HumanDimensions
Research Program

Illinois Natural History Survey
Prairie Research Institute
University of Illinois at
Urbana-Champaign

2017-2018 Illinois Waterfowl Hunter Report: Harvest, Youth Hunts, and Zone Option Preferences

Craig A. Miller, Ph.D.
Program Leader and Principal Investigator
Human Dimensions Research Program
Illinois Natural History Survey

Prepared by
Brent D. Williams, Linda K. Campbell,
and Craig A. Miller

Federal Aid Project
Number W-112-R-27
Job Number 101.3
Wildlife Restoration
Oct. 1, 2017-Sept. 30, 2018

Wayne Rosenthal, Director
Illinois Department of Natural Resources

Paul Vehlow
Federal Aid Coordinator

Mark G. Alessi
Chief, Division of Wildlife Resources

INHS Technical Report 2018 (40)
October 15, 2018

Key words: Waterfowl, harvest, youth hunts, zone options

Suggested Citation:
Williams, B.D., L.K. Campbell, and C.A. Miller. 2018. 2017-2018 Illinois Waterfowl Hunter Report: Harvest, Youth Hunts, and Zone Option Preferences. Job Completion Report, Federal Aid in Wildlife Restoration W-112-R-27. Human Dimensions Research Program Report HR-18-03/INHS Technical Report (40). Illinois Natural History Survey, Champaign, IL. 84pp.

2017-2018 ILLINOIS WATERFOWL HUNTER REPORT: Harvest, Youth Hunts, and Zone Option Preferences

JOB COMPLETION REPORT

WILDLIFE HARVEST AND
HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-27
STUDY 101
JOB NO. 101.3

Craig A. Miller, Ph.D.
Program Leader and Principal Investigator
Human Dimensions Research Program
Illinois Natural History Program

Prepared by
Brent D. Williams, Linda K. Campbell,
and Craig A. Miller, Ph.D.
Illinois Natural History Survey
Champaign, IL
October 15, 2018

Federal Aid in Wildlife Restoration
W-112-R-27

Illinois Department of Natural Resources

Wayne Rosenthal, Director
Illinois Department of Natural Resources

Mark G. Alessi, Chief
Division of Wildlife Resources

Equal opportunity to participate in programs of the Illinois Department of Natural Resources (IDNR) and those funded by the U.S. Fish and Wildlife Service and other agencies is available to all individuals regardless of race, sex, national origin, disability, age, religion or other non-merit factors. If you believe you have been discriminated against, contact the funding source's civil rights office and/or the Equal Employment Opportunity Officer, IDNR, One Natural Resources Way, Springfield, IL 62702-1271; 217/785/0067; TTY 217/782/9175.

LIST OF FIGURES

Page

Figure 1 .....Percent of hunters who purchased an Illinois State Waterfowl Stamp for the 2017-18 seasons.....4
Figure 2 .....Percent of license purchasers who hunted waterfowl in Illinois during the 2017-18 waterfowl season 4
Figure 3 .....Number of stamps sold, waterfowl hunters, and waterfowl harvested in Illinois, 2000-2016 5
Figure 4 .....Percentage of hunters who hunted ducks, geese, or both during the 2017-18 Illinois waterfowl season.....5
Figure 5 .....Teal harvest and hunter activity during the Illinois September teal season, 2000-2016.....6
Figure 6 .....Rates of teal harvest and hunter activity during the Illinois September teal season, 2000-2016 6
Figure 7 .....Percentage of hunters who took a youth hunting during the 2016 Youth Waterfowl Hunting Days 7
Figure 8 .....Percentage of hunters who took at least one youth (<16 years old) hunting for the first time 7
Figure 9 .....Percentage of hunters who took a youth hunting during the 2017-18 regular duck or goose season 8
Figure 10 .....Seasons hunters took a youth hunting during 2017-18 8
Figure 11 .....Reasons why hunters' take youth hunting.....8
Figure 12 .....Zones hunters hunted in most often during the 2017-18 duck season 9
Figure 13 .....Percent of hunters* by zone that used spinning wing decoys in duck season 9
Figure 14 .....Proportion of Mallards, Wood Ducks, and Other Ducks harvested during the 2017-18 regular duck season.....10
Figure 15 .....Illinois regular season duck harvest, 2000-2017 10
Figure 16 .....Distribution of days afield per hunter and ducks harvested for Illinois' 2017-18 regular duck season 11
Figure 17 .....Early September Canada goose harvest and hunter activity 2000-2017.....12
Figure 18 .....Early September Canada goose harvest and hunter activity by zone in Illinois during 2017.....12
Figure 19 .....Goose harvest during Illinois' regular goose season from 2000-2017. 13
Figure 20 .....Illinois' regular Canada goose season harvest.....13
Figure 21 .....Distribution of days afield per hunter and geese harvested per hunter for regular goose season 14
Figure 22 .....Proportion of hunters who harvested white fronted geese during the waterfowl season 15
Figure 23 .....Comparison between the number of white-fronted geese hunters seen in 2017-18 compared to the last 5 years.....15
Figure 24 .....Proportion of hunters who targeted white-fronted (specklebelly) geese during the Regular Goose Season 15
Figure 25 .....Duck and goose hunter opinions about the timing of the 2017-18 waterfowl seasons 16
Figure 26 .....Percentage of waterfowl hunters that feel the county they hunt in most often is in the correct zone.....18
Figure 27 .....Percentage of waterfowl hunters that hunted public lands for waterfowl.....18
Figure 28 .....Zone in which public land hunted was located.....18
Figure 29 .....Percentage of waterfowl hunters whose public land use was in a blind awarded by lottery.....18
Figure 30 .....Zone hunted most often by central zone hunters 20
Figure 31 .....Zone hunted most often by south central zone hunters 20
Figure 32 .....Percent of hunters satisfied with the current line between the North zone and the Central zone 20
Figure 33 .....Preferred type of habitat duck and goose hunters hunted in Illinois during 2017-18 seasons.....20
Figure 34 .....Percent of hunters satisfied with the current line between the South and Central zones.....21
Figure 35 .....Percent of unsatisfied hunters who want Central/South Central zone line moved in the indicated direction 21
Figure 36 .....Hunters satisfaction with the current line between the South Central Zone and the Central Zone.....22
Figure 37 .....Percent of hunters who want the current South Central/Central Zone line moved in the indicated direction 23
Figure 38 .....Percent of hunters satisfied with the current line between the South and South Central zones 24
Figure 39 .....Percent of unsatisfied hunters who want South/South Central zone line moved in the indicated direction 24
Figure 40 .....Percent of Central zone hunters who believe their county is in the correct zone.....24
Figure 41 .....Percent of South Central zone hunters who believe their county is in the correct zone 24
Figure 42 .....Gender distribution of respondents who hunted waterfowl during one of the 2017-18 waterfowl seasons 27
Figure 43 .....Number of hunters whose first-time hunting waterfowl in Illinois was during 2017-18 season 27
Figure 44 .....How often respondents hunt waterfowl in Illinois 27

LIST OF TABLES AND APPENDICES

Page

Table 1.....Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest.....30
Table 2.....Percentage of hunters who hunted exclusively ducks, exclusively geese, or both ducks and geese,.....30
Table 3 .....Summary of Teal harvest and hunter activity during September Teal season 31
Table 4 .....Teal harvest and hunter activity by zones during September Teal season.....31
Table 5 .....Rates of Teal harvest and hunter activity during September Teal season 32
Table 6 .....Waterfowl harvest and hunter activity during Youth Waterfowl Hunting Days, 2004-2016.....33
Table 7.....Summary of duck and coot harvest and hunter activity during the regular duck season, 2004-2016.....34
Table 8.....Duck harvest and hunter activity by waterfowl zones and selected areas during the regular duck season.....35
Table 9.....Rates of duck harvest and hunter activity during the regular duck season 35
Table 10.....Distribution of the number of days afield and number of ducks harvested 36
Table 11.....Canada goose harvest and hunter activity during the early September Canada goose season.....37
Table 12.....Summary of goose harvest and hunter activity during the regular goose season 38
Table 13.....Distribution of the number of days afield and number of geese harvested 38
Table 14.....Goose harvest and hunter activity by zones, regular season 39
Table 15.....Canada goose harvest by zone during the regular goose season (3 year trend) 39
Table 16.....Summary of the number of ducks and geese crippled 40
Table 17.....Illinois duck hunters' levels of satisfaction with various aspects of the 2017-18 duck seasons 41
Table 18.....Illinois goose hunters' levels of satisfaction with various aspects of the 2017-18 goose seasons.....42
Table 19.....Hunter opinions of the timing of the 2017-18 waterfowl seasons 43
Table 20.....Duck hunter zoning option preferences for 2021 through 2025 43
Table 21.....Duck hunter zone structure preference for 2021 through 2025 seasons.....44
Table 22.....Illinois waterfowl hunter satisfaction with current zone lines.....44
Table 23.....How should current Illinois Waterfowl Zone lines move.....45
Table 24.....Predicted effect of a zone change on various aspects of duck hunting season.....46
Table 25.....Preferred zone placement for hunters who feel their county is in the wrong zone 47
Table 26.....Opinion of zone timing by county hunted most often 48
Table 27.....Predicted effect of a zone change on various aspects of duck hunting season.....49
Table 28.....Duck hunters* of concern zoning option preferences for 2021 through 2025 50
Table 29.....Duck hunters* of concern zone structure preference for 2021 through 2025 seasons.....50
Table 30.....Importance of waterfowl hunting to those who hunted this year, and those that did not 51
Table 31.....Relationship to adults that were mentored in waterfowl hunting 52
Table 32.....Reason for introducing an adult to waterfowl hunting.....52

Appendix A .....Illinois Waterfowl Hunter Survey: 2017-18 Season 53
Appendix B .....Cover letter sent with first mailing of the 2017-18 Illinois Waterfowl Hunter Survey.....61
Appendix C .....Thank you/reminder postcard sent as follow-up to the mailings 63
Appendix D .....Cover letter sent with second mailing of the 2017-18 Illinois Waterfowl Hunter Survey.....64
Appendix E .....Cover letter sent with third mailing of the 2017-18 Illinois Waterfowl Hunter Survey 66
Appendix F.....Historic Data: Harvest, Days Afield, and Hunter numbers 1981-2016.....68
Appendix G.....Map of Illinois waterfowl zone boundaries.....80
Appendix H.....Waterfowl season dates and bag limits 81

OBJECTIVE

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

ABSTRACT

A total of 3,190 (44% response rate) Illinois waterfowl hunters returned usable questionnaires to the 2017-18 Illinois Waterfowl Hunter Survey. An estimated 37,215 adult waterfowl hunters spent 1 day or more afield during 2017-18, a decrease of 9.7% from the 41,242 hunters in 2016-17. Waterfowl hunters spent 732,166 days afield, a decrease of 15.9% from the 870,721 days devoted during the 2016-17 license year. Total waterfowl harvest decreased 0.4%, from 490,463 during 2016-17 to 421,384 during 2017-18. Duck harvest estimates for the regular duck season were as follows: 136,381 mallards (*Anas platyrhynchos*), 29,372 wood ducks (*Aix sponsa*), and 111,937 other ducks. A total of 15,062 teal (*Anas spp.*) were harvested during the September teal season. Goose hunters harvested 78,850 Canada geese (*Branta canadensis*) during the regular Canada goose season, a 2.1% increase from the 77,216 Canada geese harvested during the 2016-17 regular goose season. Hunters harvested 16,155 Canada geese during the September Canada goose season, an 8.8% decrease from the previous year. During the Youth Waterfowl Hunting Season, 4,780 adults took 6,459 youths waterfowl hunting, an 8.7% increase in adult participation and a 9.1% increase in youth participation from the 2016-17 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 2017-18 license year. An additional 2,000 hunters were selected from areas of concern in the central and south zones. No pre-season diary for recording hunting activity and waterfowl harvest was sent during the fall of 2017. On 20 March 2018, hunters were mailed an 8-page questionnaire

(Appendix A), cover letter (Appendix B), and a postage-paid return envelope. The effective sample was reduced to 7,696 questionnaires due to 304 being returned as undeliverable. A thank you/reminder postcard (Appendix C) was sent to hunters on 11 April 2018. Non-respondents were mailed a second questionnaire and cover letter (Appendix D) on 24 April 2018, followed by a second postcard mailing on 14 May 2018. A third and final questionnaire and cover letter (Appendix E) were mailed to non-respondents on 29 May 2018. Coded data were entered and analyzed using SPSS 25.0 (SPSS Inc. 2017). Confidence intervals are presented where appropriate.

Statewide Estimates

Estimates of number of hunters, days afield, and waterfowl harvested were based on confirmed sales of 52,069 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 and stamp exempt hunters were removed beginning with the estimates of 2016-17. The original formulas are presented for understanding how previous years 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 2017-18 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 2017-18,

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 2017-18 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:

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

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 2017-18. 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*). All species had a possession limit of 3 times the daily bag.

RESULTS

Waterfowl Harvest and Days Afield

We received 3,975 questionnaires from waterfowl hunters, of which 3,190 (80.3%) were considered usable, for an overall response rate of 44%. Of the 3,190 usable questionnaires, 2,636 (82.6%) respondents indicated they purchased an Illinois State Waterfowl Stamp for the 2017-18 season (Figure 1) and 1,884 (66.3%) of license purchasers reported hunting 1 day or more for waterfowl (Figure 2). The number of waterfowl hunters decreased from 41,242 during the 2016-17 season to 37,215 during the 2017-18 season, a 9.8% decrease in the number of hunters (Figure 3 and Table 1). Hunters reported spending 732,166 days afield, a decrease of 16.1% from the 870,721 days devoted during the 2016-17 license year. Total waterfowl harvest decreased 14.1%, from 490,463 during 2016-17 to 421,384 during the 2017-18 season (Table 1). Twenty-nine percent of hunters hunted ducks only, 12.3% hunted geese only, and 57.8% hunted both ducks and geese (Figure 4 and Table 2).

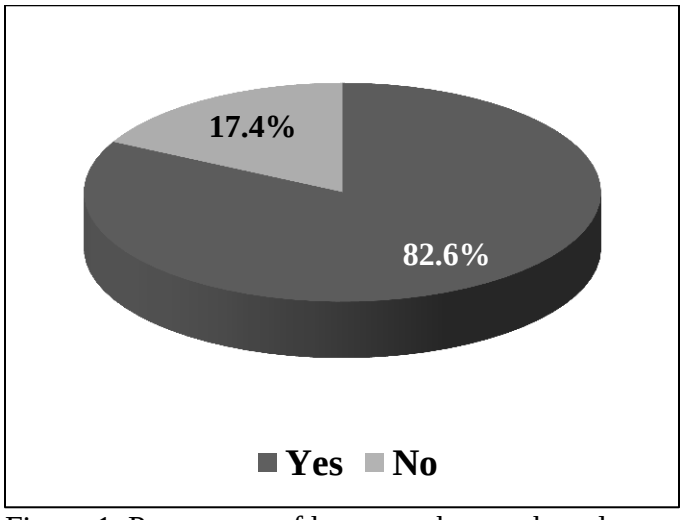


Figure 1. Percentage of hunters who purchased an Illinois State Waterfowl Stamp for the 2017-18 seasons (*n*=3,190).

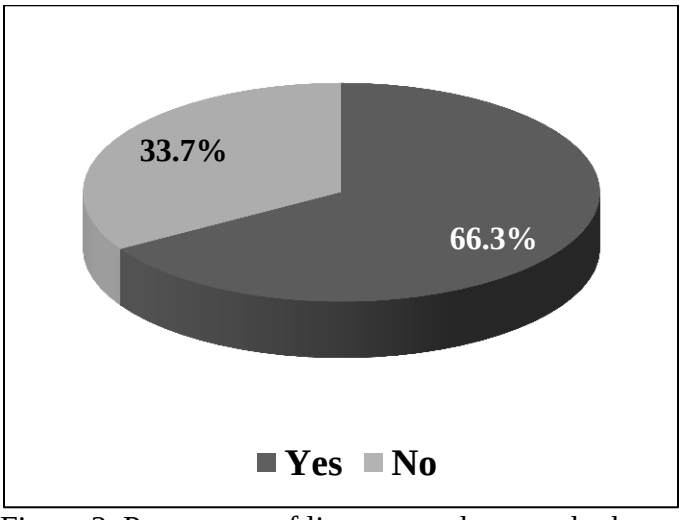


Figure 2. Percentage of license purchasers who hunted waterfowl (ducks, geese, or coots) in Illinois during the 2017-18 waterfowl hunting season (*n*=2,842).

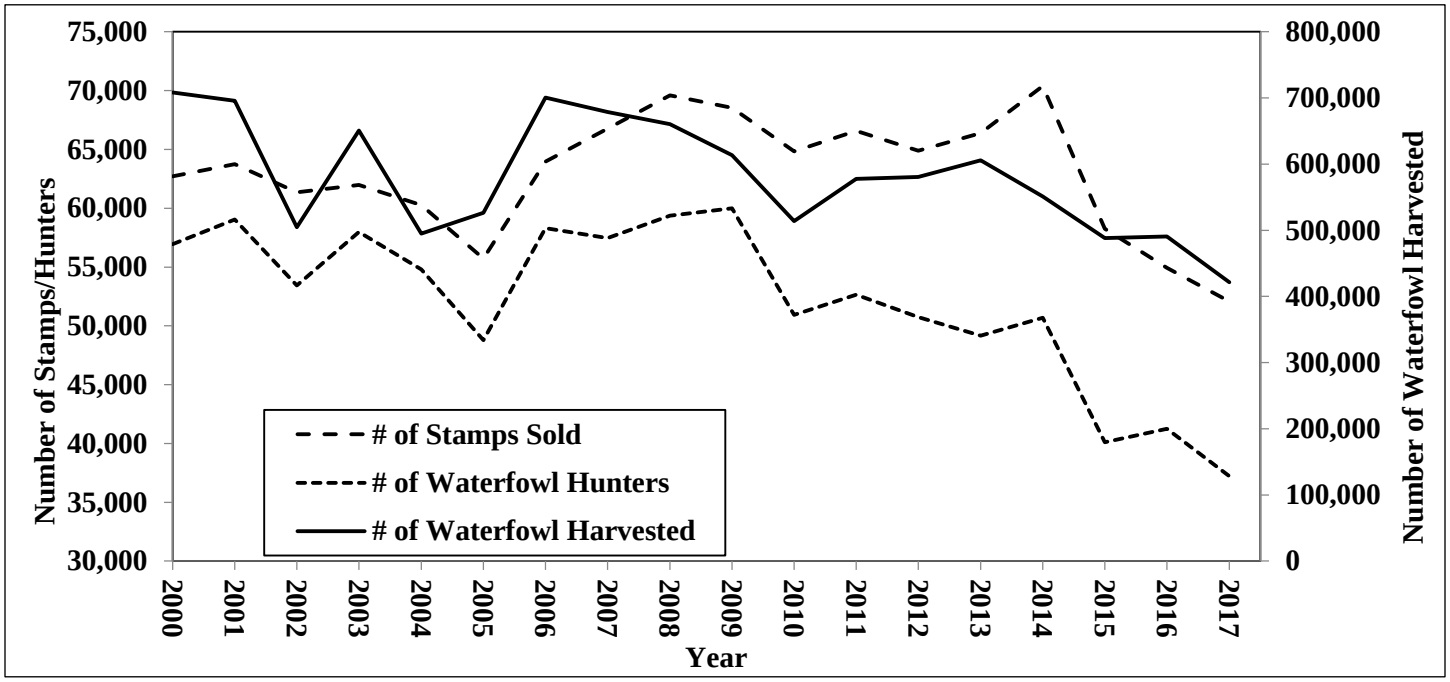


Figure 3. Number of stamps sold, waterfowl hunters, and waterfowl harvested in Illinois, 2000-2017.

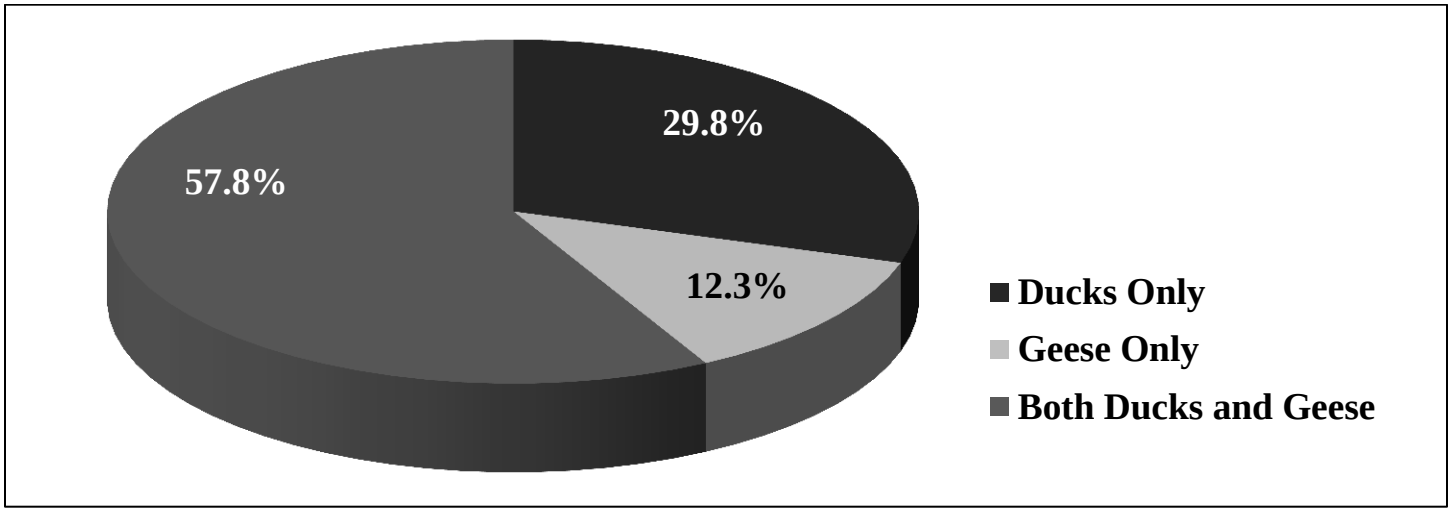


Figure 4. Percentage of hunters who hunted ducks, geese, or both during the 2017-18 Illinois waterfowl season.

September Teal Season

The number of early (September) teal season hunters decreased 16.1% from 8,969 during 2016 to 7,526 during 2017 (Figure 5 and Table 3). Days afield decreased 26.7% from 38,610 during 2016 to 28,306 during 017. Fewer numbers of teal hunters and decreased days afield coincided with a decreased teal harvest of 15,062 ± 5,480 during the 2017 September teal season, a 40.6% decrease from the 2016 harvest (25,346). The Central zone accounted for over one-half of teal hunters (53.6%), most of the teal harvested (50.2%), and half of teal

hunter days afield (54.3%). 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 3.76 days afield, and harvested an average of 0.53 teal per hunter per day and 2.00 teal per hunter for the season (Figure 6 and Table 5).

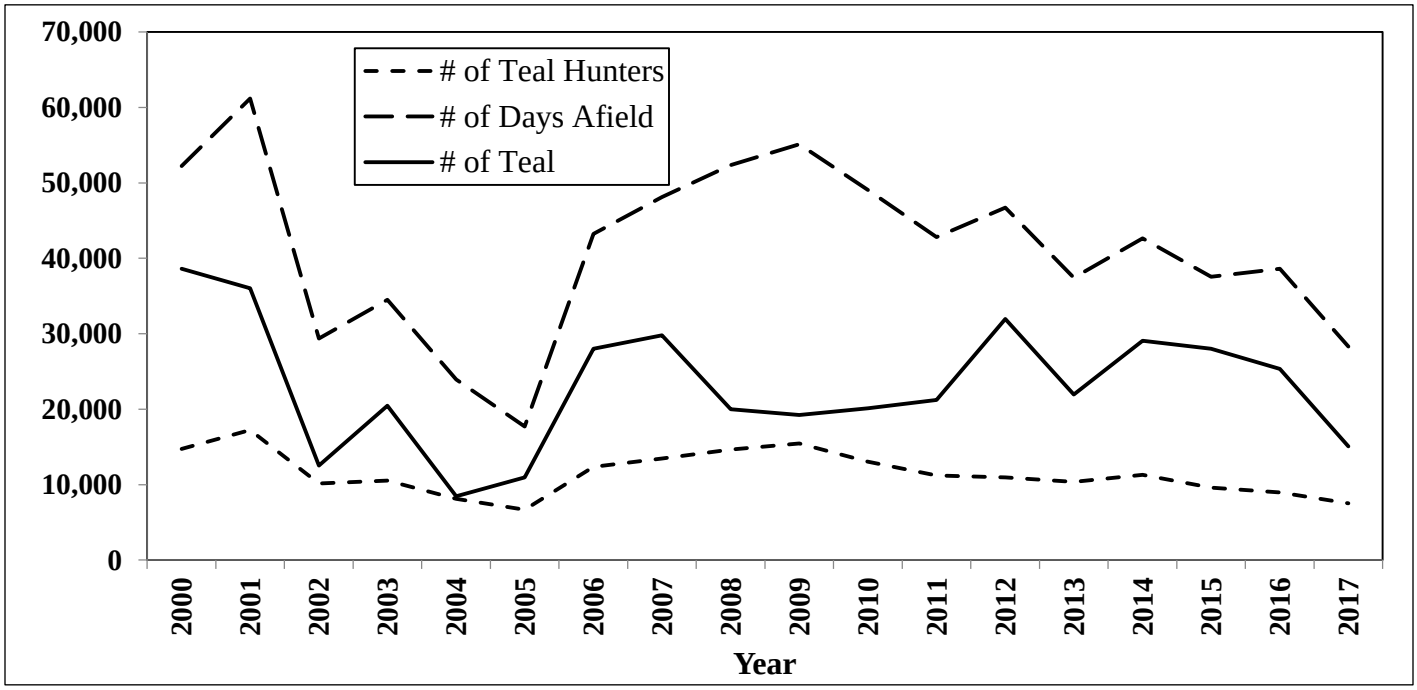


Figure 5. Number of teal harvested and hunter activity during the Illinois September teal season, from 2000-17.

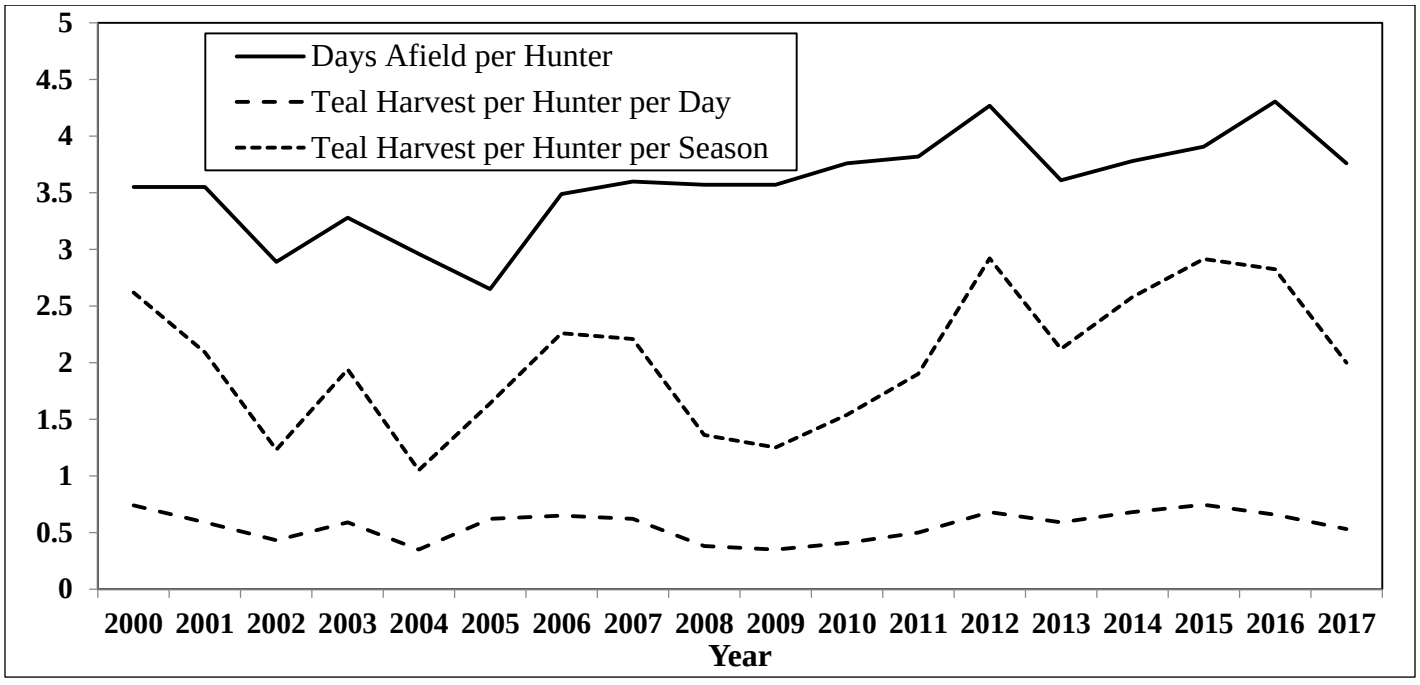


Figure 6. Rates of teal harvest and hunter activity during the Illinois September teal season from 2000-2017.

Youth Waterfowl Hunting

US Fish and Wildlife Services set the age for participating in Youth Waterfowl Hunts at age 17 and under. As of January 1, 2016, any Illinois resident age 18 and under can purchase a youth hunting license. Therefore, even though hunters age 18 may possess a youth hunting license they are not allowed to participate in Youth Waterfowl Hunting Days. Moreover, waterfowl hunters age 16 and older need both federal and state water stamps, whereas those age 15 and under do not. The Youth Waterfowl Season dates changed in all 4 zones, but number of days remained unchanged from 2016 to 2017. 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. Ten percent of those who purchased an Illinois waterfowl stamp took a youth hunting during the Youth Waterfowl Hunting Days (Figure 7). The number of adults who participated in the 2017 youth waterfowl hunt increased 8.7% from 4,398 to 4,780 participants, and number of youth participants increased 9.1% from 5,921 during 2016 to 6,459 youths during 2017 (Table 6).

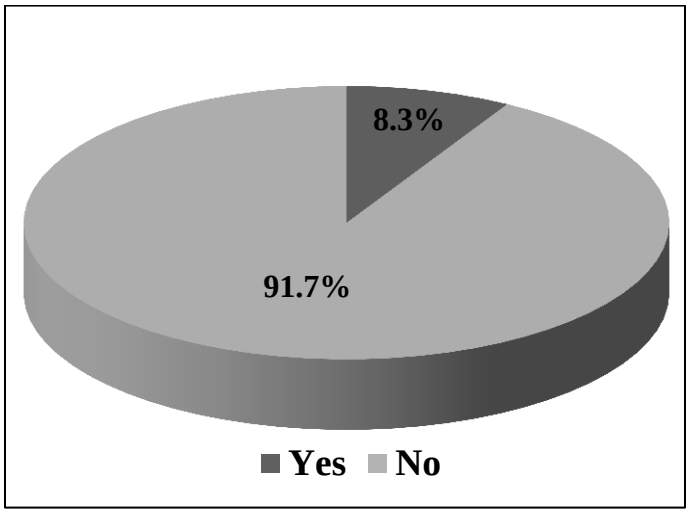


Figure 7. Percentage of hunters who took a youth (less than 17 years old) hunting during the 2017 Youth Waterfowl Hunting Days (*n*=3,190).

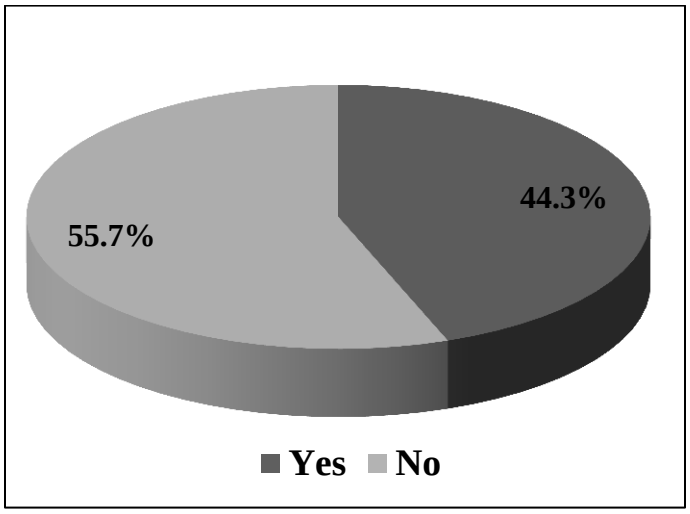


Figure 8. Percentage of hunters* who took at least one youth (less than 17 years old) hunting for the first time (*n*=262).
*Cases selected for those who indicated they took a youth hunting during the 2017 Youth Waterfowl Hunting Days.

Almost half (44.6%) of the hunting groups that participated in the 2017 youth waterfowl season had at least one youth who had never hunted ducks or geese before (Figure 8), and 22.3% of hunters indicated this was their

first time accompanying a youth during the hunt. Harvest (ducks, geese, and coots combined) during the youth season increased 26.2%, from 7,797 during 2016 to 9,836 during 2017.

Twenty percent of respondents (20.9%) took a youth hunting during the regular duck or goose season; an additional 2.5% had a youth accompany them but did not hunt (Figure 9). Hunters were more likely to take youths hunting during the regular duck season than goose season (Figure 10). The most popular responses for why hunters take youth waterfowl hunting was to "teach responsible and safe hunting practices" and "protect the sport for future generations" (Figure 11). Fifty six percent of waterfowl hunters have introduced a non-youth hunter to waterfowl hunting.

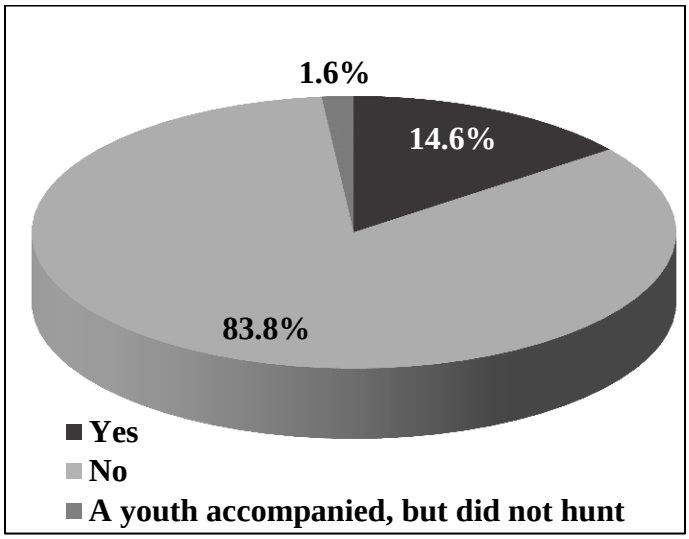


Figure 9. Percentage of respondent who took a youth (<17 years of age) hunting during the 2017-18 regular duck or goose season in Illinois (*n*=2,583).

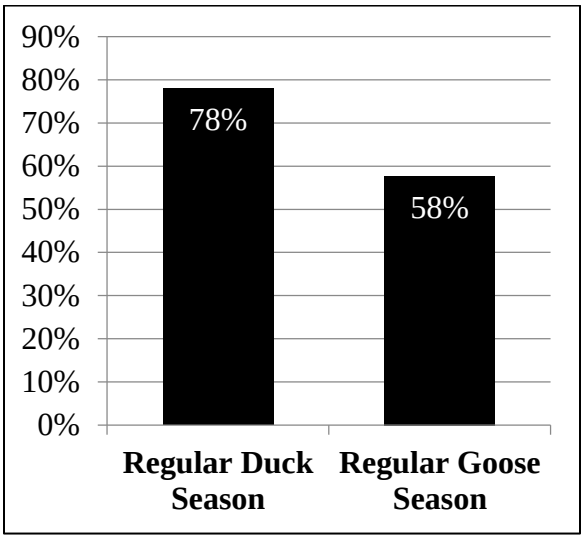


Figure 10. Seasons hunters* took a youth (<17 years of age) hunting during 2017-18 (*n*=378).
*Cases selected for those who took youth hunting or had youth accompany them while hunting.

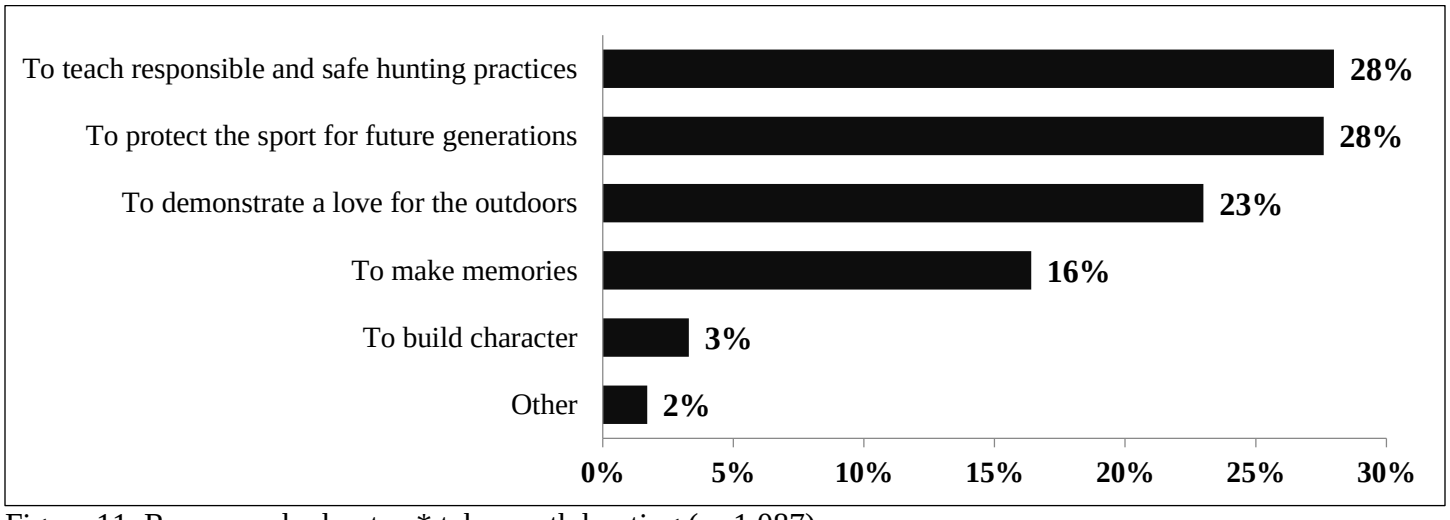


Figure 11. Reasons why hunters* take youth hunting (*n*=1,087).
*Cases selected for those who indicated they hunted 1 day or more during any 2017-18 waterfowl season.

Regular Duck Season

Number of duck hunters decreased by 4,361 (12.7%) from 34,386 during the 2016-17 season during the 2017-18 season (Table 7). Duck hunters spent 394,034 days afield (*M*= 13.12) during the 2017-18 season, a decrease of 14.2% from the 459,029 days reported during the 2016-17 season. Over half (50.5%) 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).

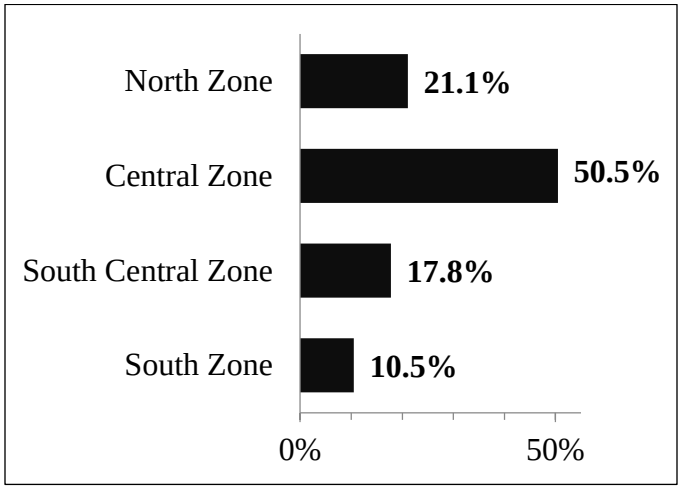


Figure 12. Zones hunters* hunted in most often during the 2017-18 duck season (*n*=1,520).
*Cases selected for those who indicated they hunted for at least one day during the 2017-18 duck seasons.

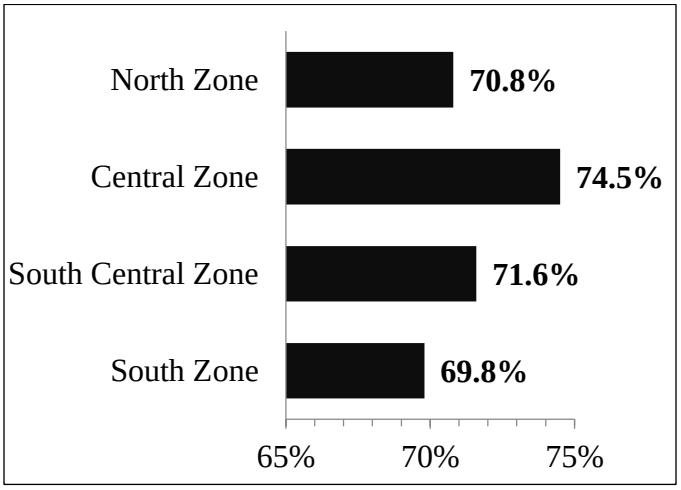


Figure 13. Percent of hunters* by zone that used Spinning wing decoys in duck season (*n*=1,512).
*Cases selected for those who indicated they hunted for at least one day during the 2017-18 duck seasons.

Total duck harvest during 2017-18 was 277,689, down 16.7% from the 333,406 reported for 2016-17 (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 decreased by 18,317 birds (11.8%) from 154,698 during the 2016-17 season to 136,381 during the 2017-18 season (Figure 15 and Table 7). Wood duck harvest decreased 18,614 (38.8%) from 47,986 during 2016-17 to 29,372 during 2017-18. The harvest of other ducks decreased 18,785 (14.4%) from 130,722 during 2016-17 to 111,937 during 2017-18, and statewide coot (*Fulica americana*) harvest decreased from 4,424 during 2016-17 to 1,544 coots during 2017-18.

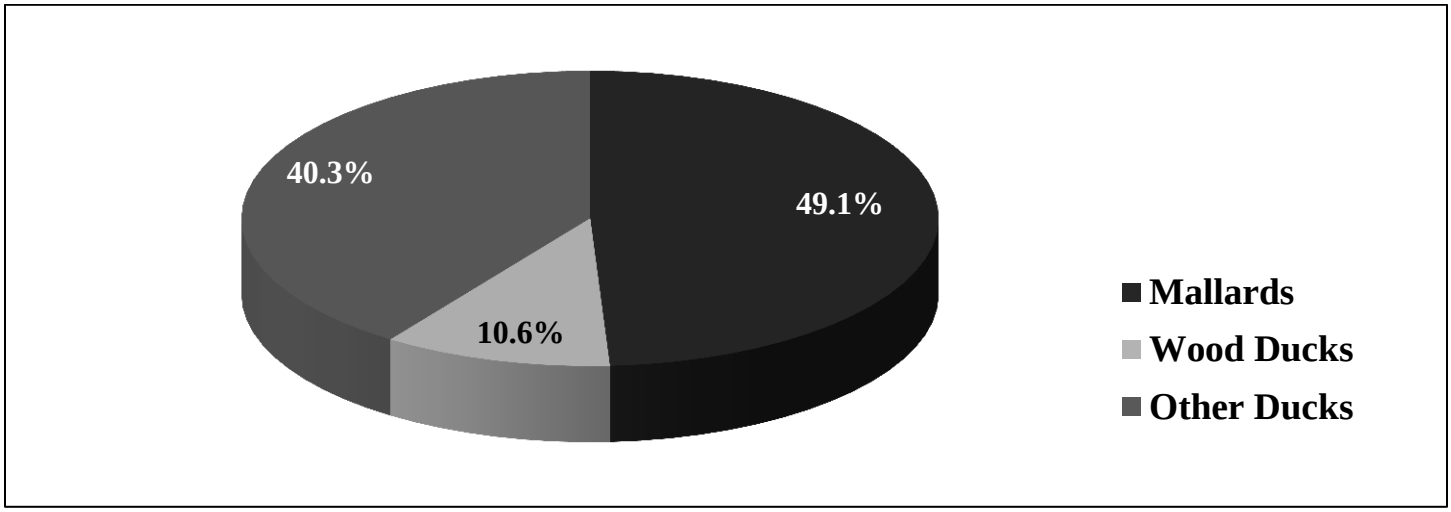


Figure 14. Proportion of Mallards, Wood, & Other Ducks harvested during the 2017-18 regular duck season.[a]

[a] Proportions 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.

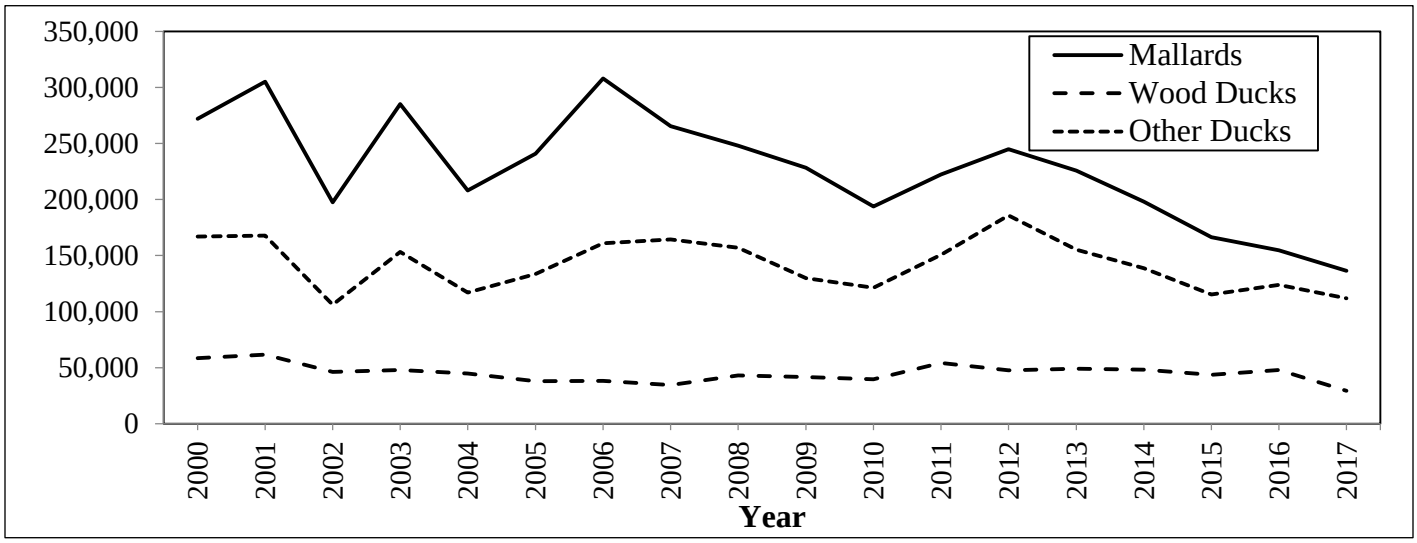


Figure 15. Illinois regular season duck harvest, 2000 – 2017.

The 2017-18 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 0.89 ducks per day, whereas the South Central zone had the highest season success rate (harvest/hunter/season) at 10.55 ducks per season. Statewide, duck hunter daily success decreased to 0.70 ducks/day and hunter season success decreased from 9.70 in 2016-17 to 9.25 during 2017-18 (Table 9). Of duck hunters who reported hunting ≥ 1 day (n=1,520), 38.0% hunted 5 days or less (Figure 16 and Table 10); 14.7% of duck hunters reported not harvesting any ducks, whereas 18.4% harvested more than 30 ducks.

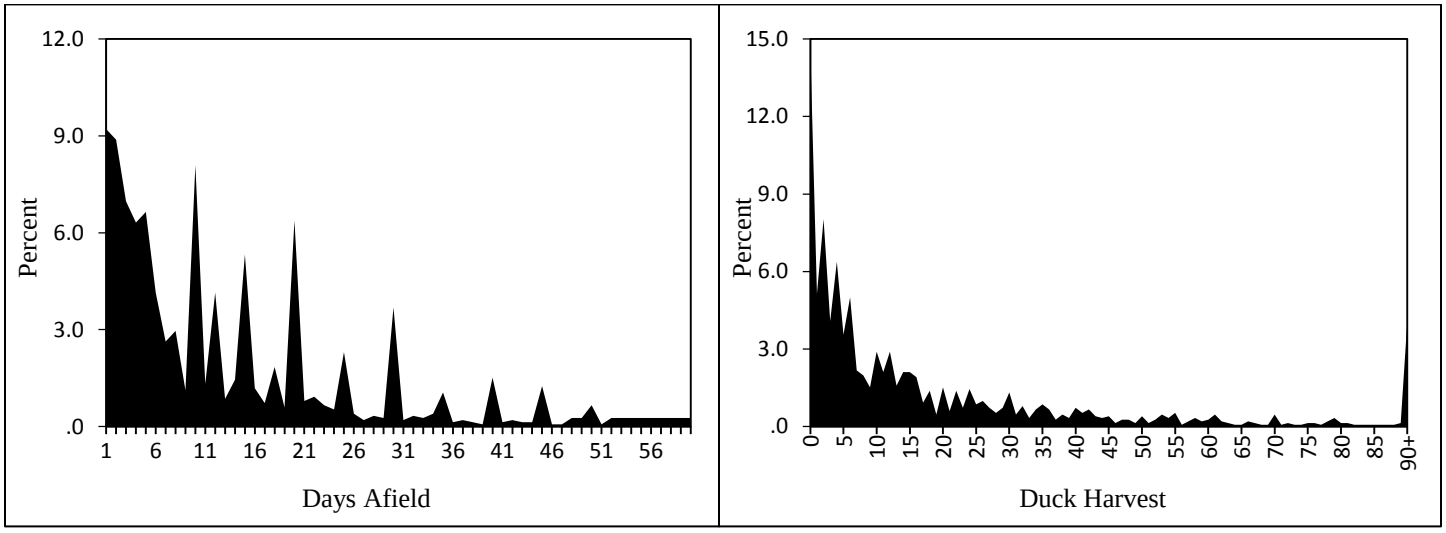


Figure 16. Distribution of days afield per hunter and ducks harvested per hunter for Illinois' during the 2017-18 regular duck season.

Early September Goose Season

An estimated 9,225 hunters participated in the early (September) Canada goose season in Illinois during the 2017 season, a decrease of 7.5% from the 9,973 who participated during 2016 (Figure 17 and Table 11). Statewide, early goose season hunters spent 33,817 days afield in 2017, 19.4% fewer than in 2016 (41,935), and harvested approximately 16,155 Canada geese, a decrease from the 2016 (17,711) harvest by 8.8%. The Central zone accounted for the most hunters and days afield, 59.3% and 63.6 %, respectively (Figure 20, Table 11).

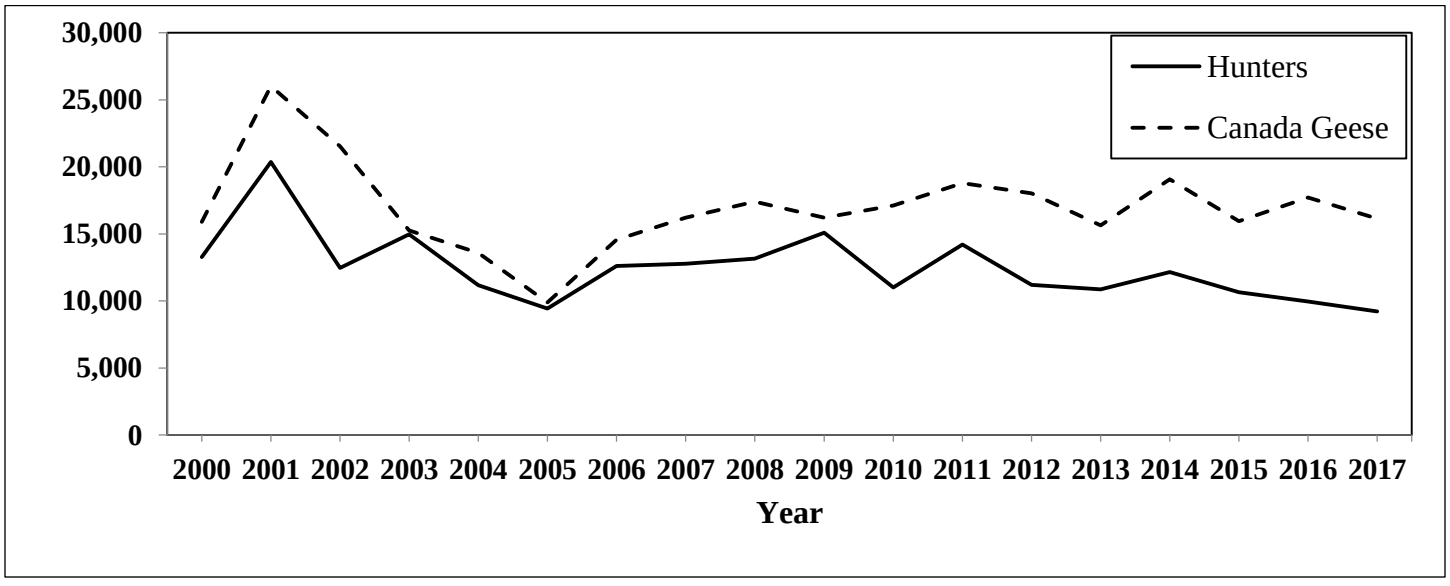


Figure 17. Early September Canada goose harvest and hunter activity, 2000-2017.

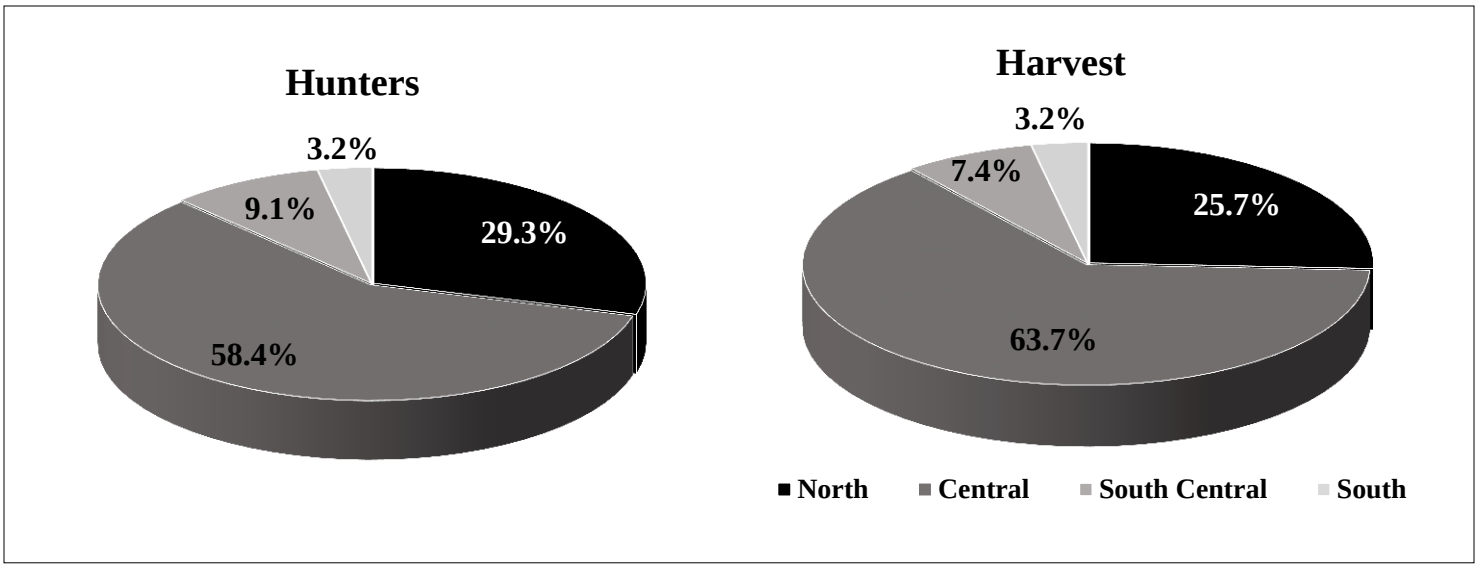


Figure 18. Early September Canada goose harvest and hunter activity by zone in Illinois during 2017.

Regular Canada Goose Season

Canada goose harvest during the 2017-18 regular goose season increased 2.1% from 2016-17 (Table 12, Figure 19). An estimated 24,039 hunters spent 276,009 days afield and harvested 78,850 Canada geese during 2017-18. Number of goose hunters in Illinois decreased 9.3% during 2017-18 compared to 2016-17, and number of days afield decreased 11.7%. Hunters also harvested 27,637 other geese, of which 17,902 were light geese (snow, blue or Ross' geese) (*Chen caerulescens*) and 9,735 were white-fronted geese (*Anser albifrons*), for a total combined harvest of 106,489 geese (Table 12, Figure 20).

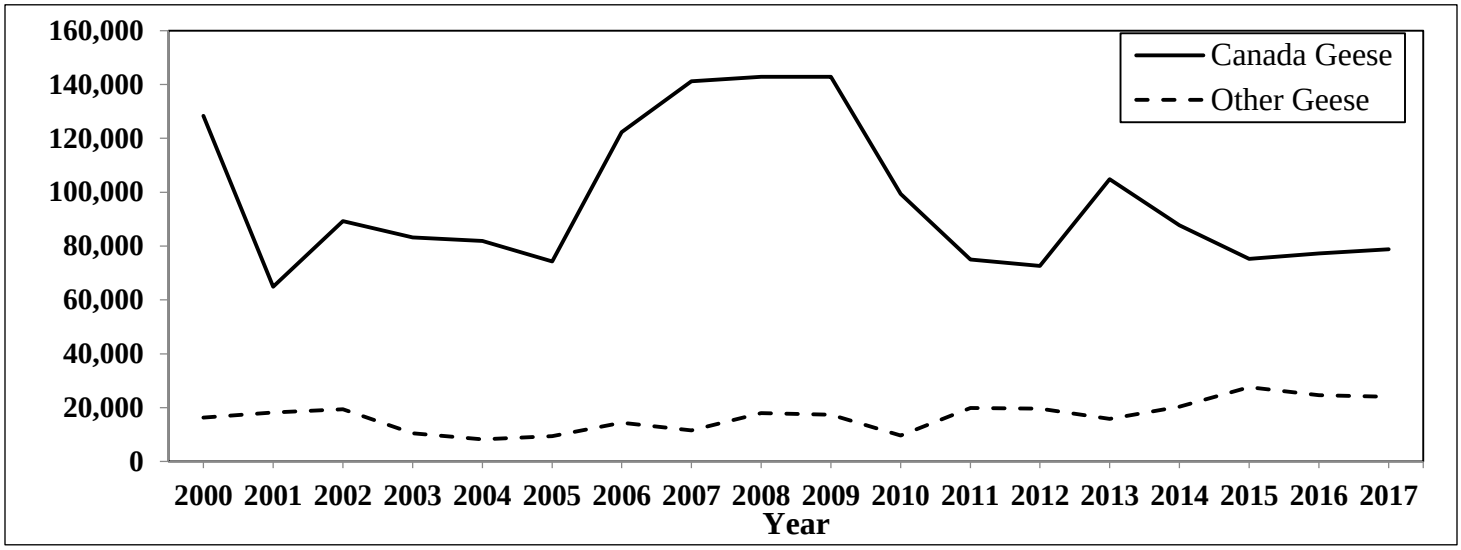


Figure 19. Goose harvest during Illinois' regular goose season from 2000-2017.

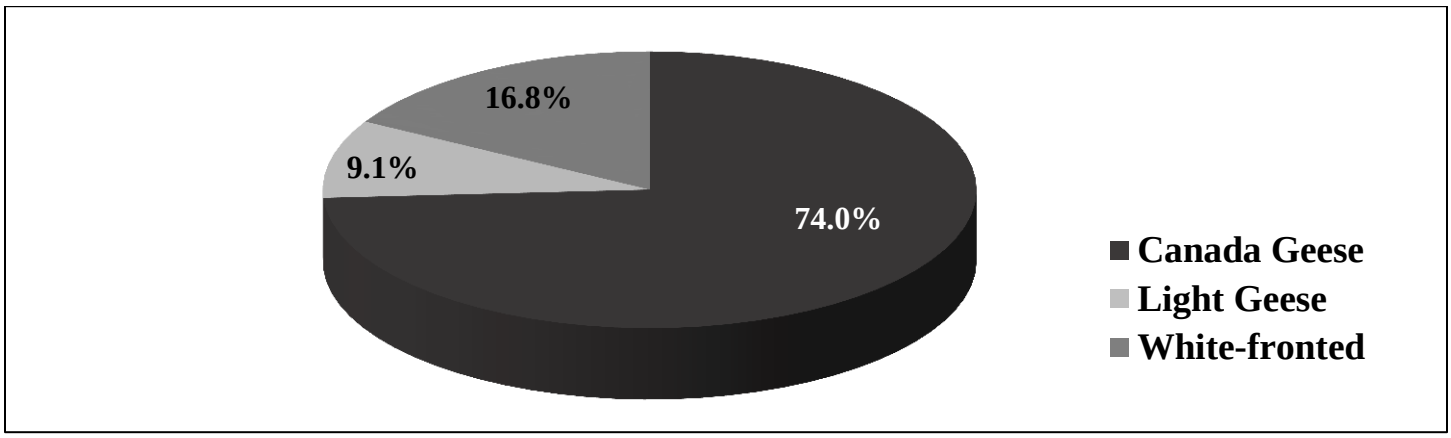


Figure 20. 2017-18 Illinois' regular Canada goose season harvest.

Goose hunters reported a mean of 11.48 days afield and mean harvest of 3.28 Canada geese and 1.15 other geese per hunter per season; 40.8% 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 (58.1%), days afield (54.2%), and Canada geese harvested (57.4%); the most white-fronted (51.9%) and light geese (37.2%) were also harvested in the Central Zone (Table 14). Harvest of Canada geese is summarized by zone and year (2015-16 through 2017-18) in Table 15.

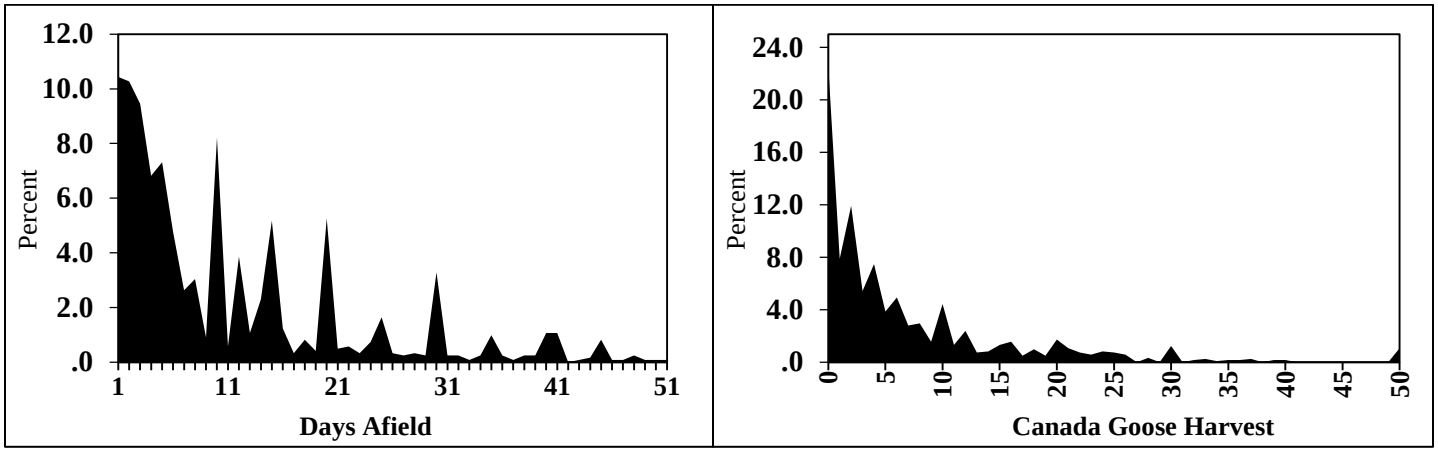


Figure 21. Distribution of days afield per hunter and geese harvested per hunter for Illinois' 2017-18 regular goose season.

Crippling Losses

Crippling losses (birds downed but not retrieved) during the 2017-18 regular season were estimated at 37,491 ducks and 6,657 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 13.5 ducks and 6.3 geese lost per 100 harvested.

White-fronted/Specklebelly Harvest

Eighteen percent of those who hunted one day or more for geese during 2017-18 harvested white-fronted (specklebelly) geese (Figure 22). Forty-seven percent of regular goose hunters saw more or much more white fronted geese as compared to five years ago (Figure 23). Over 80% of the 229 hunters (84.2 %) who harvested specklebelly geese indicated they saw more during the 2017-18 season than in the previous 5 years, while 11.4% saw the same amount and 4.3% saw fewer. Although most regular goose hunters (81.1%) did not harvest specklebelly geese; only 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).

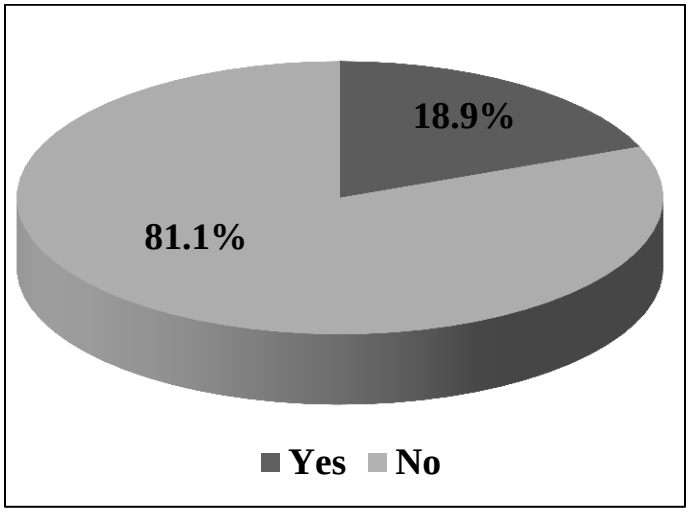


Figure 22. Proportion of hunters* who harvested white-fronted (specklebelly) geese during the 2017-18 waterfowl hunting seasons (*n*=1,217).
*Cases selected for those who indicated they hunted for at least one day during the 2017-18 goose seasons.

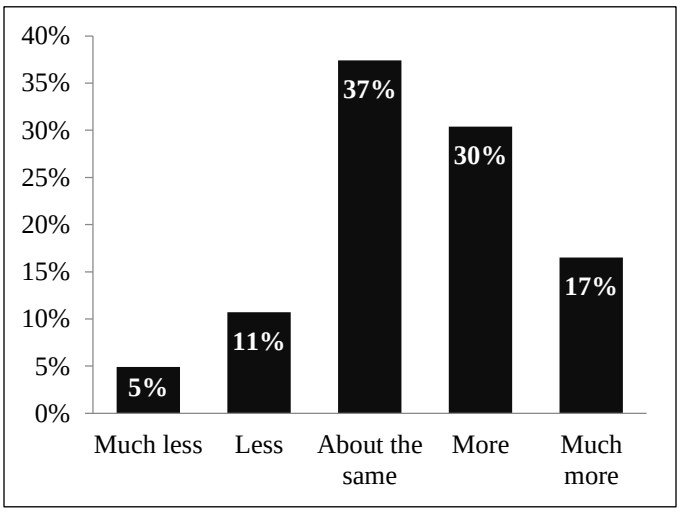


Figure 23. Comparison between the number of white-fronted geese hunters* seen in 2017-18 compared to the last 5 years (*n*=1,156).
*Cases selected for those who hunted for at least one day during the 2017-18 regular goose season.

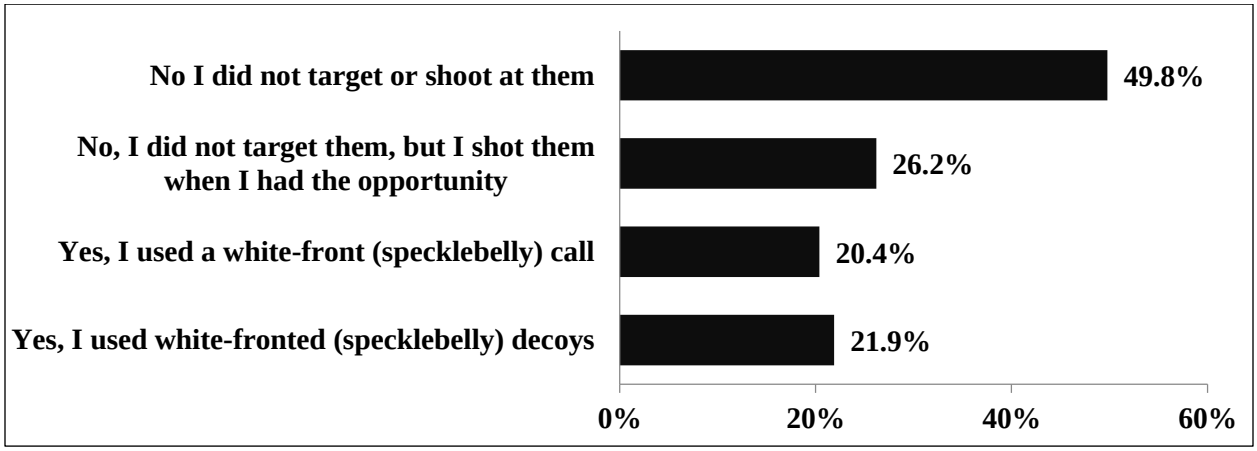


Figure 24. Proportion of hunters* who targeted white-fronted (specklebelly) geese during the Regular Goose Season (*n*=1,217).
*Cases selected for those who hunted for at least one day during regular goose season.

Satisfaction with 2017-18 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 highest average number of ducks per hunter per

season (*M* = 10.55), an average of 2.58 & 4.47 ducks per hunter per season more than hunters in the Central and North zones (respectively), and 1.95 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 two aspects of the season. South zone hunters were the most satisfied with the "amount of shooting you got in" and the least satisfied with "the number of ducks you harvested" (Table 17). South and South Central zone goose hunters harvested the fewest geese per hunter per season (*M* = 2.40 and *M* = 2.81, respectively). North zone goose hunters had the highest level of satisfaction with every measured aspect of the 2017-18 regular goose season, while South Central zone hunters had the lowest level of satisfaction with all but two aspects "amount of time you spent goose hunting" and "weather during goose season" (Table 18).

Satisfaction with Season Timing and Zone Configuration

When asked about season timing, a majority of duck hunters in the Central (55.5%) and South Central (51.7%) zones and almost half (41.2) of hunters in the North Zone reported that the 2017-18 duck season was timed "too early" (Figure 25 and Table 19). Most teal hunters (63.0%) reported that teal season was timed "about right." A majority of goose hunters, across the North, Central and South Central zones reported timing for the 2017-18 goose season was "about right."

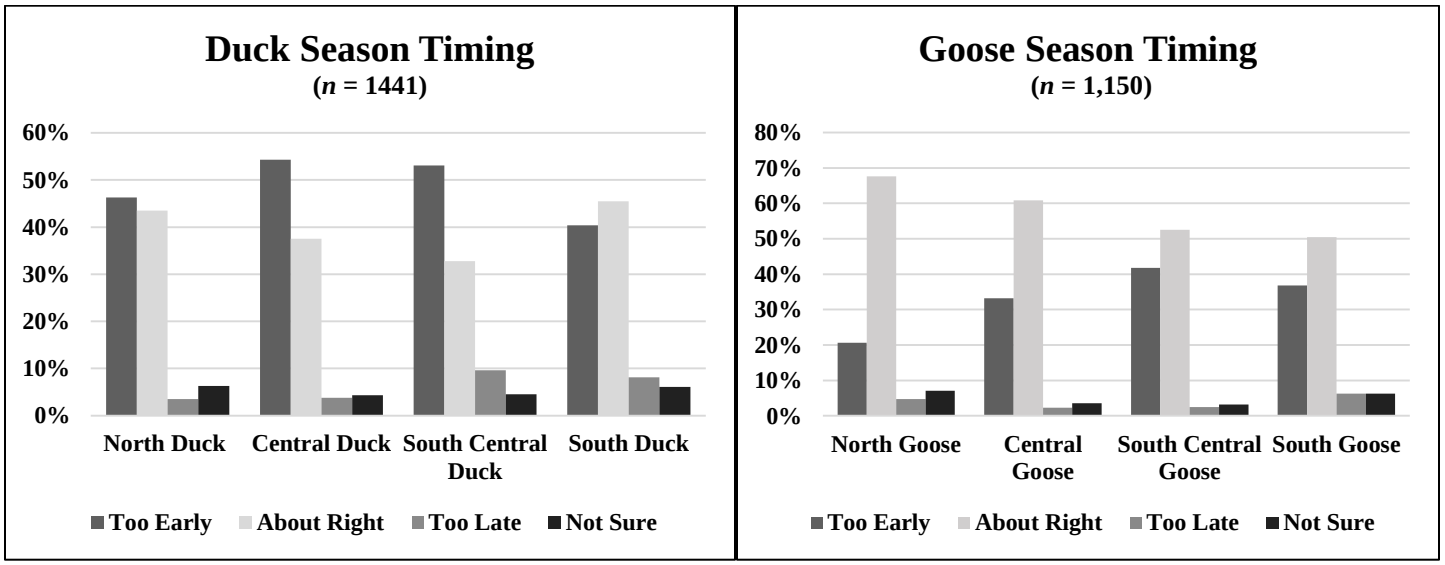


Figure 25. Duck and goose hunter* opinions about the timing of the 2017-18 waterfowl seasons.
*Cases selected for those who hunted for at least one day in the corresponding season and zone.

When asked about zone option preferences for 2021-2025 Illinois duck hunters indicated no clear majority. The most popular response among north hunters was “I do not have a preference.” In the Central zone almost equal percentages (33%) of respondents preferred “three duck zones with 2 season segments (2-way split) in one, two or all zones” and “I do not have a preference.” The 2-way split option was the most among South Central zone hunters (44.7%) followed by “I do not have a preference.” Similarly, a three-zone structure was most preferred from South Central zone hunters when asked about zone structure preferences. North, Central, and South zone hunters were most likely to prefer “No change,” but South Central hunters were more interested in a 3 zone structure that combined the South (Table 21).

When asked about the current location of zone lines most Illinois hunters (>80%) were neutral or satisfied with the current zone line. The line between the Central and South Central zones caused the highest level of dissatisfaction (17.8%, Table 22). When asked how zone lines should change, there was no preference for moving the lines north or south, and 70% of respondents (regardless of line in question) felt the “line should not move” (Table 23). Hunters in the South Central region also were more likely to indicate that changing their zone would increase every aspects of duck hunting such as “number of ducks you harvest” (Table 24). Whereas, hunters in the other zones were more likely to feel that “would not change.”

Goose hunters were slightly more in favor of keeping harvest bag limits at two. Forty-seven percent were in favor of increasing “the daily bag limit from 2 to 3 even though there may be fewer geese available to harvest in future years.”

Duck hunters in the South Zone prefer to maximize days hunted in January and open later than Thanksgiving. When asked to choose between opening on Thanksgiving or maximizing days in January, 76.8% preferred the latter.

The majority of waterfowl hunters felt that their county was located in the proper zone (Figure 26). Will, Grundy, Perry, Randolph, Franklin, Jackson, and LaSalle were the counties hunters identified most as being in the wrong zones, but most hunters (70%) in these counties believed their county was 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).

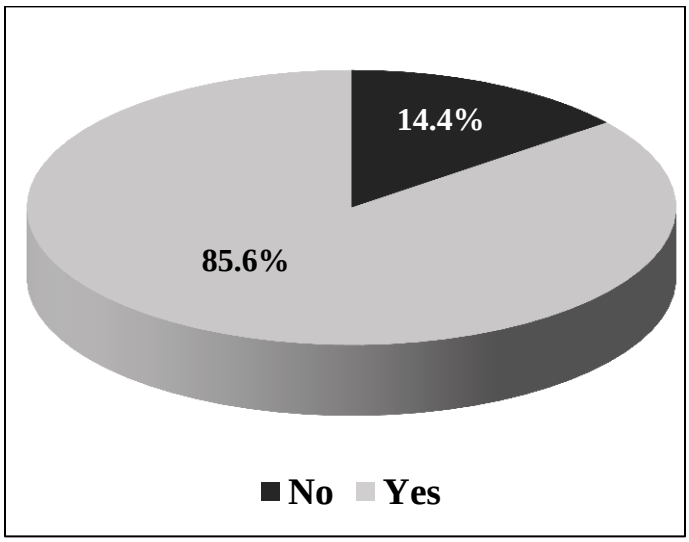


Figure 26. Percentage of waterfowl hunters that feel the county they hunt most often is in the correct zone (*n*=1,795).

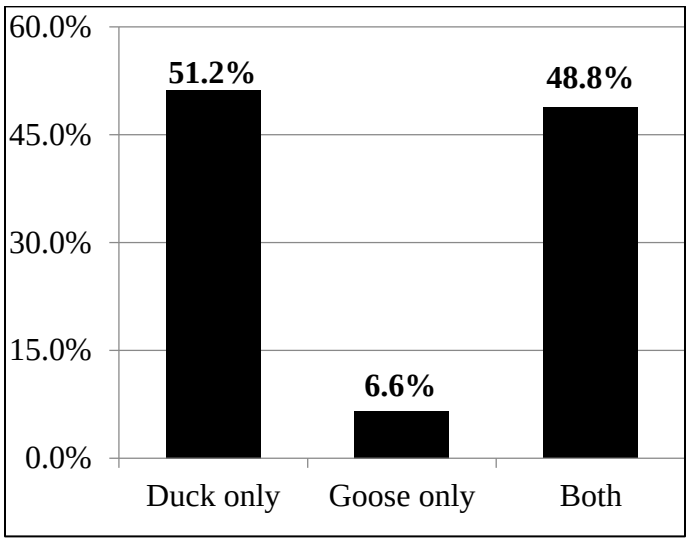


Figure 27. Percentage of waterfowl hunters that hunted public lands for waterfowl in 2017-18 (*n* = 1,718).

Public Land Use and Hunting Preferences

Duck hunters were more likely to use public lands for hunting than goose hunters (Figure 27). Of those that hunted public land, 3.9% had ever been denied an access permit for not reporting harvest by a due date. Most of those hunts occurred in the Central zone (Figure 28). Over half of the hunters on public lands had 1 hunt in a blind awarded through a lottery (Figure 29).

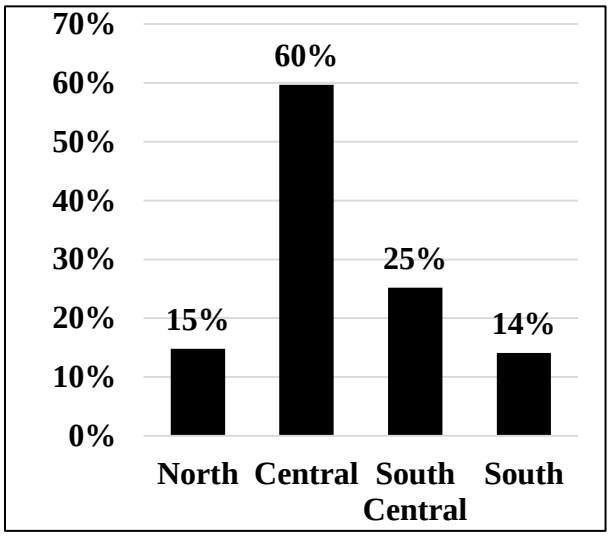


Figure 28. Zone in which public land hunted was located (*n* = 809).

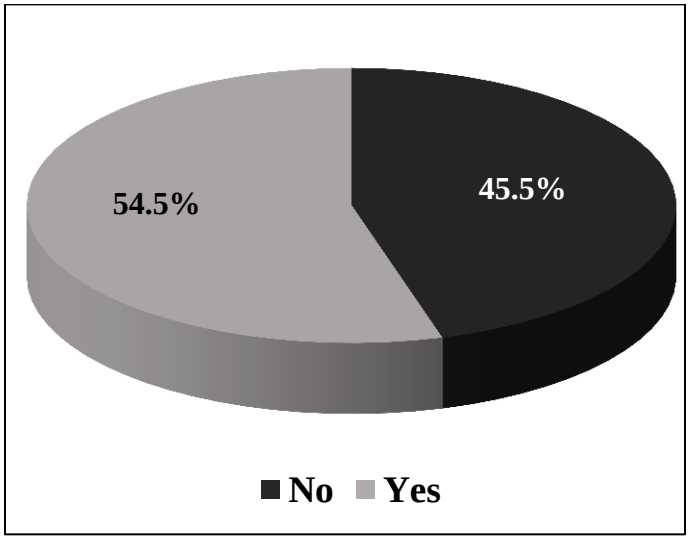


Figure 29. Percentage of waterfowl hunters whose public land use was in a blind awarded by lottery (*n* = 793).

Central and South Central Zone Hunter Satisfaction

Concern with the current boundary lines for central zone and location of south zone was expressed to Illinois Department of Natural Resources. To better understand satisfaction and concerns about the current zone line, attitudes of hunters in this area were used for analyses specific to this issue. Those who spent at least one day afield in Champaign, Christian, Coles, Dewitt, Douglass, Edgar, Ford, Grundy, Iroquois, Kankakee, LaSalle, Livingston, Logan, McLean, Macoupin, Menard, Moultrie, Piatt, Sangamon, Shelby, Vermilion, and Will were designated as "Central Zone hunters of concern". Those who spent at least one day afield in Franklin, Hamilton, Jackson, Perry, Randolph, Saline, and 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, respectively. 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 zone (Figure 30, Figure 31). To better understand the satisfaction with zone timing, hunters' opinions of zone timing were examined by the county they hunted most often (Table 26). Central zone hunters in Kankakee (78.7%), Grundy (77.6%), Champaign (76.9%), and DeWitt (72.7%) felt that the season timing was too early. Similarly in the South zone Perry (65.5%) and Randolph (56.5%) felt that the season had been timed too early.

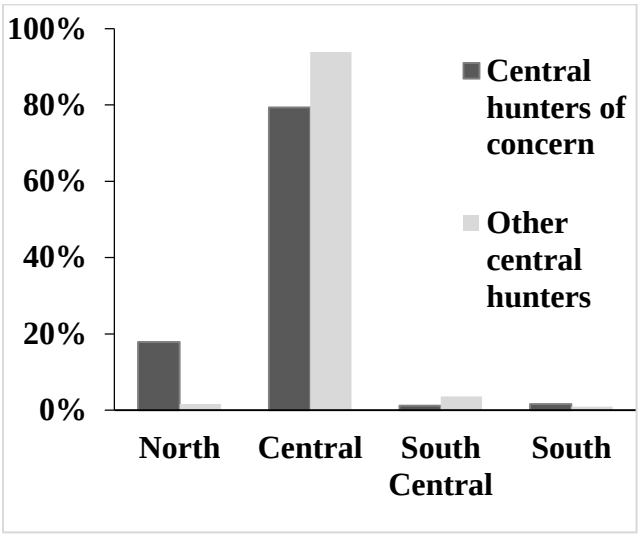


Figure 30. Zone hunted most often by central zone hunters.

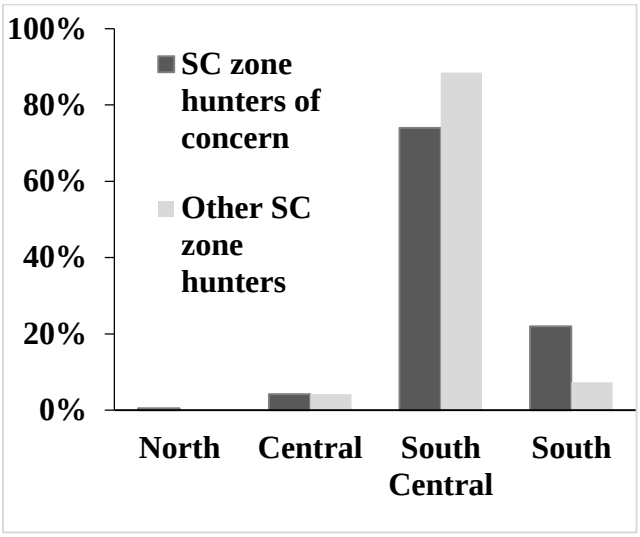


Figure 31. Zone hunted most often by south central zone hunters.

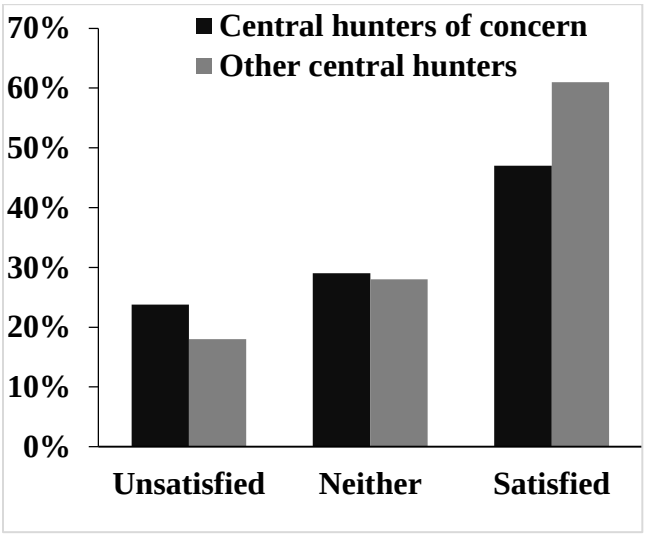


Figure 32. Percent of hunters satisfied with the current line between the North zone and the Central zone (*n*= 779).

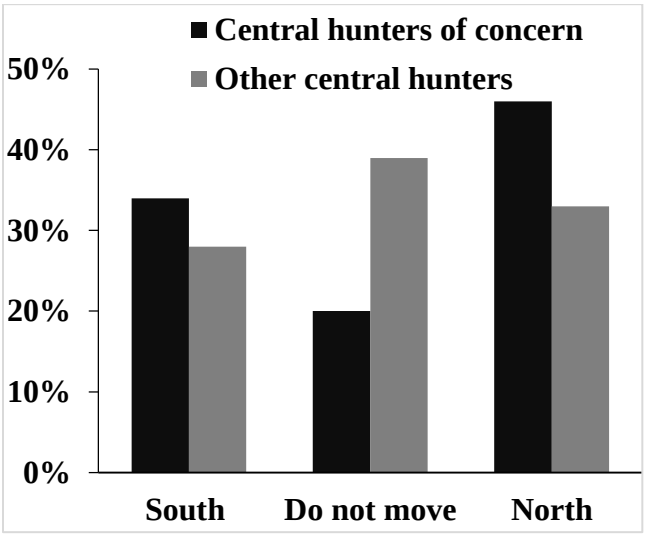


Figure 33. Percent of unsatisfied hunters who want North/Central zone line moved in the indicated direction (*n* = 129).

Hunters of concern in the Central zone were less satisfied with the current zone line between the north and central zones (Figure 32) than other central zone hunters. A one-way analysis of variance (ANOVA) was conducted to compare level of satisfaction with the current zone line between the North zone and Central zone among Central zone hunters. There was a statistically significant difference in reported satisfaction with the current zone line [F (1, 777) = 24.327, p <.001]. When asked which direction the zone line should move,

hunters of concern wanted the line to move north and other hunters were slightly preferential to "this line not move" (Figure 33). A chi-square test was performed to examine the relationship between hunter group and directional movement of the line. The relationship was insignificant, χ^2 (2, N = 129) = 4.921, p =.085, indicating no statistical difference in opinion among the central zone hunters dissatisfied with the current line.

Hunters of concern in the Central zone were less satisfied with the current zone line between the South and Central zones (Figure 34) than other central zone hunters. A one-way analysis of variance (ANOVA) was conducted to compare level of satisfaction with the current zone line between the South zone and Central zone among Central zone hunters and hunters in the targeted counties. There was a statistically significant difference in reported satisfaction with the current zone line [F(1, 675) = 3.872, p =.049]. When asked which direction the zone line should move unsatisfied hunters were split almost evenly among the three options (Figure 35). A chi-square test was performed to examine the relationship between zone hunted and directional movement of the line. The relationship was insignificant, χ^2 (2, N = 85) = 0.431, p =.806, indicating no statistical difference in opinion among the 2 groups.

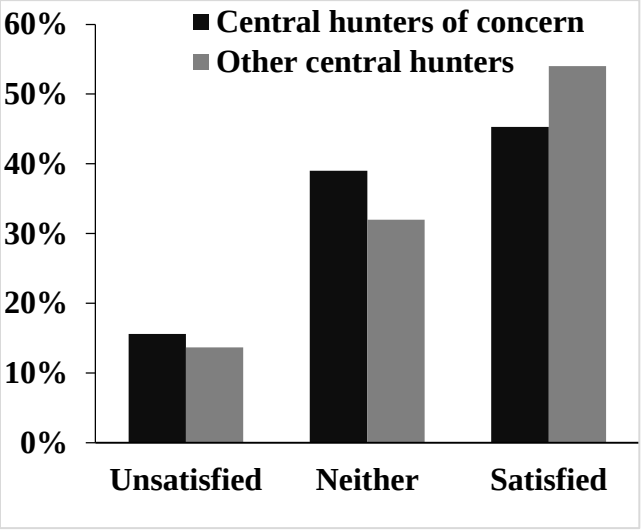


Figure 34. Percent of hunters satisfied with the current line between the South zone and the Central zone (n=677).

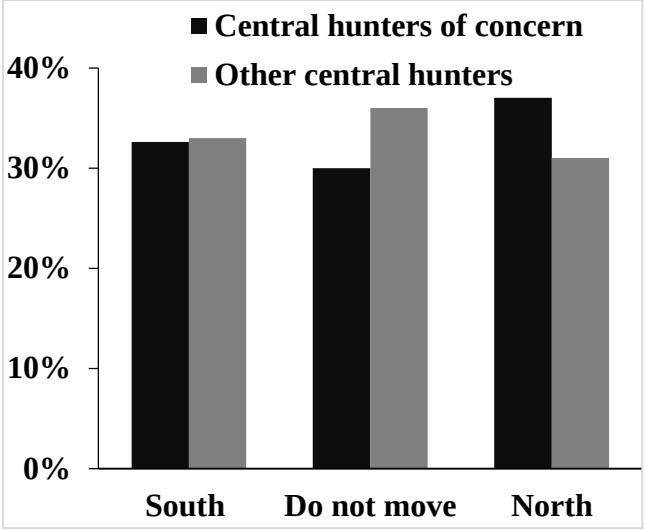


Figure 35. Percent of unsatisfied hunters who want South/Central zone line moved in the indicated direction (n = 85).

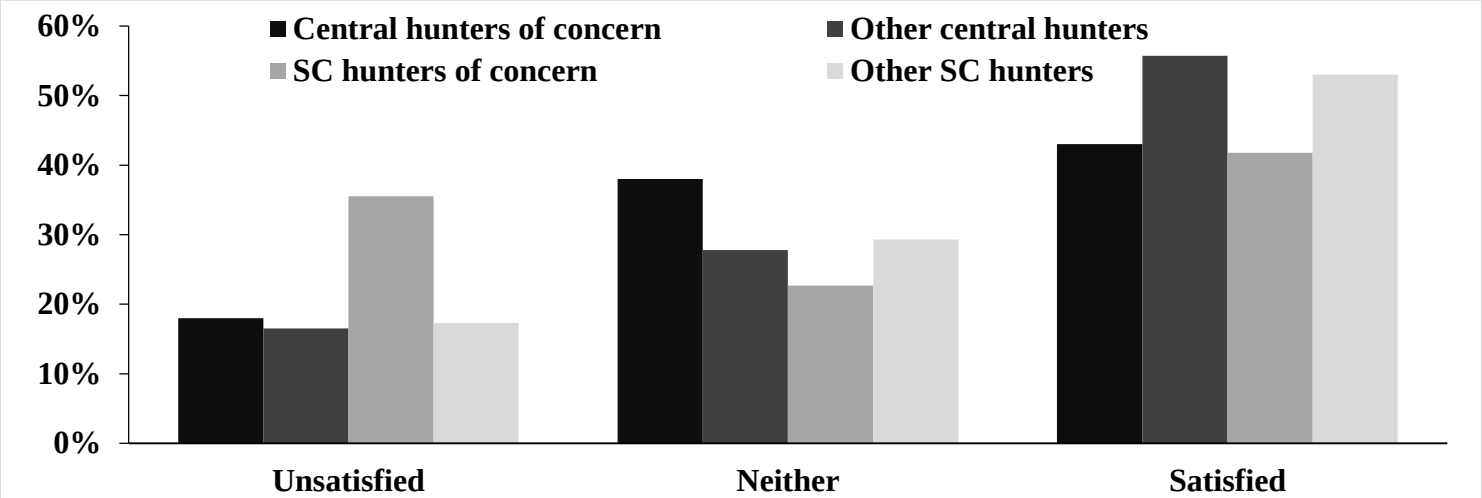


Figure 36. Hunters satisfaction with the current line between the South Central Zone and the Central zone.

Hunters of concern in the South Central zone were significantly less satisfied with the current zone line between the Central and South Central zones (Figure 36) than other central zone hunters. A one-way analysis of variance (ANOVA) was conducted to compare level of satisfaction among hunters. There was a statistically significant difference in reported satisfaction with the current zone line [$F(3, 935) = 6.771$, $p < .001$]. The satisfaction of South Central hunters of concern was statistically lower than other Central and South Central hunters. However, their opinions were not statistically lower than Central hunters of concern. Regarding the movement of this line, slightly more South Central zone hunters of concern preferred moving the line north as compared to the other groups (Figure 37). A chi-square test was performed to examine the relationship between zone hunted and directional movement of the line. The relationship was insignificant, χ^2 (6, N = 168) = 1.871, p =.931, indicating no statistical difference in opinion among the 4 groups.

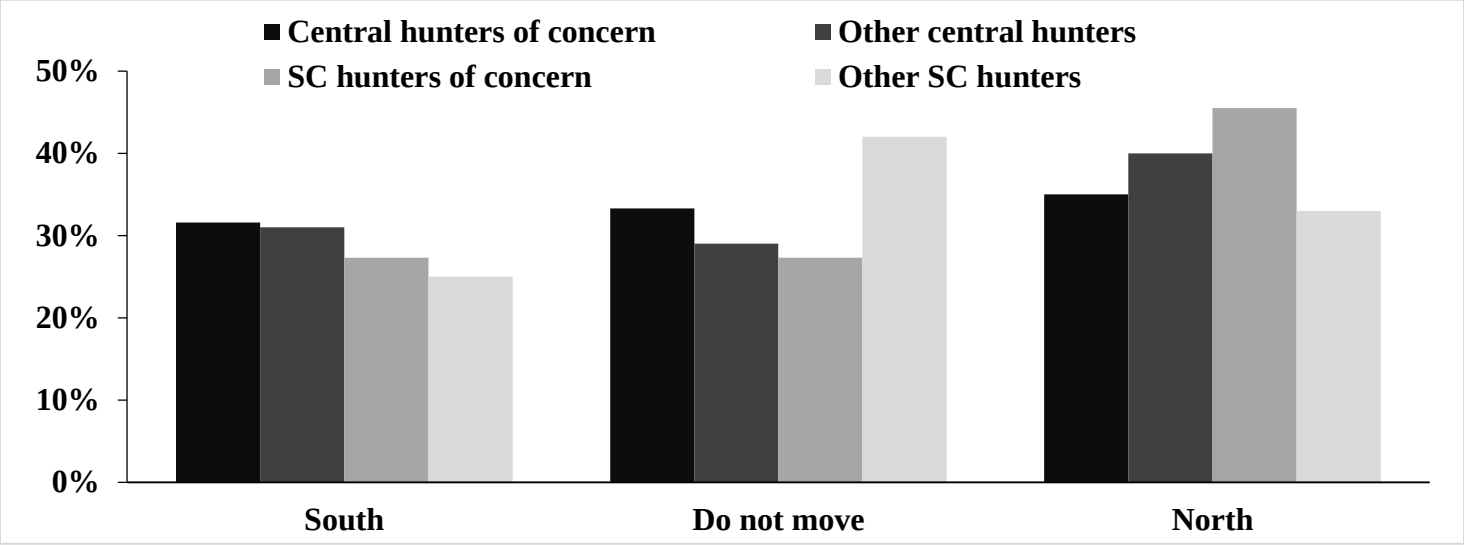


Figure 37. Percent of hunters who want the current South Central/Central zone line moved in the indicated direction.

Hunters of concern in the South Central zone were less satisfied with the current zone line between the South Central and South zones (Figure 38) than other South Central zone hunters. A one-way analysis of variance (ANOVA) was conducted to compare level of satisfaction with the current zone line between the South Central zone and South zone among South Central zone hunters and hunters in the targeted counties. There was a statistically significant difference in reported satisfaction with the current zone line [F(1, 286) = 6.775, p =.010]. When asked which direction the zone line should move most hunters, regardless of zone hunted, preferred the move North (Figure 39). A chi-square test was performed to examine the relationship between zone hunted and directional movement of the line. The relationship was insignificant, χ^2 (2, N = 110) = 0.326, *p* =.850, indicating no statistical difference in opinion among the 2 groups.

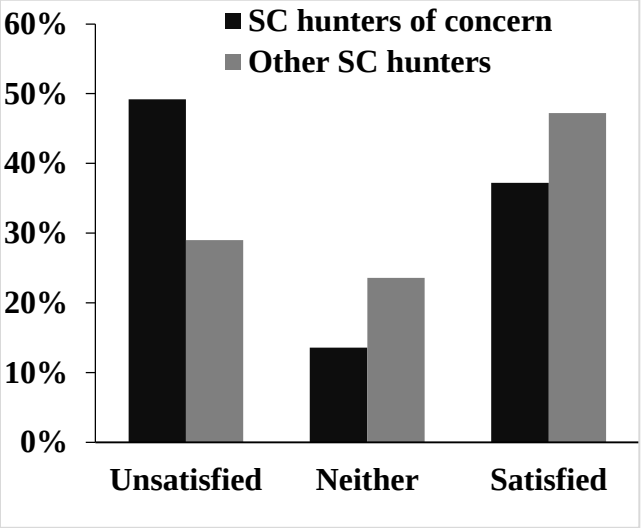


Figure 38. Percent of hunters satisfied with the current line between the South zone and the South Central zone (*n*=288).

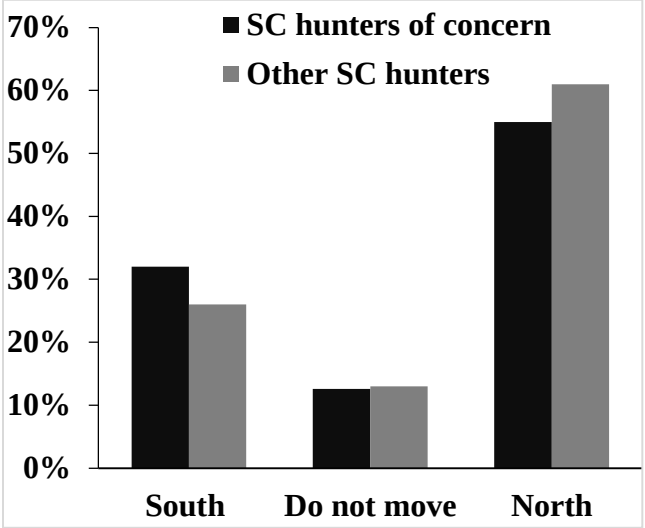


Figure 39. Percent of unsatisfied hunters who want South/South Central zone line moved in the indicated direction (*n* =110).

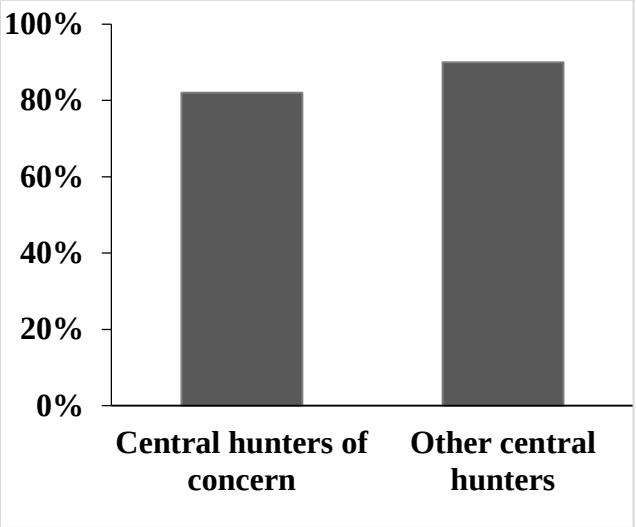


Figure 40. Percent of Central zone hunters who believe their county is in the correct zone (*n*=288).

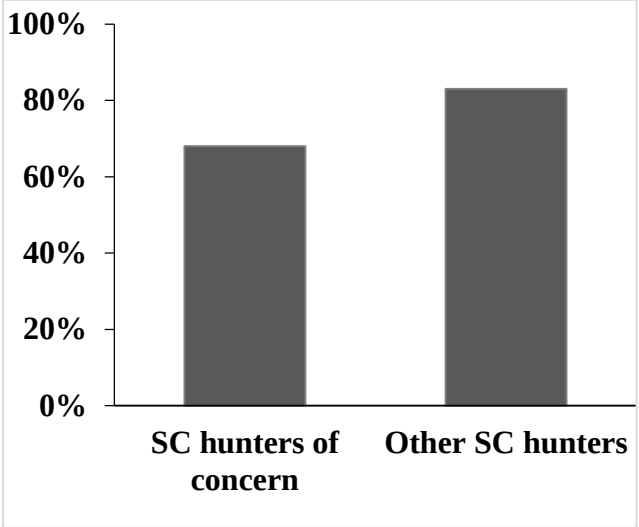


Figure 41. Percent of South Central zone hunters who believe their county is in the correct zone (*n*=307).

When asked if the county they hunt most often is in the correct zone, most Central zone hunters felt the county they hunted most often was in the correct zone (Figure 40). However, an Analysis of Variance (One-way ANOVA) test indicated there was a significant difference in the percentage of hunters who felt the county they hunt in was in the correct zone [F (1, 845) = 11.994, p = 0.001]. Hunters of concern in the Central zone were less likely to agree with the statement than other Central zone hunters. Similarly, most South Central zone

hunters felt the county they hunted was in the correct zone (Figure 41). However, an Analysis of Variance (One-way ANOVA) test indicated there was a significant difference in the percentage of hunters who felt the county they hunt in was in the correct zone [F (1, 306) = 7.374, p = 0.007]. Fewer hunters of concern in the South Central zone were less likely to agree their county is in the correct zone. Ninety-one percent of the 66 South Central zone hunters dissatisfied with their counties current zone wanted to be part of the South zone. Whereas 47.4% of Central zone hunters of concern were not happy with their counties zone location but still felt the Central zone was the best option.

Overall, less than 10% of hunters felt changing the zone would decrease satisfaction. Most of the "other hunters" in the Central zone indicated changing zone for their most hunted counties "would not change" any of the measured aspects of their hunts (Table 27). Central zone hunters of concern were similar in response, except for "Season start date allows the season to match migration". Most Central zone hunters of concern felt changing the zone would increase matching. South Central zone hunters of concern by comparison were much more optimistic about what a change in zone would accomplish. Similar amounts of "other South Central zone hunters" (40-45%) indicated a zone change would either "increase" or "not change" measured aspects of duck season. However, most South central zone hunters of concern (46% - 57%) felt a zone change would increase their outlook, except for "amount of time you spend duck hunting". Fifty-three percent of these hunters felt a zone change would "increase the number of ducks harvested".

When asked about zoning options, "other central zone hunters" were more likely to have no preference than any other group (Table 28). Hunters of concern in both zones and other South Central zone hunters were more interested in three duck zones with 2 season splits. A plurality exists regarding zone structure preference and "no change" has the highest percentage of votes among all groups but South Central hunters of concern (Table 29). These hunters prefer combining the South and South Central zones. Chi-square tests confirmed statistical differences among user groups, but those differences were weak and of minimal effect size (Vaske, 2008).

Most hunters in the full 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 but have no consensus on zone structure. South Central hunters prefer a 2-way split and to be merged with the South zone. 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 2017-18 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 Characteristics

Participants were asked a series of questions about the importance of waterfowl hunting. Waterfowl hunting was more central to the lives of those that hunted this year than those that did not (Table 30). A statistical difference was noted among all but three variables: I am disappointed when I have no waterfowl to show for my efforts, Some of my best days of waterfowl hunting have been when I come home empty-handed, and I am disappointed if I do not get any shots at waterfowl while hunting. The greatest difference in opinions was with "waterfowl hunting is one of the most important activities in my life". Sixty-six percent of 2017-18 hunters agreed with this statement as compared to 25% of those who did not hunt.

Those who hunted this year agreed with Among those who hunted this year waterfowl was more central among all respondents 56% have introduced an adult to waterfowl hunting. Of those who hunted in 2017-18, 64.2% had introduced an adult to waterfowl hunting, as compared to 40% of those who did not hunt. Friends that were not co-workers were the people taught most often, followed by immediate family, and coworkers (Table 31). The most common reason for doing so was "to share my love for the outdoors" followed by introducing new people to the sport (Table 32).

Half (52.8%) of Illinois duck hunters reported that they intend to hunt in the Central zone for ducks during the 2018-19 duck season, followed by 20.5% that intend to hunt ducks in the North zone, 17.4% in the South Central, and 9.3% in the South zone.

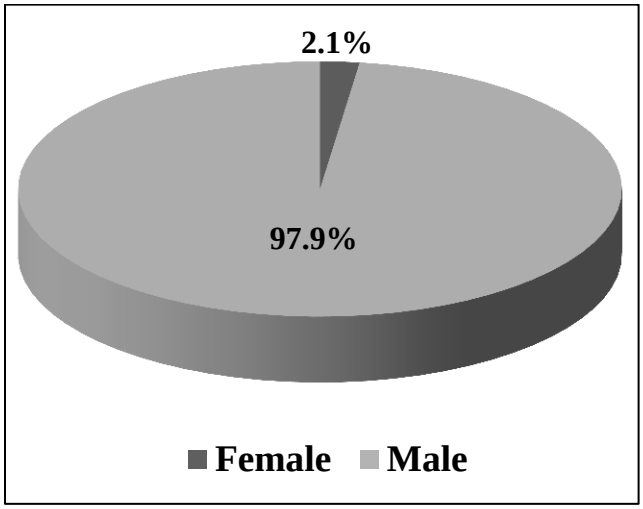


Figure 42. Gender distribution of respondents who hunted* waterfowl during one of the 2017-18 waterfowl seasons (*n*=1,884).
*Cases selected for those who indicated they hunted for at least one day or more during the 2017-18 waterfowl seasons.

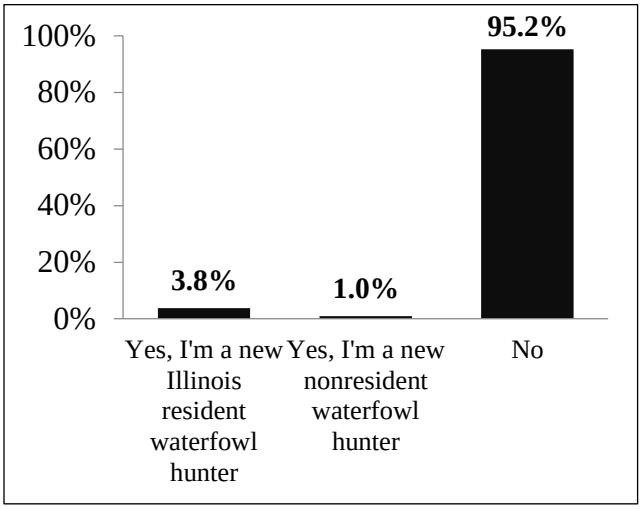


Figure 43. Number of hunters* whose first time hunting waterfowl in Illinois was during one of the 2017-18 waterfowl seasons (*n*=1,870).
*Cases selected for those who indicated they hunted at least one day during the 2017-18 waterfowl seasons.

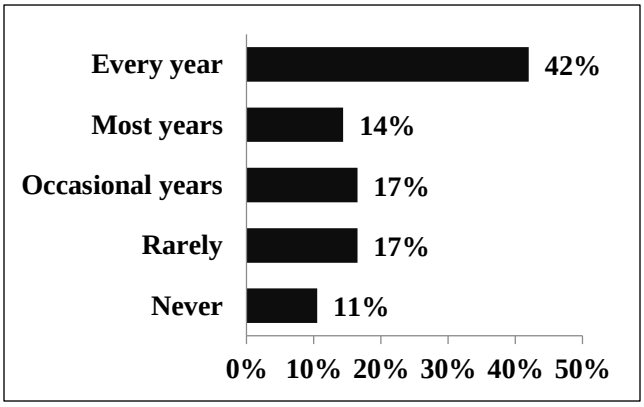


Figure 44. How often respondents hunt waterfowl in Illinois (*n*=3,161).

Respondents who hunted waterfowl during the 2017-18 waterfowl season hunted waterfowl in Illinois for a mean of 23.79 years. These hunters averaged 47.3 years of age, and started at the age of 20.9. The counties with most respondents were Will (3.6%), Madison (3.1%), Cook (3.0%), Sangamon (3.0%), LaSalle (2.6%), and St. Clair (2.4%). Females comprised 3.6% of survey respondents and 2.1% of those who hunted during the

2017-18 waterfowl hunting seasons (Figure 42). Most respondents (95%) hunted waterfowl in Illinois before this season (Figure 43). Almost half (42.0%) of respondents reported they hunt waterfowl every year in Illinois, whereas 10.5% reported that they never hunted waterfowl in Illinois (Figure 44).

REFERENCES

Anderson, W.L. 1985. Illinois waterfowl harvest, hunter activity, and attitudes toward illegal kill during September teal season and goose hunting regulations in 1983. Illinois Department of Conservation, Waterfowl Program, Periodic Report 48. 31pp.

_____. 1986. Illinois waterfowl harvest, hunter activity, zones for Carlyle Lake, and shotguns, ammunitions, and boats used in 1984. Illinois Department of Conservation, Waterfowl Program, Periodic Report 54. 32pp.

_____, R.W. Marshalla, R.M. Whitton, and D.J. Holm. 1998. Illinois waterfowl harvest, hunter activity, and attitudes toward youth waterfowl hunting day, quality hunting, and duck/goose regulations, plus sex/age of hunters, 1996-97 season. Illinois Department of Natural Resources, Waterfowl Program, Periodic Report 95. 79pp.

_____, D.D. Thornburg, and R.M. Whitton. 1996. Estimating Canada goose harvest in southern Illinois quota zones. Wildlife Society Bulletin 24:233-237.

IBM SPSS Inc. 2106. IBM SPSS Statistics 24.0. IBM Corporation, 1 New Orchard Road, Armonk, NY, U.S.A.

Miller, C. A., & Alessi, M.G. (2012, February). *Assessment of Illinois Duck Hunter Expectations and Satisfaction for 2011-12 Season with Special Emphasis on the New Fourth Zone in Illinois*. Paper presented at the Mississippi Flyway Council Technical Session.

Vaske, J. J. 2008. Survey research and analysis: Applications in parks, recreation, and human dimensions. State College, PA: Venture Publishing, Inc.

Table 1. Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest in Illinois from 2005 through 2017 hunting seasons.

Season[a] (Year)	Stamps Purchased	Estimated Hunters	Estimated Days Hunted	Estimated Harvest[b]
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

[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 2004 through 2017 seasons.

Season[a] (Year)	Hunted Ducks Only	Hunted Geese Only	Hunted Both Ducks and Geese	Duck Hunters	Goose Hunters
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%[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%	85.9%	68.8%

[a] 1981-2017 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, 2004-2017).

Season [a] (Year)	Estimated Hunters	Estimated Days Hunted	Estimated Teal Harvest
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 ± 9,332
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

[a] 1981-2017 information can be located in Appendix F.

Table 4. Teal harvest and hunter activity by zones during September Teal season (Illinois, 2017).

	n	Estimated Hunters[a]	Estimated Days Hunted	Estimated Teal Harvested
North Zone	89	1,758	6,084	2,514
Central Zone	207	4,089	15,388	8,580
South Central Zone	75	1,481	5,788	3,553
South Zone	15	296	1,047	416
Unknown	0	0	0	0

[a] The 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, 2004-2017).

Season[a] (Year)	Season Length/ Bag Limit	Days Hunted Per Hunter	Teal Harvest per Hunter	
			Per Day	Per Season
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

[a] 1981-2017 information can be located in Appendix F.

Table 6. Waterfowl harvest and hunter activity during Youth Waterfowl Hunting Days, 2004-2017.

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
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	1464	0.32

[a] 1996 - 2017 information can be located in Appendix F.
[b] Results include youth hunts during the regular season and the 2 day Youth Waterfowl Hunting Days.
[c] Results 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 2004-2017).

Season[a] (Year)	Hunters	Days Afield	Number of Ducks: Mallards	Wood Ducks	Other Ducks	Total	Coots
2004	49,046	652,960	207,982	44,725	116,951[b]	369,658	1,607
2005	43,185	539,672	240,897	37,942	133,509[b]	412,348	2,186
2006	50,437	658,881	308,000	38,366	161,098[b]	507,464	3,065
2007	49,114	600,614	265,369	34,628	164,369[b]	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[b]	384,828 ± 39,741	4,681 ± 3,311
2015	36,499	496,656	166,506	43,655	119,619[b]	329,780 ± 34,835	3,185 ± 1,960
2016	34,386	459,029	154,698	47,986	130,722[b]	333,406 ± 37,408	4,424 ± 1,338
2017	30,025	394,034	136,381	29,372	111,937[b]	277,689 ± 24,826	1,544 ± 921

[a] 1981-2017 information can be located in Appendix F.

[b] Canvasback in 2003, 2,100 in 2004, 3,918 in 2005, 5,927 in 2006, and 5,925 in 2007, 6,974 in 2016, and 3,642 in 2017 .

Table 8. Duck harvest and hunter activity by waterfowl zones and selected areas during the regular duck season (Illinois 2017-18).

Zone	*n*	Hunters[a]	Estimated Days Hunted	Estimated Ducks Harvested	Days Hunted/ Hunter	Ducks/ Hunter/ Day	Ducks/ Hunter/ Season
North	347	6,854	74,706	41,653	10.90	0.56	6.08
Central	833	16,454	200,355	131,215	12.18	0.65	7.97
South Central	322	6,360	76,780	67,117	12.07	0.87	10.55
South	222	4,385	42,192	37,705	9.62	0.89	8.60
Unknown	0	0	0	0	0	0	0
Statewide	1,520	30,025	394,034	277,689	13.12	0.70	9.25

[a] The 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 2004-2017).

Season[a] (Year)	Season Length/ Bag Limit	Days Afield/ Hunter	Duck Harvest/Hunter[b]	
			Per Day	Per Season
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

[a] 1981-2017 information can be located in Appendix F.
[b] Excludes ducks harvested coincidentally while goose hunting.

Table 10. Distribution of the number of days afield and number of ducks harvested in 2017-18.

	Days Hunting Ducks (%)	Number of Ducks Harvested (%)
0	-----	14.7
1-5	38.0	27.2
6-10	18.9	13.6
11-15	13.1	10.8
16-20	10.7	6.2
21-25	5.2	5.0
26-30	4.9	4.3
>30	9.1	18.4

*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 2005-2017).

			Waterfowl Zone				
	Year[a]	Statewide	North	Central	South Central	South	Unknown
Hunters	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[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
Days Afield	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
Canada Geese	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

[a] 1981-2016 information can be located in Appendix F.

[b] Less 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 2005 through 2017).

Season[a] (Year)	Hunters	Days Afield	Number of Geese		
			Canada Geese	Other Geese	Total
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 (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

Numbers in parentheses represent the number of geese harvested while duck hunting.
[a] 1981-2016 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	-----	22.6
1-5	44.3	36.6
6-10	19.6	16.7
11-15	13.0	6.6
16-20	8.1	5.3
21-25	3.8	23.9
26-30	4.4	2.5
>30	6.9	5.9

[a] Total is less than 100 due to rounding.

Table 14. Goose harvest and hunter activity by zones, regular season (Illinois 2017-18).

Zone	Hunters	Days Afield	Estimated Goose Harvest: Canada Geese	White-Fronted Geese	Snow/ Blue Geese[b]	Total Geese	Total Days Hunted/ Hunter	Total Geese/ Hunter/ Day	Total Geese/ Hunter/ Season
North	5,965	64,573	17,723	66	9	17,798	10.82	0.27	2.97
Central	13,965	149,590	45,302	5,051	6,657	57,010	10.71	0.30	3.24
South Central	3,615	40,632	10,141	2,304	6,137	18,582	11.24	0.25	2.81
South	2,370	21,215	5,684	2,313	5,099	13,096	8.95	0.27	2.40
Unknown	0	0	0	0	0	0	0	0	0
Statewide	24,039	276,009	78,850	9,735	17,902	106,486	11.48	0.29	3.28

[a] Less than the sum of hunters in individual zones because some hunters hunted more than 1 zone.

[b] Harvest estimates include Ross' geese.

Table 15. Canada goose harvest by zone during the regular goose season (Illinois 2014-15 through 2017-18).

Zone	2015-2016	2016-17	2017-2018	3-Year Mean	S.D.
North	24,144	29,347	17,723	23,738	5,823
Central	41,106	38,699	45,302	41,702	3,342
South Central	6,864	5,413	10,141	7,473	2,422
South	3,084	3,757	5,684	4,175	1,349
Unknown	-	-	-	-	-
Statewide	75,198	77,216	78,850	66,032	1,829

Table 16. Summary of the number of ducks and geese crippled (Illinois 2004 - 2017 regular seasons).

Season[a] (Year)	Estimated Ducks		Estimated Geese	
	Total	Per 100 Bagged	Total	Per 100 Bagged
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

[a] 1981-2016 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 2017-18 duck seasons.

	Zone	Very Dissatisfied (%)	Dissatisfied (%)	Unsure (%)	Satisfied (%)	Very Satisfied (%)	$\bar{x}$ (S.D.) [a]
Number of ducks you saw	North n = 309	12.9%	27.2%	27.8%	25.9%	6.1%	2.85(1.13)
	Central n = 751	19.3%	30.9%	26.6%	19.2%	4.0%	2.58(1.12)
	South Central n = 263	18.3%	35.4%	22.8%	20.5%	3.0%	2.55(1.10)
	South n = 155	12.3%	33.5%	25.8%	23.9%	4.5%	2.75(1.09)
Mid-season matched peak of migration	North n = 299	18.4%	28.8%	31.8%	16.1%	5.0%	2.61(1.11)
	Central n = 735	23.4%	36.5%	26.0%	12.1%	2.0%	2.33(1.03)
	South Central n = 257	22.2%	39.3%	25.3%	11.3%	1.9%	2.32(1.00)
	South n = 148	16.2%	33.1%	33.1%	15.5%	2.0%	2.54(1.01)
Amount of shooting you got in	North n = 294	18.4%	29.3%	27.6%	21.1%	3.7%	2.63(1.12)
	Central n = 727	23.2%	34.1%	24.2%	16.0%	2.5%	2.40(1.08)
	South Central n = 256	19.9%	34.8%	25.0%	16.8%	3.5%	2.49(1.10)
	South n = 152	16.4%	28.3%	27.0%	26.3%	2.0%	2.69(1.09)
Number of ducks that migrated through areas you hunted	North n = 303	14.9%	32.3%	27.1%	20.8%	5.0%	2.69(1.11)
	Central n = 740	19.6%	32.3%	27.7%	16.9%	3.5%	2.52(1.09)
	South Central n = 260	18.5%	40.0%	23.8%	15.0%	2.7%	2.43(1.04)
	South n = 153	11.8%	32.0%	37.9%	17.0%	1.3%	2.64(0.94)
Amount of time you spent duck hunting	North n = 304	8.9%	24.3%	31.3%	28.9%	6.6%	3.00(1.07)
	Central n = 743	14.1%	24.2%	26.6%	29.1%	5.9%	2.88(1.15)
	South Central n = 260	11.2%	26.5%	28.1%	28.5%	5.8%	2.91(1.11)
	South n = 154	13.6%	29.2%	29.2%	24.0%	3.9%	2.75(1.09)
Number of ducks you harvested	North n = 301	23.6%	28.6%	23.9%	19.6%	4.3%	2.52(1.17)
	Central n = 738	23.7%	32.9%	25.6%	14.9%	2.8%	2.40(1.09)
	South Central n = 260	20.8%	33.1%	23.8%	20.4%	1.9%	2.50(1.09)
	South n = 153	20.3%	30.7%	25.5%	20.3%	3.3%	2.56(1.12)
Weather during duck season	North n = 303	9.6%	16.2%	45.5%	25.1%	3.6%	2.97(0.97)
	Central n = 732	15.2%	22.0%	39.8%	20.9%	2.2%	2.73(1.03)
	South Central n = 259	16.2%	24.7%	35.9%	20.1%	3.1%	2.69(1.06)
	South n = 151	19.2%	17.2%	37.1%	24.5%	2.0%	2.73(1.10)

[a] 1= Very Dissatisfied, 5= Very Satisfied

*Cases selected for those who hunted ≥ 1 day for ducks during the 2017-18 regular duck season.

Table 18. Illinois goose hunters' levels of satisfaction with various aspects of the 2017-18 goose seasons.

		Very Dissatisfied (%)	Dissatisfied (%)	Unsure (%)	Satisfied (%)	Very Satisfied (%)	$\bar{x}$ (S.D.) [a]
Number of geese you saw	North n = 258	4.7%	10.9%	20.9%	46.5%	17.1%	3.60(1.04)
	Central n = 645	6.8%	22.2%	23.4%	38.3%	9.3%	3.21(1.10)
	South Central n = 163	17.2%	30.7%	24.5%	23.9%	3.7%	2.66(1.13)
	South n = 101	13.9%	24.8%	23.8%	31.7%	5.9%	2.91(1.17)
Mid-season matched peak of migration	North n = 251	7.2%	15.5%	38.6%	29.1%	9.6%	3.18(1.04)
	Central n = 636	10.5%	26.6%	35.4%	23.6%	3.9%	2.84(1.03)
	South Central n = 162	19.8%	32.1%	34.0%	11.7%	2.5%	2.45(1.02)
	South n = 98	18.4%	29.6%	31.6%	14.3%	6.1%	2.60(1.13)
Amount of shooting you got in	North n = 258	10.1%	23.6%	31.0%	27.1%	8.1%	3.00(1.11)
	Central n = 641	14.0%	30.3%	26.1%	24.6%	5.0%	2.76(1.12)
	South Central n = 163	22.1%	29.4%	25.2%	20.9%	2.5%	2.52(1.12)
	South n = 99	16.2%	27.3%	23.2%	31.3%	2.0%	2.76(1.13)
Number of geese that migrated through areas you hunted	North n = 256	4.7%	15.2%	32.8%	37.5%	9.8%	3.32(1.00)
	Central n = 641	10.8%	23.1%	30.6%	27.5%	8.1%	2.99(1.12)
	South Central n = 162	21.0%	30.9%	23.5%	19.1%	5.6%	2.57(1.18)
	South n = 100	16.0%	28.0%	23.0%	28.0%	5.0%	2.78(1.17)
Amount of time you spent goose hunting	North n = 256	4.3%	21.5%	35.2%	31.3%	7.8%	3.17(0.99)
	Central n = 640	8.1%	25.8%	33.3%	25.9%	6.9%	2.98(1.06)
	South Central n = 164	8.5%	22.6%	41.5%	19.5%	7.9%	2.96(1.04)
	South n = 100	10.0%	33.0%	33.0%	20.0%	4.0%	2.75(1.02)
Number of geese you harvested	North n = 256	17.6%	23.0%	27.0%	27.3%	5.1%	2.79(1.17)
	Central n = 641	18.4%	27.5%	28.1%	21.1%	5.0%	2.67(1.15)
	South Central n = 164	25.0%	25.6%	28.7%	17.1%	3.7%	2.49(1.15)
	South n = 99	16.2%	30.3%	31.3%	20.2%	2.0%	2.62(1.05)
Weather during goose season	North n = 253	5.5%	17.4%	38.3%	34.4%	4.3%	3.15(0.95)
	Central n = 636	8.5%	18.2%	42.3%	27.7%	3.3%	2.99(0.97)
	South Central n = 164	11.6%	14.6%	45.1%	25.0%	3.7%	2.95(1.00)
	South n = 99	13.1%	17.2%	41.4%	22.2%	6.1%	2.91(1.08)

[a] 1= Very Dissatisfied, 5= Very Satisfied

*Cases selected for those who hunted ≥ 1 day for geese during the 2017-18 regular goose season.

Table 19. Hunter* opinions of the timing of 2017-18 waterfowl seasons**.

Season	*n*	Too Early (%)	About Right (%)	Too Late (%)	Not Sure (%)
Teal	346	23.7	63.0	7.2	6.1
North duck	296	41.2	44.9	7.1	6.8
Central duck	733	55.5	34.4	4.9	5.2
South Central duck	263	51.7	37.6	7.2	3.4
South duck	149	35.6	47.7	10.1	6.7
North goose	253	20.6	67.6	4.7	7.1
Central goose	644	33.2	60.9	2.3	3.6
South Central goose	158	41.8	52.5	2.5	3.2
South goose	95	36.8	50.5	6.3	6.3

*Cases selected for those that indicated they hunted at least 1 day during the corresponding zone/season in 2017-18.
**Zone determined by zone hunted in most often for species in 2017-18 season.

Table 20. Duck hunter zoning option preferences for 2021 through 2025

	North Zone *n* = 294	Central Zone *n* = 743	South Central *n*= 257	South Zone *n* = 147	Total *n* = 1441
Three duck zones with no split seasons.	16.3%	17.2%	14.8%	17.0%	16.6%
Three duck zones with 2 season segments (2-way split) in one, two, or all zones	26.5%	33.8%	44.7%	27.9%	33.7%
Four duck zones with no split seasons.	15.3%	15.7%	20.2%	27.2%	17.6%
I do not have a preference.	41.8%	33.2%	20.2%	27.9%	32.1%

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

Table 21. Duck hunter zone structure preference for 2021 through 2025 seasons.

	North Zone *n*= 283	Central Zone *n*= 729	South Central *n*= 252	South Zone *n*=147	Total *n* = 1411
Change it back to the 3-zone structure used 2006-2010.	15.9%	16.2%	11.5%	9.5%	14.6%
Use a 3-zone structure, but combine the North and Central zones and leave the South Central zone and South zones the way they are.	19.1%	6.6%	3.6%	4.8%	8.4%
Use a 3-zone structure, but combine the Central and South Central Zones and leave the North and South zones the way they are.	6.7%	17.6%	9.5%	3.4%	12.5%
Use a 3-zone structure but combine the South Central and South Zones, and leave the North and Central zones the way they are.	10.6%	15.9%	36.5%	25.9%	19.6%
Keep a 4-zone structure, but reconfigure the current zone configuration.	4.2%	8.6%	8.7%	10.9%	8.0%
No change: leave the 4-zone structure the way it is now.	43.5%	35.1%	30.2%	45.6%	37.0%

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

Table 22. Illinois waterfowl hunter satisfaction with current zone lines

Zone line between:	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied
North and Central *n*= 1353	6.6%	8.2%	29.3%	45.7%	10.3%
Central and South Central *n*= 1249	7.0%	10.8%	32.3%	41.6%	8.2%
Central and South *n*= 1191	7.0%	8.8%	35.3%	40.3%	8.6%
South and South Central *n*= 1144	10.7%	1.8%	33.6%	37.2%	7.9%

1= Very Dissatisfied to 5= Very Satisfied,

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

Table 23. How should current Illinois Waterfowl Zone lines move?

Zone line between:	Significantly farther North	Slightly farther North	This line should not move	Slightly farther South	Significantly farther South
North and Central *n*= 1257	3.5%	8.6%	73.4%	11.5%	3.0%
Central and South Central *n*= 1148	3.7%	11.1%	71.6%	10.4%	3.1%
Central and South *n*= 1072	3.5%	8.8%	74.3%	10.2%	3.3%
South and South Central *n*= 988	6.0%	9.8%	72.2%	8.3%	3.7%

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

Table 24. Predicted effect of a zone change on various aspects of duck hunting season.

	Zone	Greatly Decrease	Decrease	Would not change	Increase	Greatly Increase
Number of ducks you see	North n = 263	4.2%	6.5%	64.3%	22.4%	2.7%
	Central n = 665	3.3%	6.0%	60.3%	26.5%	3.9%
	South Central n = 233	1.7%	10.7%	39.9%	37.8%	9.9%
	South n = 133	3.8%	3.0%	65.4%	21.8%	6.0%
Mid-season match peak of migration	North n = 264	3.8%	6.1%	61.4%	23.5%	5.3%
	Central n = 659	3.2%	7.7%	58.1%	26.1%	4.9%
	South Central n = 229	0.9%	7.9%	42.4%	38.0%	10.9%
	South n = 129	2.3%	4.7%	65.1%	22.5%	5.4%
Amount of shooting you get in	North n = 265	2.6%	8.7%	61.9%	23.4%	3.4%
	Central n = 660	2.4%	6.5%	59.2%	26.8%	5.0%
	South Central n = 229	1.7%	7.9%	40.2%	38.4%	11.8%
	South n = 129	2.3%	5.4%	65.1%	21.7%	5.4%
Amount of time you spend duck hunting	North n = 265	2.6%	4.9%	66.0%	22.6%	3.8%
	Central n = 666	1.7%	4.8%	64.7%	23.6%	5.3%
	South Central n = 229	2.2%	5.2%	48.5%	31.0%	13.1%
	South n = 129	2.3%	4.7%	68.2%	19.4%	5.4%
Number of ducks you harvest	North n = 265	3.0%	7.2%	58.9%	27.2%	3.8%
	Central n = 665	2.9%	6.9%	54.9%	30.1%	5.3%
	South Central n = 227	2.6%	7.0%	37.9%	39.6%	12.8%
	South n = 129	3.9%	4.7%	62.8%	21.7%	7.0%
Season start date allowed the season to match migration	North n = 265	1.1%	6.0%	54.7%	28.7%	9.4%
	Central n = 664	3.3%	5.0%	46.4%	33.4%	11.9%
	South Central n = 229	1.7%	7.0%	35.8%	38.9%	16.6%
	South n = 129	3.1%	6.2%	59.7%	20.9%	10.1%

[a] 1= Greatly Decrease, 5= Greatly Increase

*Cases selected for those who hunted ≥ 1 day for ducks during the 2017-18 regular duck season.

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	35	11.4%	77.1%	8.6%	2.9%	117
Grundy	21	28.6%	42.9%	28.6%	0.0%	84
Perry	19	0.0%	0.0%	0.0%	100.0%	66
Randolph	18	0.0%	22.2%	5.6%	72.2%	56
Franklin	15	0.0%	0.0%	0.0%	100.0%	48
Jackson	14	0.0%	0.0%	7.1%	92.9%	40
LaSalle	13	38.5%	53.8%	7.7%	0.0%	60
Montgomery	10	0.0%	0.0%	90.0%	10.0%	33
Putnam	10	0.0%	90.0%	10.0%	0.0%	23
Jefferson	9	0.0%	11.1%	0.0%	88.9%	45
Clinton	8	0.0%	12.5%	12.5%	75.0%	40
Edgar	8	0.0%	0.0%	37.5%	62.5%	40
Fayette	8	0.0%	0.0%	12.5%	87.5%	42
Kankakee	8	37.5%	12.5%	37.5%	12.5%	61
St. Clair	8	0.0%	0.0%	50.0%	50.0%	29
Coles	7	14.3%	0.0%	71.4%	14.3%	27
Madison	6	0.0%	16.7%	66.7%	16.7%	41
Saline	6	0.0%	0.0%	33.3%	66.7%	22
Jersey	5	0.0%	0.0%	80.0%	20.0%	26
Monroe	5	0.0%	0.0%	20.0%	80.0%	18
Shelby	5	20.0%	20.0%	60.0%	0.0%	37
Williamson	5	0.0%	0.0%	40.0%	60.0%	48

Table 26. Opinion of zone timing by county hunted most often.

County Hunted most often	# of hunters	Too early	About right	Too late	I am not sure
Champaign	13	76.9%	23.1%	0.0%	0.0%
Christian	16	56.3%	37.5%	0.0%	6.3%
Coles	14	64.3%	14.3%	7.1%	14.3%
DeWitt	33	72.7%	24.2%	3.0%	0.0%
Douglas	14	57.1%	35.7%	0.0%	7.1%
Edgar	31	71.0%	29.0%	0.0%	0.0%
Ford	5	60.0%	40.0%	0.0%	0.0%
Grundy	67	77.6%	14.9%	3.0%	4.5%
Iroquois	23	43.5%	34.8%	8.7%	13.0%
Kankakee	47	78.7%	19.1%	2.1%	0.0%
LaSalle	44	45.5%	36.4%	4.5%	13.6%
Livingston	28	35.7%	53.6%	7.1%	3.6%
Logan	16	37.5%	43.8%	0.0%	18.8%
McLean	10	30.0%	60.0%	0.0%	10.0%
Macoupin	11	63.6%	27.3%	9.1%	0.0%
Menard	6	50.0%	33.3%	0.0%	16.7%
Moultrie	40	42.5%	47.5%	2.5%	7.5%
Piatt	10	30.0%	40.0%	30.0%	0.0%
Sangamon	26	42.3%	42.3%	3.8%	11.5%
Shelby	29	55.2%	34.5%	0.0%	10.3%
Vermilion	20	55.0%	40.0%	5.0%	0.0%
Will	94	68.1%	23.4%	4.3%	4.3%
Franklin	44	45.5%	31.8%	9.1%	13.6%
Hamilton	12	33.3%	50.0%	16.7%	0.0%
Jackson	32	43.8%	31.3%	18.8%	6.3%
Perry	55	65.5%	29.1%	1.8%	3.6%
Randolph	46	56.5%	28.3%	8.7%	6.5%
Saline	19	36.8%	47.4%	15.8%	0.0%
Williamson	35	42.9%	48.6%	5.7%	2.9%

Table 27. Predicted effect of a zone change on various aspects of duck hunting season.

	Zone	Greatly Decrease	Decrease	Would not change	Increase	Greatly Increase	$\bar{x}$ (S.D.) [a]
Number of ducks you see	CZ of concern n = 383	3.4%	5.2%	53.0%	33.2%	5.2%	3.32(0.79)
	Other CZ hunters n = 379	2.9%	6.6%	63.3%	23.2%	4.0%	3.19(0.73)
	SCZ of concern n = 190	3.7%	8.4%	41.6%	33.2%	13.2%	3.44(0.95)
	Other SCZ hunters n = 87	1.1%	10.3%	44.8%	41.4%	2.3%	3.33(0.74)
Mid-season match peak of migration	CZ of concern n = 381	3.7%	6.6%	50.9%	30.2%	8.7%	3.34(0.87)
	Other CZ hunters n = 375	2.7%	7.5%	61.3%	24.3%	4.3%	3.2(0.75)
	SCZ of concern n = 190	1.6%	7.9%	41.1%	37.4%	12.1%	3.51(0.87)
	Other SCZ hunters n = 82	1.2%	6.1%	51.2%	37.8%	3.7%	3.37(0.71)
Amount of shooting you get in	CZ of concern n = 384	3.1%	4.7%	53.6%	31.0%	7.6%	3.35(0.81)
	Other CZ hunters n = 374	1.3%	7.8%	60.7%	25.7%	4.5%	3.24(0.72)
	SCZ of concern n = 188	3.2%	6.4%	42.0%	35.6%	12.8%	3.48(0.91)
	Other SCZ hunters n = 83	1.2%	8.4%	43.4%	42.2%	4.8%	3.41(0.77)
Amount of time you spend duck hunting	CZ of concern n = 384	1.6%	4.2%	58.1%	28.1%	8.1%	3.37(0.76)
	Other CZ hunters n = 380	1.6%	5.5%	67.4%	21.1%	4.5%	3.21(0.68)
	SCZ of concern n = 188	3.2%	3.7%	50.5%	29.3%	13.3%	3.46(0.89)
	Other SCZ hunters n = 83	2.4%	7.2%	49.4%	32.5%	8.4%	3.37(0.84)
Number of ducks you harvest	CZ of concern n = 385	3.6%	4.9%	49.4%	35.1%	7.0%	3.37(0.83)
	Other CZ hunters n = 378	2.1%	7.9%	56.6%	28.6%	4.8%	3.26(0.76)
	SCZ of concern n = 186	3.8%	5.4%	37.6%	38.7%	14.5%	3.55(0.94)
	Other SCZ hunters n = 83	1.2%	9.6%	44.6%	37.3%	7.2%	3.4(0.81)
Season start date allowed the season to match migration	CZ of concern n = 384	3.1%	5.7%	38.5%	37.8%	14.8%	3.55(0.92)
	Other CZ hunters n = 378	3.2%	5.3%	50.8%	31.0%	9.8%	3.39(0.86)
	SCZ of concern n = 186	2.7%	5.9%	34.9%	38.2%	18.3%	3.63(0.94)
	Other SCZ hunters n = 84	2.4%	7.1%	47.6%	32.1%	10.7%	3.42(0.87)

[a] 1= Greatly Decrease, 5= Greatly Increase

*Cases selected for those who hunted ≥ 1 day for ducks during the 2017-18 regular duck season.

Table 28. Duck hunters* of concern zoning option preferences for 2021 through 2025

	CZ of concern n = 412	Other CZ hunters n = 420	SCZ of concern n = 204	Other SCZ hunters n = 93	Chi-Square	Cramer's V
Three duck zones with no split seasons.	14.8%	17.9%	20.3%	14.0%	41.525[a]	.110
Three duck zones with 2 season segments (2-way split) in one, two, or all zones.	39.7%	30.9%	42.9%	41.9%		
Four duck zones with no split seasons.	16.7%	13.7%	17.9%	26.9%		
I do not have a preference.	28.8%	37.4%	18.9%	17.2%		

*Cases selected for those that indicated they hunted 1 day or more for DUCKS in the corresponding zone.
[a] Significance of < .001

Table 29. Duck hunters* of concern zone structure preference for 2021 through 2025 seasons.

	CZ of concern n = 412	Other CZ hunters n = 420	SCZ of concern n = 204	Other SCZ hunters n = 93	Chi-Square	Cramer's V
Change it back to the 3-zone structure used 2006-2010.	13.6%	17.1%	10.8%	10.8%	108.626[a]	.179
Use a 3-zone structure, but combine the North and Central zones and leave the South Central zone and South zones the way they are.	13.1%	5.5%	4.9%	2.2%		
Use a 3-zone structure, but combine the Central and South Central Zones and leave the North and South zones the way they are.	18.0%	16.2%	5.9%	12.9%		
Use a 3-zone structure but combine the South Central and South Zones, and leave the North and Central zones the way they are.	15.8%	14.5%	42.2%	29.0%		
Keep a 4-zone structure, but reconfigure the current zone configuration.	9.2%	8.8%	6.9%	9.7%		
No change: leave the 4-zone structure the way it is now.	30.3%	37.9%	29.4%	35.5%		

*Cases selected for those that indicated they hunted 1 day or more for DUCKS in the corresponding zone.
[a] Significance of < .001

Table 30. Importance of waterfowl hunting to those who hunted this year, and those that did not.

	Did not hunt (n=958)			Hunted (n=1884)[b]			Did not hunt	Hunted [b]
	Disagree	Neither	Agree	Disagree	Neither	Agree	$\bar{x}$ (S.D.) [a]	$\bar{x}$ (S.D.) [a]
Waterfowl hunting is one of the most important activities in my life.	41.7%	32.9%	25.4%	15.9%	17.7%	66.4%	3.53(1.58)	5.00(1.61)
I spend a lot of time in the off-season planning for waterfowl hunting.	49.9%	29.3%	20.8%	20.3%	16.4%	63.3%	3.25(1.56)	4.77(1.64)
I am disappointed when I have no waterfowl to show for my efforts.	31.5%	25.8%	42.7%	17.6%	15.8%	66.6%	4.13(1.79)	5.00(1.65)
I plan vacation time around waterfowl seasons.	49.3%	32.6%	18.2%	21.1%	21.9%	57.0%	3.20(1.69)	4.76(1.84)
Some of my best days of waterfowl hunting have been when I come home empty-handed.	34.9%	25.7%	39.4%	35.5%	21.0%	43.4%	3.98(1.70)	4.05(1.71)
Hunting with friends and family is an important part of my hunting.	4.3%	9.7%	86.0%	1.3%	3.7%	95.0%	5.85(1.29)	6.29(0.91)
Waterfowl hunting determines much of my lifestyle.	49.3%	34.5%	16.1%	22.9%	24.1%	53.0%	3.17(1.54)	4.55(1.67)
Waterfowl hunting is a test of skill.	8.2%	16.4%	75.3%	3.3%	9.2%	87.5%	5.27(1.33)	5.71(1.11)
My closest friends are waterfowl hunters.	22.4%	24.5%	53.2%	8.8%	12.6%	78.6%	4.47(1.62)	5.49(1.41)
I spend a lot of time before the season scouting the area I will hunt.	41.7%	33.2%	25.1%	21.2%	20.8%	58.1%	3.50(1.55)	4.64(1.60)
I enjoy introducing new people to waterfowl hunting.	19.7%	38.5%	41.9%	7.0%	20.7%	72.3%	4.28(1.53)	5.27(1.37)
Seeing waterfowl is important for a satisfying hunt.	7.7%	16.4%	75.9%	2.9%	6.6%	90.6%	5.37(1.41)	5.91(1.08)
I would rather go waterfowl hunting than do any other recreation.	57.0%	25.1%	18.0%	25.9%	20.2%	53.8%	3.08(1.63)	4.63(1.82)
I am disappointed if I do not get any shots at waterfowl while hunting.	29.7%	25.4%	44.9%	20.2%	19.3%	60.6%	4.18(1.66)	4.69(1.58)
I hunt waterfowl for the challenge.	16.5%	29.4%	54.1%	8.0%	16.0%	76.0%	4.59(1.46)	5.29(1.29)
It takes skill to consistently harvest waterfowl.	8.2%	14.9%	77.0%	4.4%	6.8%	88.7%	5.37(1.39)	5.78(1.16)

[a] 1= Strongly Disagree, 7= Strongly Agree

[b]Cases selected for those who hunted ≥ 1 day for waterfowl during the 2017-18 regular goose season.

Table 31. Relationship to adults that were mentored in waterfowl hunting.

Species	Number of hunters	Percent of hunters
Friend (not coworker)	748	51.2%
Immediate Family	343	23.5%
Coworker	223	15.3%
Distant Family	62	4.2%
Neighbor	62	4.2%
Friend of my child	20	1.4%
Business Colleague	2	0.1%
Significant other	2	0.1%
Unknowledgeable hunter	1	0.1%

Table 32. Reason for introducing an adult to waterfowl hunting.

Species	Number of hunters	Percent of hunters
To share my love for the outdoors	869	56.6%
To introduce new people to the sport	866	56.4%
To share the outdoors	782	50.9%
They had no one to teach them	453	29.5%
To teach responsible and safe hunting practices	421	27.4%
To help them learn to hunt for food	180	11.7%
Person asked	18	1.2%
To spend quality time	5	0.3%
Recruit new hunting partner	3	0.2%
To save the sport	3	0.2%
Business	2	0.1%
To give kids and parents opportunity to learn	2	0.1%
Fun activity	2	0.1%
Relative	1	0.1%
Love helping people	1	0.1%
Lost a bet	1	0.1%

Appendix A

Illinois Waterfowl Hunter Survey
2017-18 Season

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 2017-18 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 _____Occassional 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 2017-18 waterfowl hunting seasons?

_____Yes _____No (If "No," please go to Section 3)

3a. Was the 2017-18 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 3d.

3d. 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 2017-18 season?

_____Yes _____No

5. Did you hunt waterfowl on Illinois state public land during the 2017-2018 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 in Illinois. This information will help IDNR conserve waterfowl populations and provide hunting opportunities in Illinois.
If you did not hunt waterfowl in Illinois during the 2017-18 seasons, please go to Section 3.

1. Please report your hunting effort and harvest in Illinois between September 2017 and January 31st, 2018 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 **2017 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 **2017 Youth Waterfowl Hunting Days**. (North Zone: **Oct. 14-15**, Central Zone: **Oct. 21-22**, South Central Zone: **Nov. 4-5**, South Zone: **Nov. 11-12**) 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 2017-18 **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

3. If you have ever taken a youth hunting, which **one** of the following is the most important reason for doing so? (Please check **only one**.)

_____To protect the sport for future generations _____To build character

_____To teach responsible and safe hunting practices _____To make memories

_____To demonstrate a love for the outdoors _____Other (please identify):_____

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. Do you feel the dates of the 2017-18 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 (*September only*)	1	2	3	4	5
Duck Season	1	2	3	4	5
Canada Goose Season	1	2	3	4	5

2. 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 2017-18, please go to question 3.**

REGULAR DUCK SEASON	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
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

3. 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 2017-18, please go to question 4.**

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

4. In which zone do you **intend** to hunt **DUCKS** most often during the 2018-19 duck hunting season?

_____North Zone _____Central Zone _____South Central Zone _____South Zone

4a. Do you intend to hunt in the South zone at least one day? _____Yes (Go to 4b) _____ No (Skip to #5)

4b. 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. Which structure do you prefer?

_____ Opening on Thanksgiving OR _____ Opening to maximize number January hunting days

5. 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 with no split seasons.

____ I do not have a preference.

6. If a continuous duck season is established in Illinois during the period 2021 through 2025, which of the following zoning options would you prefer? **Please choose ONE response.**

____ Change it back to the 3-zone structure that was used from 2006 through 2010.

____ Use a 3-zone structure, but combine the North and Central zones into one zone, and leave the South Central and South Zones the way they are.

____ Use a 3 zone structure, but combine the Central and South Central Zones into one zone, and leave the North and South Zones the way they are.

____ Use a 3 zone structure, but combine the South Central and South Zones into one zone, and leave the North and Central Zones the way they are.

____ Keep a 4 zone structure, but reconfigure the current zone configuration.

____ No change: leave the 4-zone structure the way it is now.

7. Illinois and Wisconsin harvest a greater portion of geese from the Hudson Bay than other states. Illinois has the option to increase the daily bag from 2 to 3 geese. Increased bag may result in a decline of this population. With that in mind, please give your preference by checking ONE of the following options:

____Increase the daily bag limit from 2 to 3 even though there may be fewer geese available to harvest in future years.

____Retain the current 2 goose bag limit to conserve the goose population for future years.

Please refer to the zone map on the back of the included cover letter to answer questions 8-11.

8. 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

9. Using the table below, please indicate how you feel the current Illinois Waterfowl Zone lines should move.

Zone line between…	Significantly Farther North	Slightly Farther North	This line should NOT Move	Slightly Farther South	Significantly Farther South	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

10. In which county do you hunt waterfowl most often? _____County

10a. Do you feel this county is located in the correct zone? _____Yes _____No

10b. If no, in which zone do you feel this county should be placed?

_____North Zone _____Central Zone _____South Central Zone _____South Zone

11. Please indicate how changing the zone of the area you hunt most often would impact the following by circling the number that best matches your response.

	Greatly Decrease	Decrease	Would not change	Increase	Greatly Increase
Number of ducks you see	1	2	3	4	5
Mid-season matched peak of duck migration	1	2	3	4	5
Amount of shooting you get in	1	2	3	4	5
Amount of time you spend duck hunting	1	2	3	4	5
Number of ducks you harvest	1	2	3	4	5
Season start date allowed the season to match migration	1	2	3	4	5

Section 5. Attitudes Toward Waterfowl Hunting. The following questions tell us about yourself as a hunter.

1. Please state if you agree or disagree with the following statements by circling the number that matches your response.

	Strongly Disagree	**Disagree**	**Slightly Disagree**	**Neither**	**Slightly Agree**	**Agree**	**Strongly Agree**
Waterfowl hunting is one of the most important activities in my life.	1	2	3	4	5	6	7
I spend a lot of time in the off-season planning for waterfowl hunting.	1	2	3	4	5	6	7
I am disappointed when I have no waterfowl to show for my efforts.	1	2	3	4	5	6	7
I plan vacation time around waterfowl seasons.	1	2	3	4	5	6	7
Some of my best days of waterfowl hunting have been when I come home empty-handed.	1	2	3	4	5	6	7
Hunting with friends and family is an important part of my hunting.	1	2	3	4	5	6	7
Waterfowl hunting determines much of my lifestyle.	1	2	3	4	5	6	7
Waterfowl hunting is a test of skill.	1	2	3	4	5	6	7
My closest friends are waterfowl hunters.	1	2	3	4	5	6	7
I spend a lot of time before the season scouting the area I will hunt.	1	2	3	4	5	6	7
I enjoy introducing new people to waterfowl hunting.	1	2	3	4	5	6	7
Seeing waterfowl is important for a satisfying hunt.	1	2	3	4	5	6	7
I would rather go waterfowl hunting than do any other recreation.	1	2	3	4	5	6	7
I am disappointed if I do not get any shots at waterfowl while hunting.	1	2	3	4	5	6	7
I hunt waterfowl for the challenge.	1	2	3	4	5	6	7
It takes skill to consistently harvest waterfowl.	1	2	3	4	5	6	7

Section 6. Mentoring Adult Hunters. Please help us know more about hunters introducing new waterfowl hunters.

1. Have you ever introduced an **adult hunter (**18 years old or older) to waterfowl hunting?

_____Yes _____No (Please go to Section 7)

1a. Please describe your relationship with the adult you mentored by choosing one of the options below.

_____ immediate family _____ distant family

_____ neighbor _____ friend (not coworker)

_____ coworker _____ Other (please identify):_____

1b. If you have ever introduced an adult to waterfowl hunting, which of the following are reasons for doing so? (Please check **all that apply**.)

_____To introduce new people to the sport _____To help them learn to hunt for food

_____To teach responsible and safe hunting practices _____To share the outdoors

_____To share my love for the outdoors _____They had no one to teach them

_____Other (please identify):_____

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

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 2016 Illinois Harvest Information Program (HIP) registrants. We are asking you to provide information about your activities during the 2017-18 waterfowl hunting seasons in Illinois. **Even if you did not hunt ducks or geese in Illinois during the 2017-18 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/.

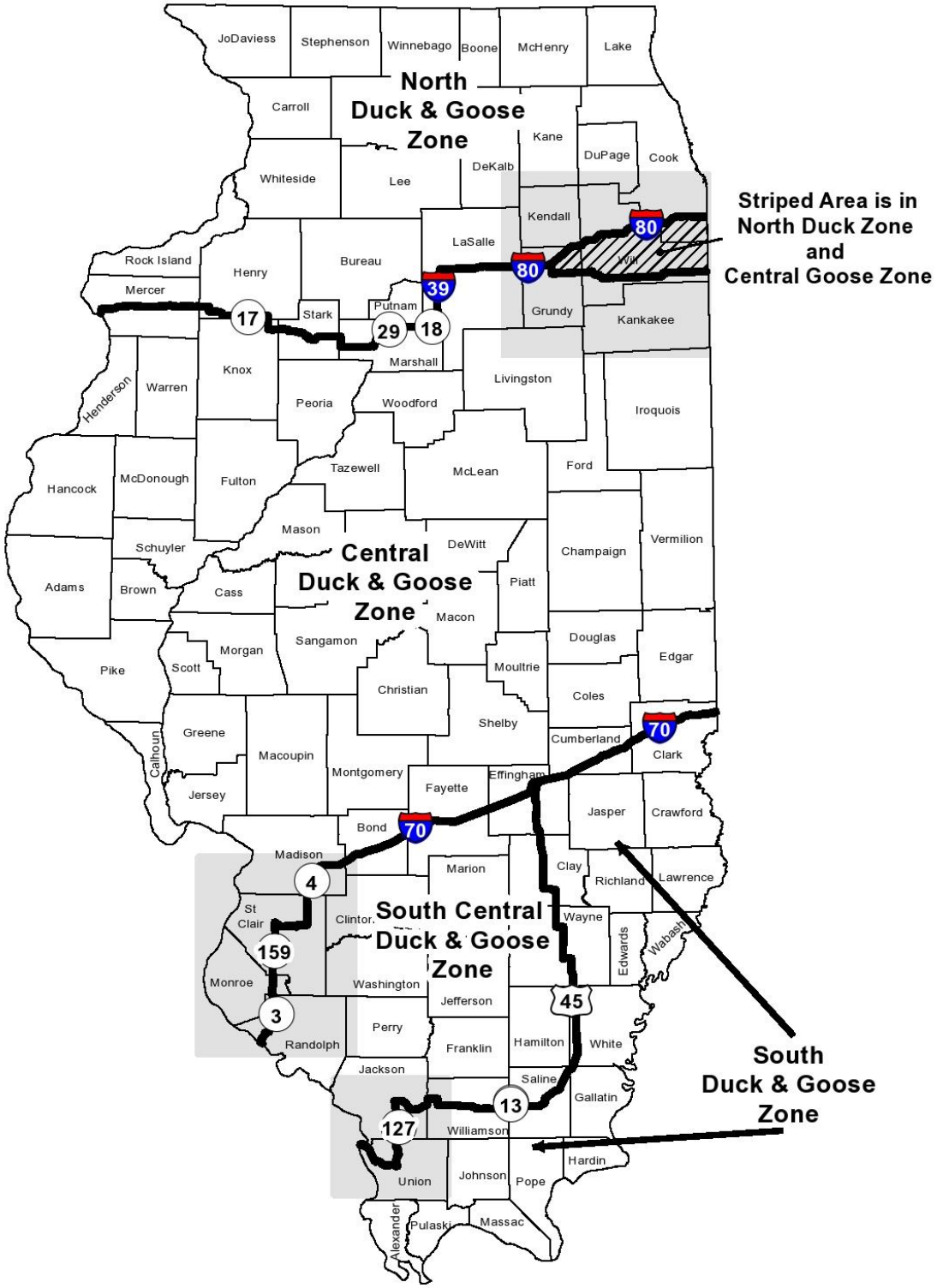
If you have questions regarding this study, please call us at (217) 244-5121.

Sincerely,

Craig A. Miller
Human Dimensions Research Program

1816 South Oak Street,
Champaign, Illinois 61820 USA

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 2016 Illinois Harvest Information Program (HIP) registrants. We recently mailed you a questionnaire regarding your hunting experiences in Illinois during the 2017-18 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 2106-17 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.

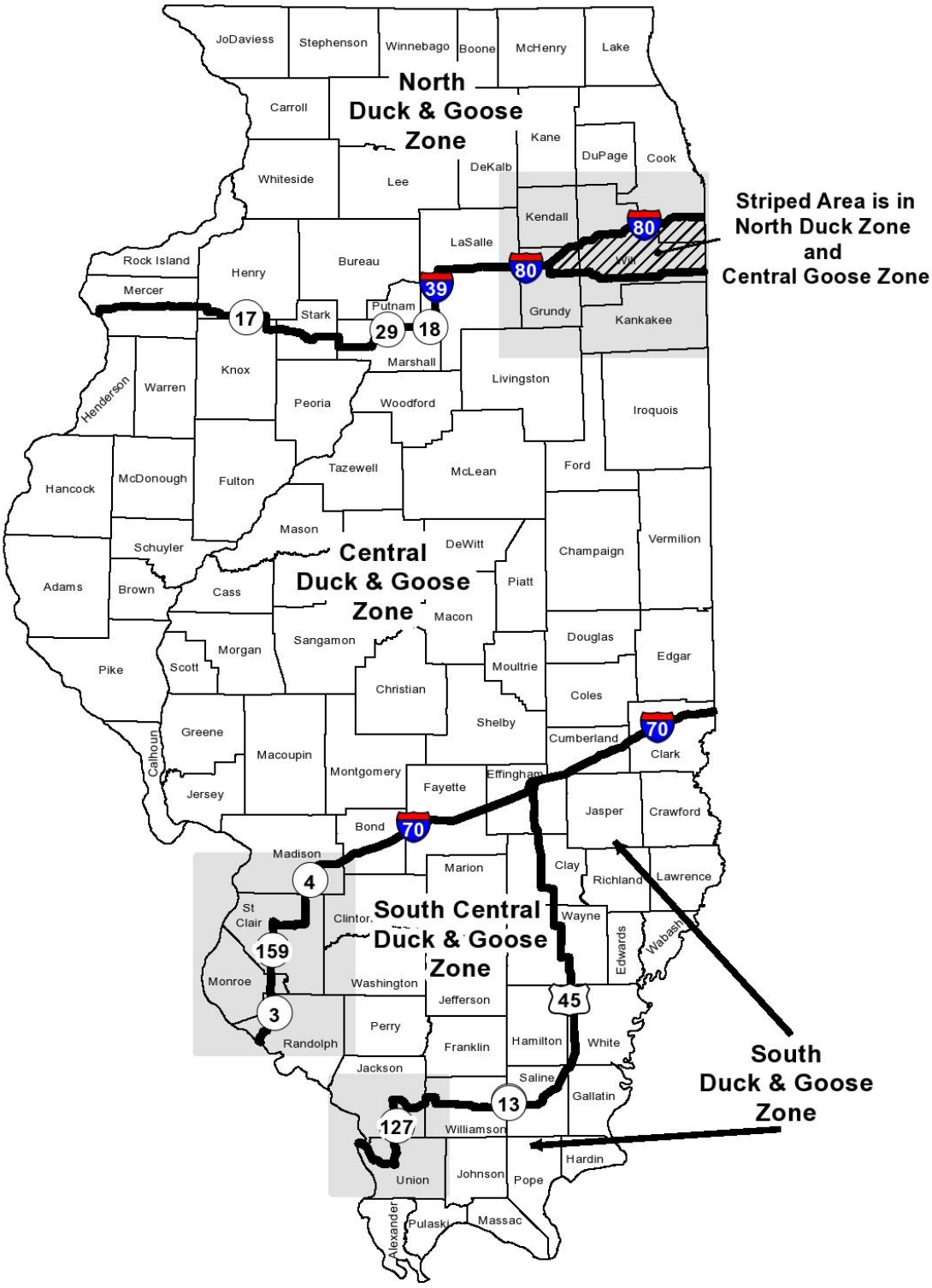
Thank you for helping with this important study.

Sincerely,

Craig A. Miller
Human Dimensions Research Program

1816 South Oak Street,
Champaign, Illinois 61820 USA

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 2016 Illinois Harvest Information Program (HIP) registrants. We recently mailed you a questionnaire regarding your hunting experiences in Illinois during the 2017-18 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.

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/.

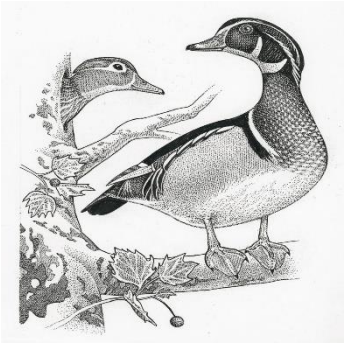
If you have questions regarding this study, please call us at (217) 244-5121.

Thank you for helping with this important study.

Sincerely,

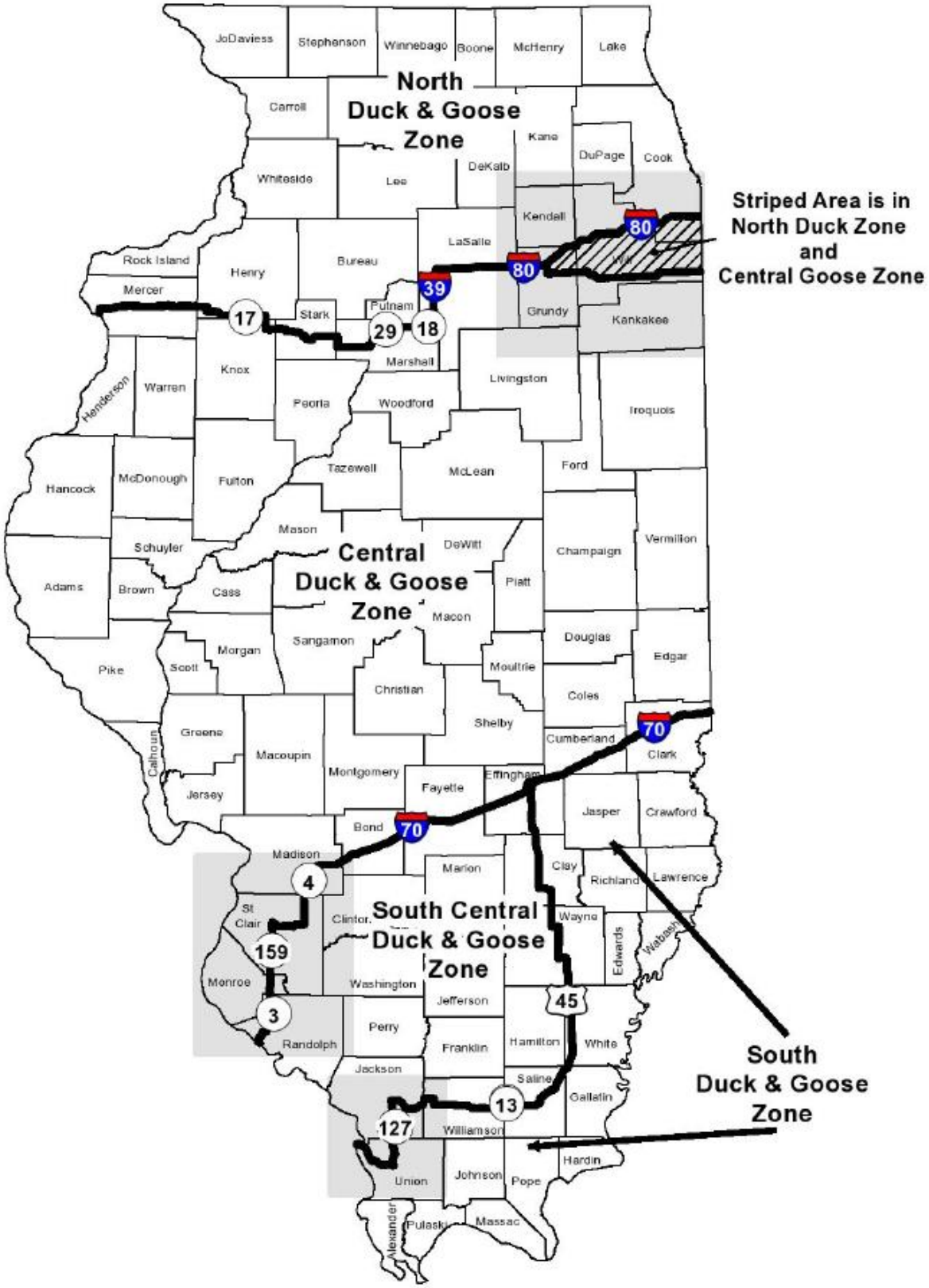
Craig A. Miller
Human Dimensions Research Program

Human Dimensions Research Program



1816 South Oak Street,
Champaign, Illinois 61820 USA

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



Appendix F

Table F-1. Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest in Illinois from 1981 through 2016 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

[a] Teal, 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.

[b] Stamps purchased for commercial art purposes. These stamps were not included in the numbers to the left.

[c] Estimates 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 2016 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%

[a] 2008-2010 numbers changed to reflect responses in the sample.

Table F-3. Summary of Teal harvest and hunter activity during September Teal season (Illinois, 1981-2016).

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

[a] The 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, 1981-2016).

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

[a] September 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, 1996-2016.

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

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

[a] Could not hunt geese during the Youth Waterfowl Hunting Day in 1996 and 1997.

[b] Results include youth hunts during the regular season and the 2 day Youth Waterfowl Hunting Days.

[c] Results 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 1981-2016).

Season (Year)	Hunters	Days Afield	Number of Ducks				Coots
			Mallards	Wood Ducks	Other Ducks[b]	Total	
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[b]	384,828 ± 39,741	4,681 ± 3,311
2015	36,499	496,656	166,506	43,655	119,619	329,780 ± 34,835	3,185 ± 1,960
2016	34,386	459,029	154,698	47,986	130,722[b]	333,406 ± 37,408	4,424 ± 1,338
2017	30,025	394,034	136,381	29,372	111,937[b]	277,689 ± 24,826	1,544 ± 921

[a] Estimates 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.

[b] Numbers in parentheses represent harvest of Canvasback.

Table F-7. Rates of duck harvest and hunter activity during the regular duck season (Illinois 1981-2016).

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

[a] Excludes ducks harvested coincidentally while goose hunting.
[b] The 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 1997-2016).

			Waterfowl Zone				
	Year	Statewide	North	Central	South Central	South	Unknown
Hunters	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

[a] Less 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 1997-2016).

	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

Table F-10. Number of Days Afield during the early September Canada goose season (Illinois 1997-2016).

	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

Table F-11. Summary of goose harvest and hunter activity during the regular goose season (Illinois 1981-2016).

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

[a] Number of geese harvested while duck hunting.

[b] The 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).

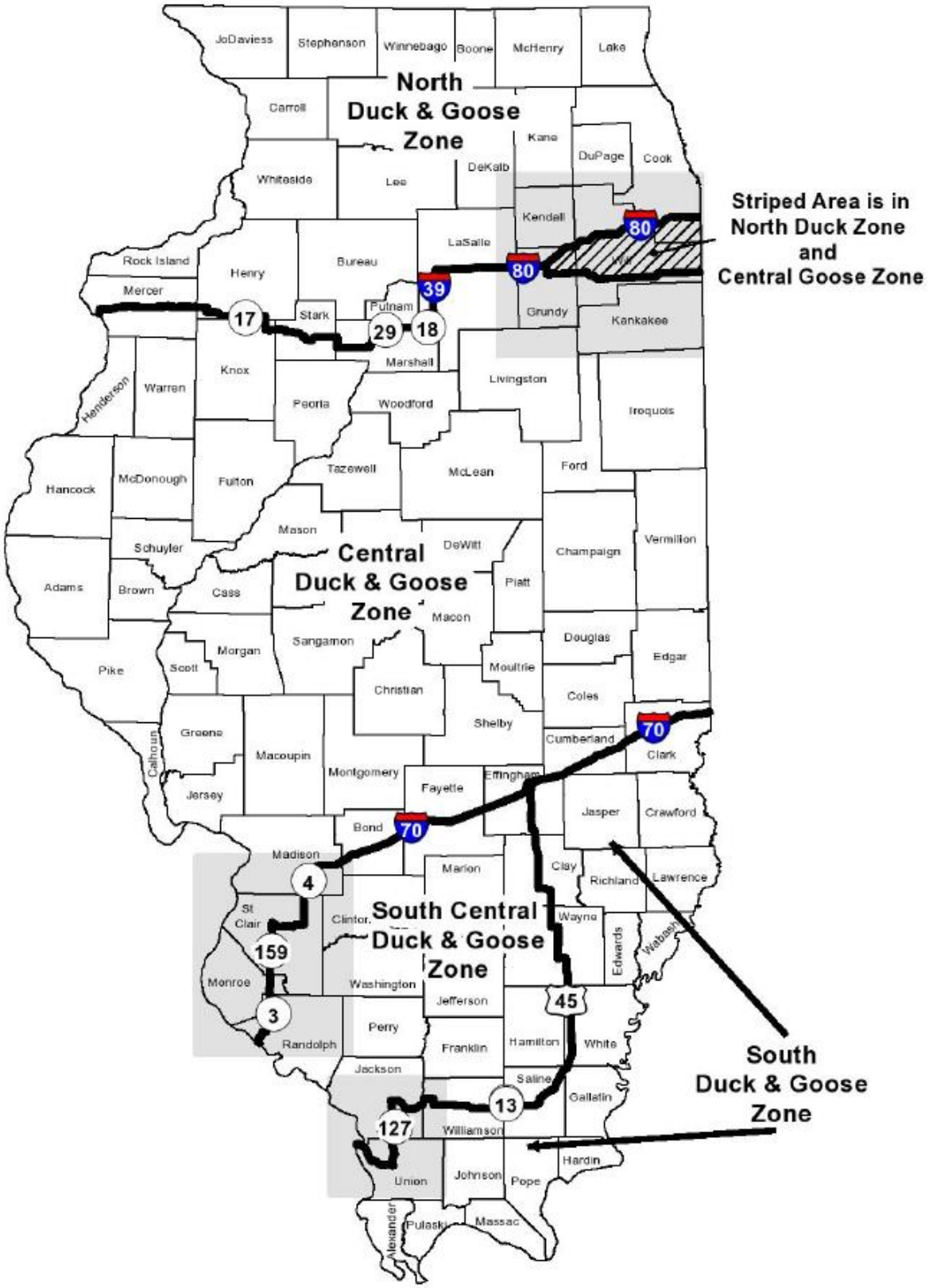
[c] Reduced by 23,151 from estimate given in 2002 report to exclude Conservation Order snow goose harvest.

Table F-12. Summary of the number of ducks and geese crippled (Illinois 1981-2016 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

[a] The 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


North Duck & Goose Zone
Striped Area is in North Duck Zone and Central Goose Zone
Central Duck & Goose Zone
South Central Duck & Goose Zone
South Duck & Goose Zone
JoDaviess
Stephenson
Winnebago
Boone
McHenry
Lake
Carroll
Whiteside
Lee
DeKalb
Kane
DuPage
Cook
Kendall
LaSalle
Rock Island
Henry
Bureau
Mercer
Putnam
Stark
Grundy
Kankakee
Knox
Marshall
Livingston
Iroquois
Henderson
Warren
Peoria
Woodford
Hancock
McDonough
Fulton
Tazewell
McLean
Ford
Mason
DeWitt
Champaign
Vermilion
Schuyler
Adams
Brown
Cass
Macon
Piatt
Douglas
Edgar
Pike
Scott
Morgan
Sangamon
Moultrie
Coles
Christian
Shelby
Cumberland
Clark
Calhoun
Greene
Macoupin
Montgomery
Fayette
Effingham
Jasper
Crawford
Jersey
Bond
Madison
Marion
Clay
Richland
Lawrence
St Clair
Clinton
Wayne
Edwards
Wabash
Monroe
Washington
Jefferson
Perry
Franklin
Hamilton
White
Randolph
Jackson
Saline
Gallatin
Williamson
Union
Johnson
Pope
Hardin
Alexander
Pulaski
Massac
17
29
18
39
80
80
4
159
3
45
13
127
70
70

DUCKS & EARLY CANADA GEESE

SPECIES	DATES (Inclusive)	HOURS	DAILY BAG LIMIT	POSSESSION LIMIT
Teal	Sep. 9 – Sep. 24 (Statewide)	Sunrise to Sunset	6	18
Ducks	**North Zone** Oct. 21 – Dec. 19 **Central Zone** Oct. 28 – Dec. 26 **South Central Zone** Nov. 11 – Jan. 9 **South Zone** Nov. 23 – Jan. 21	1/2 hour before sunrise to sunset	**6** (See section on Bag Limits)	18 (See section on Bag Limits)
Mergansers			5 (See section on Bag Limits)	15 (See section on Bag Limits)
Coots			15	45
Early Canada Geese	Sep. 1 – Sep. 15 (North and Central Zones)		5	15
Early Canada Geese	Sep. 1 – Sep. 15 (South Central and South Zones)		2	6

Bag Limit – DUCKS – Bag limits on ducks are as follows: The basic daily bag limit shall be 6 ducks of any species including all teal species, (except mergansers); however, no more than 4 shall be mallards (no more than 2 hen mallards) and not more than 3 wood ducks, 3 scaup, 2 redheads, 2 canvasbacks, 2 black ducks, and not more than 1 pintail and 1 mottled duck. In addition to the daily bag limit for ducks, the daily bag limit for all mergansers is 5, only 2 of which may be hooded mergansers. The possession limit for ducks and mergansers is three (3) times the daily bag limit by species and sex.

YOUTH WATERFOWL HUNTING DAYS*

SPECIES	DATES	HOURS	DAILY BAG LIMIT
Ducks	**North Zone** Oct. 14 – Oct. 15 **Central Zone** Oct. 21 – Oct. 22 **South Central Zone** Nov. 4 – Nov. 5 **South Zone** Nov. 11 – Nov. 12	1/2 hour before sunrise to sunset	**6** (See section on Bag Limits)
Mergansers			5 (See section on Bag Limits)
Coots			15
Canada Geese			2
Snow Geese			20
White-fronted Geese			2
Brant			1

***Youth Waterfowl Hunting Day Regulations**

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. No stamps are required for youths under 16. State and federal waterfowl stamps are required for all hunters age 16 and older, even those hunting with a Youth License, unless exempt (see page 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.**
2. Only geese, ducks, mergansers and coots may be taken in addition to other game in season.
3. An adult at least 18 years of age must accompany the youth hunter into the field. This adult cannot hunt geese, ducks, coots or mergansers but can participate in other open seasons.
4. Zone lines for Youth Waterfowl Hunt follow duck zone lines.

GEESE

	DATES (Inclusive)	HOURS	DAILY BAG LIMIT	POSSESSION LIMIT
Canada Geese		1/2 hour before sunrise to sunset		
North Zone	Oct. 21 – Jan. 18		2	6
Central Zone	Oct. 28 – Nov. 5 & Nov. 12 – Jan. 31			
South Central Zone	Nov. 11 – Jan. 31			
South Zone	Nov. 23 – Jan. 31			
Snow/Blue & Ross' Geese and Brant				
North Zone	Oct. 21 – Jan. 18		20 Snow/Blue & Ross' Geese 1 Brant	Unlimited Snow/Blue & Ross' Geese 3 Brant
Central Zone	Oct. 28 – Jan. 31			
South Central Zone	Nov. 11 – Jan. 31			
South Zone	Nov. 23 – Jan. 31			
White-fronted Geese				
North Zone	Oct. 23 – Jan. 18		2	6
Central Zone	Nov. 5 – Jan. 31			
South Central Zone	Nov. 11 – Jan. 31			
South Zone	Nov. 23 – Jan. 31			

PUBLIC WATERFOWL PERMIT APPLICATION DATES

What	Who May Apply	Application Period
First Lottery	Online only - Residents only	Aug. 16 - 31, 2017
Second Lottery	Online only - Unsuccessful residents, residents that did not apply in first lottery, non-residents	Sept. 1 - 14, 2017
Third Lottery	Online only - All applicants	Sept. 15 - 28, 2017
First-Come, First-Serve	Online only - All applicants, permits remaining after lotteries	Begins Oct. 1, 2017
Youth Waterfowl	Paper application – Hunters age 10–17	Aug. 31 - Oct. 1, 2017

For more information and applications: *https://www.dnr.illinois.gov/hunting/waterfowl/Pages/OnlinePermitApplication.aspx*