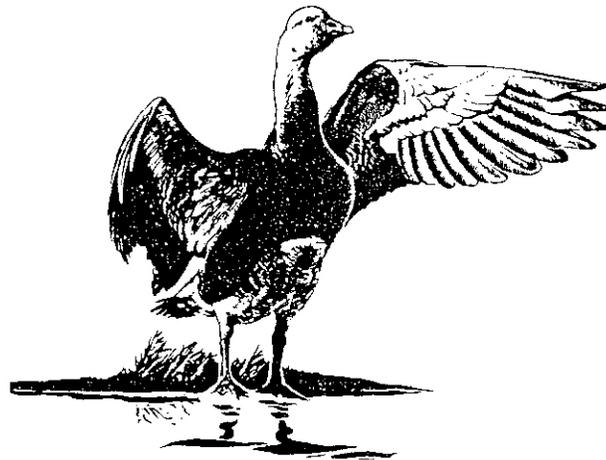


HumanDimensions
Research Program

2011 Illinois Conservation Order Season Report

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



Federal Aid Project
Number W-112-R-20
Job Number 101.6
Wildlife Restoration
Oct. 1, 2010-Sept. 30, 2011

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2011 ILLINOIS CONSERVATION ORDER SEASON REPORT

JOB COMPLETION REPORT

WILDLIFE HARVEST AND HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-20
STUDY 101
JOB NO. 101.6

Prepared by
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Illinois Natural History Survey
Champaign, IL
August 25, 2011

Federal Aid in Wildlife Restoration
W-112-R-20

Illinois Department of Natural Resources

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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 2011 Illinois Conservation Order season was estimated at 66,406, which is similar to the 2010 harvest of 65,987 geese. Participation increased 3% to 3,825 hunters, a small increase compared to 3,702 hunters during 2010. Hunters spent an estimated 30,753 days afield during 2011, an increase of 5,172 days (20%) from 2010. The majority (73%) of the snow goose harvest occurred during the month of February. Electronic calls were used most often (63%); however, unplugged shotguns were used by 58% of hunters. Hunters who did not participate in the Conservation Order season reported “no place to hunt snow geese,” “did not have the proper equipment,” and “no snow geese in my area” as the primary reasons they did not hunt snow geese.

Objective

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

Methods

A sample of 3,000 waterfowl hunters was randomly selected from purchasers of the Illinois State Waterfowl Stamp for the 2010-2011 season. On 28 March 2011, these potential Conservation Order Light Goose (*Chen caerulescens*, *Chen rossii*) hunters were mailed a 4-page mail-back questionnaire and cover letter (Appendices A and B). Non-respondents were mailed a thank you/reminder postcard (Appendix C) on 13 April, a second copy of the questionnaire and cover letter (Appendix D) on 4 May, and another thank you/reminder postcard on 23 May. Estimates of number of hunters, days hunted, and snow geese harvested were based on

confirmed sales of 64,828 Illinois Migratory Waterfowl Stamps (2010-2011 series). Estimated snow goose harvest was adjusted for reporting bias using 0.478 as the adjustment factor (Anderson et al. 1996). Ninety-five percent 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 19.0 (SPSS Inc. 2010).

The 2011 Conservation Order Light Goose season took place from 9 January to 31 March in the North zone and from 1 February to 31 March in the Central and South zones. The season began in each zone the day after the regular Canada goose season closed. Hunters during the Conservation Order Light Goose season were exempt from any daily bag or possession limits, and hunters were permitted to use unplugged shotguns, electronic calls, and hunt from half an hour before sunrise to half an hour after sunset.

Results

The questionnaire was not deliverable to 80 addresses, thus reducing our mailing list to 2,920 individuals. A total of 1,375 questionnaires were returned, of which 1,368 were considered usable, for a 47% response rate. Of the usable responses, 81 (6%) hunters reported hunting snow geese during the 2011 Conservation Order season. This proportion is similar to the 2010 proportion (6%) that hunted snow geese. During the 2011 Conservation Order season, we estimated a total of 3,825 snow goose hunters statewide hunted for 30,753 days and harvested 66,406 snow geese (Table 1). The majority (73%) of the harvest occurred during February, a 5% increase from the 2010 February harvest (Table 2). Hunters focused their efforts in the Central zone (47%) and the South zone (46%). Mean harvest was 17.36 geese per hunter for the season,

and was 21.34 geese per successful hunter for the season. A total of 7,810 snow geese were estimated to be crippled, which was an increase of 119% from the 2010 season.

Table 1. Estimates of the number of hunters, days afield, and harvest of light geese 2007-2011 during the Illinois Conservation Order snow goose season.

	2007	2008	2009	2010	2011
Hunters	5,962	6,409	4,663	3,702 ± 820 ^a	3,825 ± 826 ^a
Days Afield	39,170	50,471	33,947	25,581 ± 6,297	30,753 ± 8,902
Harvest	44,514	97,021	85,635	65,987 ± 42,519	66,406 ± 30,962

^a 95% confidence intervals

Table 2. 2010 and 2011 estimated snow goose harvest by month during the Illinois Conservation Order snow goose season.

	January	February	March
2011 Harvest	0	48,323	18,082
2010 Harvest	249	44,755	20,983

Electronic calls were used by 63% of snow goose hunters, and they harvested an estimated 47,702 snow geese with electronic calls. On at least one occasion, 58% of snow goose hunters used an unplugged shotgun, and they harvested an estimated 43,570 snow geese with unplugged shotguns; hunters harvested an estimated 10,495 geese with the 4th, 5th, or 6th shell. Thus, most geese that were harvested with an unplugged shotgun were harvested with 3 or fewer shotgun shells. Twenty-two percent of snow goose hunters took advantage of being able to hunt snow geese after sunset, and these hunters harvested an estimated 10,586 snow geese after sunset (Table 3). Snow goose hunters hunted on private land that they had permission to hunt most frequently (72%, up 12% from 2010), followed by private land owned by themselves or their family (20%, up 7% from 2010, Table 4). Most (86%) of snow goose hunters did not use a guide while hunting snow geese during 2011; a decrease of 8% from the 2010 season.

Respondents that did not hunt snow geese (94% of total respondents) responded they did not have a place to hunt snow geese (40%), did not have proper equipment, or there were no snow geese in the area (Table 5). Sixty-three percent of respondents who did not hunt agreed that they would “consider” hunting snow geese if they were no longer constrained.

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.

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.

SPSS Inc. 2010. *SPSS for Windows*. SPSS, Chicago, Illinois, U.S.A.

Table 3. Methods utilized by hunters to hunt snow geese and the estimated harvest associated with each.

Method	% Used	Total Hunters	Estimated Harvest
Electronic calls	63	2,410	47,702
Unplugged shotguns	58	2,066	43,570
Using 4 th , 5 th , or 6 th shell	38	1,454	10,495
Hunting after sunset	22	842	10,586

Table 4. Types of land hunted by snow goose hunters during 2011.

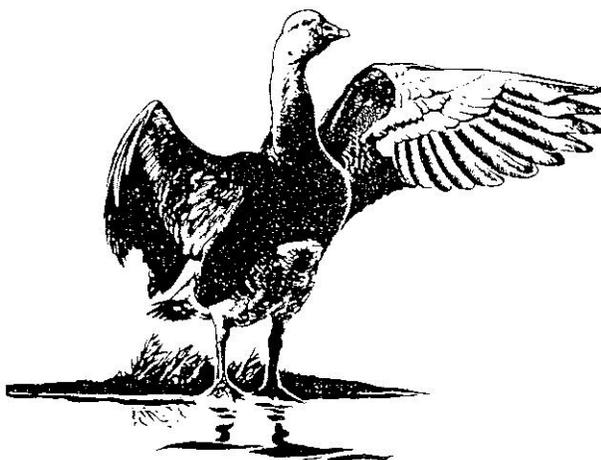
Land Hunted	%	% change from 2010
Public lands owned or managed by IDNR	17	+ 8
Other public lands	4	- 1
Private land I or a member of my family own	20	+ 7
Private land on which I had permission to hunt	72	+ 12
Private land I paid to access (lease, membership, etc.)	17	+ 6
Other	3	0

Table 5. Reasons for not hunting during the 2011 Illinois Conservation Order snow goose season.

Reasons	%
No place to hunt snow geese	40
Did not have the proper equipment	33
No snow geese in my area	30
Not enough time	27
Not interested	25
Did not know any other hunters who hunted snow geese	20
Not enough knowledge of snow goose habits	18
Unsatisfactory past experience	6
Other	6

Appendix A

Illinois Light (Snow) Goose Hunter Survey: 2011 Season



Your comments are welcome! Please write them on a separate sheet of paper to receive proper attention.

THANK YOU FOR YOUR COOPERATION!

All of your responses will be kept confidential.

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



Illinois Department of Natural Resources
Division of Wildlife Resources
and
Illinois Natural History Survey



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 hunting arms and ammunition. The IDNR 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 62702-1271, (217) 782-7616 or the Officer of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

Light Goose Hunting Effort and Harvest. Please answer the following questions about your hunting activities during the 2011 Conservation Order light (snow) goose hunting season in Illinois. Throughout this survey, the term “light geese” includes Snow, Ross’ and Blue geese.

1. Did you hunt light (snow) geese in Illinois during the 2011 Conservation Order light (snow) goose season (**North Zone: Jan. 9-March 31, 2011; Central and South Zones: Feb. 1-March 31, 2011**)? Do not include hunting light geese during the regular Canada goose season. (*Please check one.*)
- ₁ Yes (*Please skip to question 4.*)
- ₀ No
2. For which of the following reasons did you not participate in the 2011 Conservation Order light (snow) goose season in Illinois? (*Please check all that apply.*)
- ₁ I did not have the proper equipment to hunt light geese (decoys, calls, etc.).
- ₂ I did not know any other hunters who hunted light geese in Illinois.
- ₃ I did not have enough knowledge of light goose habits.
- ₄ I did not have a place to hunt light geese in Illinois.
- ₅ There were no light geese in the area in which I hunt.
- ₆ I did not have enough time to hunt light geese.
- ₇ I was not interested in hunting light geese.
- ₈ My past experience hunting light geese in Illinois was unsatisfactory.
- ₉ Other (*Please indicate.*) _____
3. If the factors above that prevented you from hunting snow geese in 2011 were removed, would you consider hunting snow geese during the 2012 Conservation Order light (snow) goose season? (*Please check one.*)
- ₁ Yes
- ₂ No
- ₃ I am not sure.

If you did not hunt light (snow) geese during the 2011 Conservation Order season, please skip to question 15.

4. In which zone did you hunt light (snow) geese most often during the 2011 Conservation Order Light Goose season? (*Please check one.*)
- ₁ North Zone
- ₂ Central Zone
- ₃ South Zone

5. Please indicate **your** effort- not your hunting party's effort- and harvest in the following table. **Include only harvest that occurred during the Conservation Order Light Goose season; do not include light goose harvest during the regular Canada goose seasons.** Report the county(ies) in which you hunted, number of days you hunted, and geese harvested for the time period in which you hunted light 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 1-7:				
February 8-15:				
February 16-28:				
March:				

6. Did you hunt light (snow) geese with a gun that held more than 3 shells? *(Please check one.)*

- ₁ Yes
- ₀ No *(Please skip to question 9.)*

7. If yes, how many light (snow) geese did you harvest with a gun holding 3 or more shells? *(Please indicate.)*

_____ light (snow) geese

8. If yes, how many light (snow) geese did you harvest with the 4th, 5th, or 6th shells in your gun? *(Please indicate.)*

_____ light (snow) geese

9. Did you hunt light (snow) geese with the aid of an electronic caller? *(Please check one.)*

₁ Yes

₀ No *(Please skip to question 11.)*

10. If yes, how many light (snow) geese did you harvest with the aid of an electronic caller?
(Please indicate.)

_____ light (snow) geese

11. Did you hunt light (snow) geese after sunset? *(Please check one.)*

₁ Yes

₀ No *(Please skip to question 13.)*

12. If yes, how many light (snow) geese did you harvest after sunset? *(Please indicate.)*

_____ light (snow) geese

13. On which of the following types of land did you hunt light (snow) geese in Illinois during 2011? *(Please check all that apply.)*

₁ Public land owned or managed by IDNR

₂ Other public land

₃ Private land I or a member of my family own

₄ Private land on which I had permission to hunt

₅ Private land I paid to access (lease, membership, etc)

₆ Other *(Please indicate.)* _____

14. Did you use a guide or outfitter while hunting light (snow) geese in Illinois during 2011?
(Please check one.)

₁ Yes

₀ No

15. What is your county of residence? *(Please indicate.)*

_____ County

THANK YOU FOR YOUR TIME AND ASSISTANCE!
--

Appendix B

ILLINOIS NATURAL HISTORY SURVEY

Institute of Natural Resource Sustainability
University of Illinois at Urbana-Champaign

April 1, 2011

Dear Light (Snow) Goose Hunter:

I am writing to ask for your help in a study of Illinois hunters who participated in the 2011 Conservation Order light (snow) goose hunting season. This study, jointly conducted by the Illinois Department of Natural Resources and the Illinois Natural History Survey, is an effort to learn about light goose hunting activities in Illinois and the factors that motivate hunters to take to Illinois waterways and fields to hunt light geese. Results of this study will guide waterfowl management decisions to optimize hunting opportunity, maintain or improve hunter satisfaction, and allow for effective management of Illinois's light goose populations.

You are part of a random sample of waterfowl hunters we have selected to provide information about your hunting activities during the 2011 Conservation Order light (snow) goose hunting season in Illinois. Please take a few minutes to complete the enclosed questionnaire, even if you did not hunt light geese in Illinois during the 2011 season. Your responses are confidential and will not be associated with your name or address in published reports. While your response to this questionnaire and any of the questions is completely voluntary, you can help us effectively manage waterfowl and hunting in Illinois by sharing your experiences and views. You may skip any questions you do not feel comfortable answering. We look forward to hearing from you soon.

If you have any questions or comments about this study, please contact Linda Campbell, Survey Administrator, at (217) 244-5121 or write her at the address listed below. If you have any questions about your rights as a participant in this study, please contact the University of Illinois Institutional Review Board at (217) 333-2670 (collect calls accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

You may access the results of this and other studies of wildlife use 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,

Mark G. Alessi
Human Dimensions Specialist
Illinois Natural History Survey

Appendix C

Dear Illinois Hunter,

Recently you were mailed a questionnaire about your Snow Goose hunting activities in Illinois during the Conservation Order Season. We have not yet received your response. **If you have already returned the questionnaire, please accept our sincere thanks. If you have not returned the questionnaire, please do so today.** Because wildlife managers are interested in serving the public, your input is vital. If you have any questions about this study or require a replacement questionnaire, please call (217) 244-5121.

Thank you for your cooperation.


Mark G. Alessi
Human Dimensions Specialist,
Illinois Natural History Survey

Appendix D

ILLINOIS NATURAL HISTORY SURVEY

Institute of Natural Resource Sustainability
University of Illinois at Urbana-Champaign

May 1, 2011

Dear Light (Snow) Goose Hunter:

A few weeks ago, we sent you a questionnaire asking about your light (snow) goose hunting activities in Illinois during 2011. To the best of our knowledge, the questionnaire has not yet been returned. If this letter and your completed questionnaire have crossed in the mail, please accept our sincere thanks for your participation in this study!

Your views are crucially important, even if you did not hunt light (snow) geese in Illinois during 2011. The comments of hunters who have already responded show that Illinois light goose hunters desire different types of hunting experiences and take to the field for many different reasons. The results of this study will help Illinois Department of Natural Resources biologists make informed decisions about how to manage waterfowl and waterfowl hunting in Illinois.

If you have not already done so, please take a few minutes to complete the enclosed questionnaire. The enclosed questionnaire is a duplicate copy of the one you received earlier. Your responses are completely confidential and will not be associated with your name or address in any printed reports. While your response to this questionnaire and any of the questions is completely voluntary, you can help us effectively manage ducks and geese in Illinois by sharing your experiences and views. You may skip any questions you do not feel comfortable answering. We look forward to hearing from you soon.

If you have any questions or comments about this study, please contact Linda Campbell, Survey Administrator, at (217) 244-5121 or write her at the address listed below. If you have any questions about your rights as a participant in this study, please contact the University of Illinois Institutional Review Board at (217) 333-2670 (Collect calls accepted if you identify yourself as a research participant) or via email at irb@illinois.edu.

Thank you very much for helping with this important study.

Sincerely,

Mark G. Alessi
Human Dimensions Specialist
Illinois Natural History Survey