

**HumanDimensions**  
Research Program

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



Federal Aid Project  
Number W-112-R-23  
Job Number 101.6  
Wildlife Restoration  
Oct. 1, 2013-Sept. 30, 2014

**Marc Miller**, Director  
Illinois Department of Natural  
Resources

**Paul Vehlow**  
Federal Aid Coordinator

**John E. Buhnerkempe**  
Chief, Division of Wildlife  
Resources

# Hunter Participation, Harvest, and Hunting Behavior During the 2014 Illinois Conservation Order Season



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

Prepared by  
**Andrew L. Stephenson, Laura A. Schweizer,  
Linda K. Campbell, and Craig A. Miller**



INHS Technical Report 2014 (46)  
December 4, 2014

Key words: Conservation Order, Snow goose, Light goose, Harvest, Hunter participation

Suggested Citation:

Stephenson A.L., L.A. Schweizer, L.K. Campbell, and C.A. Miller. 2014. Hunter Participation, Harvest, and Hunting Behavior During the 2014 Illinois Conservation Order Season. Job Completion Report, Federal Aid in Wildlife Restoration W-112-R-23. Human Dimensions Program Report HR-14-06/INHS Technical Report (46). Illinois Natural History Survey, Champaign, IL. 21pp.

## LIST OF FIGURES, TABLES, AND APPENDICES

	<u>Page</u>
Figure 1 .....Percent of respondents that hunted waterfowl in Illinois during the 2013-14 regular waterfowl season .....	3
Figure 2 .....Percent of hunters that hunted snow geese in Illinois during the 2014 Conservation Order season .....	3
Figure 3 .....Percent of snow goose hunters that hunted waterfowl in Illinois during the 2013-14 regular waterfowl season .....	4
Figure 4 .....How often hunters hunt spring snow geese in Illinois.....	4
Figure 5 .....Zone hunted most often during the 2014 spring snow goose season .....	4
Figure 6 .....Distribution of days afield per hunter for Illinois' 2013-14 Conservation Order Light Goose Season .....	5
Figure 7 .....Distribution of snow geese harvested per hunter for Illinois' 2013-14 Conservation Order Light Goose Season .....	5
Figure 8 .....Hunters that used a magazine extension while hunting snow geese in 2014 .....	6
Figure 9 .....Did the extended magazine result in a greater harvest of snow geese? .....	6
Figure 10 .....Type of land hunters hunt most often for snow geese.....	6
Figure 11 .....Hunters who would want the 2015 spring snow goose season to be extended into mid-April .....	7
Figure 12 .....Hunters who would hunt snow geese in April if the season was extended .....	7
Figure 13 .....Hunter's perceptions of costs from 2014 Illinois Conservation Order hunting season, as compared to previous years ....	7
Figure 14 .....Gender of hunters .....	8
Figure 15 .....Hunters that used a guide or outfitter while hunting snow geese in 2014 .....	8
Figure 16 .....Hunters that introduced someone to snow goose hunting during the 2014 season .....	8
Table 1 .....Estimates of the number of hunters, days afield, and harvest of light geese 1999-2014 during the Illinois Conservation Order light goose season .....	10
Table 2 .....Estimated light goose harvest by month during the Illinois Conservation Order light goose season from 2004-2014.....	10
Table 3 .....Methods utilized by hunters to hunt light geese in 2014 and the estimated harvest associated with each.....	11
Table 4 .....Change in hunters' spring snow goose hunting effort over the past 5 years.....	11
Table 5 .....Hunter satisfaction with the 2014 spring Conservation Order (snow goose) season in Illinois. ....	12
Table 6 .....Comparison between the number of snow geese observed in 2013-14 to the last 5 years.....	12
Table 7 .....Reasons for wanting to hunt light geese during the spring light goose season .....	13
Table 8 .....Various categories of light goose hunting equipment owned by Illinois light goose hunters .....	13
Appendix A .....Illinois Spring Snow Goose Hunter Survey: 2013-2014 Season .....	14
Appendix B .....Cover letter sent with first mailing of the 2013-2014 Illinois Spring Snow Goose Hunter Survey .....	18
Appendix C .....Thank you/reminder postcard sent as follow-up to the mailings.....	19
Appendix D .....Cover letter sent with second mailing of the 2013-2014 Illinois Spring Snow Goose Hunter Survey.....	20
Appendix E .....Geographic distribution of Illinois light goose hunters' activity in spring 2014 .....	21

HUNTER PARTICIPATION, HARVEST, AND HUNTING  
BEHAVIOR DURING THE 2014 ILLINOIS  
CONSERVATION ORDER SEASON

JOB COMPLETION REPORT

WILDLIFE HARVEST AND  
HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-23  
STUDY 101  
JOB NO. 101.6

Prepared by  
Andrew L. Stephenson, Laura A. Schweizer,  
Linda K. Campbell, and Craig A. Miller  
Illinois Natural History Survey  
Champaign, IL  
December 4, 2014

Federal Aid in Wildlife Restoration  
W-112-R-23

Illinois Department of Natural Resources

Marc Miller, Director  
Illinois Department of Natural Resources

John E. Buhnerkempe, 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.

## **ABSTRACT**

Harvest of light geese (*Chen caerulescens*, *Chen rossii*) during the 2014 Illinois Light Goose Conservation Order season was estimated at 82,161. An estimated 1,962 hunters participated in the 2014 Illinois Light Goose Conservation Order season. Hunters spent an estimated 21,170 days afield during 2014, and the majority (51%) of the light goose harvest occurred during the month of March. Due to changes in sampling of addresses and calculation of estimates, comparisons cannot be made to previous years' figures. Addresses were sampled from Harvest Information Program (HIP) registrants who indicated they hunted light geese during the 2013 waterfowl hunting season. Electronic calls were used by 81% of hunters, 77% used unplugged shotguns, and 70% indicated hunting between sunset and ½ hour after sunset. Fifty-six percent of light goose hunters indicated an increase in effort over the past five years, and 49% of hunters perceived an increase in light goose abundance during the regular goose seasons. A majority of the hunters (91%) were interested in light goose hunting to extend their hunting season.

## **OBJECTIVE**

To survey hunters participating in the Light Goose Conservation Order (hereafter, spring) season to determine their activities and harvests in Illinois, as well as their opinions toward specific waterfowl management issues.

## **METHODS**

The 2014 Harvest Information Program (HIP) registration was the first year in which hunters were asked if they hunted light geese the previous year. The addition of this question allowed for more precise sampling of likely participants in the Illinois Conservation Order Light Goose season than a sample of Illinois State Waterfowl Stamp purchasers, as was previously done (Williams et al. 2013). A sample of 2,500 waterfowl hunters was randomly selected from HIP registrants who indicated they hunted light geese during the 2012-13 waterfowl hunting season in Illinois. On 07 May 2014, these potential Conservation Order Light Goose (*Chen caerulescens*, *Chen rossii*) hunters were mailed a 4-page mail-back questionnaire (Appendix A) and cover letter (Appendix B). Non-respondents were mailed a thank you/reminder postcard (Appendix C) on 22 May 2014, a

second copy of the questionnaire and cover letter (Appendix D) on 09 June 2014, and another thank you/reminder postcard on 26 June 2014. The number of light goose hunters ( $Hunt_{sp}$ ), days afield ( $Days_{sp}$ ), birds crippled but not retrieved ( $Crip_{sp}$ ) and harvest ( $Harv_{sp}$ ) were calculated as follows:

$$\begin{aligned}
 Hunt_{sp} &= Hunt_r \frac{L_t}{n}, & Days_{sp} &= Days_r \frac{L_t}{n}, \\
 Crip_{sp} &= Crip_r \frac{L_t}{n}, & Harv_{sp} &= Harv_r \frac{L_t}{n}
 \end{aligned}$$

Where:

$Hunt_r$  = number of respondents to the 2014 Illinois Spring Snow Goose Hunter Survey who reported hunting light geese (adjustment for non-hunters is inherent),

$L_t$  = total number of Harvest Information Program (HIP) registrants who indicated they hunted light geese in Illinois during 2012-13 waterfowl hunting season.

$n$  = number of respondents to the 2014 Illinois Spring Snow Goose Hunter Survey,

$Days_r$  = 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,

Estimates of number of hunters, days hunted, and light geese harvested were based on 6,375 HIP registrants in 2014. Estimated light goose harvest was not adjusted for reporting bias using 0.478 as has been done in previous years (Anderson et al. 1996). Confidence intervals were calculated for number of hunters, days hunted, and geese harvested, as described in Lischka et al. (2006). We entered and analyzed data using SPSS 22.0 (IBM SPSS Inc. 2012). Due to changes in sampling of addresses and calculation of estimates, comparisons to previous years' figures must be done with caution.

## SEASON DATES AND BAG LIMITS

The 2014 spring goose season took place from 17 January to 31 March in the North Zone and from 1 February to 31 March in the Central, South Central, and South Zones. The season began in each zone the day

after the regular Canada goose (*Branta canadensis*) season closed. Hunters during the conservation order light goose season were required to have a state duck stamp and hunting license, but were exempt from any daily bag or possession limits. Hunters were permitted to use unplugged shotguns and electronic calls, and to hunt from half an hour before sunrise to half an hour after sunset, liberalized regulations not permitted during other waterfowl seasons.

## RESULTS

### *Harvest Results*

The questionnaire was not deliverable to 51 addresses, thus reducing our mailing list to 2,449 individuals. A total of 1,028 questionnaires were returned, of which 981 were considered usable for a 40% response rate. Of the usable responses, less than one-third indicated they did not hunt during the regular waterfowl season (Figure 1). Approximately one-third (33.5%) of respondents reported hunting light geese during the 2014 conservation order light goose season (Figure 2). Nearly all (96.9%) light goose hunters indicated they also hunted during the regular waterfowl seasons (Figure 3). Over two-thirds of those who hunted (67.3%) indicated they hunt light geese every year (Figure 4) and nearly 60% of hunters (58.1%) identified the Central Zone as the zone in which they hunted most often for light geese (Figure 5).

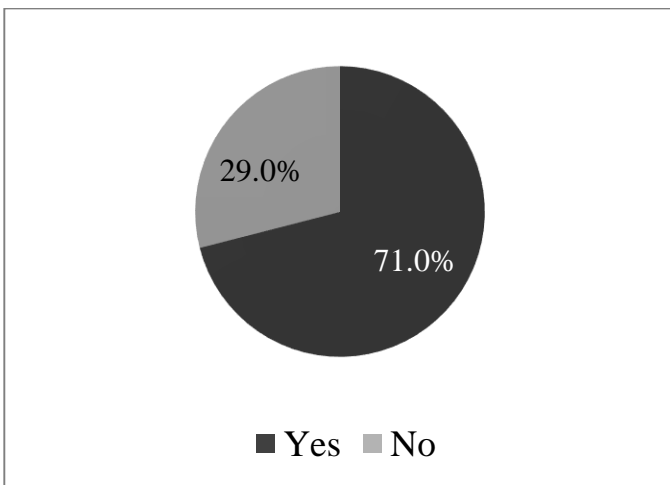


Figure 1. Percent of survey respondents that hunted waterfowl in Illinois during the 2013-14 regular waterfowl season ( $n=972$ ).

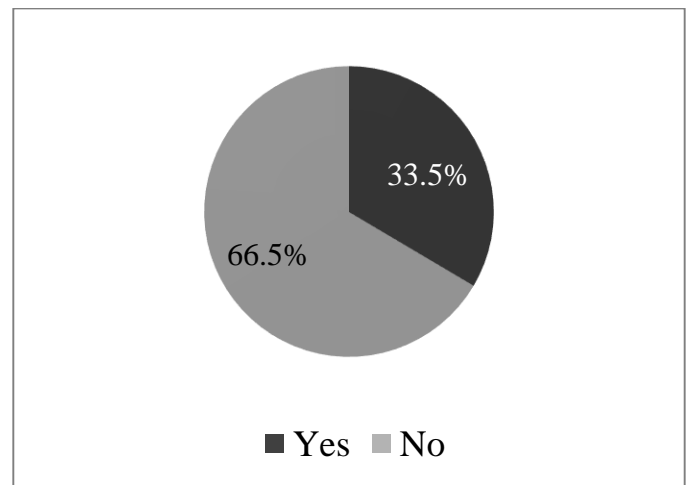


Figure 2. Percent of survey respondents that hunted light geese in Illinois during the 2014 conservation order light goose season ( $n=981$ ).

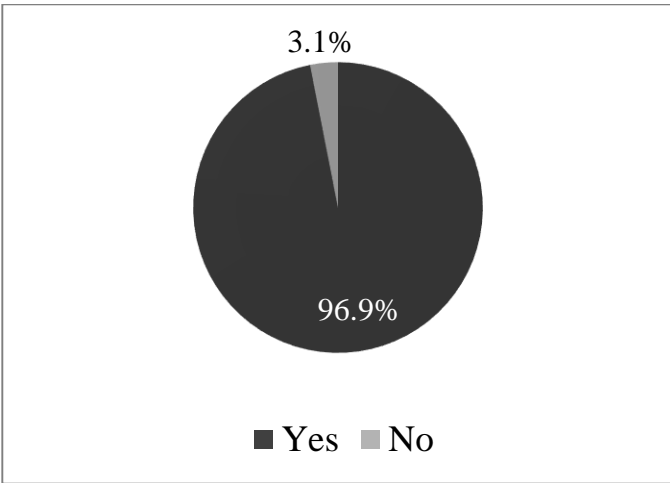


Figure 3. Percent of light goose hunters that hunted waterfowl in Illinois during the 2013-14 regular waterfowl season (n=326).

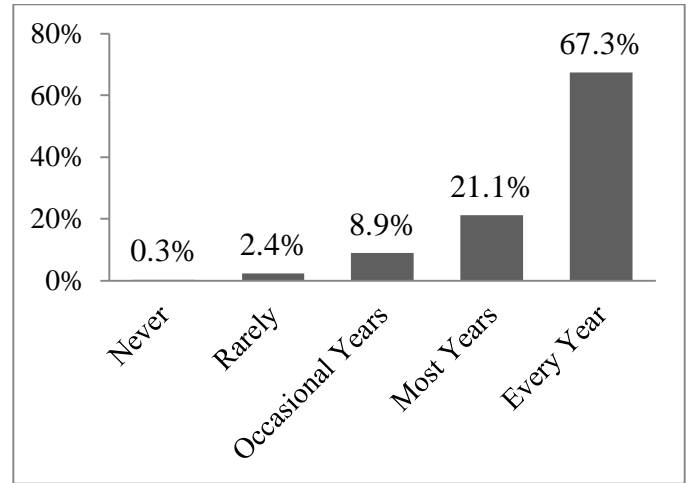


Figure 4. How often light goose hunters hunt the conservation order light goose season in Illinois (n=327).

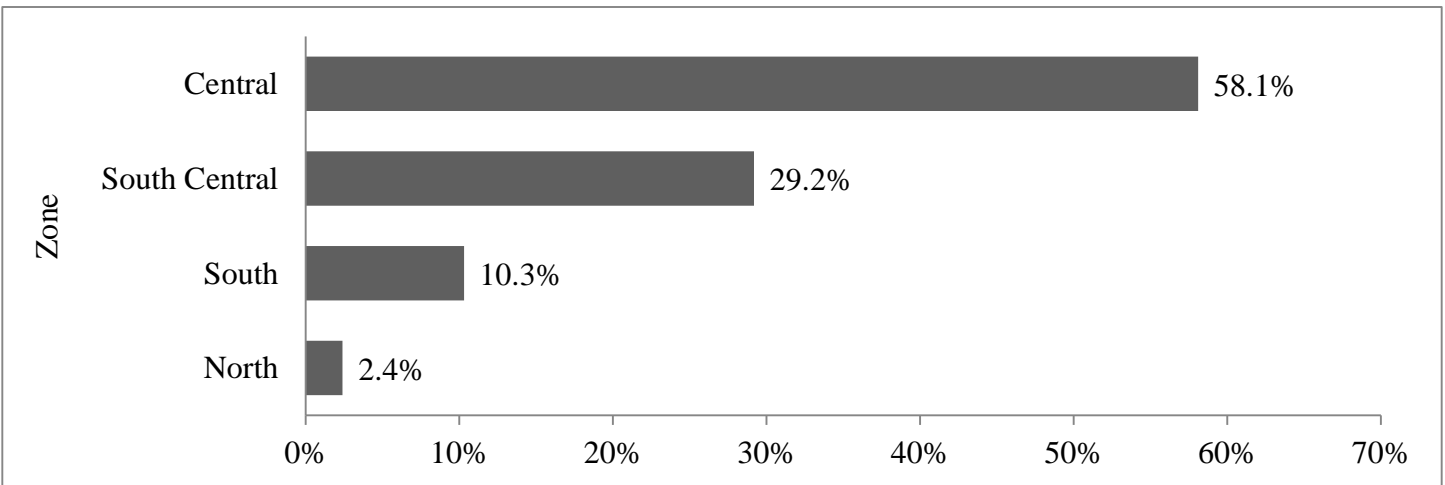


Figure 5. Zone hunted most often during the 2014 conservation order light goose season (n=329).

During the 2014 spring snow goose season, we estimated a total of 1,962 light goose hunters statewide hunted for 21,170 days and harvested 82,161 light geese (Table 1). Of respondents who indicated hunting light geese  $\geq 1$  day, 46% hunted 5 days or less (Figure 6). One fifth of hunters (20.5%) reported not harvesting any light geese, while 10% harvested  $\leq 100$  snow geese (Figure 7). Approximately half (49%) of the harvest occurred during February, and half (51%) in March (Table 2). Mean harvest was 41.87 geese per hunter overall for the season and 52.68 geese per successful hunter (harvested  $\geq 1$  goose) for the season. When hunters who harvested  $>100$  geese are excluded, mean geese harvested per hunter and geese per successful hunter for the season, respectively, drop to 19.27 and 24.93 geese. A total of 6,108 light geese were estimated to be crippled.



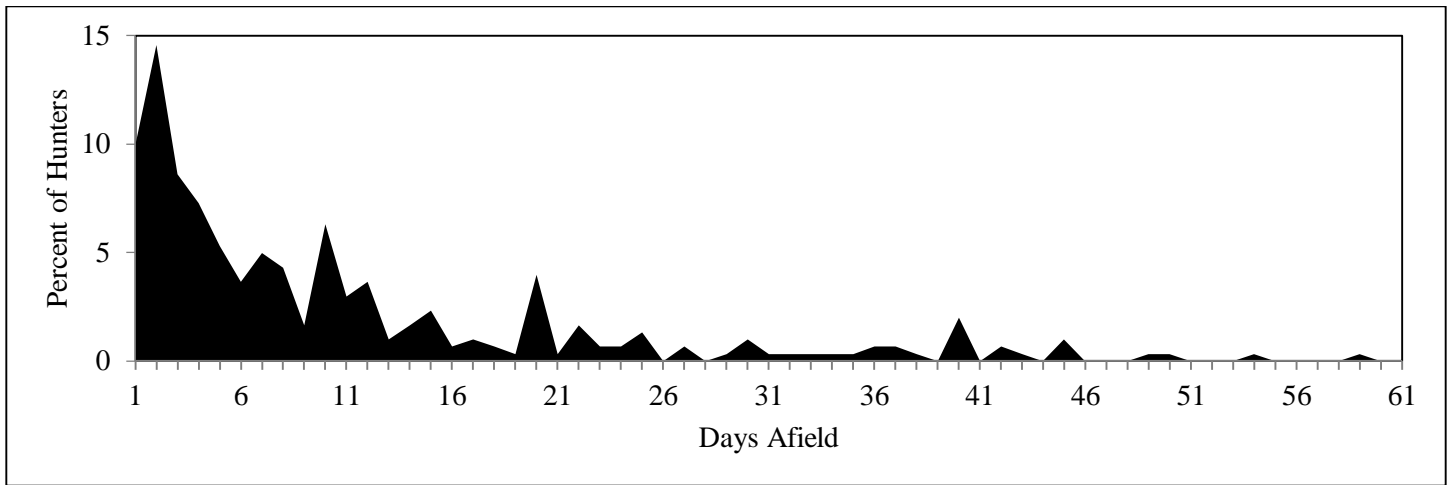


Figure 6. Distribution of days afield per hunter for Illinois' 2014 Conservation Order Light Goose Season.

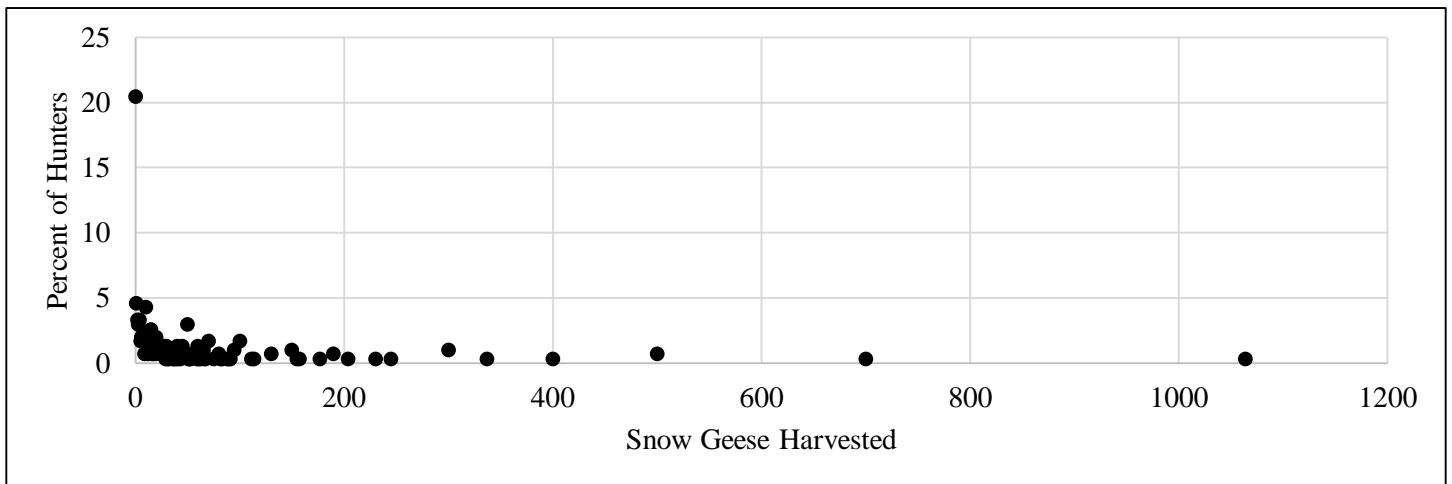


Figure 7. Distribution of snow geese harvested per hunter for Illinois' 2014 Conservation Order Light Goose Season.

Electronic calls were used by 81% of light goose hunters, and they harvested an estimated 49,866 light geese with electronic calls. Seventy-seven percent of light goose hunters reported using an unplugged shotgun during the spring snow goose season. Hunters harvested an estimated 47,676 light geese with unplugged shotguns. Seventy percent of hunters reported hunting between sunset and ½ hour after sunset and harvested an estimated 39,111 light geese during that time period (Table 3). One-third of hunters used magazine extensions when hunting snow geese (Figure 8), and 80% of them indicated it resulted in greater harvest (Figure 9). Light goose hunters hunted most frequently on private land on which they had permission (74%), followed by private land owned by themselves or their family (26%) (Figure 10). The general locations in Illinois in which light goose hunters concentrated their efforts is presented in Appendix E.

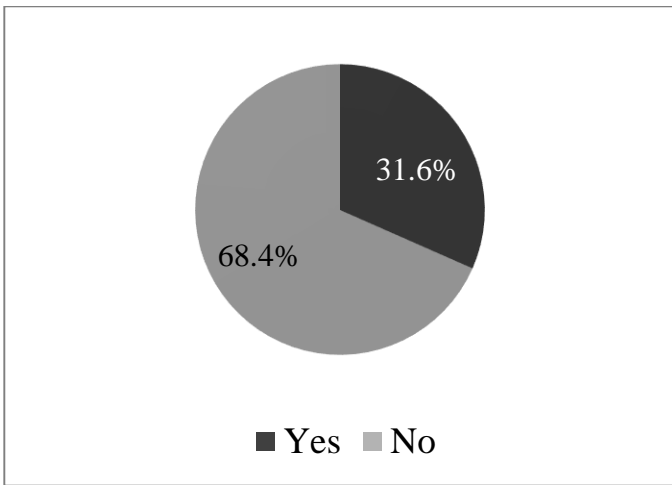


Figure 8. Hunters that used a magazine extension while hunting light geese in 2014 ( $n=326$ ).

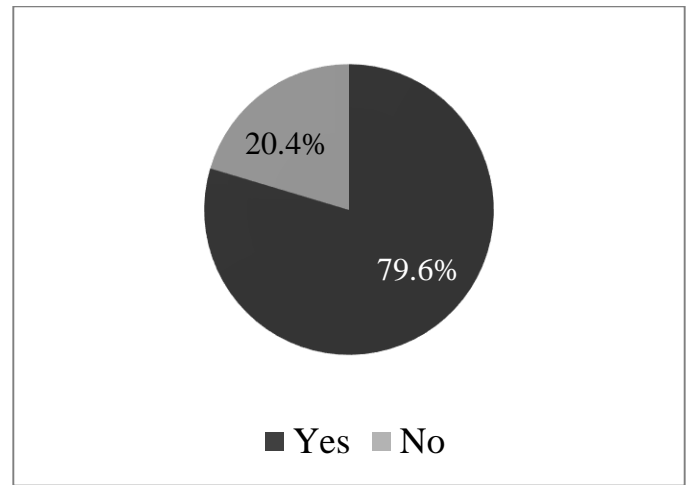


Figure 9. Did the extended magazine result in a greater harvest of light geese? ( $n=103$ ).

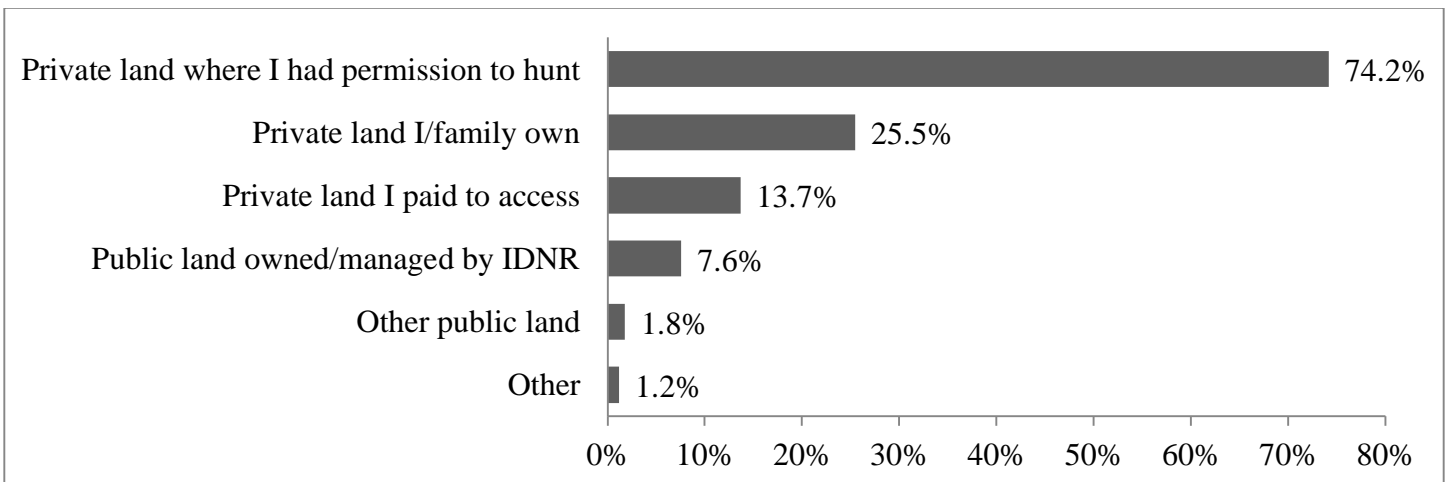


Figure 10. Type of land hunters hunt most often for light geese ( $n=329$ ).

\*Percentages do not add up to 100 because some hunters indicated they hunted multiple types of land.

### *Satisfaction with the 2014 Conservation Order Light Goose Season*

Hunters who hunted light geese in 2014 had either increased their light goose hunting efforts (56.0%) or indicated no change (22.8%) in their effort (Table 4). Light goose hunters were most satisfied with the number of snow geese they saw (68.0%) during the 2014 Spring Conservation Order season and the number of snow geese that migrated through the areas they hunted (59.7%) and were least satisfied with the number of snow geese they harvested (57.6%) and the amount of shooting they got in (53.4%) (Table 5). Half of the hunters (49.0%) perceived an increase in the number of light geese during the regular goose seasons (Table 6.) When asked if they would want the 2015 spring snow goose season extended into mid-April, over two-thirds of respondents (67.8%) indicated they would (Figure 11), and the same number indicated they would hunt during

that time (Figure 12). When asked why hunters are interested in light goose hunting, the top reasons were to extend their hunting season (91.2%) and to reduce the population (61.1%) (Table 7). Over one-half (53.2%) of light goose hunters believed expenses during the 2014 Conservation Order season were typical of past years, though one quarter of hunters indicated gas prices and other expenses from waterfowl hunting were higher than past years (Figure 13).

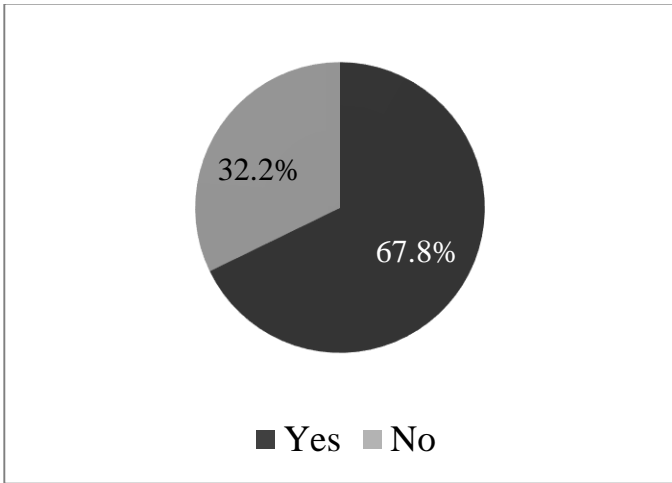


Figure 11. Hunters who would want the 2015 Conservation Order Light Goose season to be extended into mid-April ( $n=320$ ).

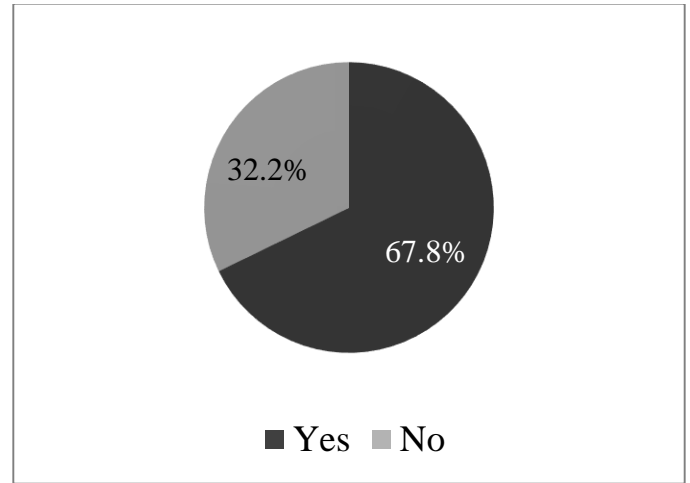


Figure 12. Hunters who would hunt light geese in April if the season was extended ( $n=320$ ).

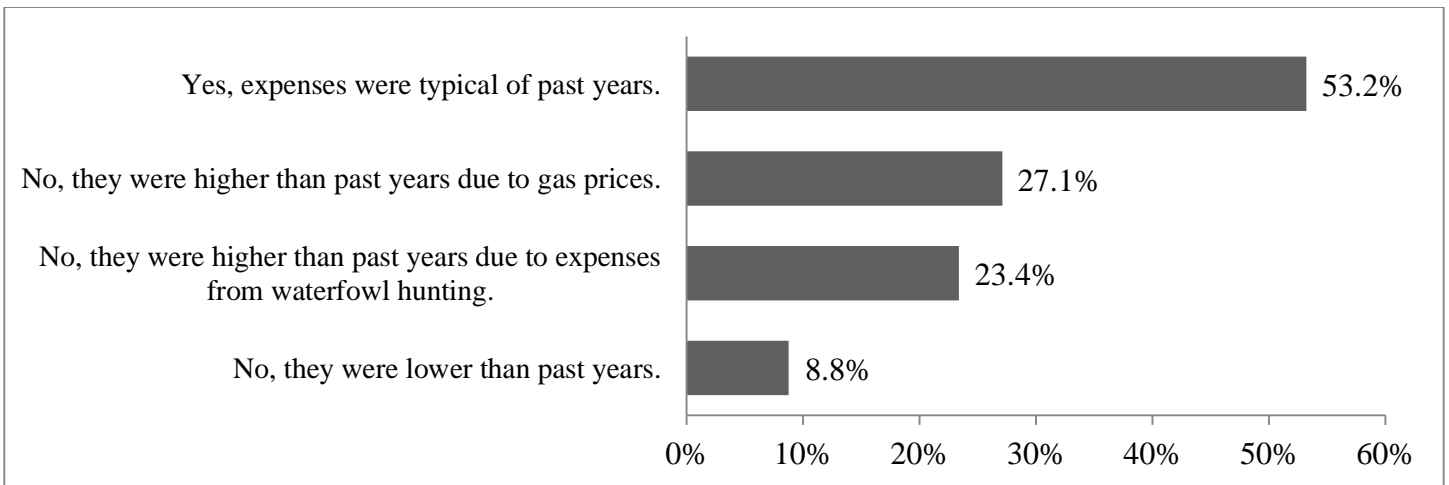


Figure 13. Hunter's perceptions of costs from the 2014 Illinois Conservation Order hunting season, as compared to previous years ( $n=329$ ).

\*Percentages do not add up to 100 because some hunters indicated their expenses had increased for multiple reasons.

Conservation Order goose hunters were younger ( $M = 42$  years old) than non-hunters ( $M = 46$  years old), and had been hunting light geese during the spring for an average of 6.8 years. Ninety-nine percent of light goose hunters were male (Figure 14). Light goose hunters were asked what type(s) of light goose hunting

equipment they had: 81% of hunters had snow goose calls (including e-callers), 68% had shell decoys, 68% had kites/flags, and 67% had full-body decoys (Table 8). Eight percent of light goose hunters used a guide or outfitter while hunting light geese during the 2014 season (Figure 15) and fifty-six percent of light goose hunters took someone light goose hunting for the first time during 2014 (Figure 16).

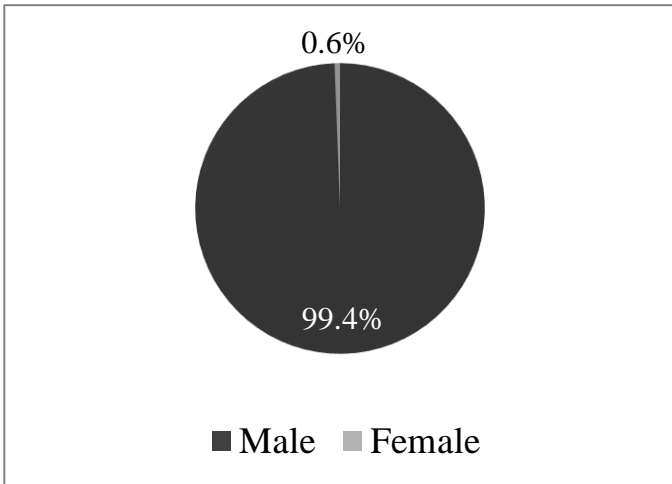


Figure 14. Gender of hunters ( $n=325$ ).

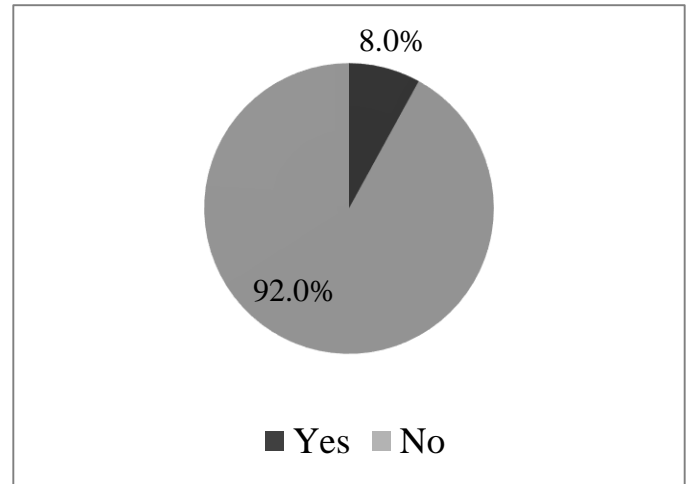


Figure 15. Hunters that used a guide or outfitter while hunting light geese in 2014 ( $n=323$ ).

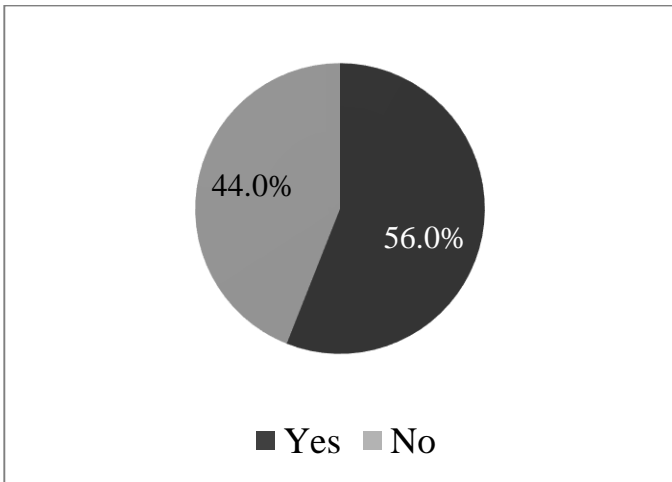


Figure 16. Hunters that introduced someone to light goose hunting during the 2014 season ( $n=327$ ).

## REFERENCES

- Anderson, W.L., 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. 2010. *SPSS for Windows*. IBM Corporation, 1 New Orchard Road, Armonk, NY, U.S.A.
- Lischka, S.A., W.L. Anderson, and L.K. Campbell. 2006. Results of the 2005-2006 Illinois hunter harvest survey. Human Dimensions Program Report HR-06-01. Illinois Natural History Survey, Champaign, IL. 55pp.
- Williams, B.D., C.A. Miller, and L.K. Campbell. 2013. Hunter Participation, Harvest, and Hunting Behavior During the 2013 Illinois Conservation Order Season. Job Completion Report, Federal Aid in Wildlife Restoration W-112-R-22. Human Dimensions Research Program HR-13-06/INHS Technical Report (33). Illinois Natural History Survey, Champaign, IL. 22pp.

Table 1. Estimates of the number of hunters, days afield, and harvest of light geese 1999-2014 during the Illinois Conservation Order light goose season.

	Hunters	Days Afield	Harvest
1999	1,076	3,756	2,254
2000	865	6,643	7,612
2001	4,665	32,634	36,830
2002	5,107	31,204	17,875
2003	3,111	27,177	30,564
2004	5,976	44,306	37,189
2005	5,689	42,349	38,183 <sup>b</sup>
2006	5,543	53,154	59,799 <sup>b</sup>
2007	5,962 ± 1,147 <sup>a</sup>	39,170 ± 15,221	44,514 ± 25,794
2008	6,409 ± 1,046 <sup>a</sup>	50,471 ± 10,331	97,021 ± 40,811
2009	4,663 ± 950 <sup>a</sup>	33,947 ± 8,403	85,635 ± 36,479
2010	3,702 ± 820 <sup>a</sup>	25,581 ± 6,297	65,987 ± 42,519
2011	3,825 ± 826 <sup>a</sup>	30,753 ± 8,902	66,406 ± 30,962
2012	5,726 ± 943 <sup>a</sup>	51,763 ± 11,376	87,558 ± 41,316
2013	4,477 ± 1,192 <sup>a</sup>	45,724 ± 16,642	73,495 ± 52,191
2014	1,962 ± 188 <sup>a</sup>	21,170 ± 3,151	82,161 ± 22,291 <sup>b</sup>

<sup>a</sup> 95% confidence intervals

<sup>b</sup> Harvest data are estimates for Conservation Order Season only.

Table 2. Estimated light goose harvest by month during the Illinois Conservation Order light goose season from 2004-2014.

	January <sup>b,c</sup>	February	March
2004 <sup>a</sup>	-	26,404	10,785
2005	824 <sup>d</sup>	29,008	8,351
2006	67	43,815	15,917
2007	2,006	32,564	9,944
2008	295	61,376	35,351
2009	77	58,761	26,797
2010	249	44,755	20,983
2011	-	48,323	18,082
2012	55	60,625	26,878
2013	476 <sup>e</sup>	45,080	22,233
2014	97	39,969	42,094

<sup>a</sup> Monthly harvest data before 2004 are not available.

<sup>b</sup> January estimates include only North Zone harvest unless otherwise noted.

<sup>c</sup> Harvest data are estimates for Conservation Order Season only.

<sup>d</sup> January harvest in 2005 also included Central Zone harvest.

<sup>e</sup> Revised from reported 2013-14 harvest.

Table 3. Methods utilized by hunters to hunt light geese in 2014 and the estimated harvest associated with each.\*

Method	Number of Hunters	Percentage of Hunters (%)	Total Hunters	Estimated Harvest
Electronic calls ( <i>n</i> =311)	252	81.0	1,637	49,866
Unplugged shotguns ( <i>n</i> =310)	237	76.5	1,540	47,676
Hunting from sunset to 1/2 hour after sunset ( <i>n</i> =270)	188	69.6	1,222	39,111
Using 4 <sup>th</sup> , 5 <sup>th</sup> , or 6 <sup>th</sup> shell ( <i>n</i> =329)	147	44.7	955	13,705
Using 4 <sup>th</sup> shell ( <i>n</i> =329)	136	41.3	884	6,414
Using 5 <sup>th</sup> shell ( <i>n</i> =329)	106	32.2	689	4,074
Using 6 <sup>th</sup> shell ( <i>n</i> =329)	73	22.2	474	3,217

\* Estimated harvest cannot be summed to estimate statewide harvest as harvest may be double counted when hunters used multiple listed methods when hunting.

Table 4. Change in hunters' spring snow goose hunting effort over the past 5 years (*n*=325).

	Number of Hunters	Percentage of Hunters (%)
Decreased Considerably	12	3.7
Decreased Moderately	16	4.9
Decreased Slightly	41	12.6
No Change	74	22.8
Increased Slightly	68	20.9
Increased Moderately	60	18.5
Increased Considerably	54	16.6

Table 5. Hunter satisfaction with the 2014 spring Conservation Order (snow goose) season in Illinois.

	Very Dissatisfied	Dissatisfied	Unsure	Satisfied	Very Satisfied
Number of snow geese you saw ( <i>n</i> =325).	3.7%	17.5%	10.8%	48.9%	19.1%
Mid-season matched peak of snow goose migration ( <i>n</i> =321).	5.0%	19.6%	33.0%	34.0%	8.4%
Amount of shooting you got in ( <i>n</i> =324).	15.7%	37.7%	7.1%	31.2%	8.3%
Number of snow geese that migrated through areas you hunted ( <i>n</i> =323).	6.2%	21.4%	12.7%	45.8%	13.9%
Amount of time you spent snow goose hunting ( <i>n</i> =324).	11.4%	30.6%	12.3%	39.5%	6.2%
Number of snow geese you harvested ( <i>n</i> =323).	24.5%	33.1%	5.6%	32.8%	4.0%
The weather during the Conservation Order season ( <i>n</i> =324).	17.0%	22.5%	16.4%	38.6%	5.6%

Table 6. Comparison between the number of snow geese observed in 2013-14 to the last 5 years (*n*=320).

	Number of Hunters	Percentage of Hunters (%)
Decreased Considerably	16	5.0
Decreased Moderately	24	7.5
Decreased Slightly	58	18.1
No Change	65	20.3
Increased Slightly	74	23.1
Increased Moderately	48	15.0
Increased Considerably	35	10.9



Table 7. Reasons for wanting to hunt light geese during the spring light goose season ( $n=329$ ).

Reasons for Interest	Number of Hunters	Percentage of Hunters (%)
Extend my hunting season	300	91.2
Reduce the population	201	61.1
Protect the tundra	197	59.9
To eat them	192	58.4
No bag limits	189	57.4
Get to use electronic calls	95	28.9
Other	29	8.8

Table 8. Various categories of light goose hunting equipment owned by Illinois light goose hunters ( $n=329$ ).

Equipment	Number of Hunters	Percentage of Hunters (%)
Snow goose calls (including e-callers)	266	80.9
Goose shells	225	68.4
Kites/Flags	224	68.1
Full-body decoys	221	67.2
Rag/sock decoys	218	66.3
Silhouettes	165	50.2
Vortex™-like system	114	34.7
Spinning-wing decoys	108	32.8
Floater	101	30.7
Other	7	2.1

# Illinois Spring Snow Goose Hunter Survey

## 2013-2014 Season



*Alberto Rava*



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. Conservation Order (Spring) Snow Goose Hunting Effort and Harvest.** Please take a few minutes to complete the following questionnaire to help us evaluate the recent **spring Conservation Order snow goose hunting season even if you did not hunt snow geese. All questions pertain to Illinois hunting. Please note: "Snow geese" also includes Ross' and Blue geese.**

1. Did you hunt snow geese in Illinois during the 2014 Conservation Order (spring snow goose) season (**North Zone: Jan. 17-March 31, 2014 Central, South Central, and South Zones: Feb. 1- March 31, 2014**)? Do not include hunting snow geese during the regular Canada goose season. (Please check one.)

Yes  No (Please skip to **Section 2**)

2. In which zone did you hunt snow geese most often during the 2014 **spring snow goose season**? (Please check one.)

North Zone  Central Zone  South Central Zone  South Zone

3. On which of the following types of land did you hunt snow geese during the 2014 **spring snow goose season**? (Please check all that apply.)

Public land owned/managed by IDNR  Other public land  
 Private land I/family own  Private land where I had permission to hunt  
 Private land I paid to access  Other (Please identify): \_\_\_\_\_

4. Did you use a guide or outfitter while hunting snow geese during the 2014 **spring snow goose season**?

Yes  No

5. Please indicate **your** effort- not your hunting party's effort- and harvest in the following table. **Include only harvest that occurred during the spring snow/blue and Ross' goose season; do not include snow goose harvest during the regular Canada goose seasons.** Report the counties in which you hunted, number of days you hunted, and geese harvested for the time period in which you hunted snow geese. Include only geese you harvested and days you hunted in Illinois. Count part of 1 day as 1 day.

	County hunted	Days hunted	Geese harvested	Geese hit, but not retrieved
January:				
February:				
March:				

6. Please indicate which of the following methods you used to hunt snow geese during the **spring snow goose season** by placing a check in the appropriate box and the number of geese you harvested using each method.

	Used	Did Not Use	Geese Harvested
Electronic calls			
Unplugged shotgun			
Hunting from sunset to ½ hour after sunset			

7. If you used an unplugged shotgun during the **spring snow goose season**, how many geese did you harvest using the:

4<sup>th</sup> shell  geese      5<sup>th</sup> shell  geese      6<sup>th</sup> shell  geese

8. Did you use a magazine extension during the **spring snow goose season**?  Yes  No
- 8a. If "Yes," did the extended magazine result in a greater harvest of geese?  Yes  No
9. The 2014 **spring snow goose season** ends March 31<sup>st</sup>, but regulations for 2015 allow the season to be extended to mid-April. Would you want the season to be extended into mid-April?  
 Yes  No
10. If the season was extended, would you hunt snow geese in April?  Yes  No
11. Which of the following best describes how often you hunt **spring snow goose** in Illinois?  
 Every year  Most years  Occassional years  Rarely  Never
12. How has your spring snow goose hunting effort changed over the past 5 years? Please circle the number that matches your response.
- | Decreased Considerably | Decreased Moderately | Decreased Slightly | No Change | Increased Slightly | Increased Moderately | Increased Considerably |
|------------------------|----------------------|--------------------|-----------|--------------------|----------------------|------------------------|
| 1                      | 2                    | 3                  | 4         | 5                  | 6                    | 7                      |
13. How does the number of snow geese you saw during the **spring snow goose season** compare to the last 5 years? Please circle the number that matches your response.
- | Decreased Considerably | Decreased Moderately | Decreased Slightly | No Change | Increased Slightly | Increased Moderately | Increased Considerably |
|------------------------|----------------------|--------------------|-----------|--------------------|----------------------|------------------------|
| 1                      | 2                    | 3                  | 4         | 5                  | 6                    | 7                      |
14. Which type(s) of snow goose hunting equipment do you have? (Please check all that apply.)
- Floater decoys  Full-bodied decoys  Rags/sock decoys
- Silhouettes  Kites/flags  Calls (including electronic callers)
- Shells  Spinning-wing decoys  Vortex-like system
- Other (please identify): \_\_\_\_\_
15. Did you introduce someone to snow goose hunting during the 2014 **spring snow goose season**?  
 Yes  No
16. How many years have you been **spring snow goose** hunting in Illinois? \_\_\_\_\_ years
17. Please identify why you're interested in hunting snow geese during the **spring snow goose season**. (Please check all that apply.)
- No bag limits  Reduce the population  Get to use electronic calls
- To protect the tundra  Extend my hunting season  To eat them
- Other (Please identify) \_\_\_\_\_
18. Were your expenses in Illinois during the 2014 **spring snow goose season** typical of past years?  
 Yes, they were typical of past years.  
 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.

19. Please rate your **SATISFACTION with the 2014 spring Conservation Order (snow 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 snow geese you saw.	1	2	3	4	5
Mid-season matched peak of snow goose migration.	1	2	3	4	5
Amount of shooting you got in.	1	2	3	4	5
Number of snow geese that migrated through areas you hunted.	1	2	3	4	5
Amount of time you spent snow goose hunting.	1	2	3	4	5
Number of snow geese you harvested.	1	2	3	4	5
The weather during the Conservation Order season.	1	2	3	4	5

**Section 2. Background Information.** The following questions allow us to understand more about the people involved in snow goose hunting in Illinois. All responses are kept confidential.

1. How many years have you been waterfowl hunting in Illinois? \_\_\_\_\_ years
2. Did you hunt waterfowl (ducks and/or geese) in Illinois during the **2013-2014 regular waterfowl seasons**?  
 Yes       No
  - 2a. If "Yes," in which zone did you **hunt waterfowl most often during the 2013-2014 regular waterfowl seasons**? (Please check only one)  
 North Zone       Central Zone       South Central Zone       South Zone
3. Please give your age. \_\_\_\_\_ years
4. What is your gender?  Male       Female
5. What is your county of residence? \_\_\_\_\_ County

**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.



## ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute  
University of Illinois at Urbana-Champaign

---

May 07, 2014

Dear Snow Goose Hunter,

You have been chosen as one of a select group of Illinois snow goose hunters to provide information about your snow goose hunting activities. Enclosed is a survey questionnaire regarding your snow goose hunting experiences in Illinois during the 2014 Conservation Order (spring) season. We ask you to please take a few moments of your time to complete this questionnaire and return it in the envelope provided **even if you were not successful or did not hunt snow geese during the Conservation Order (spring) season.**

**The information you and other selected hunters provide our biologists is vital for proper snow goose management and allows us to safeguard snow goose populations while maximizing hunting opportunities.**

This survey is limited to those hunters selected. Please take a few minutes to complete the enclosed questionnaire and return it in the postage paid envelope provided.

You may access the results of this and other studies of hunters and hunting in Illinois at <http://www.inhs.illinois.edu/programs/hd/> or like us on Facebook at the Human Dimensions Research Program - Illinois Natural History Survey page to be notified when results are available.

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 your time and assistance.

Sincerely,  


Craig A. Miller  
Human Dimensions Research Program

1816 South Oak Street,  
Champaign, Illinois 61820 USA

## Appendix C



Dear Waterfowl Hunter,

Recently you were mailed a questionnaire about snow goose hunting during the Conservation Order (spring) season. 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.



## ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute  
University of Illinois at Urbana-Champaign

---

June 9, 2014

Dear Waterfowl Hunter,

You recently received a survey questionnaire requesting information about snow goose hunting during the 2014 Conservation Order (spring) season. If you recently returned your questionnaire, we thank you. If not, we have enclosed a second one for you. Please take a few minutes to complete this questionnaire and return it in the envelope provided **even if you were not successful or did not hunt snow geese during the Conservation Order (spring) season.**

**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.**

Please take a few minutes to complete the enclosed questionnaire and return it in the envelope provided. If you have any questions please call 217-244-5121.

Thank you for your time and assistance.

Sincerely,

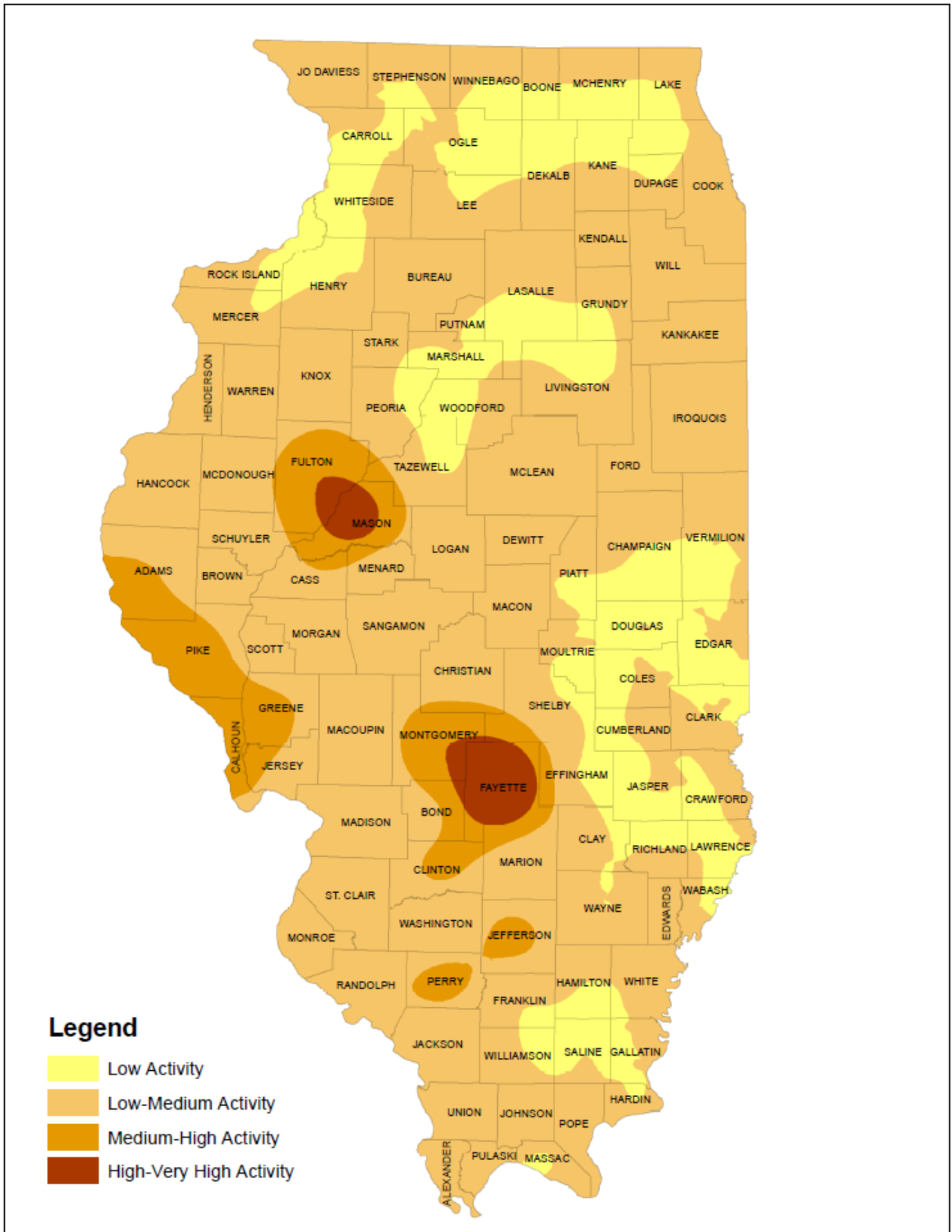
A handwritten signature in black ink, appearing to read "Craig A. Miller", followed by a long horizontal line.

Craig A. Miller  
Human Dimensions Research Program

1816 South Oak Street,  
Champaign, Illinois 61820 USA



Appendix E



Geographic distribution of Illinois light goose hunters' ( $n = 302$ ) activity in spring 2014. (Map by Jeremy Clark, INHS)