

HumanDimensions
Research Program



ILLINOIS
NATURAL
HISTORY
SURVEY



ILLINOIS
DEPARTMENT OF
NATURAL
RESOURCES

Federal Aid Project
Number W-112-R-13
Job Number 101.6
Wildlife Restoration
June 30, 2003 - Sept 30, 2004

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2004 Illinois Light Goose Conservation Order Survey Report



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October 19, 2004

RESULTS OF THE 2004 ILLINOIS LIGHT GOOSE CONSERVATION ORDER HUNTER SURVEY

JOB COMPLETION REPORT

WILDLIFE HARVEST AND
HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

Federal Aid Project Number: W-112-R-13
Job Number. 101.6
Wildlife Restoration Fund

July 1, 2003-September 30, 2004

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Illinois Natural History Survey
Champaign, IL

October 19, 2004

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Suggested Citation:

Miller, C.A., and W.L. Anderson. 2004. Results of the 2004 Illinois Light Goose Conservation Action Survey. Job Completion Report, Federal Aid in Wildlife Restoration W-112-R-13. Human Dimensions Program Report HR-04-04. Illinois Natural History Survey, Champaign, IL. 15pp.

Results of the 2004
Illinois Light Goose Conservation Order
Hunter Survey

Final Report

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Abstract

An estimated 37,189 snow geese were harvested during the Light Goose Conservation Order season in Illinois in 2004. This harvest is 22% greater than the estimated 30,564 snow geese harvested in 2003. Participation in the Light Goose Conservation Order season increased from 3,111 hunters in 2003 to 5,976 hunters in 2004, a 92% increase. Similarly, the days spent afield by snow goose hunters increased 63%, from 27,177 days to 44,306 days. Sixty-three percent of the 2004 snow goose harvest occurred in the South Waterfowl Zone during February. Of the specialized methods afforded snow goose hunters, unplugged shotgun was the most often used, being employed by 67% of hunters. Electronic calls and hunting after sunset were utilized by 62% and 60% of the hunters, respectively.

Methods

A self-administered mail survey of potential waterfowl hunters was conducted during June and July 2004. A total of 1,762 survey participants were randomly selected from the population of Illinois migratory bird hunters who registered with the National Migratory Bird Harvest Information Program (HIP) for the 2003-04 season. Of these, 73 were deleted due to

incorrect or undeliverable addresses, thus reducing the usable sample to 1,689 individuals. These hunters were mailed a 4-page questionnaire (Appendix A), followed 10 days later by a postcard reminder to nonrespondents. A second questionnaire was mailed 10 days later, followed in another 10 days by a second postcard reminder. The questionnaire focused on snow goose hunting activities and harvest during the 2004 Light Goose Conservation Order season. A total of 1,079 usable questionnaires was returned, for a 64% response. Estimates of number of hunters, days afield, and snow goose harvest were based on the sales of 61,991 Illinois Migratory Waterfowl Stamps (2003-04 series).

Results

The 1,079 respondents included 104 individuals (9.6%) who reported hunting snow geese during the Light Goose Conservation Order season in Illinois in 2004. These findings suggest there were 5,976 hunters statewide who participated in the Conservation Order season in 2004. Hunters expended an estimated 44,306 days afield, and harvested 37,189 snow geese. From 2003 to 2004, the number of hunters, days afield, and snow geese harvested increased 92%, 63%, and 22%, respectively (Table 1). In 2004, 68% of the hunters successfully harvested ≥ 1 snow geese. The overall harvest rate was 6.2 geese per hunter (9.2 geese per successful hunter). In comparison, the overall harvest rate was 3.5 geese per hunter in 2002 and 9.8 geese per hunter in 2003.

Seventy percent of the 2004 Conservation Order snow goose harvest took place in the South Waterfowl Zone (Table 2). The remaining 30% occurred in the Central Zone, with no geese being reported for the North Zone. Similarly, 71% of the 2004 snow goose harvest

occurred during February (Table 2). Nearly two-thirds (63%) of the snow goose harvest took place in the South Zone during February.

When non-participating hunters were asked why they did not pursue snow geese during the Light Goose Conservation Order season, the most common reasons were “no snow geese in my area” (44%) and “no place to hunt” (41%) (Table 3). “Not enough time” (28%) and “do not have proper equipment” (28%) were also frequently stated reasons.

Two-thirds (67%) of the hunters said they used unplugged shotguns to hunt snow geese in 2004 (Table 4). Nearly as many hunters reported using electronic calls (62%) and hunting after sunset (60%). The 4th, 5th, and 6th shotgun shell accounted for the harvest of an estimated 6,811 snow geese, or 18% of the total harvest, during 2004 (Table 5). Therefore, the legal use of unplugged shotguns increased the snow goose harvest by 22% during the 2004 season:

$6,811 / (37,189 - 6,811) = 0.22$. That is, the harvest was increased by 22% over what it would have been had shotguns been limited to 3 shells.

“Decoying over land” was the preferred technique of snow goose hunters in Illinois in 2004 - i.e., 73% of the hunters said they often used this strategy (Table 6). “Pass shooting” (45%) and “sneaking/creeping” (40%) were also often used techniques. Decoys most commonly used for snow goose hunting were “rags” and “shells”, reported by 46% and 43% of the hunters, respectively (Table 7). “Silhouettes” and “wind socks/kites” were each used by 38% of the hunters. Slightly less than one-half (41%) of the hunters said they made or purchased snow goose decoys in the past year (Table 8).

Forty percent of the hunters indicated that the unlimited bag limit contributed greatly to the satisfaction they derived from snow goose hunting (Table 9). Another 31% said the unlimited bag limit contributed somewhat to their satisfaction. When asked about the disposition

of the snow geese they harvested, 55% of the hunters disclosed that they “ate them or plan to eat them” (Table 10). Another 27% said they “ate some, gave some away”.

One-half (52%) of the hunters reported that they had the opportunity to harvest white-fronted geese between the close of Canada goose season and mid-February in 2004 (Table 11). However, the hunters were split 50/50 as to whether the start of the Light Goose Conservation Order season should be delayed to allow white-fronted goose hunting until mid-February (Table 12).

Most (52%-79%) of the snow goose hunters who were active in 2004 had hunted snow geese during the Light Goose Conservation Order season in previous years (Table 13). If the Light Goose Conservation Order is offered again next year (2005), almost all (97%) of the Illinois hunters who were active in 2004 indicated they would participate (Table 14).

Age of snow goose hunters who participated in this survey are profiled in Table 15. Respondents indicated all hunters participating were male.

Discussion

In-depth analyses of data generated with this survey are compromised by the low number of Illinois hunters who pursue snow geese during the Light Goose Conservation Order season. However, the limited data indicate the number of hunters who participated increased from 2003 (3,111 hunters) to 2004 (5,976 hunters). As Miller and Colligan (2003) predicted, the increase in harvest rate in 2003 apparently encouraged hunters to participate in 2004. Retention of hunters is also high, with both the current survey and the 2003 survey indicating that 97% of the active hunters would hunt snow geese again next year.

The overall harvest rate was 3.5 geese per hunter in 2002, 9.8 geese per hunter in 2003, and 6.2 geese per hunter in 2004. Thus, it appears that success in bagging snow geese can be, and is, highly variable and is probably a consequence of the uncertainties of the weather, timing of snow goose migration, and local food conditions.

In conclusion, the harvest of snow geese during the Light Goose Conservation Order season increased from 17,875 birds in 2002 to 30,564 birds in 2003 to 37,189 birds in 2004. Although the number of hunters who pursued snow geese decreased in 2003 (3,111 hunters), participation apparently rebounded in 2004 (5,976 hunters).

Literature Cited

Miller, C.A., and C. Colligan. 2003. Results of the 2003 Illinois Light Goose Conservation Action Hunter Survey. Human Dimensions Research Program, Illinois Natural History Survey, Champaign, IL. Final Report, 8pp.

Table 1. Estimates of hunters, days afield, and snow goose harvest during the Light Goose Conservation Order, Illinois 1999-2004.

	1999	2000	2001	2002	2003	2004
Hunters	1,076	865	4,665	5,107	3,111	5,976
Days Afield	3,756	6,643	32,634	31,204	27,177	44,306
Harvest	2,254	7,612	36,830	17,875	30,564	37,189

Table 2. Snow goose harvest by zone and month during the Light Goose Conservation Order, Illinois 2004.

Waterfowl Zone	Percentage of Harvest		
	February	March	All
North	0	0	0
Central	8	22	30
South	63	7	70
Entire state	71	29	100

Table 3. Reasons for not hunting snow geese during the Light Goose Conservation Order, Illinois 2004 (n=975).

Reason	Percent Respondents
No snow geese in my area	44
No place to hunt	41
Not enough time	28
Do not have proper equipment	28
Do not know any other hunters who hunt snow geese	21
Not interested/other interests	18
Not enough knowledge	16
Out of area during season	1
Health reasons/age	1
Do not hunt waterfowl	1
Decoy poorly/hard to hunt	<1
Do not like the taste	<1
Not aware of spring season	<1
Hunted in another state	<1

Table 4. Methods used to hunt snow geese and harvest using each method during the Light Goose Conservation Order, Illinois 2004.

Method	(n)	%Used	Total Hunters	% Successful ^a	Estimated Harvest
Electronic calls	(94)	62%	3,705	66%	17,441
Unplugged shotgun	(100)	67	4,004	58	16,342
Hunting after sunset	(87)	60	3,586	40	7,114

^aHarvested ≥ 1 geese.

Table 5. Snow geese harvested with the 4th, 5th, and 6th shotgun shell in unplugged shotguns during the Light Goose Conservation Order, Illinois 2004 (n=104).

Shotgun Shell	Estimated Hunters	Percent	Estimated Harvest
4 th Shell	2,011	34%	3,735
5 th Shell	1,379	23	2,032
6 th Shell	747	13	1,044

Table 6. Techniques used to hunt snow geese during the Light Goose Conservation Order, Illinois 2004.

Technique	(n)	Often	Rarely	Never
Decoying over land	(100)	73%	12%	15%
Pass shooting	(89)	45	25	30
Sneaking/creeping	(84)	40	23	37
Decoying over water	(82)	25	15	60

Table 7. Types of decoys used to hunt snow geese during the Light Goose Conservation Order, Illinois 2004 (n=104).

Decoy type	Number of Respondents	Percent of Total Snow Goose Hunters ^a	Mean Number Per Owner
Rag	48	46%	229
Shells	45	43	130
Silhouette	39	38	185
Wind socks/kites	40	38	81
Mechanical	8	8	4
Did not use decoys	17	16	0

^aPercentages total >100% because some hunters used >1 type of decoy.

Table 8. Percentage of hunters who made or purchased snow goose decoys in the past year, Illinois 2004 (n=103).

Make or Purchase	Percent Response
Yes	41%
No	59

Table 9. Contributions of unlimited bag limit to satisfaction with snow goose hunting during the Light Goose Conservation Order, Illinois 2004 (n=101).

Contribution	Percent Response
Greatly	40%
Somewhat	31
Did not contribute	29

Table 10. Use of snow geese harvested during the Light Goose Conservation Order, Illinois 2004 (n=77).

Use	Number of Respondents
Ate them or plan to eat them	55%
Ate some, gave some away	27
Gave them away	18
Other	0

Table 11. Percentage of Conservation Order snow goose hunters who had the opportunity to harvest white-fronted geese between close of Canada goose season and mid-February, Illinois 2004 (n=104).

Opportunity to Harvest White-Fronted Geese	Percentage of Respondents
Yes	52%
No	48

Table 12. Should the start of the Conservation Order snow goose season be delayed to allow white-fronted goose hunting until mid-February, Illinois 2004 (n=99).

Delay Conservation Order Season	Percentage of Respondents
Yes	50%
No	50

Table 13. Hunter participation in snow goose hunting during past Light Goose Conservation Order seasons, Illinois 2004 (n=104).

Season	Percentage of Hunters in 2004 Conservation Order
Spring 2003 Conservation Order season	79%
Spring 2002 Conservation Order season	65
Spring 2001 Conservation Order season	52
2003-04 regular goose season	52
2002-03 regular goose season	35
2001-02 regular goose season	30

Table 14. If offered next season, do you plan to hunt snow geese during the Light Goose Conservation Order, Illinois 2004 (n=101).

Plan to Hunt	Percentage of Respondents
Yes	97
No	3

Table 15. Gender and age of hunters who participated in the Light Goose Conservation Order season, Illinois 2004. Sample sizes are in parentheses.

Gender		
		(104)
Male		100%
Female		0
Age		(104)
Mean		37 years
Distribution: <15 years		4%
	16-20 “	13
	21-30 “	20
	31-40 “	25
	41-50 “	14
	51-60 “	21
	61-64 “	1
	>65 “	2

Appendix A

2003-2004 Illinois Snow Goose Hunter Survey



ALL RESPONSES ARE CONFIDENTIAL
THANK YOU FOR YOUR COOPERATION!
Postage-paid return envelope provided



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



The Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Illinois Compiled Statutes, The Wildlife Code, Chapter 520. Disclosure of information is voluntary.

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 2003-2004 spring Conservation Order season that occurred after Canada goose season closed? (Please answer "No" if you hunted snow geese only during Canada goose season).

_____ Yes (please go to **question 3**)

_____ No

2. If you did not hunt snow geese during the spring Conservation Order season, what were your reasons for not doing so? (Please check all that apply and go to **question 12**).

_____ Did not have the proper equipment (decoys, calls, etc.)

_____ Did not know any other hunters who hunted snow geese

_____ Not enough knowledge of snow goose habits

_____ No place to hunt snow geese

_____ No snow geese in my area

_____ Not enough time

_____ Not interested

_____ Other (please identify): _____

3. If you answered "Yes" to question 1, please indicate the **number of days hunted, geese harvested and counties hunted most:** (Note: Respond for **Illinois only** during the **spring Conservation Order season**)

Days Hunted	County Hunted	Geese Hit/Retrieved	Geese Hit/Not Retrieved	Month (Circle one)
_____ days	_____	_____ geese	_____ geese	Jan Feb Mar
_____ days	_____	_____ geese	_____ geese	Jan Feb Mar
_____ days	_____	_____ geese	_____ geese	Jan Feb Mar
_____ days	_____	_____ geese	_____ geese	Jan Feb Mar

4. Please indicate which of the following methods you used to hunt snow geese during the spring Conservation Order season and your harvest using each method.

	Used	Did Not Use	Harvest
Electronic calls	1	2	_____
Unplugged shotgun	1	2	_____
Hunting from sunset to ½ hour after sunset	1	2	_____

5. If you used an unplugged shotgun during the spring Conservation Order season, how many geese did you harvest using the:

4th shell _____ geese

5th shell _____ geese

6th shell _____ geese

6. How often did you use the following techniques when hunting snow geese during the spring Conservation Order season?

Hunting Technique	Often	Rarely	Never
Sneaking/creeping	1	2	3
Decoying over water	1	2	3
Decoying over land	1	2	3
Pass Shooting	1	2	3

7. How many of the following types of decoys did you use to hunt snow geese during the spring Conservation Order season?

<u># Used</u>	<u># Used</u>	<u># Used</u>
_____ rag decoys	_____ silhouette decoys	_____ wind socks and/or kites
_____ shells	_____ mechanical, rotating wing snow goose decoy	
_____ I did not use decoys (check if no decoys used)		

8. Did you make or purchase snow goose decoys in the past year?

_____ Yes

_____ No

9. How did the unlimited bag limit contribute to satisfaction with snow goose hunting during the spring Conservation Order season?

Greatly Somewhat Not at all

1 2 3

10. How did you use the birds you harvested?

_____ ate them or plan to eat them myself

_____ ate some and gave some away

_____ gave them away

_____ other (please identify): _____

11. While hunting snow geese, did you have the opportunity to harvest white-fronted (speckle-bellied) geese between the close of Canada goose season and mid-February?

Yes No

12. Should the start of the Spring Conservation Order season be delayed to allow white-fronted goose hunting until mid-February? (Note: snow goose hunting would be allowed during this time using regular hunting methods)

Yes No

13. Did you hunt snow geese in Illinois during past Spring Conservation Order seasons? Please check all seasons during which you hunted snow geese.

<input type="checkbox"/> spring 2003 Conservation Order season	<input type="checkbox"/> 2003-04 regular goose season
<input type="checkbox"/> spring 2002 Conservation Order season	<input type="checkbox"/> 2002-03 regular goose season
<input type="checkbox"/> spring 2001 Conservation Order season	<input type="checkbox"/> 2001-02 regular goose season

14. If offered next year, do you plan to hunt the conservation snow goose season after Canada goose season?

Yes

No (please explain): _____

15. What is your county of residence? _____

16. What is your gender? Male Female

17. What is your age? years

Comments

This study is funded through federal Wildlife Restoration dollars through your purchase of hunting arms and ammunition.

Thank you. Please return this questionnaire in the envelope provided.

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