%	49.0%
1987	46.6%	14.3%	39.1%	85.7%	53.4%
1988	35.5%	19.1%	45.4%	80.9%	64.5%
1989	29.2%	21.3%	49.5%	78.7%	70.8%
1990	26.7%	29.7%	43.6%	70.3%	73.4%
1991	26.0%	27.3%	46.7%	72.7%	74.0%
1992	31.3%	23.4%	45.3%	76.6%	68.7%
1993	30.9%	20.2%	48.9%	79.8%	69.1%
1994	30.3%	16.5%	53.2%	83.5%	69.7%
1995	33.2%	23.4%	43.4%	76.6%	66.8%
1996	35.8%	22.3%	41.9%	77.7%	64.2%
1997	38.8%	22.2%	39.0%	77.8%	61.2%
1998	47.6%	17.0%	35.4%	83.0%	52.4%
1999	27.2%	10.6%	62.2%	89.4%	72.8%
2000	34.0%	23.1%	42.9%	76.9%	66.0%
2001	33.0%	9.9%	57.1%	90.1%	67.0%
2002	33.8%	10.2%	56.0%	89.8%	66.2%
2003	32.3%	12.6%	55.1%	87.4%	67.7%
2004	32.1%	10.5%	57.4%	89.5%	67.9%
2005	37.2%	11.5%	51.3%	88.5%	62.8%
2006	28.8%	13.5%	57.7%	86.5%	71.2%
2007	27.7%	12.2%	60.1%	87.8%	72.3%
2008	25.9%	10.6%	63.5%	89.4% ^a	74.1% ^a
2009	27.5%	8.4%	64.1%	91.6% ^a	72.5% ^a
2010	25.0%	13.1%	61.9%	86.9% ^a	75.0% ^a
2011	20.7%	18.3%	61.0%	81.7%	79.3%
2012	29.4%	9.8%	60.8%	90.2%	70.6%
2013	30.2%	9.8%	60.0%	90.2%	69.8%
2014	30.8%	10.9%	58.3%	89.1%	69.2%
2015	28.3%	8.6%	63.0%	91.3%	71.6%
2016	29.3%	8.2%	62.5%	91.8%	70.7%
2017	29.8%	12.3%	57.8%	85.9%	68.8%
2018	31.9%	9.2%	58.9%	90.8%	68.1%

^a2008-2010 numbers changed to reflect responses in the sample.

Table F-3. Summary of Teal harvest and hunter activity during September Teal season (Illinois, 1981-2018).

Season (Year)	Estimated Hunters	Estimated Days Hunted	Estimated Teal Harvest
1981	14,802	38,586	22,946
1982	14,863	41,856	28,785
1983	13,295	39,475	29,355
1984	14,158	39,481	32,730
1985	13,852	36,521	29,260
1986	15,449	40,241	30,375
1987	12,297	32,582	23,193
1988 ^a	-----	-----	-----
1989 ^a	-----	-----	-----
1990 ^a	-----	-----	-----
1991 ^a	-----	-----	-----
1992	7,696	18,265	12,069
1993	6,474	16,722	8,562
1994	8,062	20,341	12,436
1995	9,123	24,865	19,731
1996	8,964	22,825	11,565
1997	11,819	32,179	22,005
1998	10,307	33,049	21,270
1999	20,036	74,170	55,199
2000	14,733	52,229	38,597
2001	17,222	61,199	36,013
2002	10,171	29,381	12,542
2003	10,522	34,505	20,453
2004	8,097	23,928	8,463
2005	6,686	17,708	10,953
2006	12,378	43,223	28,016
2007	13,478	48,115	29,800
2008	14,652	52,365	19,981
2009	15,436	55,139	19,222 ± 7,372
2010	13,038	49,038	20,127 ± 9,322
2011	11,221	42,811	21,227 ± 7,993
2012	10,944	46,719	31,942 ± 11,740
2013	10,378	37,431	21,967 ± 7,169
2014	11,282	42,635	29,058 ± 10,909
2015	9,615	37,574	28,031 ± 9,911
2016	8,969	38,610	25,346 ± 9,296
2017	7,526	28,306	15,062 ± 5,480
2018	9,263	35,334	23,326 ± 8,817

^aThe September Teal season was suspended by the U.S. Fish and Wildlife Service during these years

Table F-4. Rates of Teal harvest and hunter activity during September Teal season (Illinois, 1981-2018).

Season (Year)	Season Length/ Bag Limit	Days Hunted Per Hunter	Teal Harvest Per Hunter	
			Per Day	Per Season
1981	9/4	2.61	0.59	1.55
1982	9/4	2.82	0.69	1.94
1983	9/4	2.97	0.74	2.21
1984	9/4	2.79	0.83	2.31
1985	9/4	2.64	0.80	2.11
1986	9/4	2.60	0.75	1.97
1987	9/4	2.65	0.71	1.89
1988 ^a	----	----	----	----
1989 ^a	----	----	----	----
1990 ^a	----	----	----	----
1991 ^a	----	----	----	----
1992	9/4	2.37	0.66	1.57
1993	9/4	2.58	0.51	1.32
1994	9/4	2.52	0.61	1.54
1995	9/4	2.73	0.79	2.16
1996	9/4	2.55	0.51	1.29
1997	9/4	2.72	0.68	1.86
1998	16/4	3.21	0.64	2.06
1999	16/4	3.70	0.74	2.75
2000	16/4	3.55	0.74	2.62
2001	16/4	3.55	0.59	2.09
2002	9/4	2.89	0.43	1.23
2003	16/4	3.28	0.59	1.94
2004	9/4	2.96	0.35	1.05
2005	9/4	2.65	0.62	1.64
2006	16/4	3.49	0.65	2.26
2007	16/4	3.60	0.62	2.21
2008	16/4	3.57	0.38	1.36
2009	16/4	3.57	0.35	1.25
2010	16/4	3.76	0.41	1.54
2011	16/4	3.82	0.50	1.90
2012	16/4	4.27	0.68	2.92
2013	16/6	3.61	0.59	2.12
2014	16/6	3.78	0.68	2.58
2015	16/6	3.91	0.75	2.92
2016	16/6	4.31	0.66	2.83
2017	16/6	3.76	0.53	2.00
2018	16/6	3.81	0.66	2.52

^aSeptember Teal season was suspended by the U.S. Fish and Wildlife Service during these years.

Table F-5. Waterfowl harvest and hunter activity during Youth Waterfowl Hunting Days, 1996-2018.

Season ^a (Year)	Adult Participation	Youth Participation	Days Hunting	Mean Youths/ Hunting Party	Total Ducks	Ducks/ Youth/Day	Total Coots	Coots/ Youth/ Day	Total Geese	Geese/ Youth/ Day
1996	2,749	4,353	4,353	1.58	3,171	0.73	230	0.05	---- ^a	---
1997	3,163	4,322	4,322	1.37	3,451	0.80	387	0.09	---- ^a	---
1998	3,343	5,142	5,142	1.54	4,159	0.81	208	0.04	289	0.06
1999	5,505	8,113	8,113	1.47	5,835	0.72	629	0.08	571	0.07
2000	6,815	10,107	14,079	1.48	8,388	0.60	38	<0.01	882	0.06
2001	9,140	15,148	22,525	1.67	11,727	0.52	480	0.02	971	0.04
2002	8,498	13,325	19,548	1.57	9,085	0.46	271	0.01	887	0.05
2003	7,415	11,419	17,985	1.54	9,184	0.51	178	0.01	1,116	0.06
2004	5,603	7,891	12,997	1.41	7,477	0.58	48	<0.01	561	0.04
2005	4,540	6,489	10,268	1.58	5,644	0.55	583	0.06	965	0.09
2006	5,447	8,024	11,903	1.48	9,863	0.83	133	0.01	732	0.06
2007	6,259	8,981	14,356	1.60	9,141	0.64	850	0.06	1,701	0.12
2008	6,402	9,878	14,799	1.50	10,380	0.70	241	0.02	1,466	0.10
2009	7,073	9,772	15,922	1.63	11,229	0.71	599	0.04	2,396	0.15
2010	5,471	7,452	11,828	1.59	9,156	0.77	419	0.04	1,420	0.12
2011	6,325	8,642	14,059	1.63	9,569	0.68	1,333	0.09	1,318	0.09
2012	7,825	10,001	52,448 ^b	1.27	8,147 ^c	0.41	503 ^c	0.03	1,064 ^c	0.05
2013	8,438	8,639	19,136	1.02	12,715	1.33	359	0.04	2,065	0.23
2014	6,405	8,572	13,798	1.33	9,004	1.30	192	0.03	929	0.14
2015	4,718	6,291	9,873	1.33	8,171	1.65	117	0.02	571	0.12
2016	4,398	5,921	8,553	1.34	6,731	1.57	139	0.03	927	0.23
2017	4,780	6,459	9,956	1.35	8,283	1.66	89	0.02	1,464	0.32
2018	4,822	5,775	8,663	1.20	7,452	1.72	205	0.05	729	0.18

1996 – 1999 were one day seasons and 2000 – present were 2-day seasons.

^aCould not hunt geese during the Youth Waterfowl Hunting Day in 1996 and 1997.

^bResults include youth hunts during the regular season and the 2-day Youth Waterfowl Hunting Days.

^cResults are a 2-day estimate based on the mean number harvested by youth from the entire season

Table F-6. Summary of duck and coot harvest and hunter activity during the regular duck season (Illinois 1981-2018).

Season (Year)	Hunters	Days Afield	Number of Ducks			Total	Coots
			Mallards	Wood Ducks	Other Ducks ^b		
1981	54,744	703,534	170,972	72,065	94,947	337,984	4,950
1982	52,220	646,394	163,439	61,706	101,989	327,134	5,905
1983	50,440	651,409	220,317	72,237	110,862	403,416	10,472
1984	49,715	606,325	182,132	52,955	120,016	355,103	7,702
1985	51,362	556,800	168,549	51,216	97,155	316,920	5,773
1986	53,588	638,090	201,676	65,414	112,490	379,580	7,372
1987	51,704	558,172	155,783	58,488	74,748	289,019	2,694
1988 ^a	43,233	381,985	119,149	23,743	42,836	185,728	1,936
1989 ^a	43,841	407,478	133,128	28,065	63,073	224,266	2,049
1990 ^a	38,759	350,119	112,370	33,253	51,562	197,185	2,287
1991 ^a	42,911	393,247	177,221	49,556	80,793	307,570	1,101
1992	39,272	362,275	124,112	34,280	58,035	216,427	3,275
1993	40,941	366,656	134,334	39,906	43,360	217,600	1,445
1994	44,447	475,264	137,263	44,683	64,998 (3,760)	246,944	3,880
1995	42,499	482,620	230,505	47,155	99,632 (5,393)	377,292	3,386
1996	44,219	460,517	163,311	38,783	82,431 (4,348)	284,525	3,286
1997	42,587	514,934	145,533	44,678	100,950 (5,800)	291,161	3,935
1998	41,755	517,372	200,030	57,393	129,439 (3,948)	386,862	2,920
1999	51,850	860,368	311,325	69,930	181,650 (4,977)	562,905	3,654
2000	43,810	621,542	271,903	58,604	166,834 (4,231)	497,341	2,206
2001	53,194	797,884	305,180	61,515	167,883 (1,968)	534,578	2,904
2002	47,964	642,542	197,392	46,238	106,213 (851)	349,843	1,743
2003	50,658	738,914	285,011	48,023	153,165 (1,789)	486,199	1,693
2004	49,046	652,960	207,982	44,725	116,951 (2,100)	369,658	1,607
2005	43,185	539,672	240,897	37,942	133,509 (3,918)	412,348	2,186
2006	50,437	658,881	308,000	38,366	161,098 (5,927)	507,464	3,065
2007	49,114	600,614	265,369	34,628	164,369 (5,925)	464,366	3,771
2008	50,683	600,574	247,895	43,051	156,849	447,795	2,266
2009	49,648	626,832	228,211	41,549	129,795	399,555 ± 69,698	3,904 ± 3,342
2010	43,450	499,758	193,758	39,611	121,375	354,859 ± 60,571	1,770 ± 2,435
2011	46,619	632,712	222,405	54,294	150,786	427,484 ± 66,551	4,327 ± 2,663
2012	43,444	630,233	244,988	47,623	185,776	478,387 ± 50,294	4,133 ± 3,536
2013	43,653	563,961	225,873	49,001	155,306	430,179 ± 29,431	2,143 ± 4,031
2014	44,019	525,114	197,997	48,216	138,615 (4,820)	384,828 ± 39,741	4,681 ± 3,311
2015	36,499	496,656	166,506	43,655	119,619 (4,437)	329,780 ± 34,835	3,185 ± 1,960
2016	34,386	459,029	154,698	47,986	130,722 (6,794)	333,406 ± 37,408	4,424 ± 1,338
2017	30,025	394,034	136,381	29,372	111,937 (3,624)	277,689 ± 24,826	1,544 ± 921
2018	33,836	464,327	147,733	29,003	96,087 (5,200)	272,823 ± 28,512	2,088 ± 1,764

^aEstimates of duck hunters, days afield, ducks and coots harvested for these years have been reduced to 92.48% - 96.48% of the original estimates. See Anderson and Williamson (1994) for explanation.

^bNumbers in parentheses represent harvest of Canvasback.

Table F-7. Rates of duck harvest and hunter activity during the regular duck season (Illinois 1981-2018).

Season (Year)	Season Length/ Bag Limit ^b	Days Afield Per Hunter	Duck Harvest Per Hunter ^a	
			Per Day	Per Season
1981	50/10(4,2)	12.85	0.48	6.17
1982	50/10(4,2)	12.38	0.51	6.26
1983	50/10(4,2)	12.91	0.62	8.00
1984	50/10(4,2)	12.20	0.59	7.14
1985	40/5(3,1)	10.84	0.57	6.17
1986	40/5(3,1)	11.91	0.59	7.08
1987	40/5(3,1)	10.80	0.52	5.59
1988	30/3(2,1)	8.84	0.49	4.30
1989	30/3(2,1)	9.29	0.55	5.12
1990	30/3(2,1)	9.03	0.54	4.90
1991	30/3(2,1)	9.16	0.72	6.57
1992	30/3(2,1)	9.22	0.57	5.22
1993	30/3(2,1)	8.96	0.58	5.21
1994	40/3(2,1)	10.96	0.51	5.47
1995	50/5(4,1)	11.36	0.74	8.40
1996	50/5(4,1)	10.41	0.58	6.03
1997	60/6(4,2)	12.09	0.57	6.84
1998	60/6(4,2)	12.39	0.75	9.27
1999	60/6(4,2)	16.59	0.65	10.86
2000	60/6(4,2)	14.19	0.80	11.36
2001	60/6(4,2)	15.00	0.67	10.05
2002	60/6(4,1)	13.40	0.54	7.29
2003	60/6(4,1)	14.59	0.66	9.60
2004	60/6(4,2)	13.31	0.57	7.54
2005	60/6(4,2)	12.50	0.76	9.55
2006	60/6(4,2)	13.06	0.77	10.06
2007	60/6(4,2)	12.23	0.77	9.45
2008	60/6(4,2)	11.85	0.75	8.84
2009	60/6(4,2)	12.63	0.64	8.05
2010	60/6(4,2)	11.50	0.71	8.17
2011	60/6(4,2)	13.57	0.68	9.17
2012	60/6(4,2)	14.51	0.76	11.01
2013	60/6(4,2)	12.92	0.76	9.85
2014	60/6(4,2)	11.93	0.73	8.74
2015	60/6(4,2)	13.61	0.66	9.01
2016	60/6(4,2)	13.35	0.73	9.70
2017	60/6(4,2)	13.12	0.70	9.25
2018	60/6(4,2)	13.72	0.59	8.06

^aExcludes ducks harvested coincidentally while goose hunting.

^bThe Point System was used in 1981-1987 (Havera 1999: 17-18). A maximum of 10 ducks (4 mallards, 2 hens) was allowed in 1981-1984, and a maximum of 5 ducks (3 Mallards, 1 hen) was allowed in 1985-1987.

Table F-8. Number of hunters who participated in the early September Canada goose season (Illinois 1997-2018).

	Year	Statewide	Waterfowl Zone				Unknown
			North	Central	South Central	South	
Hunters ^b	1997	11,765	5,577	5,768	-----	-----	420
	1998	11,981	4,837	5,915	-----	677	552
	1999	16,945	6,005	9,869	-----	693	378
	2000	13,289	5,410	6,908	-----	971	0
	2001	20,359	7,318	10,807	-----	2,085	149
	2002	12,459	4,517	6,665	-----	1,135	142
	2003	14,973	5,532	7,761	-----	1,348	332
	2004	11,170	4,250	6,220	-----	984	0
	2005	9,448	3,949	5,034	-----	1,085	0
	2006	12,609	4,848	6,607	-----	1,154	0
	2007	12,788	4,723	6,413	-----	1,652	0
	2008	13,157	4,934	6,690	-----	1,533	0
	2009	15,102	5,232	8,089	-----	1,781	0
	2010	11,015	3,918	5,813	-----	1,285	0
	2011	14,214	4,625	7,889	-----	1,700	0
	2012	11,192 ^a	4,601	5,928	1,161	249	0
	2013	10,865 ^a	3,646	6,076	681	462	0
	2014	12,147 ^a	4,153	6,679	934	554	0
	2015	10,659 ^a	3,226	6,104	1,075	443	0
	2016	9,973 ^a	3,324	5,125	1,316	381	0
	2017	9,225	2,746	5,472	849	296	0
	2018	9,916	3,187	5,503	899	599	0

^aLess than the sum of hunters in individual zones because some hunters hunted more than 1 zone.

^bLess than the sum of hunters in individual zones because some hunters hunted more than 1 zone.

Table F-9. Number of Canada geese harvested during the early September Canada goose season (Illinois 1997-2018).

	Year	Statewide	North	Central	South Central	South	Unknown
Canada Geese	1997	11,443	7,621	3,774	-----	-----	48
	1998	7,852	4,184	3,046	-----	384	238
	1999	20,223	9,124	10,491	-----	491	117
	2000	15,897	6,191	8,774	-----	932	0
	2001	26,021	10,979	13,170	-----	1,580	290
	2002	21,534	8,971	11,130	-----	1,433	0
	2003	15,267	5,907	7,103	-----	2,221	36
	2004	13,587	6,319	5,915	-----	767	0
	2005	9,896	4,862	4,047	-----	987	0
	2006	14,578	6,771	6,717	-----	1,090	0
	2007	16,207	6,057	8,645	-----	1,505	0
	2008	17,419	7,343	8,951	-----	1,125	0
	2009	16,212	6,101	8,336	-----	1,774	0
	2010	17,115	7,967	7,859	-----	1,289	0
	2011	18,790	6,339	10,874	-----	1,577	0
	2012	18,028	8,557	7,664	1,599	228	0
	2013	15,644	5,165	9,271	523	685	0
	2014	19,089	7,527	9,015	1,770	777	0
	2015	15,693	4,233	8,587	2,147	726	0
	2016	17,711	7,895	7,780	1,539	497	0
	2017	16,155	4,154	10,282	1,199	510	20
	2018	35,361	12,777	18,035	2,779	1,771	0

Table F-10. Number of Days Afield during the early September Canada goose season (Illinois 1997-2018).

	Year	Statewide	North	Central	South Central	South	Unknown
Days Afield	1997	34,988	17,991	15,890	-----	-----	1,107
	1998	37,322	15,891	18,247	-----	1,880	1,304
	1999	64,881	21,795	39,768	-----	2,625	693
	2000	47,831	17,396	27,078	-----	3,357	0
	2001	73,587	26,359	40,208	-----	6,318	702
	2002	39,485	14,303	21,049	-----	4,092	41
	2003	51,083	18,799	26,532	-----	5,422	330
	2004	37,941	14,279	19,670	-----	2,592	0
	2005	29,143	12,184	14,352	-----	2,607	0
	2006	42,444	16,735	22,621	-----	3,088	0
	2007	41,549	14,169	22,080	-----	5,300	0
	2008	45,637	17,305	23,174	-----	5,158	0
	2009	51,318	19,591	26,048	-----	5,678	0
	2010	39,019	15,929	19,236	-----	3,854	0
	2011	49,306	16,832	27,441	-----	5,033	0
	2012	39,589	17,079	18,613	3,524	373	0
	2013	40,955	12,323	24,816	2,042	1,774	0
	2014	44,919	16,300	23,844	3,288	1,488	0
	2015	38,744	13,505	21,191	2,404	1,645	0
	2016	41,935	14,925	20,950	4,883	1,177	0
	2017	33,817	9,442	19,714	3,595	1,067	0
	2018	13,165	4,909	6,928	925	404	0

Table F-11. Summary of goose harvest and hunter activity during the regular goose season (Illinois 1981-2018).

Season (Year)	Hunters	Days Afield	Number of Geese		
			Canada Geese	Other Geese	Total
1981	23,610	132,610	44,302 (6,312 ^a)	3,082 (1,719 ^a)	47,384 (8,031 ^a)
1982	24,058	107,557	29,574 (4,968)	1,499 (710)	31,073 (5,678)
1983	26,199	124,639	31,395 (4,325)	962 (577)	32,357 (4,902)
1984	22,426	102,583	23,147 (2,859)	1,675 (593)	24,822 (3,452)
1985	22,160	105,792	37,976 (5,248)	2,324 (753)	40,300 (6,001)
1986	30,327	200,291	45,535 (11,348)	2,625 (832)	48,160 (12,180)
1987	32,246	224,164	36,103 (3,563)	1,525 (499)	37,628 (4,062)
1988 ^b	34,456	251,176	72,550 (3,871)	1,832 (350)	74,382 (4,221)
1989 ^b	39,459	329,369	91,379 (2,988)	1,715 (182)	93,094 (3,170)
1990 ^b	40,459	346,036	67,127 (1,515)	1,319 (97)	68,446 (1,612)
1991 ^b	43,692	450,807	92,239 (1,245)	2,434 (70)	94,673 (1,315)
1992	35,253	334,010	59,352 (2,679)	1,412 (170)	60,764 (2,849)
1993	35,489	299,120	93,361 (1,260)	1,314 (82)	94,675 (1,342)
1994	37,090	320,580	67,790 (1,895)	1,753 (77)	69,543 (1,972)
1995	37,060	367,341	92,478 (4,034)	3,183 (245)	95,661 (4,279)
1996	36,582	339,253	65,864 (2,527)	4,939 (114)	70,803 (2,641)
1997	33,498	295,107	61,282 (4,772)	7,572 (438)	68,854 (5,210)
1998	26,343	202,676	43,222 (2,463)	4,290 (305)	47,512 (2,968)
1999	42,246	464,769	119,611 (1,846)	14,568 (152)	134,179 (1,998)
2000	37,593	383,367	128,387 (1,406)	16,356 (0)	144,743 (1,406)
2001	39,570	382,102	64,907 (1,761)	18,189 (263)	83,096 (2,024)
2002	35,352	323,091	89,297 (3,259)	19,414 (1,433)	108,711 (4,692)
2003	39,275	409,487	83,207 (1,526)	10,458 ^c (342)	93,665 ^c (1,868)
2004	37,189	345,279	81,859 (3,418)	8,231 (349)	90,090 (3,767)
2005	30,614	271,708	74,293 (1,653)	9,353 (62)	83,646 (1,715)
2006	41,521	438,350	122,294 (1,338)	14,426 (869)	136,720 (2,207)
2007	43,046	445,670	141,205 (404)	11,582 (55)	152,787 (459)
2008	44,404	461,868	142,806 (590)	17,956 (0)	160,762 (590)
2009	44,601	473,769	142,836 (585)	17,382 (355)	160,218 ± 36,569 (940)
2010	36,803	385,432	99,422 (534)	9,594 (46)	109,016 ± 22,523 (580)
2011	36,996	411,380	75,061(618)	19,862 (33)	94,923 ± 22,387 (651)
2012	34,034	386,356	72,682 (0)	19,597 (0)	92,280 ± 19,570 (0)
2013	33,809	391,246	104,887 (0)	15,859 (0)	120,746 ± 12,775 (0)
2014	34,226	369,179	87,672 (50)	20,313 (0)	107,985 ± 15,517 (50)
2015	31,280	330,482	75,198	27,576	102,774 ± 17,608 (0)
2016	26,490	312,725	77,216 (0)	24,563 (0)	101,779 (0) ± 18,215
2017	24,039	276,009	78,850 (0)	27,637 (0)	106,486 (0) ± 14,607
2018	25,363	296,021	71,035 (0)	21,578 (0)	92,613 (0) ± 16,720

^aNumber of geese harvested while duck hunting.

^bThe estimates of goose hunters and days hunted for these years have been reduced to 92.48%-96.48% of the original estimates. The estimates for geese harvested have not been reduced (Anderson and Williamson 1994).

^cReduced by 23,151 from estimate given in 2002 report to exclude Conservation Order snow goose harvest.

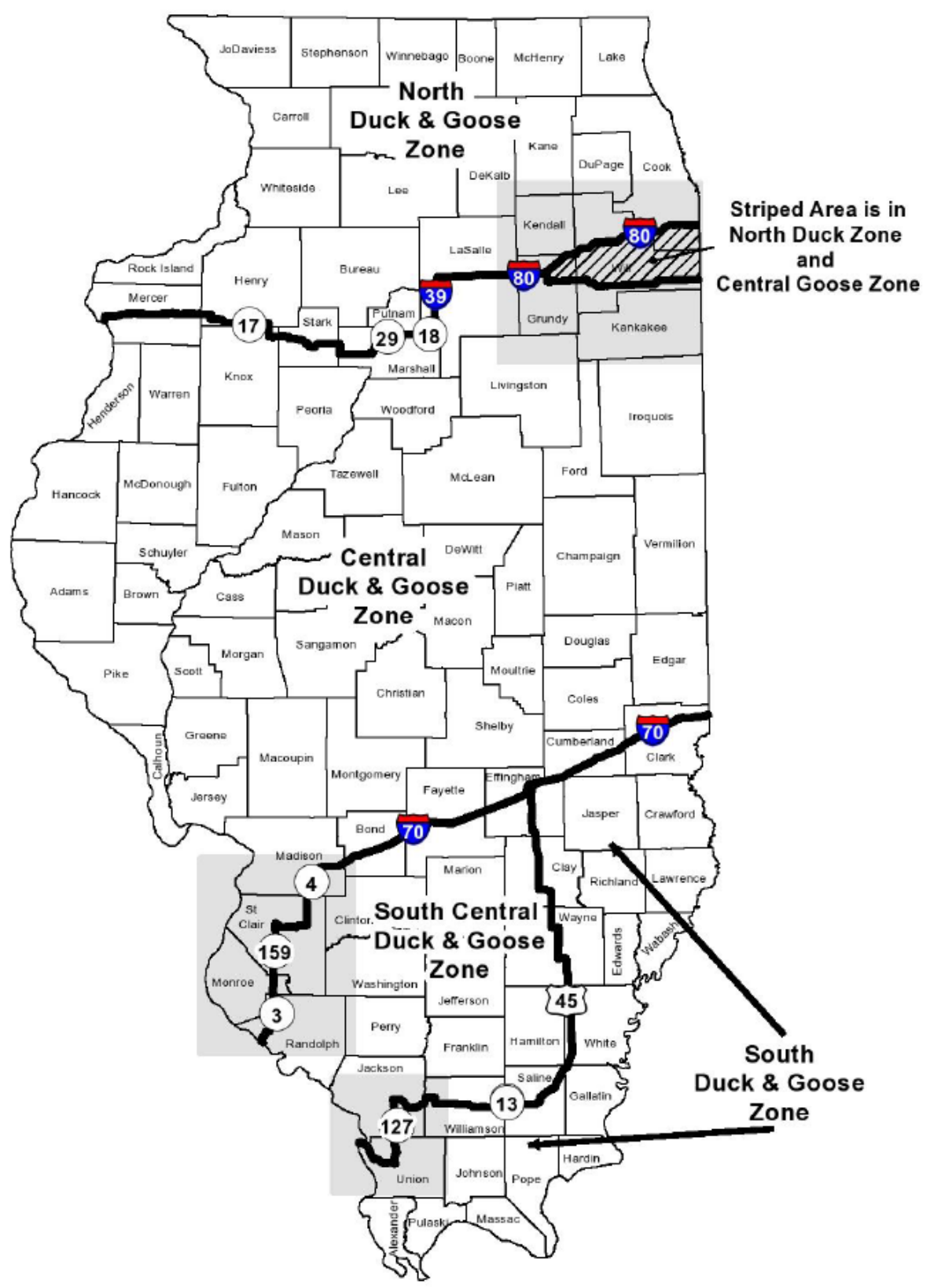
Table F-12. Summary of the number of ducks and geese crippled (Illinois 1981-2018 seasons).

Season (Year)	Estimated Ducks		Estimated Geese	
	Total	Per 100 Bagged	Total	Per 100 Bagged
1981	104,216	30.8	12,573	26.5
1982	82,287	25.2	5,868	18.9
1983	96,907	24.0	7,627	23.6
1984	84,665	23.8	5,711	23.0
1985	100,191	31.6	15,918	39.5
1986	145,283	38.3	20,699	41.5
1987	98,155	34.0	18,375	48.8
1988	65,856	35.5	22,730	30.6
1989	66,150	29.5	21,696	23.3
1990 ^a	59,007	29.9	23,895	34.9
1991 ^a	74,932	24.4	27,164	28.7
1992	68,027	31.4	18,631	32.1
1993	62,250	28.6	21,067	22.3
1994	65,266	26.4	16,234	23.3
1995	86,834	23.0	18,391	19.2
1996	64,324	22.6	16,641	23.5
1997	67,979	23.3	12,490	18.1
1998	74,679	19.3	5,514	11.6
1999	95,961	17.0	12,934	9.6
2000	70,423	14.2	10,071	7.0
2001	88,019	16.5	7,148	8.6
2002	59,005	16.9	6,382	5.9
2003	77,361	15.9	12,661	10.8
2004	63,765	17.2	9,433	10.5
2005	68,121	16.5	7,666	9.2
2006	83,648	16.5	14,110	10.3
2007	77,914	16.8	16,627	10.9
2008	74,044	16.5	14,166	8.8
2009	67,718	16.9	12,245	7.6
2010	57,388	16.2	9,217	8.5
2011	64,268	15.0	6,937	7.3
2012	71,054*	14.9*	10,452*	11.3*
2013	59,064	13.7	8,847	7.3
2014	51,909	13.5	7,856	7.3
2015	47,442	14.4	7,622	7.4
2016	43,666	13.1	6,149	5.6
2017	37,491	13.5	6,657	6.3
2018	36,996	13.6	5,558	6.0

^aThe estimates of ducks and geese crippled for these years have been reduced to 92.48% - 96.48% of the original estimates. The estimates for the number of geese crippled per 100 bagged have been similarly reduced. See Anderson and Williamson (1994) for explanation.

*Amended from 2012-13 report.

Appendix G



WATERFOWL SEASON DATES AND LIMITS						
SPECIES	Zone	DATES (inclusive)	HOURS	DAILY LIMIT	POSSESSION LIMIT	ADDITIONAL REGULATIONS
Teal <i>(early season)</i>	Statewide	8-23 Sep 2018	Sunrise to Sunset	6	18	Blue-winged teal, green-winged teal and cinnamon teal are the only legal duck species during this season. Daily and possession limits are for all teal species combined (in the aggregate).
Rail <i>(Sora and Virginia only)</i>	Statewide	8 Sep– 16 Nov 2018		25	75	Daily and possession limits are for both rail species combined (in the aggregate).
Snipe <i>(Wilson's snipe)</i>	Statewide	8 Sep– 23 Dec 2018		8	24	
Ducks	North	20 Oct– 18 Dec 2018	1/2 hour before sunrise to sunset	6	18	Basic daily limit is 6 ducks of any species. However, daily limit can consist of no more than the following: 4 mallards (of which no more than 2 can be hen mallards), 3 wood ducks, 3 scaup, 2 redheads, 2 canvasback, 2 black ducks, 2 pintail and 1 mottled duck. Possession limit for ducks is three times the daily limit by species and sex.
	Central	27 Oct– 25 Dec 2018				
	South-central	10 Nov 2018– 8 Jan 2019				
	South	22 Nov 2018– 20 Jan 2019				
Mergansers	Same as ducks	Same as ducks		5	15	
Coots	Same as ducks	Same as ducks	15	45		
Canada Geese <i>(early season)</i>	North and Central	1-15 Sep 2018	5	15		
	South-central and South		2	6		
Canada Geese	North	20 Oct– 17 Jan 2019	2	6		
	Central	27 Oct–4 Nov 2018 and 12 Nov 2018– 31 Jan 2019				
	South-central	10 Nov 2018– 31 Jan 2019				
	South	22 Nov 2018– 31 Jan 2019				

WATERFOWL SEASON DATES AND LIMITS

SPECIES	Zone	DATES (inclusive)	HOURS	DAILY LIMIT	POSSESSION LIMIT	ADDITIONAL REGULATIONS
Light Geese <i>(Snow/Blue/Ross' Geese)</i>	North	20 Oct 2018– 17 Jan 2019	1/2 hour before sunrise to sunset	20	Unlimited	Daily bag limit is for both species combined (in the aggregate).
	Central	27 Oct 2018– 31 Jan 2019				
	South-central	10 Nov 2018– 31 Jan 2019				
	South	22 Nov 2018– 31 Jan 2019				
Brant	Same as light geese	Same as light geese		1	3	
White-fronted Geese <i>(Specklebellies)</i>	North	22 Oct 2018– 17 Jan 2019	1/2 hour before sunrise to 1/2 hour after sunset	2	6	
	Central	5 Nov 2018– 31 Jan 2019				
	South-central	10 Nov 2018– 31 Jan 2019				
	South	22 Nov 2018– 31 Jan 2019				
Conservation Order Light Geese <i>(Snow/Blue/Ross' Geese)</i>	North	18 Jan– 31 Mar 2019	1/2 hour before sunrise to 1/2 hour after sunset	Unlimited	Unlimited	The following apply to the Conservation Order only: 1) unplugged shotguns may be used and there is no limit to the number of shells that may be placed in a shotgun, 2) electronic calling devices may be used, 3) federal duck stamp not required, 4) Illinois duck stamp and hunting license is required.
	Central, South-central, South	1 Feb– 31 Mar 2019				
Youth waterfowl	North	13-14 Oct 2018	1/2 hour before sunrise to sunset	Same as during regular duck, goose, and coot seasons	Same as during regular duck, goose, and coot seasons	The following apply to the Youth season only: 1) youth hunters must be 17 years of age or younger and must have a hunting license and HIP registration/ certification unless hunting on property where they reside, 2) no stamps are re- quired for youths under 16, 3) state and federal waterfowl stamps are required for all hunters age 16 and older, even those hunting with a Youth License, unless exempt, 4) hunters aged 18 years and older may not hunt waterfowl and coots during the Youth Waterfowl Hunting Days, even if hunting with a Youth License.
	Central	20-21 Oct 2018				
	South-central	3-4 Nov 2018				
	South	10-11 Nov 2018				