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

2012-2013 Illinois Waterfowl Hunter Report: Effort, Harvest, and Season Preferences

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2012-2013 ILLINOIS WATERFOWL HUNTER REPORT: EFFORT, HARVEST, AND SEASON PREFERENCES

JOB COMPLETION REPORT

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HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-22
STUDY 101
JOB NO. 101.3

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Federal Aid in Wildlife Restoration
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Illinois Department of Natural Resources

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Division of Wildlife Resources

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OBJECTIVE

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

ABSTRACT

A total of 1,882 (41%) Illinois waterfowl hunters responded to the 2012-2013 Illinois Waterfowl Hunter Survey. Hunters reported spending 1,155,346 days afield, an increase of .7% from the 1,147,037 days devoted during the 2011-2012 license year. Waterfowl harvest increased .5% from 577,654 during 2011-2012 to 580,557 during 2012-2013. Duck harvest estimates for the regular duck season were as follows: 244,988 mallards (*Anas platyrhynchos*), 47,623 wood ducks (*Aix sponsa*), and 185,776 other ducks. A total of 31,942 teal (*Anas spp.*) were harvested during the September teal season. Goose hunters harvested 72,682 Canada geese (*Branta canadensis*) during the regular Canada goose season, a 3.2% decrease from the 75,061 Canada geese harvested during the 2011-2012 regular goose season. Hunters harvested 18,028 Canada geese during the September Canada goose season, a 4% decrease from the previous year. During the Youth Waterfowl Hunting Season, 7,825 adults took 10,001 youths waterfowl hunting, a 24% increase from the 6,325 adults and a 16% increase from the 8,642 youths that participated in the 2011-2012 Youth Waterfowl Hunting Season. We discuss the use of public duck permits, duck hunter satisfaction with the waterfowl seasons, and hunter spending habits regarding waterfowl.

METHODS

A random sample of 5,000 waterfowl hunters was drawn from the population of Illinois State Waterfowl Stamp purchasers from the 2011-2012 license year (64,896 stamps sold). On 31 August 2012, a 1-page diary for recording their hunting activity and waterfowl harvest was sent to the original sample of 5,000. After incomplete and duplicate addresses were removed, the sample was reduced to 4,900. On 7 March 2013, hunters were mailed a 12-page questionnaire (Appendix A), cover letter (Appendix B), and a postage-paid return envelope. We received 90 (2%) questionnaires returned as undeliverable; the sample was then reduced to 4,810. Hunters were sent a follow-up postcard (Appendix C) on 29 March 2013 thanking them for returning their questionnaire and also reminding non-respondents to return the completed questionnaire. Non-respondents were mailed a second questionnaire and a cover letter (Appendix D) on 17 April 2013, followed with a second postcard mailing on 10 May 2013. A third questionnaire and cover letter (Appendix E) were mailed to non-respondents on 4 June 2013. Estimates of number of hunters, days afield, and waterfowl harvested were computed following the procedures outlined by Anderson et al. (1998). Coded data were entered and analyzed using SPSS 21.0 (SPSS Inc. 2013). Confidence intervals are presented where appropriate.

SEASON LENGTHS AND BAG LIMITS

Illinois was granted permission from the U.S. Fish and Wildlife Service to incorporate a fourth waterfowl zone beginning with the 2011-2012 regular waterfowl seasons. September goose season used this zone configuration for the first time in the 2012-2013 season. Hunters in the northern part of the former South Zone had expressed dissatisfaction with late duck seasons, and hunters in the southern part of the former South Zone had expressed dissatisfaction with early duck seasons. The former South Zone, which ran from Interstate 70 south, was split into two zones. The South Central Zone encompasses Carlyle Lake and Rend Lake, while the Wabash River and southern portion of Illinois comprise the South Zone. Additionally, the eastern location of the North/Central Zone line was changed; the portion between Interstate 80 and the Wilmington-Peotone road lie in the North duck zone and the Central goose zone (Appendix F). The early (September) teal (*Anas spp.*) season length and daily bag limits remain unchanged; hunters could hunt for 16 days and could harvest 4 teal a day. Early (September) Canada goose (*Branta canadensis*) season length remained unchanged from the 2011 season. Hunters could hunt for 15 days statewide and could harvest 5 geese a day in the North and Central Zones; the South Central and South Zones were limited to a harvest of 2 birds a day. Length and daily bag limit of the regular duck season did not change (60-day/6-bird duck season) in 2012. The regular Canada goose season changed (90-day/2-bird Canada goose season in North and Central zone, 83-day/2-bird in the South Central and 71-day/2-bird in the South Zone).

RESULTS

Waterfowl Harvest and Days Afield

We received 1,971 (41%) questionnaires from hunters in the sample, of which 1,882 were usable surveys. Of the 1,882 usable surveys, 1,627 (86%) hunters purchased a 2012-2013 state waterfowl stamp. Of these 1,627 hunters that purchased a 2012-2013 stamp, 1,048 (64%) hunters actually hunted waterfowl in Illinois during the 2012-2013 license year. The number of waterfowl hunters decreased from 52,660 during the 2011-2012 season to 50,740 during the 2012-2013 season, a 3.7% decrease in hunters (Table 1, Figure 1). Hunters reported spending 1,155,346 days afield in 2012-2013, an increase of 0.7% from the 1,147,037 in 2011-2012. Total waterfowl harvest increased 0.5% from 577,654 birds during 2011-2012 to 580,557 birds during 2012-2013. Twenty-nine percent of the hunters hunted ducks only, 10% hunted geese only, and 61% hunted both ducks and geese (Table 2, Figure 2).

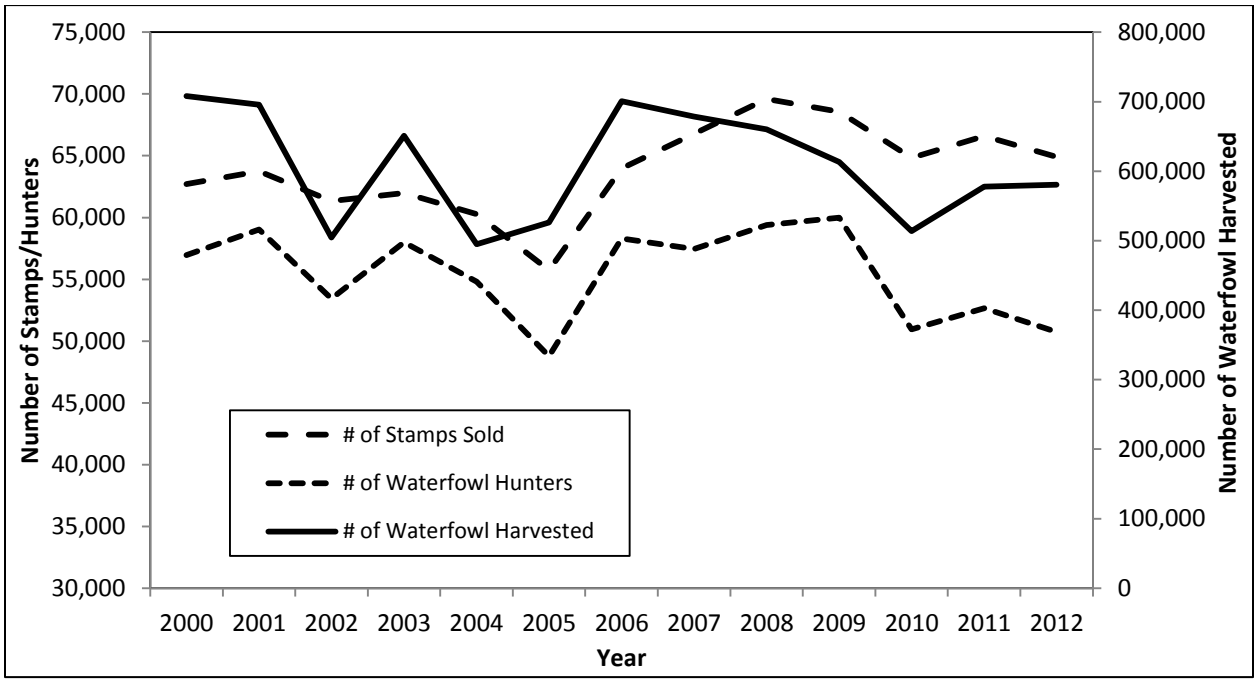

Figure 1. Stamps sold, number of hunters, and waterfowl harvested in Illinois, 2000-2012.

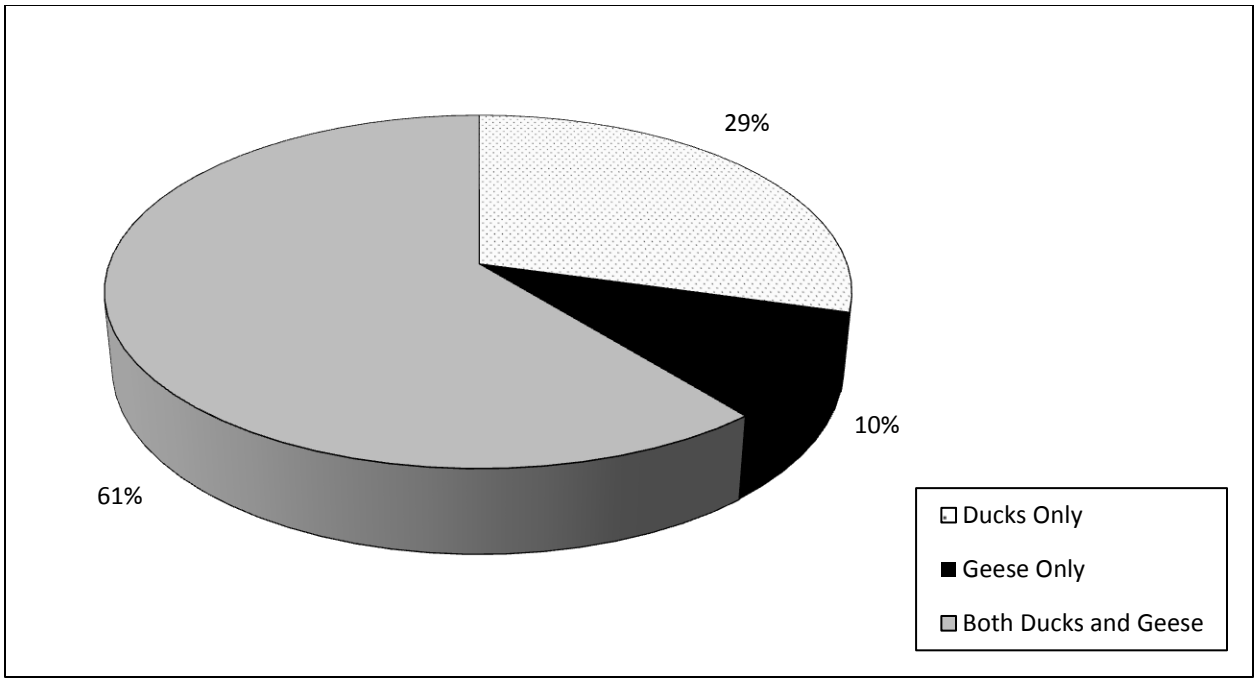

Figure 2. Percentage of hunters who hunted ducks, geese, or both during the 2012-13 Illinois waterfowl season.

September Teal Season

The number of early (September) teal hunters decreased 2.5% from 11,221 during 2011 to 10,944 during 2012 (Table 3, Figure 3). Days afield increased 9.1% from 42,811 during 2011 to 46,719 during 2012. Despite the decline in hunters, teal hunters harvested 31,942 ± 11,740 teal in the 2012 September season, a 49% increase from the 2011 harvest. The Central Zone accounted for one-half (52%) of September teal season hunters, 48% of the days afield, and 56% of the teal harvest (Table 4). The South Zone had 22% of the teal hunters, 20% of the days afield, and 27% of the teal harvest. Statewide, September season teal hunters averaged 4.27 days afield in 2012, and they harvested an average of 0.68 teal per hunter per day and 2.92 teal per hunter per season (Table 5, Figure 4).

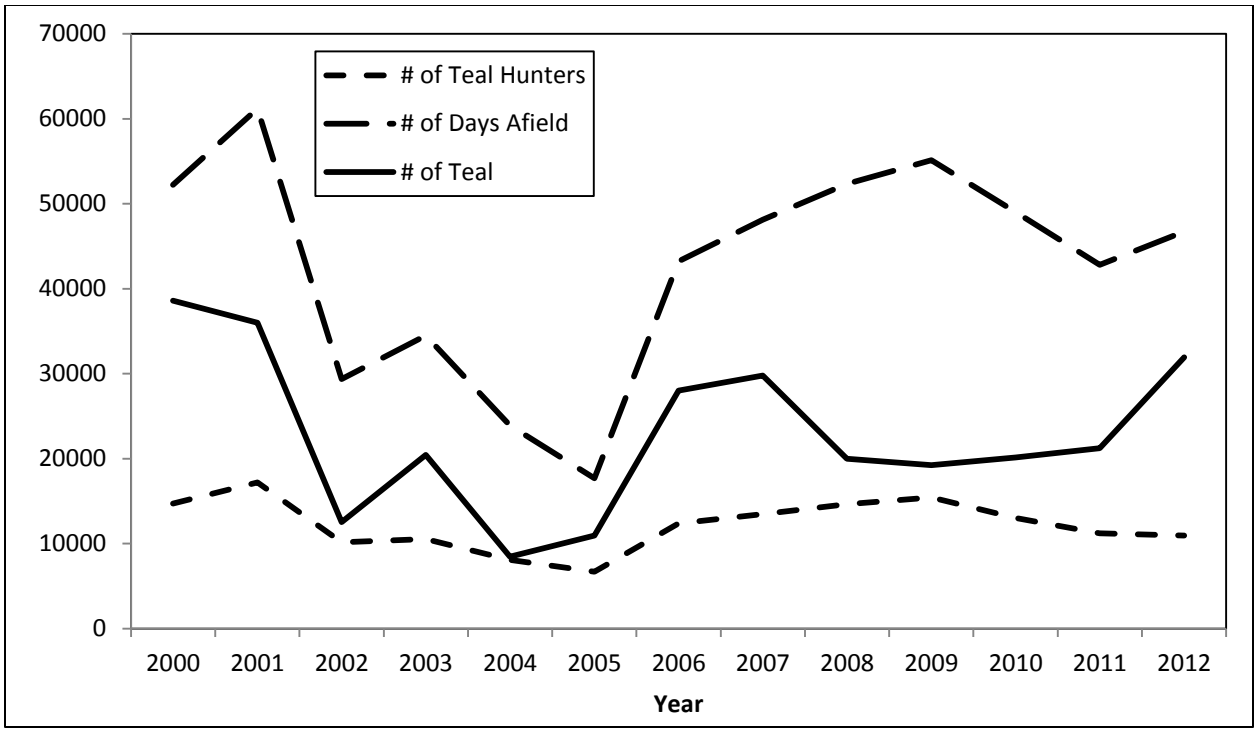

Figure 3. Teal harvest and hunter activity during the Illinois September teal season, from 2000– 2012.

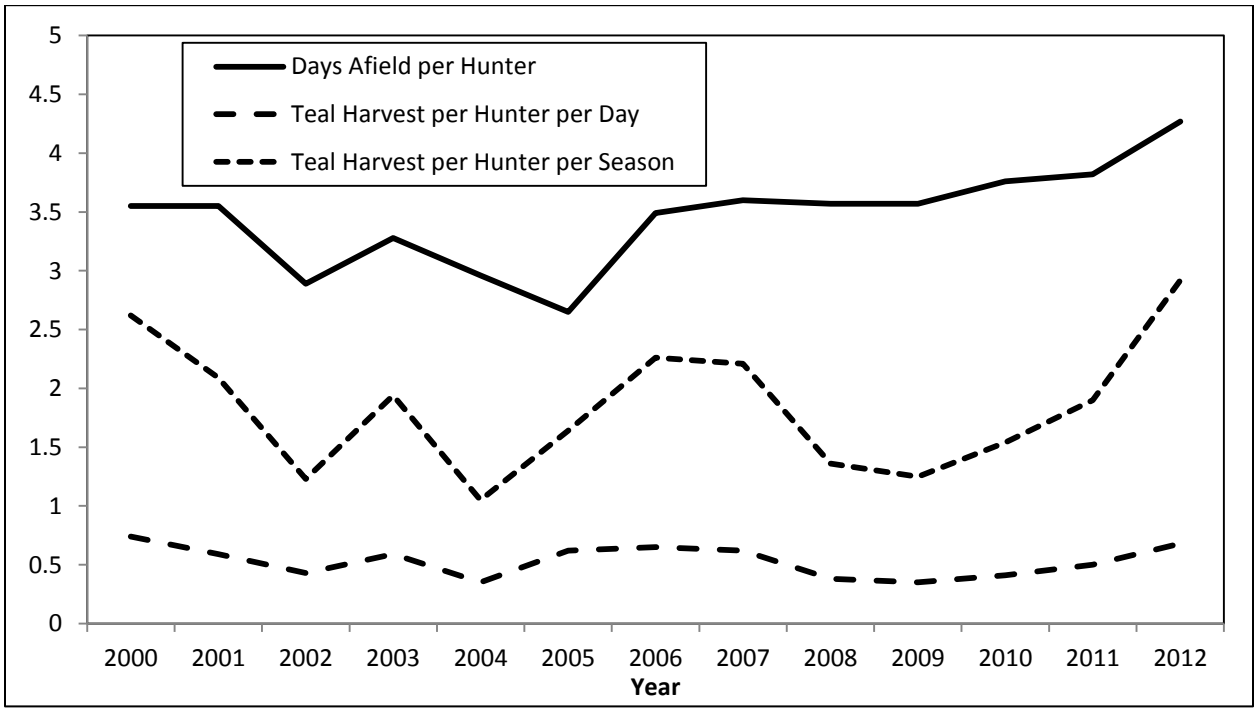

Figure 4. Rates of teal harvest and hunter activity during the Illinois September teal season from 2000-2012.

Youth Waterfowl Hunting Season

The Youth Waterfowl Season framework remained unchanged from 2011 to 2012; youth less than 16 years of age were able to hunt ducks, geese, and coots for two days before the regular duck season opened in all four zones. The number of adults and youths that participated in the 2012 youth hunt increased; participating adults increased 24%, from 6,325 adults during 2011 to 7,825 adults during 2012, and the number of youths participating increased 16% from 8,642 youths during 2011 to 10,001 youths during 2012 (Table 6). Respondents to the 2012 questionnaire combined regular season youth hunt results with Youth Waterfowl Hunting Days. To address this issue we calculated the average number of birds harvested by youth per day for the entire season. Waterfowl harvested is this average multiplied by 2 (number of days Youth Waterfowl Hunting Days is open) and the number of youth taken to Youth Waterfowl Hunting Days. The youth waterfowl harvest (ducks, geese, and coots combined) decreased 22%, from 12,220 in 2011 to an estimated 9,714 in 2012.

Thirty-eight percent of youth that participated in the 2012 youth waterfowl season had never hunted ducks or geese before. Twenty-eight percent of hunters who hunted during the 2012-13 duck or goose seasons took a youth hunting during the regular duck or goose seasons; 73% of these hunters took a youth during the regular duck season, and 56% of these hunters took a youth during the regular goose season. Entire season harvest totals for all youth were: 12,583 mallards; 5,010 wood ducks; 9,964 other; 1,358 coots; and 5,182 geese.

Regular Duck Season

The number of duck hunters decreased by 3,175 (7%) from 46,619 during the 2011-2012 season to 43,444 during the 2012-2013 season (Table 7). Duck hunters spent 630,233 days afield (M = 14.51 days) during the 2012-2013 season, a decrease of 1% from the 632,712 days

reported during the 2011-2012 season. Mallards (*Anas platyrhynchos*) comprised 51% of the total regular season duck harvest, while wood ducks (*Aix sponsa*) and other ducks accounted for 10% and 39%, respectively (Figure 5). These numbers do not necessarily reflect the most often harvested ducks, but are a product of how hunters are asked to provide their harvest data. Statewide mallard harvest in Illinois increased by 22,583 birds (10%) from 222,405 during 2011-2012 to 244,988 during the 2012-2013 season (Table 7, Figure 6). Wood duck harvest decreased 6,671 (12%) from 54,294 during 2011-2012 to 47,623 during 2012-2013. The harvest of other ducks increased 34,990 (23%) from 150,786 during 2011-2012 to 185,776 during 2012-2013. Total duck harvest during 2012-2013 was 478,387, 12% greater than the 427,484 ducks reported for 2011-2012. The statewide coot (*Fulica americana*) harvest decreased 5% from 4,327 in 2011-2012 to 4,133 in 2012-2013. The 2012-2013 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. South Central Zone hunters had the highest ducks harvested per hunter per season (10.64 ducks) and ducks per day (1.03 ducks, Table 8). Statewide, the duck harvest per hunter per day increased from 0.68 in 2011-2012 to 0.76 in 2012-2013, and duck harvest per hunter per season increased from 9.17 in 2011-2012 to 11.01 in 2012-2013 (Table 9).

Of duck hunters who reported hunting ≥ 1 day, 33% hunted less than 5 days (Table 10), and 7% of duck hunters reported not harvesting any ducks. A quarter of hunters (25%) harvested more than 30 ducks (Table 10), and 49% of hunters used a spinning-wing decoy (SWD) during the 2012-13 duck seasons.

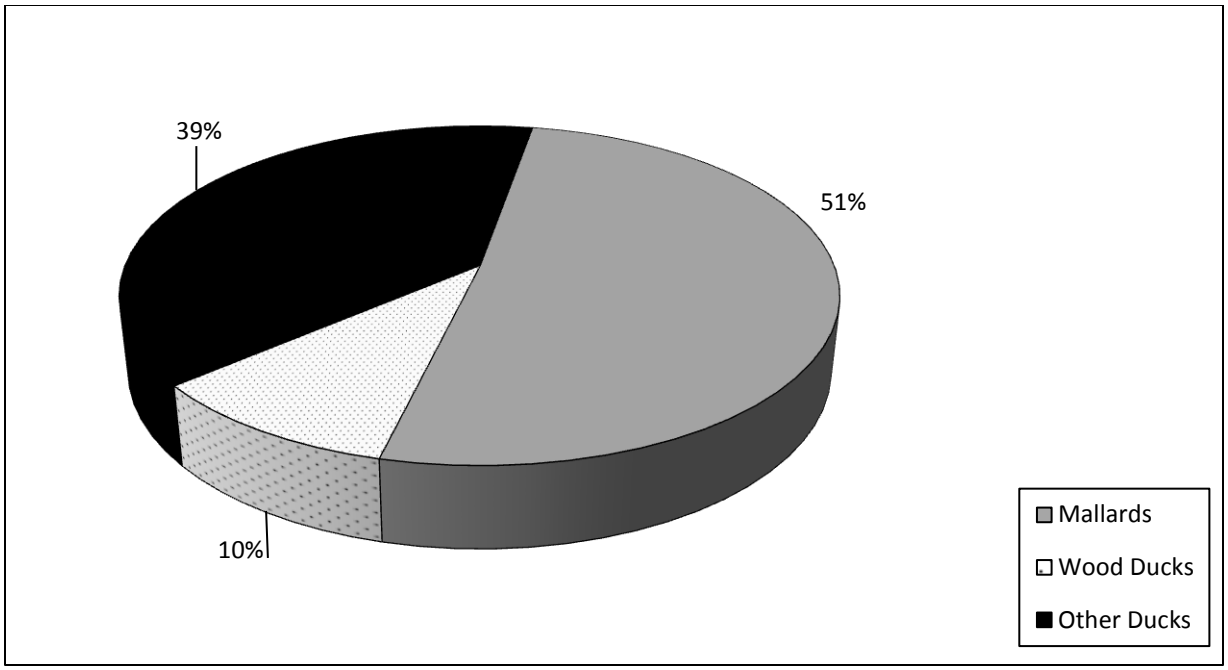

Figure 5. Proportion of Mallards, Wood Ducks, and Other Ducks harvested during the 2012-2013 regular duck season[a].

[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, other ducks) is not necessarily the order of the most often harvested ducks in Illinois.

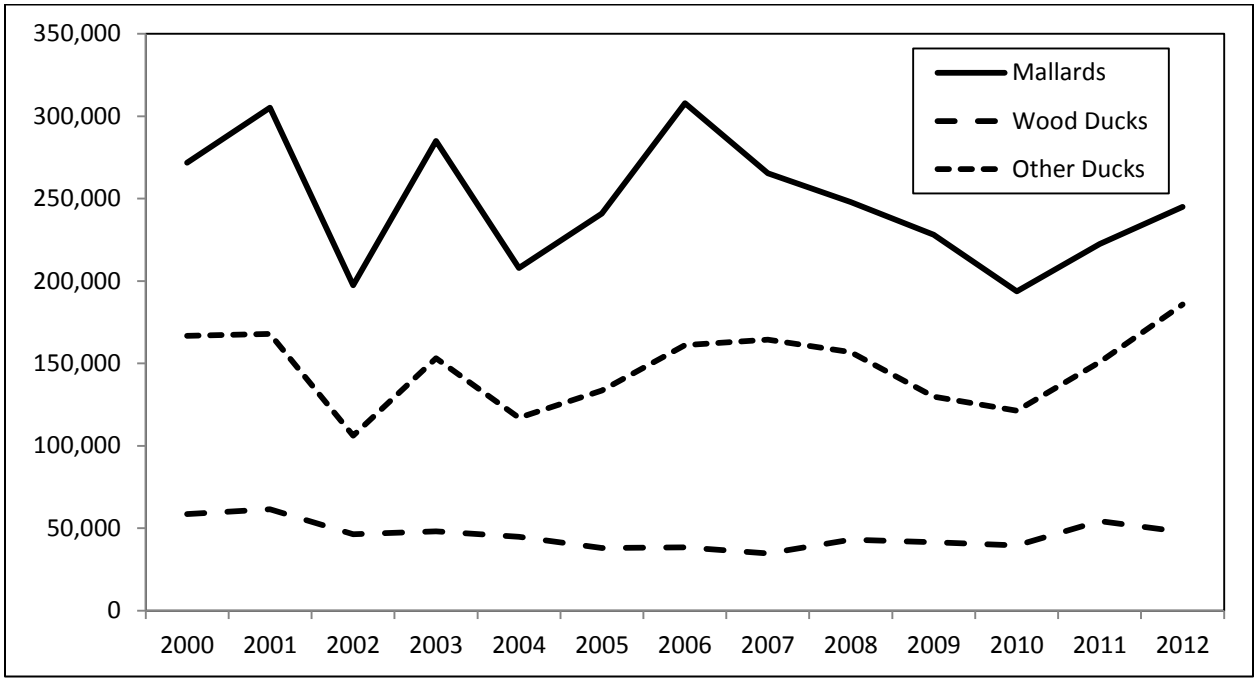

Figure 6. Illinois regular season duck harvest, 2000 – 2012.

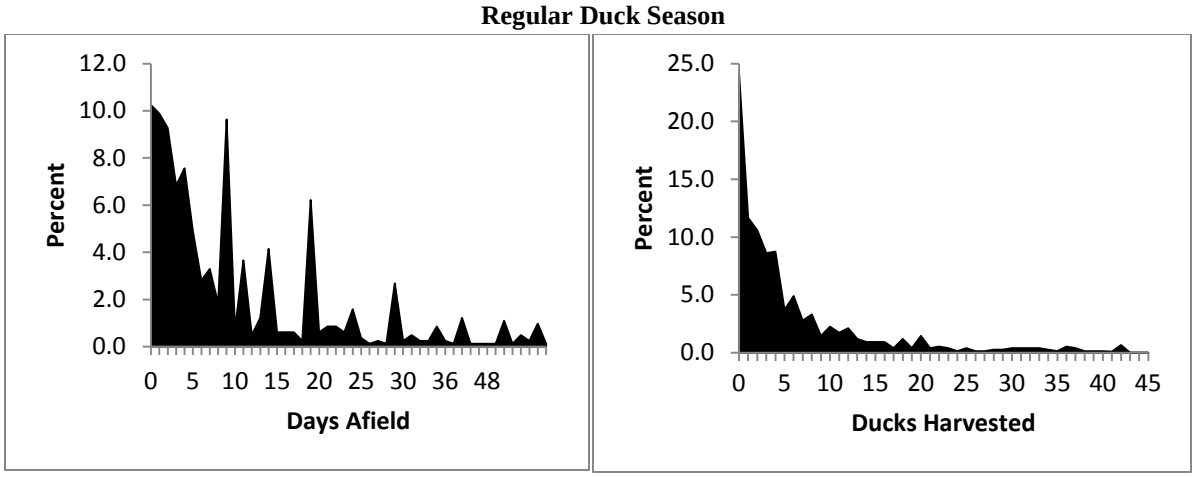

Figure 7. Distribution of days afield per hunter and ducks harvested per hunter for Illinois' 2012-2013 regular duck season.

Early September Goose Season

An estimated 11,192 hunters participated in the early (September) Canada goose season in Illinois during the 2012 season (Table 11), which was a 16% decrease from the number of hunters that participated in the 2011 season. The majority (53%) of these hunters were active in the Central Zone. Hunters, regardless of the zone they hunted, collectively harvested 18,028 geese during the early season, with the majority 8,557 (47%) being harvested in the North Zone (Figure 8). The number of days afield in 2012 decreased 20% from 49,306 in 2011 to 39,589 in 2012, and the harvest of geese decreased slightly (4%) from 18,790 in 2011 to 18,028 in 2012 (Figure 9).

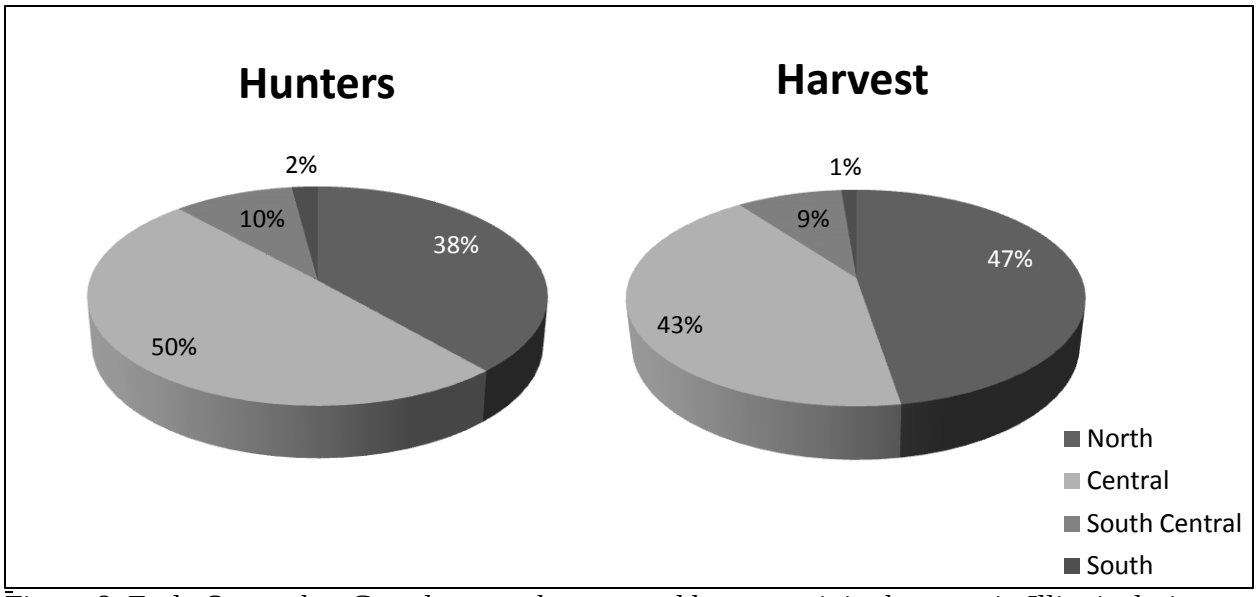

Figure 8. Early September Canada goose harvest and hunter activity by zone in Illinois during 2012.

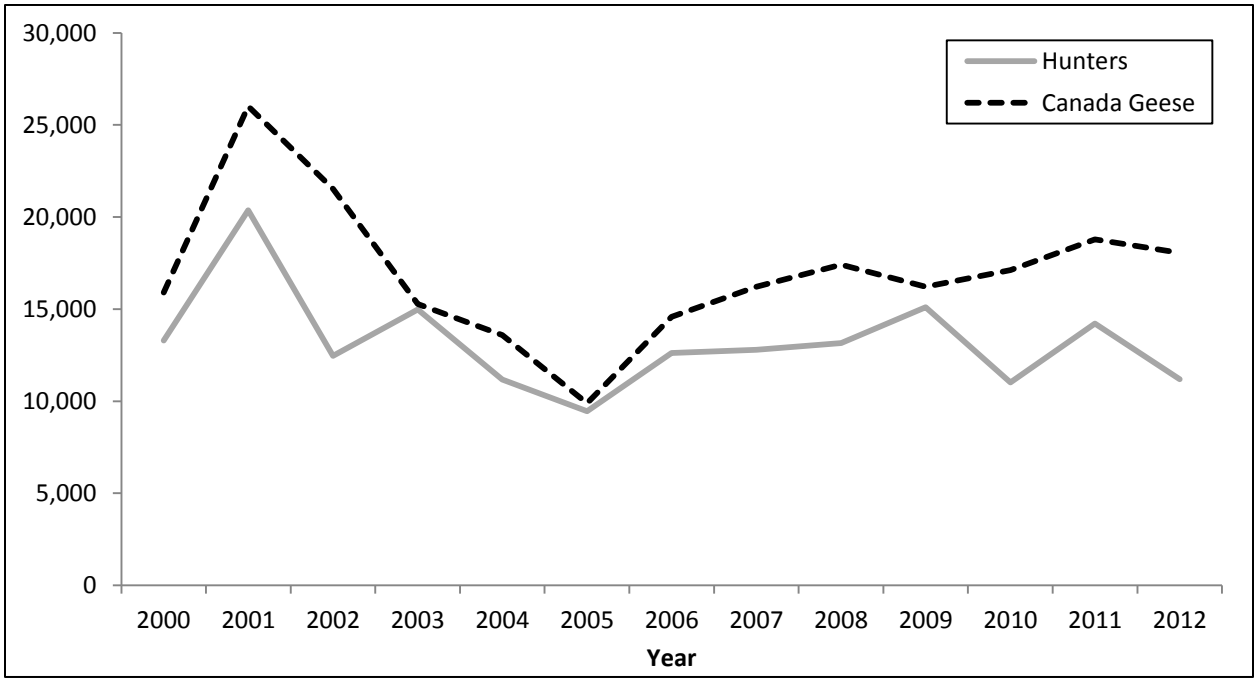

Figure 9. Early September Canada goose harvest and hunter activity, 2000-2012.

Regular Canada Goose Season

Canada goose harvest during the 2012-2013 regular goose season decreased 3% from 2011-2012 (Table 12, Figure 10). An estimated 34,034 hunters spent 386,356 days afield and harvested 72,682 Canada geese during 2012-2013. Number of goose hunters in Illinois decreased (8%) from the number of hunters in 2011-2012, and number of days afield during regular Canada goose season decreased 6%. These hunters also harvested 19,597 other geese (of which 12,900 were snow/blue geese, *Chen caerulescens*), for a total combined harvest of 92,280 geese (Figure 11). Goose hunters hunted an average of 11.35 days for geese; mean harvest of geese was 2.14 geese per hunter per season, and 70% of goose hunters harvested ≤ 5 geese (Table 13, Figure 12).

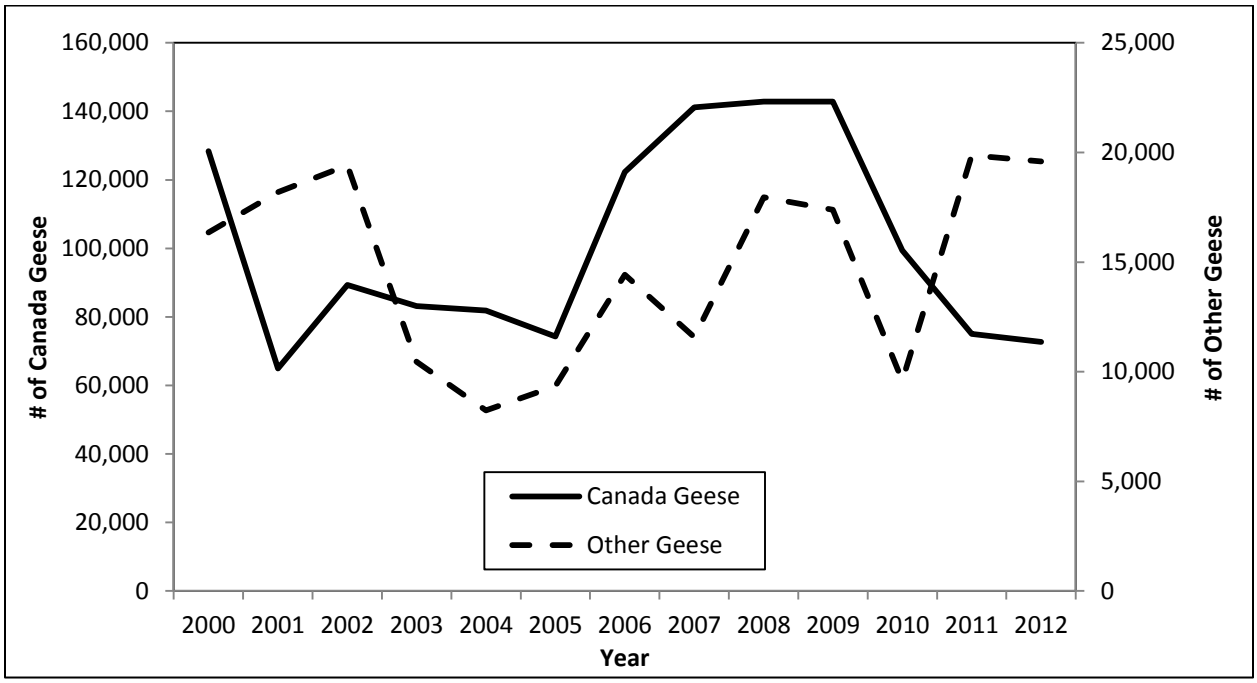

Figure 10. Goose harvest during Illinois' regular goose season from 2000-2012.

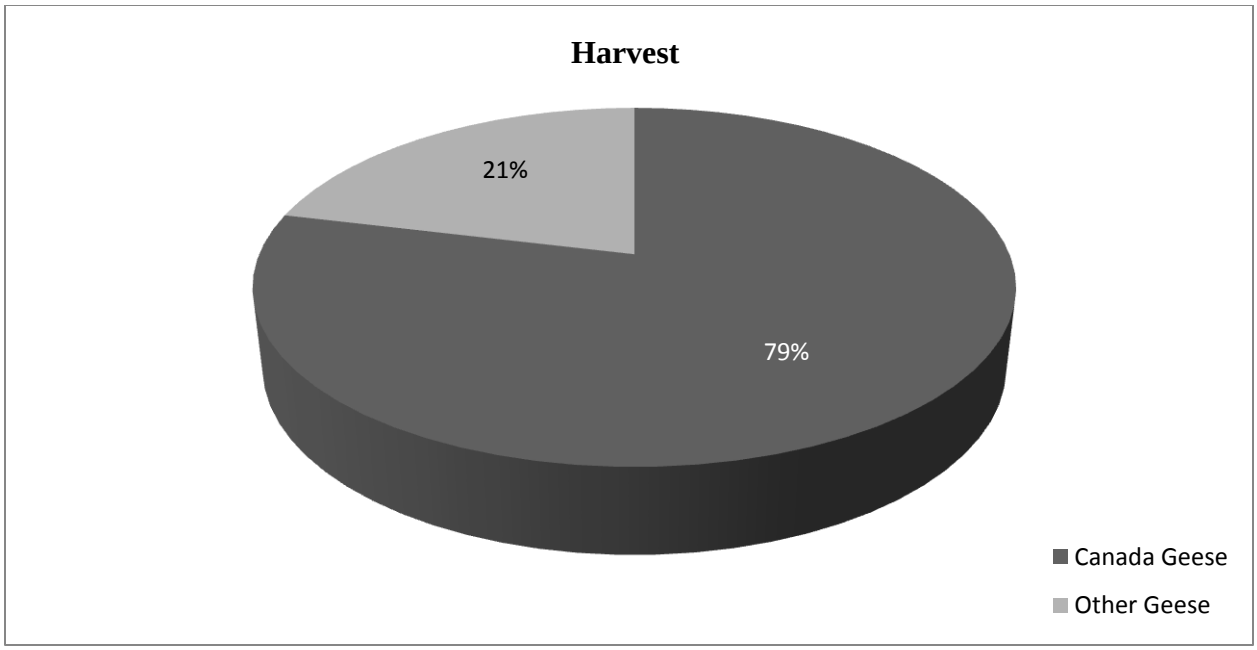

Figure 11. 2012-2013 Illinois' regular Canada goose season harvest.

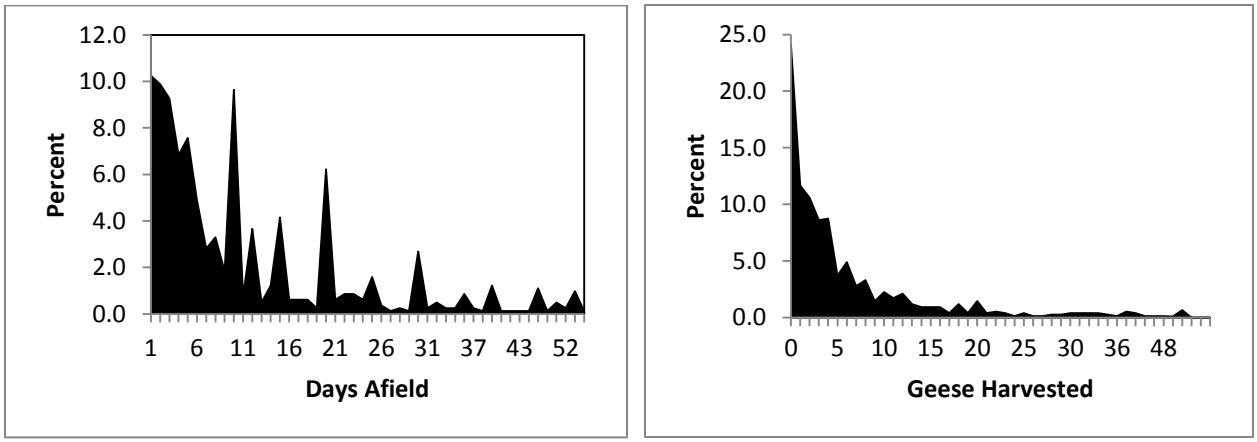

Figure 12. Distribution of days afield per hunter and geese harvested per hunter for Illinois' 2012-2013 regular goose season.

The Central Zone led the state in the number of goose hunters (59%, Table 14), days afield (52%), and both Canada goose (45%) and total goose harvest (45%). Harvest of Canada geese is summarized by zone and year (2010-2011 through 2012-2013) in Table 15.

Crippling Losses

Crippling losses (birds downed but not retrieved) were estimated at 35,598 ducks and 4,775 geese in Illinois during the 2012-2013 season (Table 16). These estimates, which are considered to be indices because they contain information about the relative number and are not actual number or abundance estimates, equate to 7.4 ducks and 5.2 geese lost per 100 harvested.

Waterfowl Hunting Effort

Fifty-one percent of respondents indicated they hunt waterfowl every year in Illinois. The 49% of hunters who do not hunt every year in Illinois is similar to the proportion of hunters who did not buy a stamp this year (14%) and who bought a stamp but did not hunt waterfowl this year (25%). The importance of these results is that ~40% of the waterfowl hunters may be "churn" hunters, hunters who do not hunt waterfowl every year in Illinois.

Of the hunters who did not hunt waterfowl this past year, 23% indicated they do not waterfowl hunt in Illinois every year, 20% did not have enough time, 22% indicated birds were not available when they could hunt, and 22% did not have access to waterfowl hunting areas. Forty-three percent of respondents prefer to hunt ducks and geese equally, followed by 35% preferring to hunt ducks.

Satisfaction with 2012-2013 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 the change. The former South Zone was divided into two zones with a goal of providing preferred season dates to the majority of hunters in the South Central and South Zone. South Central Zone hunters harvested the most ducks per hunter per season (M = 10.64, Table 8); these hunters were the most satisfied

with every aspect of the season except the number of ducks harvested (Table 17). South Central Zone goose hunters harvested the fewest geese per hunter per season (M = 1.40, Table 14), but South Central Zone goose hunters were second most satisfied with the number of geese harvested (Table 18). South Zone goose hunters were more dissatisfied than hunters in any other zone with respect to the amount of shooting they got in and number of geese they saw.

Sixty-five percent of hunters indicated that they felt weather patterns over the last 5 seasons were leading to a trend. Seventy-two percent of waterfowl hunters agreed with a statement that seasons were warmer with fewer ducks migrating to the area; an equal portion agreed this trend also applied to geese (Table 19). The majorities of respondents disagreed or were unsure if there had been an increase in mudflats and less vegetation.

Season and Zone Preferences

When given the proposition of a 45 day duck season, duck hunters that hunted ducks >1 day were in agreement regarding the start of the proposed season (Table 20). The majority of duck hunters in each of the 4 zones would prefer to lose 2 weeks at the beginning of the season and have it end at the same time. Second preferred among all zones, except for the South Zone, was for the loss to be split with one week at the beginning and one at the end. When given the proposition of 30 day season a similar trend was noticed (Table 21). Hunters indicated a preferred loss of 4 weeks at the beginning of the season and have it end at the same time, a greater percentage (43 - 57%) were open to losing 2 weeks at the beginning and 2 weeks at the end.

The next opportunity for zone changes will be for the 2016-2020 seasons. When asked, the majority (40-50%) of respondents in all 4 zones and among those who did not hunt agreed

for no change in the 4 zone structure (Table 22). However, about 20% of those in each group felt that the zones should be changed back to the 3 zone structure.

Wetland Conservation

One-third of waterfowl hunters (36%) indicated improving habitat in current wetlands was an extremely important activity for Illinois DNR (Table 23). Additionally, partnering with private conservation organizations, and maintaining pumps, dikes, and other facilities at state sites were seen as highly important. Purchasing wetlands near where I hunt was seen as least important among the options provided. Respondents were also asked to rate their level of satisfaction with Illinois DNR conservation activities. Waterfowl hunters indicated they were most satisfied with access to state sites, parking lots, and ramps (Table 24). Thirty-four percent of waterfowl hunters indicated that they were not satisfied with the Illinois DNR's provision of flooded corn for hunting. Twenty-seven percent also indicated a lack of satisfaction with enhancement of wetland habitat where they hunt and creation of wetlands in areas with fewer existing wetlands.

Approximately one-third (35%) of duck hunters (defined as those who hunted ducks more days than geese in 2012-2013) hunted most often on state land/water (Table 25). Goose hunters (those who hunted geese more days than ducks) hunted mostly on private land owned by someone else (47%). Federal land/water was hunted most often by 6% of duck hunters and 4% of these goose hunters.

Of those hunting private lands most often, 40% indicated that it was a wetland managed specifically for waterfowl. The most common management practices acknowledged by duck hunters were "pumping to improve water levels' and "flooded crops" (Table 26). Goose hunters indicated the most popular technique was "crops in adjacent or nearby fields".

Waterfowl hunters perceived flooded corn, soybean, or rice as the most important habitat for waterfowl use, waterfowl hunting, and to be maintained on state sites (Table 27). Additionally, hunters placed a high importance on other crops such as milo, millet, and sorghum as habitat for waterfowl use and waterfowl hunting. Open water without vegetation was consistently seen as the least important habitat for waterfowl to use and was least important for state sites to maintain.

When compared to those which hunted in 2012, those that did not hunt were less likely to agree that more wetlands in America need to be protected (Table 28). Additionally, those that hunted in 2012 were more likely to agree that wetland habitat protection is important for waterfowl.

Hunter Characteristics

Respondents who hunted waterfowl during the 2012-2013 year have hunted waterfowl for an average of 25 years, hunted waterfowl in Illinois for an average of 23 years, were 47 years of age, and responded from all counties but Hardin. Fifty-eight percent of respondents have access to a Global Position System (GPS); only 2% of those without a GPS plan to purchase one. Fourteen percent of respondents indicated they had no experience with a GPS, 50% indicated they were slightly or somewhat experienced, and 10% were extremely experienced. Sixty-seven percent of respondents indicated that they do not use their GPS while waterfowl hunting, 23% rarely do, and only 3% always use their GPS. Were IDNR to supply coordinates to a certain blind on public property 12% of respondents felt it would be difficult for them to find the blind. Sixty-six percent of participants indicated it would be easy to find the specified blind and 22% were unsure. Fifty-three percent of hunters indicated they possess smart phones, and 70% use

them while hunting. Fifty percent indicated they use their phones to "check the weather," and 41% "text hunting partners" (Table 29). Respondents that expressed interest in an IDNR smartphone app reported they would use it to "automatically determine shooting times for where I'm hunting" (Table 30). Sixty-seven percent of waterfowl hunters use the Digest of Waterfowl Hunting Regulations every year, 13% do most years, 9% do some years, and 7% percent never do. Eighty-one percent of hunters indicated that the digest was very or extremely useful (Table 31). Those that hunted waterfowl in 2012 and those that had not were equally in agreement (70%) to closing state sites at 1:00 pm to allow refuge to waterfowl and other wetland wildlife. Waterfowl hunters were also asked about their expenditures related to the activity, and identified boats/motors as the most expensive expenditures. Leases, dog, and gun related purchases were also listed in the top expenditures; these results can be located in Table 32.

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Table 1. Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest in Illinois from 1990 through 2012 hunting seasons.

Season[a] (Year)	Stamps Purchased	Estimated Hunters	Estimated Days Hunted	Estimated Waterfowl Harvested[b]
1990[c]	55,009 (2,390)[d]	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

[a] 1981-1989 information can be located in Alessi et al. (2011).

[b] 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.

[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.

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

Table 2. The percentage of waterfowl hunters who hunted exclusively ducks, exclusively geese, or both ducks and geese in Illinois from 1990 through 2012 seasons.

Season[a] (Year)	Hunted Ducks Only	Hunted Geese Only	Hunted Both Ducks and Geese	Duck Hunters	Goose Hunters
1990	26.7%	29.7%	43.6%	70.3%	73.3%
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%[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%

[a] 1981-1989 information can be located in Alessi et al. (2011).
[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 1990-2012).

Season [a] (Year)	Estimated Hunters	Estimated Days Hunted	Estimated Teal Harvest
1990[b]	------	------	------
1991[b]	------	------	------
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[c]
2010	13,038	49,038	20,127[c]
2011	11,221	42,811	21,227[c]
2012	10,944	46,719	31,942 [c]

[a] 1981-1989 information can be located in Alessi et al. (2011).
[b] The September Teal season was suspended by the U.S. Fish and Wildlife Service during these years.
[c] The 95% confidence intervals are: 2009 = $\pm$ 7,372, 2010 = $\pm$ 9,322, 2011= $\pm$ 7,993, & 2012 = $\pm$11,740.

Table 4. Teal harvest and hunter activity by zones during September Teal season (Illinois 2012).

	n	Estimated Hunters	Estimated Days Hunted	Estimated Teal Harvested
North Zone	63	2,612	12,809	4,299
Central Zone	151	6,260	22,634	17,923
South Zone	58	2,404	9,369	8,702
Unknown	16	66	1,907	1,018
Statewide	264	10,944	46,719	31,942

Table 5. Rates of Teal harvest and hunter activity during September Teal season (Illinois 1990-2012).

Season[a] (Year)	Season Length/ Bag Limit	Days Hunted Per Hunter	Teal Harvest Per Hunter	
			Per Day	Per Season
1990[b]	----	----	----	----
1991[b]	----	----	----	----
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

[a]1981-1989 information can be located in Alessi et al. (2011).
[b] September Teal season was suspended by the U.S. Fish and Wildlife Service during these years.

Table 6. Waterfowl harvest and hunter activity during Youth Waterfowl Hunting Days, 2000 - 2012.

Season[a] (Year)	Adult Participation	Youth Participation	Days Hunting	Mean Youths/ Hunting Party
2000[b]	6,815	10,107	14,079	1.48
2001[b]	9,140	15,148	22,525	1.67
2002[b]	8,498	13,325	19,548	1.57
2003[b]	7,415	11,419	17,985	1.54
2004[b]	5,603	7,891	12,997	1.41
2005[b]	4,540	6,489	10,268	1.58
2006[b]	5,447	8,024	11,903	1.48
2007[b]	6,259	8,981	14,356	1.60
2008[b]	6,402	9,878	14,799	1.50
2009[b]	7,073	9,772	15,922	1.63
2010[b]	5,471	7,452	11,828	1.59
2011[b]	6,325	8,642	14,059	1.63
2012	7,825	10,001	52,448[c]	1.27

Year	Total Ducks	Ducks/ Youth/Day	Total Coots	Coots/ Youth/ Day	Total Geese	Geese/ Youth/ Day
2000[b]	8,388	0.60	38	<0.01	882	0.06
2001[b]	11,727	0.52	480	0.02	971	0.04
2002[b]	9,085	0.46	271	0.01	887	0.05
2003[b]	9,184	0.51	178	0.01	1,116	0.06
2004[b]	7,477	0.58	48	<0.01	561	0.04
2005[b]	5,644	0.55	583	0.06	965	0.09
2006[b]	9,863	0.83	133	0.01	732	0.06
2007[b]	9,141	0.64	850	0.06	1,701	0.12
2008[b]	10,380	0.70	241	0.02	1,466	0.10
2009[b]	11,229	0.71	599	0.04	2,396	0.15
2010[b]	9,156	0.77	419	0.04	1,420	0.12
2011[b]	9,569	0.68	1,333	0.09	1,318	0.09
2012	8,147[d]	0.41	503[d]	0.03	1,064[d]	0.05

[a] 1981-1989 information can be located in Alessi et al. (2011).
[b] Two day season.
[c] Results includes youth hunts during the regular season and the 2 day Youth Waterfowl Hunting Days.
[d] 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 1990-2012).

Season[a] (Year)	Hunters	Days Afield	Number of Ducks: Mallards	Wood Ducks	Other Ducks	Total	Coots
1990[b]	38,759	350,119	112,370	33,253	51,562	197,185	2,287
1991[b]	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[c]	246,944	3,880
1995	42,499	482,620	230,505	47,155	99,632[c]	377,292	3,386
1996	44,219	460,517	163,311	38,783	82,431[c]	284,525	3,286
1997	42,587	514,934	145,533	44,678	100,950[c]	291,161	3,935
1998	41,755	517,372	200,030	57,393	129,439[c]	386,862	2,920
1999	51,850	860,368	311,325	69,930	181,650[c]	562,905	3,654
2000	43,810	621,542	271,903	58,604	166,834[c]	497,341	2,206
2001	53,194	797,884	305,180	61,515	167,883[c]	534,578	2,904
2002	47,964	642,542	197,392	46,238	106,213[c]	349,843	1,743
2003	50,658	738,914	285,011	48,023	153,165[c]	486,199	1,693
2004	49,046	652,960	207,982	44,725	116,951[c]	369,658	1,607
2005	43,185	539,672	240,897	37,942	133,509[c]	412,348	2,186
2006	50,437	658,881	308,000	38,366	161,098[c]	507,464	3,065
2007	49,114	600,614	265,369	34,628	164,369[c]	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[d]	3,904[e]
2010	43,450	499,758	193,758	39,611	121,375	354,859[d]	1,770[e]
2011	46,619	632,712	222,405	54,294	150,786	427,484[d]	4,327[e]
2012	43,444	630,233	244,988	47,623	185,776	478,387[d]	4,133[e]

[a] 1981-1989 information can be located in Alessi et al. (2011).

[b] 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.

[c] Includes 3,760 Canvasback in 1994, 5,393 in 1995, 4,348 in 1996, 5,800 in 1997, 3,948 in 1998, 4,977 in 1999, 4,231 in 2000, 1,968 in 2001, 851 in 2002, 1,789 in 2003, 2,100 in 2004, 3,918 in 2005, 5,927 in 2006 and 5,925 in 2007.

[d] The 95% confidence intervals are: 2009 = ± 69,698, 2010 = 60,571, 2011 = ±66,551, & 2012 = ±50,294

[e] The 95% confidence intervals are: 2009 = ± 3,342, 2010 = 2,435, 2011 = ±2,663, & 2012 = ±3,536

Table 8. Duck harvest and hunter activity by waterfowl zones and selected areas during the regular duck season (Illinois 2012-2013).

Zone	*n*	Hunters	Estimated Days Hunted	Estimated Ducks Harvested	Days Hunted per Hunter	Ducks per Hunter per Day	Ducks per Hunter per Season
North	325	13,473	135,017	67,768	10.02	0.50	5.03
Central	609	25,246	314,267	227,667	12.45	0.72	9.02
South Central	243	10,073	103,844	107,146	10.31	1.03	10.64
South	211	8,747	76,940	75,764	8.80	0.98	8.66
Unknown	2	83	166	42	2.00	0.25	0.50
Statewide	1048[a]	43,444	630,233	478,387	14.51	0.76	11.01

[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 1990-2012).

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

[a] 1981-1989 information can be located in Alessi et al. (2011).
[b] Excludes ducks harvested coincidentally while goose hunting.

Table 10. Distribution of the number of days afield and number of ducks harvested in 2012-2013. Number of ducks harvested was calculated by taking responses and applying the correction factor (Anderson et al. 1986).

	Days Hunting Ducks[a]	Number of Ducks Harvested
0	--	7%
1-5	33%	25
6-10	19	14
11-15	13	11
16-20	10	8
21-25	7	6
26-30	6	4
>30	11	25

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

Table 11. Canada goose harvest and hunter activity during the early September Canada goose season (Illinois 2000-2012).

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

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

Table 12. Summary of goose harvest and hunter activity during the regular goose season (Illinois 1990-1991 through 2012-2013).

Season[a] (Year)	Hunters	Days Afield	Number of Geese		
			Canada Geese	Other Geese	Total
1990[b]	40,459	346,036	67,127 (1,515[c])	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[d] (342)	93,665[d] (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[e] (940)
2010	36,803	385,432	99,422 (534)	9,594 (46)	109,016[e] (580)
2011	36,996	411,380	75,061(618)	19,862 (33)	94,923[e] (651)
2012	34,034	386,356	72,682 (0)	19,597 (0)	92,280 (0)

[a] 1981-1989 information can be located in Alessi et al. (2011).
[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] Number of geese harvested while duck hunting.
[d] Reduced by 23,151 from estimate given in 2002 report to exclude Conservation Order snow goose harvest.
[e] The 95% confidence intervals are : 2009 = $\pm$ 36,569, 2010 = $\pm$ 22,523, 2011= $\pm$ 22,387, & 2012 = $\pm$ 19,570.

Table 13. Distribution of the number of days afield and number of geese harvested. Number of geese harvested was calculated by taking responses and applying the correction factor (Anderson et al. 1996).

	Days Hunting Geese[a]	Number of Geese Harvested[a]
0	--	30%
1-5	44%	40
6-10	22	14
11-15	10	6
16-20	8	4
21-25	5	2
26-30	4	1
>30	7	3

[a] Total is greater than 100 due to rounding

Table 14. Goose harvest and hunter activity by zones, regular season (Illinois 2012-2013).

			Estimated Goose Harvest						
Zone	Hunters	Days Afield	Canada Geese	White-Fronted Geese	Snow/ Blue Geese	Total Geese	Days Hunted per Hunter	Geese per Hunter per Day	Geese per Hunter per Season
North	11,815	112,342	27,068	99	79	27,246	9.51	0.24	2.29
Central	20,105	200,599	33,012	2,774	5,786	41,572	9.98	0.16	1.64
South Central	4,767	41,081	6,678	1,764	3,725	12,167	8.62	0.16	1.40
South	3,607	32,293	5,905	2,061	3,309	11,275	8.95	0.18	1.64
Unknown	41	41	20	0	0	20	1.00	0.48	0.48
Statewide	34,034[a]	386,356	72,682	6,698	12,900	92,280	11.35	0.19	2.14

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

Table 15. Canada goose harvest by zone during the regular goose season (Illinois 2010-2011 through 2012-2013).

Zone	2010-2011	2011-2012	2012-2013	3-Year Mean	S.D.
North	29,472	25,925	27,068	27,488	1,811
Central	78,306	37,677	33,012	49,665	24,913
South Central		5,933	6,678		
South	19,433[a]	2,503	5,905	9,280	8,956
Unknown	2,210	3,023	20	1,751	1,553
Statewide	99,422	75,061	72,682	82,388	14,799

[a] 2010-2011 South Zone harvest includes South Central Zone harvest.

Table 16. Summary of the number of ducks and geese crippled (Illinois 1990 - 2012 seasons).

Season[a] (Year)	Estimated Ducks		Estimated Geese	
	Total	Per 100 Bagged	Total	Per 100 Bagged
1990[b]	59,007	29.9	23,895	34.9
1991[b]	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	35,598	7.4	4,775	5.2

[a] 1981-1989 information can be located in Alessi et al. (2011).

[b] 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.

Table 17. Illinois duck hunters' (≥ 1 day hunting ducks) levels of satisfaction with various aspects of the 2012-2013 duck seasons.

	Zone	Very Dissatisfied	Dissatisfied	Unsure	Satisfied	Very Satisfied	$\bar{x}$
# of Ducks you saw	North Zone	20%	37%	9%	29%	4%	2.60[a]
	Central Zone	19	33	9	33	7	2.75
	South Central Zone	11	29	11	42	6	3.02
	South Zone	14	24	13	43	6	2.70
Mid-season matched peak of migration	North Zone	26	35	25	14	1	2.29
	Central Zone	27	33	22	16	2	2.31
	South Central Zone	19	27	33	17	4	2.59
	South Zone	19	25	27	26	3	2.29
Amount of shooting you got in	North Zone	23	43	13	18	3	2.36
	Central Zone	23	37	11	28	2	2.49
	South Central Zone	15	33	12	37	4	2.82
	South Zone	18	31	10	33	7	2.61
# of ducks that migrated through areas you hunted	North Zone	26	36	19	16	3	2.37
	Central Zone	22	33	17	25	5	2.59
	South Central Zone	13	30	28	26	3	2.77
	South Zone	18	33	24	22	4	2.52
Amount of time you spent duck hunting	North Zone	14	28	11	40	7	2.98
	Central Zone	12	28	9	42	9	3.09
	South Central Zone	11	26	11	45	7	3.10
	South Zone	14	28	16	35	6	2.92
# of ducks you harvested	North Zone	30	37	9	22	2	2.29
	Central Zone	28	36	10	24	2	2.37
	South Central Zone	16	29	10	39	5	2.88
	South Zone	26	31	10	28	6	3.52
Weather during duck season	North Zone	16	25	15	39	4	2.90
	Central Zone	20	29	15	36	1	2.70
	South Central Zone	11	23	16	41	8	3.11
	South Zone	13	21	16	43	7	2.52

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

Table 18. Illinois goose hunters' (≥ 1 day hunting geese) levels of satisfaction with various aspects of the 2012-2013 goose seasons.

		Very Dissatisfied	Dissatisfied	Unsure	Satisfied	Very Satisfied	$\bar{x}$
# of geese you saw	North Zone	24%	27%	12%	29%	8%	2.69[a]
	Central Zone	27	32	7	29	5	2.53
	South Central Zone	47	31	5	16	1	1.92
	South Zone	41	39	3	14	3	1.98
Mid-season matched peak of migration	North Zone	27	26	27	18	3	2.45
	Central Zone	32	32	19	17	1	2.24
	South Central Zone	49	24	23	4	--	1.82
	South Zone	37	42	14	8	--	1.92
Amount of shooting you got in	North Zone	36	34	13	15	3	2.15
	Central Zone	37	36	11	15	1	2.08
	South Central Zone	48	30	7	14	1	1.90
	South Zone	38	44	8	9	2	1.92
# of geese that migrated through areas you hunted	North Zone	27	28	19	22	5	2.51
	Central Zone	28	34	12	23	4	2.40
	South Central Zone	51	27	13	10	--	1.81
	South Zone	44	38	11	6	2	1.83
Amount of time you spent goose hunting	North Zone	23	29	17	28	4	2.61
	Central Zone	13	31	16	35	5	2.87
	South Central Zone	27	18	16	35	4	2.72
	South Zone	20	35	18	26	2	2.55
# of geese you harvested	North Zone	41	29	13	15	1	2.06
	Central Zone	40	37	9	13	1	1.96
	South Central Zone	46	25	12	17	1	2.02
	South Zone	45	29	12	12	2	1.97
Weather during goose season	North Zone	22	21	23	32	2	2.72
	Central Zone	25	29	18	27	2	2.53
	South Central Zone	22	24	25	28	1	2.63
	South Zone	23	29	21	24	3	2.56

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

Table 19. Reported perceptions of weather averaged over the last 5 hunting seasons.

	Disagree	Unsure	Agree
Warmer seasons with fewer ducks migrating into the area	14.2%	13.4%	72.4%
Lower water levels caused by draught	18.8	18.5	62.7
More mudflats and less vegetation	21.9	30.9	47.2
Warmer seasons with fewer geese migrating into the area	13.0	15.5	71.8
Freeze-ups later in the season	25.1	15.8	59.1
More "blue bird days"	13.4	28.9	57.7

Table 20. Duck hunter[a] season structure preference if duck season were 45 days.

	North Zone	Central Zone	South Central Zone	South Zone
Start the duck season two weeks later than last year, and have it end at the same time.	55%	59%	46%	60%
Start the duck season one week later, and have it end one week earlier.	33	23	32	18
Start the duck season at the same time as last year, but have it end two weeks earlier.	12	12	22	22

[a] Duck hunters were hunters who hunted ≥ 1 day for ducks during 2012-13 duck seasons.

Table 21. Duck hunter[a] season structure preference if duck season were 30 days.

	North Zone	Central Zone	South Central Zone	South Zone
Start the duck season one month later than last year, and have it end at the same time.	49%	53%	43%	57%
Start the duck season two weeks later, and have it end two weeks earlier.	41	39	38	29
Start the duck season at the same time as last year, but have it end one month earlier.	10	8	19	14

[a] Duck hunters were hunters who hunted ≥ 1 day for duck during 2012-13 duck seasons.

Table 22. Hunter[a] preferences for possible zone changes for 2016 through 2020.

	North Zone	Central Zone	South Central Zone	South Zone	Did not hunt in 2012
Continuous seasons: combine the North and Central zone into one zone, and leave the South Central and South Zones the way they are.	14%	11%	6%	6%	11%
Continuous seasons: combine the Central and South Central Zone into one zone, and leave the North and South Zones the way they are	5	9	6	5	6
Split seasons: combine the North and Central zone into one zone, and leave the South Central and South Zones the way they are	6	5	5	2	7
Split seasons: combine the South Central and South Zone into one zone, and leave the North and Central Zones the way they are	5	7	11	3	5
Split seasons: combine the Central and South Central Zone into one zone, and leave the North and South Zones the way they are	3	7	6	10	5
No splits: change it back to the 3-zone structure	20	21	18	25	22
No change: leave the 4-zone structure the way it is now	48	40	49	50	45

[a] Persons who hunted $\geq$ 1 day for waterfowl during 2012-13 any waterfowl seasons.

Table 23. Reported importance IDNR should place on conservation topics.

	Not Important	Slightly Important	Moderately Important	Important	Very Important	Extremely Important	$\bar{x}$
Purchasing wetlands near where I hunt	13%	9%	14%	27%	16%	20%	3.86 [a]
Providing more habitat of native wetland plants	6	6	12	29	21	26	4.30
Providing flooded corn for hunting	13	9	14	23	18	23	3.92
Purchasing more wetlands in Illinois	7	6	12	25	21	29	4.35
Partnering with private conservation organizations to protect wetlands	5	4	11	24	23	33	4.56
Improving habitat in current wetlands statewide	2	2	7	25	28	36	4.81
Enhancing wetland habitat where I hunt	6	5	10	27	23	30	4.46
Creating new wetlands in areas with fewer existing wetlands	8	7	13	24	20	28	4.26
Developing wetland projects across the landscape, instead of for single wetlands	6	7	17	26	20	24	4.19
Maintaining pumps, dikes, and other facilities at state sites	4	5	10	24	25	33	4.59
Providing access to state sites, parking lots, ramps, etc.)	6	7	12	26	21	27	4.29
Working with landowners to enhance wetlands on private land	5	5	10	23	23	33	4.52

[a] 1= Not Important, 6= Extremely Important

Table 24. Respondent reported satisfaction with IDNR conservation activities.

	Not Satisfied	Slightly Satisfied	Moderately Satisfied	Satisfied	Very Satisfied	Extremely Satisfied	$\bar{x}$
Purchasing wetlands near where I hunt	25%	16%	25%	28%	3%	3%	2.78 [a]
Providing more habitat of native wetland plants	23	21	28	23	3	3	2.71
Providing flooded corn for hunting	34	19	19	21	3	3	2.50
Purchasing more wetlands in Illinois	27	21	24	21	3	3	2.61
Partnering with private conservation organizations to protect wetlands	22	23	28	21	4	3	2.73
Improving habitat in current wetlands statewide	24	24	28	18	3	4	2.64
Enhancing wetland habitat where I hunt	27	24	23	18	4	3	2.58
Creating new wetlands in areas with fewer existing wetlands	27	23	24	19	3	3	2.57
Developing wetland projects across the landscape, instead of for single wetlands	26	24	25	19	4	3	2.61
Maintaining pumps, dikes, and other facilities at state sites	23	20	26	23	4	4	2.78
Providing access to state sites, parking lots, ramps, etc.)	17	17	27	30	6	4	3.03
Working with landowners to enhance wetlands on private land	28	24	23	18	3	4	2.56

[a] 1= Not Satisfied, 5= Extremely Satisfied

Table 25. Types of land hunted most often by duck and goose hunters[a] in Illinois.

	Duck Hunters	Goose Hunters
Private land owned by me	14%	12%
Private land owned by someone who gave me permission	34	47
Private land under a lease	11	14
State land/water	35	24
Federal land/water	6	4

[a] Hunters were respondents who hunted ≥ 1 day for ducks or geese.

Table 26. Percent of private land hunters[a] identified as using listed management techniques to specifically benefit waterfowl.

	Duck Hunters	Goose Hunters
Flooded crops	64%	46%
Emergent wetland plants	41	31
Submerged vegetation	45	33
Moist soil plants	39	24
Pumping to improve water levels	65	57
Crops in adjacent or nearby fields	48	63
Providing nest boxes or structures for waterfowl	44	43

[a] Hunters were respondents who hunted ≥ 1 day for ducks or geese.

Table 27. Importance of wildlife habitats for waterfowl use, waterfowl hunting, and being maintained on state sites.

		Not Important	Slightly Important	Moderately Important	Very Important	Not Sure	$\bar{x}$
Moist plants, such as smart weed, sedges	Waterfowl use	2%	11%	29%	51%	7%	3.49[a]
	Waterfowl hunting	3	12	30	48	7	3.43
	Maintained on state sites	2	8	27	46	17	3.67
Flooded corn, soybeans, or rice	Waterfowl use	3	8	23	61	5	3.56
	Waterfowl hunting	2	6	20	67	6	3.67
	Maintained on state sites	4	7	20	53	16	3.71
Emergent wetland plants, such as cattails	Waterfowl use	9	21	31	33	6	3.05
	Waterfowl hunting	9	18	34	32	7	3.10
	Maintained on state sites	8	15	27	33	17	3.37
Other crops, such as milo, millet, or sorghum	Waterfowl use	2	12	29	51	6	3.48
	Waterfowl hunting	2	9	27	55	8	3.56
	Maintained on state sites	3	9	24	48	17	3.67
Flooded timber in river bottomlands	Waterfowl use	3	11	26	55	5	3.49
	Waterfowl hunting	3	10	27	54	6	3.51
	Maintained on state sites	3	9	24	47	17	3.67
Open water with submerged vegetation	Waterfowl use	2	9	31	53	5	3.49
	Waterfowl hunting	3	11	32	48	6	3.43
	Maintained on state sites	3	9	29	43	16	3.61
Open water without vegetation	Waterfowl use	19	30	26	18	7	2.64
	Waterfowl hunting	15	24	31	23	7	2.83
	Maintained on state sites	12	18	27	26	17	3.18

[a] 1= Not Important, 5= Not Sure

Table 28. Hunter and non-hunter agreement with statements concerning wetland conservation.

	Did not Hunt 2012-2013			Hunted in 2012-2013		
	Disagree	Unsure	Agree	Disagree	Unsure	Agree
We need to protect wetlands even if it means interfering with economic development.	17%	11%	72%	10%	18%	72%
Wetlands cost too much money to purchase.	53	27	20	57	20	23
Wetlands have value whether people use them or not.	6	6	88	3	5	92
The primary value of wetlands is to provide products useful to people.	59	17	24	56	19	25
We need to purchase more wetlands in Illinois.	15	19	66	9	12	79
It is important to protect wetland habitat for more than waterfowl.	11	13	76	2	4	94
Wetland protections interfere with human development.	60	18	22	69	13	18
Illinois DNR needs to improve waterfowl habitat where I hunt.	4	19	77	8	15	77
Wetlands have value in flood protection.	4	14	82	3	13	85
More wetlands need to be protected in North America.	5	13	82	3	6	91
Wetlands should not be negatively altered for human benefit.	18	14	68	13	11	76
Protecting wetlands is more important than economic development.	17	15	68	11	15	75
I feel there are enough wetlands in the Mississippi Flyway to produce waterfowl.	41	24	35	47	26	28
Illinois DNR is not doing enough to conserve wetlands in Illinois.	20	40	40	19	37	44
Wetland loss causes problems beyond habitat loss.	7	18	75	6	14	80
We need to improve wetland habitat in Illinois.	4	18	78	3	9	88
I feel it is important to protect more wetlands in the northern breeding grounds.	3	18	79	2	10	88

Table 29. Waterfowl hunter uses for smartphones while hunting.

	Percent Yes
To check the weather	50%
To check shooting times	40
To look up seasons dates	19
To look up site regulations	12
To text hunting partners	41
To access maps to see where I'm at	15
To try to identify a duck	9
To use GPS	15
DU Migration App	17

Table 30. Hunter indicated uses for an IDNR smartphone app.

	Percent Yes
Automatically determine shooting times for where I'm hunting	50%
A way to look up season dates for waterfowl	43
A section on duck ID (both in hand and in flight)	30
Information on the various types of non-toxic ammunition	9
Duck populations across the state/migration issues	3

Table 31. Acknowledged usefulness of Digest of Waterfowl Hunting Regulations by waterfowl hunters.

	Not Useful	Somewhat Useful	Moderately Useful	Very Useful	Extremely Useful
Seasons and bag limits	--	2%	9%	38%	51%
Hunting zones map	2%	6	18	39	35
Shooting hours	2	4	9	35	50
Steel shot lethality table	20	23	23	19	16
Overall value of the Digest of Waterfowl Hunting Regulations	1	3	16	43	38

Table 32. Hunter's [a] reported expenditures for items purchased during waterfowl outings in the 2012-2013 Waterfowl Hunting Season.

Expenditure	$\bar{x}$	S.D.
Automobile gas/oil	$ 323	$ 449
Boat gas/oil	$ 103	$ 137
Lodging (hotel, hunting lodge, etc.)	$ 467	$ 705
Groceries/ice/beverages	$ 153	$ 215
Restaurant or take-out meals	$ 121	$ 145
Daily use fees	$ 141	$ 299
Entertainment	$ 171	$ 366
Game processing	$ 148	$ 166
Hunting guide/outfitter fees	$ 327	$ 377
Hunting package fees	$ 473	$ 545
Shells	$ 166	$ 190
Clothing	$ 274	$ 261
Decoys	$ 547	$ 1,017
Calls	$ 129	$ 129
Gun	$ 998	$ 644
Dog	$ 908	$ 1,256
Lease	$ 1,246	$ 1,654
Boat/motor	$ 4,238	$ 4,950

[a] Hunters were respondents who hunted ≥ 1 day for ducks or geese.

Appendix A

Illinois Waterfowl Hunter Survey
2012-2013 Season

Illinois Department of Natural Resources

Division of Wildlife Resources
and
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 Effort and Harvest in Illinois. Please provide the following information so that Illinois Department of Natural Resources (IDNR) waterfowl biologists may estimate waterfowl harvest in Illinois. This information will help IDNR conserve waterfowl populations and provide hunting opportunities in Illinois.

1. Did you purchase an Illinois Migratory Waterfowl Stamp for the 2012-2013 seasons? (Please check one.)

_____Yes _____No (Please go to **question 5**)

2. Did you hunt waterfowl (ducks, geese, or coots) in Illinois during the 2012-2013 waterfowl hunting seasons? (Please check one.)

_____ Yes _____ No

3. If "No" what was the last season you hunted? _____ Year

4. Was the 2012-2013 Illinois waterfowl season your first time hunting waterfowl in Illinois?

_____ Yes, I'm a new Illinois resident waterfowl hunter

_____ Yes, I'm a new nonresident waterfowl hunter

_____ No

5. Which of the following best describes how often you hunt waterfowl in Illinois?

_____ Every year _____ Most years _____ Occassional years _____ Rarely _____Never

6. If you **did not hunt waterfowl** (ducks, geese, or coots) in Illinois during the 2012-2013 seasons, please give the reason(s) why not. Please *select all that apply*.

_____ I normally do not hunt waterfowl every year

_____ Ducks or geese were not available where I hunt when I could hunt them

_____ I am a nonresident hunter and do not hunt in Illinois every year

_____ I did not have access to waterfowl hunting areas

_____ other (please identify) : _____

7. Did you use a spinning-wing decoy to hunt ducks in Illinois during the 2012-13 season? _____Yes _____No

If "Yes," in which of the following did you use a spinning-wing decoy most often (Please choose one.)

____ hunting in fields

____ hunting over water

Think about your typical hunt. How many spinning-wing decoys would you use (include your party)?

____ number of spinning-wing decoys

8. Which is your preference for hunting in Illinois: hunting ducks or geese? Please check one.

____ Ducks ____ Geese ____ Ducks and geese equally

9. Have you ever introduced a hunter 16 years old or older to waterfowl hunting? ____ Yes ____ No

If you did not hunt waterfowl in Illinois please go to Section 3.

10. Please report your hunting effort and harvest in Illinois between September 2012 and January 2013 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	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

11. In which of the following zones did you hunt **opening day of duck season**? *(Please check all that apply.)*

____ North Zone ____ Central Zone ____South Central Zone ____ South Zone

12. Which of the following best describes where you hunt ducks **most often**? Please check one.

____ Water ____ Fields

Section 2. Youth Hunts. Please answer the following questions about mentoring youth hunters in Illinois. **Please note:** "Youths" are defined as hunters **under** 16 years of age.

1. Did you take a youth (less than 16 years old) hunting during the 2012 Youth Waterfowl Hunting Days?
____ Yes ____ No

If "Yes," was this at least one youth's first time duck or goose hunting? ____ Yes ____ No

2. Did you take a youth (<16 years of age) hunting during the 2012-13 **regular** duck or goose seasons in Illinois?

____ Yes If "Yes," please check which season(s): ____ Regular Duck Season ____ Regular Goose Season

____ No

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

a. For each youth that hunted, please report information about all youths that hunted. 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								

Section 3. Satisfaction. Please tell us about your satisfaction with the **most recent duck and/or goose seasons you hunted** by answering the following statements.

1. Please rate your **SATISFACTION with the 2012-13 duck season in Illinois** for each of the following by circling the number that matches your response.

	Very Dissatisfied	Dissatisfied	Unsure	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
Weather during duck season.	1	2	3	4	5

2. Please rate your **SATISFACTION with the 2012-13 regular Canada goose season in Illinois** for each of the following by circling the number that matches your response.

	Very Dissatisfied	Dissatisfied	Unsure	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
The weather during goose season.	1	2	3	4	5

3. Consider the weather during the past **5 waterfowl hunting seasons.** Which of the following best describes any trends you may have observed in the area where you hunt? Please circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
Warmer seasons with fewer ducks migrating into the area.	1	2	3	4	5	6	7
Lower water levels caused by drought.	1	2	3	4	5	6	7
More mudflats and less vegetation.	1	2	3	4	5	6	7
Warmer seasons with fewer geese migrating into the area.	1	2	3	4	5	6	7
Freeze-ups later in the season.	1	2	3	4	5	6	7
More "blue bird days."	1	2	3	4	5	6	7

4. Do you think the events you selected above are leading to a trend? ____ Yes ____ No

Section 4. Season Preferences. Please answer the following questions on waterfowl seasons in Illinois.

1. Currently Illinois has a continuous season with 4 zones. This system must be in place for 2013 through 2015. If the Fish and Wildlife Service determines that Illinois needs to have a **45-day duck season**, which of the following would you prefer be done in the zone you hunt ducks most often?

____ Start the duck season two weeks later than last year, and have it end at the same time.

____ Start the duck season one week later, and have it end one week earlier.

____ Start the duck season at the same time as last year, but have it end two weeks earlier.

1a. If the Fish and Wildlife Service determines that Illinois needs to have **a 30-day duck season**, which of the following would you prefer for the zone you hunt ducks most often?

____ Start the duck season one month later than last year, and have it end at the same time.

____ Start the duck season two weeks later, and have it end two weeks earlier.

____ Start the duck season at the same time as last year, but have it end one month earlier.

2. The next opportunity to change zone options will be for the period **2016 through 2020**. Which of the following would you prefer?

Please choose ONE response.

____ Continuous seasons: combine the North and Central zone into one zone, and leave the South Central and South Zones the way they are

____ Continuous seasons: combine the Central and South Central Zone into one zone, and leave the North and South Zones the way they are

____ Split seasons: combine the North and Central zone into one zone, and leave the South Central and South Zones the way they are

____ Split seasons: combine the South Central and South Zone into one zone, and leave the North and Central Zones the way they are

____ Split seasons: combine the Central and South Central Zone into one zone, and leave the North and South Zones the way they are

____ No splits: change it back to the 3-zone structure

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

Section 5. Wetland Conservation. Please give your opinions of wetland conservation for the questions below.

1. Please give your opinions of **importance** of the following wetland conservation activities **by IDNR in Illinois** by circling the number that matches your response.

	Not Important	Slightly Important	Moderately Important	Important	Very Important	Extremely Important
Purchasing wetlands near where I hunt.	1	2	3	4	5	6
Providing more habitat of native wetland plants.	1	2	3	4	5	6
Providing flooded corn for hunting.	1	2	3	4	5	6
Purchasing more wetlands in Illinois.	1	2	3	4	5	6
Partnering with private conservation organizations to protect wetlands.	1	2	3	4	5	6
Improving habitat in current wetlands statewide.	1	2	3	4	5	6
Enhancing wetland habitat where I hunt.	1	2	3	4	5	6
Creating new wetlands in areas with fewer existing wetlands.	1	2	3	4	5	6
Developing wetland projects across the landscape, instead of for single wetlands.	1	2	3	4	5	6
Maintaining pumps, dikes, and other facilities at state sites.	1	2	3	4	5	6
Providing access to state sites, parking lots, ramps, etc.).	1	2	3	4	5	6
Working with landowners to enhance wetlands on private land.	1	2	3	4	5	6

2. Please give your **satisfaction** with the following wetland conservation activities conducted by **IDNR in Illinois** by circling the number that matches your response.

	Not Satisfied	Slightly Satisfied	Moderately Satisfied	Satisfied	Very Satisfied	Extremely Satisfied
Purchasing wetlands near where I hunt.	1	2	3	4	5	6
Providing more habitat of native wetland plants.	1	2	3	4	5	6
Providing flooded corn for hunting.	1	2	3	4	5	6
Purchasing more wetlands in Illinois.	1	2	3	4	5	6
Partnering with private conservation organizations to protect wetlands.	1	2	3	4	5	6
Improving habitat in current wetlands statewide.	1	2	3	4	5	6
Enhancing wetland habitat where I hunt.	1	2	3	4	5	6
Creating new wetlands in areas with fewer existing wetlands.	1	2	3	4	5	6
Developing wetland projects across the landscape, instead of for single wetlands.	1	2	3	4	5	6
Maintaining pumps, dikes, and other facilities at state sites.	1	2	3	4	5	6
Providing access to state sites, parking lots, ramps, etc.).	1	2	3	4	5	6
Working with landowners to enhance wetlands on private land.	1	2	3	4	5	6

3. Which type of land do you hunt most often for waterfowl? Please choose one.

____ Private land owned by me

____ Private land owned by someone who gave me permission

____ Private land under a lease

____ State land/water

____ Federal land/water

4. If you hunt on private land does it include wetlands where the habitat is managed specifically for waterfowl? (If you hunt public land only, please go to **Question 5.**)

____ Yes ____ No

4a. If "Yes," please select the types of management you practice from the list below. Please select all that apply.

____ Flooded crops

____ Emergent wetland plants

____ Submerged vegetation

____ Moist soil plants

____ Pumping to improve water levels

____ Crops in adjacent or nearby fields

____ Providing nest boxes or structures for waterfowl

____ Other (Please identify):_____

5. Please give your opinion for the following types of habitat for **waterfowl use**.

	Not Important	Slightly Important	Moderately Important	Very Important	Not Sure
Moist soil plants, such as smart weed, sedges	1	2	3	4	5
Flooded corn, soybeans, or rice	1	2	3	4	5
Emergent wetland plants, such as cattails	1	2	3	4	5
Other crops, such as milo, millet, or sorghum	1	2	3	4	5
Flooded timber in river bottomlands	1	2	3	4	5
Open water with submerged vegetation	1	2	3	4	5
Open water without vegetation	1	2	3	4	5

6. Please give your opinion for the following types of habitat for **waterfowl hunting**.

	Not Important	Slightly Important	Moderately Important	Very Important	Not Sure
Moist soil plants, such as smart weed, sedges	1	2	3	4	5
Flooded corn, soybeans, or rice	1	2	3	4	5
Emergent wetland plants, such as cattails	1	2	3	4	5
Other crops, such as milo, millet, or sorghum	1	2	3	4	5
Flooded timber in river bottomlands	1	2	3	4	5
Open water with submerged vegetation	1	2	3	4	5
Open water without vegetation	1	2	3	4	5

7. Please give your opinion for the following types of habitat **maintained on state sites**.

	Not Important	Slightly Important	Moderately Important	Very Important	Not Sure
Moist soil plants, such as smart weed, sedges	1	2	3	4	5
Flooded corn, soybeans, or rice	1	2	3	4	5
Emergent wetland plants, such as cattails	1	2	3	4	5
Other crops, such as milo, millet, or sorghum	1	2	3	4	5
Flooded timber in river bottomlands	1	2	3	4	5
Open water with submerged vegetation	1	2	3	4	5
Open water without vegetation	1	2	3	4	5

8. Please indicate how much you disagree or agree with the following statements about wetland conservation by circling the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
We need to protect wetlands even if it means interfering with economic development.	1	2	3	4	5	6	7
Wetlands cost too much money to purchase.	1	2	3	4	5	6	7
Wetlands have value whether people use them or not.	1	2	3	4	5	6	7
The primary value of wetlands is to provide products useful to people.	1	2	3	4	5	6	7
We need to purchase more wetlands in Illinois.	1	2	3	4	5	6	7
It is important to protect wetland habitat for more than waterfowl.	1	2	3	4	5	6	7
Wetland protections interfere with human development.	1	2	3	4	5	6	7
Illinois DNR needs to improve waterfowl habitat where I hunt.	1	2	3	4	5	6	7
Wetlands have value in flood protection.	1	2	3	4	5	6	7
More wetlands need to be protected in North America.	1	2	3	4	5	6	7
Wetlands should not be negatively altered for human benefit.	1	2	3	4	5	6	7
Protecting wetlands is more important than economic development.	1	2	3	4	5	6	7
I feel there are enough wetlands in the Mississippi Flyway to produce waterfowl.	1	2	3	4	5	6	7
Illinois DNR is not doing enough to conserve wetlands in Illinois.	1	2	3	4	5	6	7
Wetland loss causes problems beyond habitat loss.	1	2	3	4	5	6	7
We need to improve wetland habitat in Illinois.	1	2	3	4	5	6	7
I feel it is important to protect more wetlands in the northern breeding grounds.	1	2	3	4	5	6	7

Section 6. Waterfowl Hunting Expenditures. Please help us understand the economic contributions in Illinois by providing your expenses below.

1.Please use the log of waterfowl hunting expenditures you recorded on the 2012-13 Illinois Waterfowl Hunting Record you received before the season to answer the items below.

Items Purchased during waterfowl hunting outing	**Estimated TOTAL Season Expenditures**
Transportation	
1. Automobile gas/oil	**$ _____.00**
2. Boat gas/oil	**$ _____.00**
3. Lodging (hotel, hunting lodge, etc.)	**$ _____.00**
Food & Beverages	
4. Groceries/ice/beverages	**$ _____.00**
5. Restaurant or take-out meals	**$ _____.00**
Other shopping, services, and entertainment	
6. Daily use fees	**$ _____.00**
7. Entertainment	**$ _____.00**
8. Game processing	**$ _____.00**
9. Hunting guide/outfitter fees	**$ _____.00**
10. Hunting package fees	**$ _____.00**
Durable Equipment (Used one or more seasons)	
11. Shells	**$ _____.00**
12. Clothing	**$ _____.00**
13. Decoys	**$ _____.00**
14. Calls	**$ _____.00**
15. Gun	**$ _____.00**
16. Dog	**$ _____.00**
17. Lease	**$ _____.00**
18. Boat/motor	**$ _____.00**
19. Other (Please list): _____	**$ _____.00**

2. Were your expenses in Illinois during the 2012-13 waterfowl season typical of past years?

____ Yes, due to waterfowl hunting expenses

____ No, they were higher than past years due to gas prices

____ No, they were higher than past years due to expenses from waterfowl hunting

____ No, they were lower than past years

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 total have you hunted waterfowl? _____ years

2. How many years have you hunted waterfowl in Illinois? _____ years

3. What is your county of residence? _____ County (If nonresident please include state)

4. Please give your age. _____ years

5. Do you currently have access to a portable Global Position System (GPS)?

____ Yes ____ No (Please go to Question 9) ____ No, but I plan on buying one.

6. How experienced are you with using a GPS? Please circle the number that matches your response.

Not at all experienced	Slightly experienced	Somewhat experienced	Experienced	Extremely experienced
1	2	3	4	5

7. Do you use your GPS while hunting waterfowl? Please choose one.

____ Yes, always ____ Yes, often ____ Yes, sometimes/rarely ____ No

8. If IDNR supplied with you coordinates to a certain blind location on a public site where you would build your duck blind, how difficult or easy do you think it would be for you to find this location?

Very Difficult	Difficult	Somewhat Difficult	Unsure	Somewhat Easy	Easy	Very Easy
1	2	3	4	5	6	7

9. Do you have a "smartphone" cell phone that has Internet access? ____ Yes ____ No (Please go to Question10)

9a. Do you use your smartphone while hunting waterfowl?

____ Yes ____ No (Please go to Question 9c)

9b. What do you use your smartphone for while hunting?

____ To check the weather ____ DU Migration App

____ To check shooting times ____ To access maps to see where I'm at

____ To look up seasons dates ____ To try to identify a duck

____ To look up site regulations ____ To use GPS

____ To text hunting partners ____Other (Please identify):_____

9c. If IDNR were to make an app for waterfowl hunting in Illinois, which of the following do you think would be most important for waterfowl hunters?

____ Automatically determine shooting times for where I'm hunting

____ A way to look up season dates for waterfowl

____ A section on duck ID (both in hand and in flight)

____ Information on the various types of non-toxic ammunition

____ Other (Please identify): _____

10. How often do you use the Digest of Waterfowl Hunting Regulations?

____ Every year ____ Most years ____ Some years ____ Never

11. If you use the Digest of Waterfowl Hunting Regulations, consider the various sections. Please rate the usefulness of the Digest sections listed below by circling the number that matches your response.

	Not Useful	Somewhat Useful	Moderately Useful	Very Useful	Extremely Useful
Seasons and bag limits	1	2	3	4	5
Hunting zones map	1	2	3	4	5
Shooting hours	1	2	3	4	5
Steel shot lethality table	1	2	3	4	5
Overall value of the Digest of Waterfowl Hunting Regulations	1	2	3	4	5

12. Currently, some state areas close to hunting at 1 pm to provide refuge to waterfowl and other wetland wildlife. Would you support closing state sites to waterfowl hunting at 1:00 pm to provide refuge for roosting ducks?

____ Yes ____ No

Comments

WILDLIFE RESTORATION

Your purchase of hunting equipment supports Wildlife Restoration

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

March 8, 2013

Dear Waterfowl Hunter,

You are one of a group of Illinois waterfowl hunters selected from throughout the state to provide information about your hunting activities during the 2012-2013 waterfowl hunting seasons in Illinois. Please take a few minutes to complete the enclosed questionnaire, even if you did not hunt ducks or geese in Illinois during the 2012-2013 seasons. Please refer to the harvest record card we sent you in September to complete the harvest portion of the questionnaire. We have included the Illinois waterfowl zone map on the back of this letter if you need it to determine the zone 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 completely confidential. Your response to this questionnaire is completely voluntary, and by responding you will help us effectively manage waterfowl and hunting in Illinois.

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/.

Sincerely,

Craig A. Miller
Human Dimensions Research Program

Appendix C

ILLINOIS
DEPARTMENT OF
NATURAL
RESOURCES

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

April 1, 2013

Dear Waterfowl Hunter,

As one of a select group of Illinois waterfowl hunters, you have been asked to provide information about your waterfowl hunting activities. We recently mailed you a survey questionnaire regarding your hunting experiences in Illinois during the 2012-2013 waterfowl season. We have not received your completed questionnaire. Perhaps you recently mailed the questionnaire and it has not yet arrived in our office. If so, we thank you.

If you have not returned your completed questionnaire to us, please do so as soon as possible. We have enclosed another copy of the questionnaire. **The information you and other selected hunters furnish our biologists is vital for proper waterfowl management and allows us to safeguard waterfowl populations while maximizing hunting opportunities.**

This survey is limited to those hunters selected. Please take 15 minutes to complete the enclosed questionnaire **even if you were not successful.** A stamped envelope is provided for you to return the questionnaire to us.

Thank you for helping with this important study.

Sincerely,

Craig A. Miller
Human Dimensions Research Program

Appendix E

ILLINOIS NATURAL HISTORY SURVEY
Prairie Research Institute
University of Illinois at Urbana-Champaign

May 29, 2013

Dear Waterfowl Hunter,

As one of a select group of Illinois waterfowl hunters, you have been asked to provide information about your waterfowl hunting activities. We recently mailed you a survey questionnaire regarding your hunting experiences in Illinois during the 2012-2013 waterfowl season. We have not received your completed questionnaire. Perhaps you recently mailed the questionnaire and it has not yet arrived in our office. If so, we thank you.

If you have not returned your completed questionnaire to us, please do so as soon as possible. We have enclosed another copy of the questionnaire. **The information you and other selected hunters furnish our biologists is vital for proper waterfowl management and allows us to safeguard waterfowl populations while maximizing hunting opportunities.**

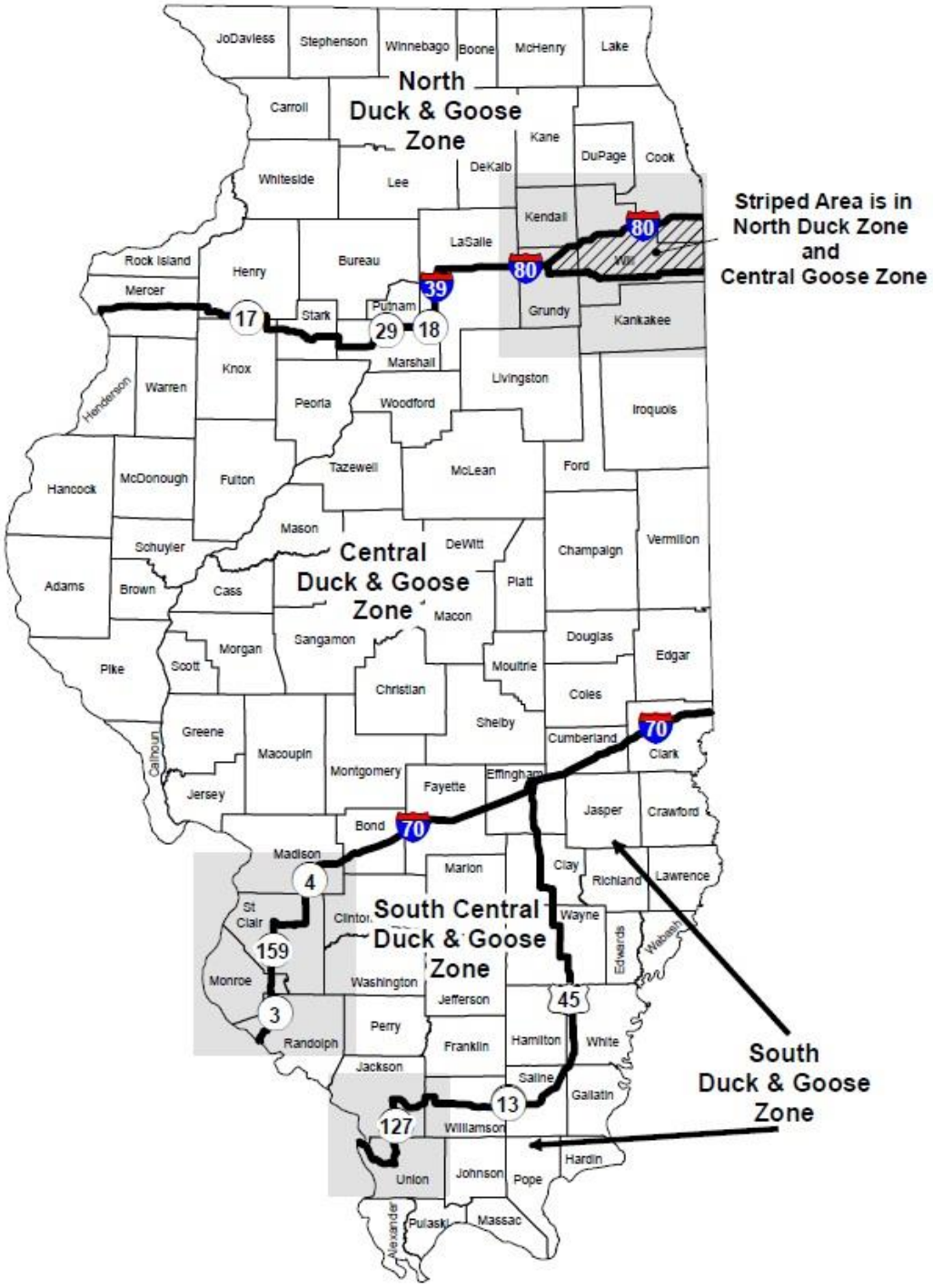
This survey is limited to those hunters selected. Please take 15 minutes to complete the enclosed questionnaire **even if you were not successful.** A stamped envelope is provided for you to return the questionnaire to us.

Thank you for helping with this important study.

Sincerely,

Craig A. Miller
Human Dimensions Research Program

Appendix F


North Duck & Goose Zone
Central Duck & Goose Zone
South Central Duck & Goose Zone
South Duck & Goose Zone
Striped Area is in North Duck Zone and Central Goose Zone
JoDaviess
Stephenson
Winnebago
Boone
McHenry
Lake
Carroll
Kane
DuPage
Cook
Whiteside
Lee
DeKalb
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
Schuyler
DeWitt
Champaign
Vermilion
Adams
Brown
Cass
Platt
Macon
Sangamon
Douglas
Edgar
Pike
Scott
Morgan
Moultrie
Christian
Coles
Shelby
Cumberland
Clark
Greene
Calhoun
Macoupin
Montgomery
Fayette
Effingham
Jersey
Bond
Jasper
Crawford
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
80
39
17
29
18
70
4
159
3
45
13
127