# *Human*Dimensions

Research Program





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Results of the 2007 Illinois Conservation Order Light Goose Hunter Survey



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# RESULTS OF THE 2007 ILLINOIS CONSERVATION ORDER LIGHT GOOSE HUNTER SURVEY

## JOB COMPLETION REPORT

# WILDLIFE HARVEST AND HUMAN DIMENSIONS RESEARCH PROGRAM

## STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-16 STUDY 101 JOB NO. 101.6

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> Federal Aid in Wildlife Restoration W-112-R-16

Illinois Department of Natural Resources

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#### ABSTRACT

A random sample of 2,000 potential goose hunters was selected from National Migratory Bird Harvest Information Program (HIP) registrants in Illinois. Survey participants were mailed an 8-page questionnaire, reminder postcards, and a follow-up 2-page questionnaire, between April and July 2007. We received 1,052 usable responses, which included 841 responses to the original 8-page questionnaire (44% response) and 211 to the follow-up 2-page questionnaire (20% response). Based on these responses, we estimate 5,962 hunters were active during the Conservation Order snow goose season in Illinois in 2007, slightly more than the 5,543 hunters estimated for the 2006 season. Days of hunting were estimated at 39,170 in 2007, which was 26% less than the estimate of 53,154 days in 2006. An estimated 47,514 snow geese were harvested during the 2007 Conservation Order snow goose season. This represents a 40% decrease from the 2006 estimated harvest of 74,268 snow geese. The South Zone accounted for 46% of total days of hunting and 61% of total harvest. Statewide, 73% of the harvest occurred during February. Of respondents who did not hunt during the Conservation Order season, 39% indicated they had no place to hunt. Two-thirds (66%) of hunters pursued snow geese by using decoys over land. Hunters expressed a preference for hunting multiple species of geese (snow geese, white-fronted geese, Canada geese) at the same time. Although large acreages of land are potentially available to snow goose hunters, survey responses indicate hunters may have difficulty accessing this available land.

#### **OBJECTIVE**

To annually determine activities, harvests, and attitudes/opinions of hunters participating each year in the Light Goose Conservation Action.

#### METHODS

A sample of 2,000 goose hunters was randomly selected from the population of goose hunters who registered with the National Migratory Bird Harvest Information Program (HIP) in Illinois for the 2006-2007 season. On 11 April 2007, these potential Conservation Order snow goose hunters were mailed an 8-page mail-back questionnaire and cover letter (Appendices A and B). Non-respondents were mailed a thank you/reminder postcard (Appendix C) on 1 May, a second copy of the questionnaire and cover letter (Appendix D) on 16 May, and another thank you/reminder postcard on 6 June. Due to a lower than expected response rate to the full survey, a follow-up 2-page questionnaire and cover letter (Appendices E and F) were mailed to nonrespondents on 16 July 2007. Estimates of number of hunters, days of hunting, and snow geese harvested were based on confirmed sales of 63,965 Illinois Migratory Waterfowl Stamps (2006-2007 series). The 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 12.0 (SPSS Inc. 2003). Results are summarized in Appendices A and E.

#### SEASON LENGTHS AND BAG LIMITS

The 2007 Conservation Order Light Goose seasons extended from 15 January to 31 March in the North Zone, and from 1 February to 31 March in the Central Zone and South Zone. In each zone, the light goose season began the next day after the regular Canada goose season closed. There was no daily or seasonal bag limit for snow geese during the Conservation Order season.

RESULTS

The questionnaire was not deliverable to 97 recipients, thus the sample population was reduced to 1,903 individuals. A total of 1,057 questionnaires were returned, of which 1,052 were usable. The usable responses included 841 responses to the original 8-page questionnaire (44% response) and 211 to the follow-up 2-page questionnaire (20% response). These low response rates and small sample sizes compromise the findings of this survey. This shortcoming should be addressed when designing future Conservation Order snow goose hunter surveys. Consideration should be given to increasing the number of names on the mailing list, shortening and simplifying the questionnaire design, and initiating the mailings earlier in the year.

Eighty-five percent of respondents to the follow-up survey indicated they did not respond to the original questionnaire because they did not hunt during the 2007 Conservation Order season or they have never hunted light geese in Illinois (Table 1).

Ninety-eight (9.3%) of the 1,052 respondents reported hunting during the Conservation Order snow goose season in Illinois in 2007. These hunters included 95 males and 3 females. The average age of respondents was 38.4 years, with a range of 12 to 83 years (n=95). Nearly one-half (45%, n=36) of hunters currently live in a rural (farm, non-farm, or rural subdivision) setting, and nearly one-half (45%, n=36) indicated an annual household income of \$60,000 or greater. Respondents are listed by county of residence in Appendix G.

Based on survey responses, we estimate there were 5,962 active snow goose hunters statewide during the Conservation Order season in Illinois in 2007 (Table 2). These hunters expended an estimated 39,170 days hunting, and they harvested an estimated 44,514 snow geese. An estimated 11,078 snow geese were hit but not retrieved. These estimates indicate an 8% decrease in hunters, a 26% decrease in days hunted, and a 40% decrease in snow goose harvest

in 2007 compared to the 2006 season. Fifty-four percent of the hunters successfully harvested  $\geq 1$  snow goose during the 2007 season. The harvest rate was 7.5 snow geese per hunter or 13.8 snow geese per successful hunter. The South Zone accounted for 46% of total days of hunting and 61% of total harvest (Table 3). Statewide, 73% of the harvest occurred during February.

Of the 954 respondents who did not hunt during the Conservation Order season in 2007, 39% indicated they had no place to hunt snow geese, 32% said they did not have enough time, and 29% were not interested. Twenty-six percent did not have proper equipment to hunt and 23% had no snow geese in their areas (Table 4).

Conservation Order snow goose hunters reported harvesting  $\leq 5$  geese on 84% of their days of hunting in 2007. Almost all of the snow goose hunters used auto-loading (61%) or pump-action (38%) shotguns in 2007 (Table 6). Nearly one-half of the snow goose hunters took advantage of the regulations that allowed the use of electronic calls (47%) and unplugged shotguns (48%). Fewer hunters hunted until  $\frac{1}{2}$  hour after sunset (28%). Electronic calls and unplugged shotguns were used in conjunction with taking one-half (49% and 50%, respectively) of the total snow goose harvest, whereas hunting until  $\frac{1}{2}$  hour after sunset was associated with 30% of the harvest (Table 7).

The most popular technique used for hunting snow geese during the Conservation Order season was decoying over land, selected by 65% of the hunters (Table 8). About one-third (35%) of the hunters used decoys over water to pursue snow geese. A majority (82%) of hunters reported that decoying over land was either effective or very effective on snow geese. In addition, 46% felt that sneaking/creeping was effective or very effective.

Two-thirds (66%) of all snow goose hunters reported using shell decoys to hunt snow geese (Table 9). Other types of decoys used included silhouettes (48% of all hunters), rags

(43%), and wind socks/kites (37%). Relatively few (18%) of these hunters used rotating-wing decoys to lure snow geese.

A majority of snow goose hunters felt that rags (61%), shells (78%), silhouettes (73%), and windsocks/kites (65%) were effective or very effective for hunting snow geese (Table 9). Only 40% of the hunters felt that rotating-wing decoys were effective or very effective for attracting snow geese. Thirteen percent of the snow goose hunters reported hunting without any type of decoy.

Most (79%) snow goose hunters indicated that having an unlimited bag limit for light geese was very important or somewhat important to them (Table 10). Hunters also felt that hunting light geese concurrently with Canada geese (84%), white-fronted (specklebelly) geese (85%), and Canada geese and white-fronted geese (87%), was important. Hunters prefer to hunt as many species of geese as possible when they are afield.

For the white-fronted goose season in 2007-2008, snow goose hunters showed a preference for a 72-day season with 2 geese per day limit (49%, n=40) over an 85-day season with 1 goose per day limit (35%, n=28).

Eighty-seven (93%) 2007 Conservation Order snow goose hunters said they plan to participate in the Conservation Order season in Illinois in 2008. For all survey respondents, 40% (n = 567) said they plan to hunt snow geese during the 2008 Conservation Order season.

#### DISCUSSION

The findings of this survey suggest that a relatively small segment of the waterfowl hunting community pursue snow geese during the spring Conservation Order light goose season in Illinois. From 2004 to 2007, hunter estimates ranged from 5,543 to 5,976 (Table 2). Harvest

has been variable, ranging from 37,189 to 74,268 during these years. Nearly two-thirds (61%) of the harvest takes place in the South Zone (Table 3). Of hunters who did not participate in the Conservation Order, 39% said they had no place to hunt (Table 4). Although large acreages of land are potentially available to these hunters, survey responses indicate hunters may have difficulty accessing this available land.

#### 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. 2003. SPSS for Windows. SPSS, Chicago, Illinois, U.S.A.

| Reason   | n  | %     |
|--|----|-------|
| I did not hunt during the 2007 Conservation Order Light Goose season | 94 | 50.7% |
| I have never hunted light geese in Illinois                          | 52 | 34.1% |
| I do not like answering surveys                                      | 38 | 18.0% |
| I did not receive the survey   | 9  | 4.3%  |
| I was not interested in the issues covered in the survey             | 1  | 1.0%  |
| The survey looked too long and/or complicated                        | 1  | 1.4%  |
| I prefer to be contacted by phone                                    | 1  | 1.0%  |
| Other  | 15 | 9.0%  |

Table 1. Reasons given for not responding to the mailings of the original questionnaire for the Illinois Light Goose Hunter Survey: 2007 season (n = 211).

Table 2. Estimates of hunters, days hunted, and snow goose harvest during the Conservation Order snow goose seasons in Illinois in 1999-2007, as estimated by the Illinois Light Goose Hunter Survey.

|                   |           | ,           | U         |
|-------------------|-----------|-------------|-----------|
|                   | Estimated | Estimated   | Estimated |
| Year              | Hunters   | Days Hunted | 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      | 43,839    |
| 2006              | 5,543     | 53,154      | 74,268    |
| 2007 <sup>a</sup> | 5,962     | 39,170      | 44,514    |
|                   |           |             |           |

<sup>a</sup> For the 2007 season, n = 98 and the 95% confidence interval was 1,147 for hunters, 15,221 for days, and 25,794 for harvest.

Table 3. Reported snow goose harvest and days hunted by waterfowl zone and month during the Conservation Order snow goose season in Illinois, as estimated by the Illinois Light Goose Hunter Survey: 2007 season (n = 98).

|                   | January February March                           |                        | Sea                      | son                      |                        |                         |                         |                         |
|-------------------|--|------------------------|--------------------------|--------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| Waterfowl<br>Zone | Harvest  | Days<br>Hunted         | Harvest                  | Days<br>Hunted           | Harvest                | Days<br>Hunted          | Harvest                 | Days<br>Hunted          |
| North             | 2,006<br>29.7% <sup>a</sup><br>4.5% <sup>b</sup> | 3,163<br>40.6%<br>8.1% | 2,675<br>39.7%<br>6.0%   | 2,250<br>28.9%<br>5.7%   | 2,064<br>30.6%<br>4.6% | 2,372<br>30.5%<br>6.1%  | 6,745<br>100%<br>15.1%  | 7,785<br>100%<br>19.9%  |
| Central           |  |                        | 6,804<br>63.2%<br>15.3%` | 7,177<br>53.4%<br>18.3%  | 3,954<br>36.8%<br>8.9% | 6,265<br>46.6%<br>16.0% | 10,758<br>100%<br>24.2% | 13,442<br>100%<br>34.3% |
| South             |  |                        | 23,086<br>85.5%<br>51.9% | 12,955<br>72.2%<br>33.1% | 3,925<br>14.5%<br>8.8% | 4,988<br>27.8%<br>12.7% | 27,011<br>100%<br>60.7% | 17,943<br>100%<br>45.8% |
| Statewide         | 2,006<br>4.5%                                    | 3,163<br>8.1%          | 32,564<br>73.2%          | 22,382<br>57.1%          | 9,944<br>22.3%         | 13,625<br>34.8%         | 44,514<br>100%          | 39,170<br>100%          |

<sup>a</sup> Percent of harvest in zone. <sup>b</sup> Percent of statewide harvest.

Table 4. Reasons for not hunting during the Conservation Order snow goose season in Illinois, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season (n = 954).

|  | п   | %     |
|--|-----|-------|
| No place to hunt snow geese                          | 370 | 38.8% |
| Not enough time                                      | 301 | 31.6% |
| Not interested                                       | 277 | 29.0% |
| Did not have the proper equipment                    | 246 | 25.8% |
| No snow geese in my area                             | 223 | 23.4% |
| Did not know any other hunters who hunted snow geese | 198 | 20.8% |
| Not enough knowledge of snow goose habits            | 175 | 18.3% |
| Unsatisfactory past experience                       | 87  | 9.1%  |
| Other  | 39  | 4.1%  |

|                       | Days | %     |
|-----------------------|------|-------|
| Harvested 0 geese     | 226  | 38.6% |
| Harvested 1-5 geese   | 261  | 44.6% |
| Harvested 6-10 geese  | 65   | 11.1% |
| Harvested 11-20 geese | 21   | 3.6%  |
| Harvested 21-30 geese | 3    | 0.5%  |
| Harvested ≥31 geese   | 9    | 1.5%  |

Table 5. Daily success reported by hunters during the Conservation Order snow goose season in Illinois, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season (n = 83).

Table 6. Types of shotguns used by hunters during the Conservation Order snow goose season in Illinois, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season (n = 79).

| n  | %     |
|----|-------|
| 48 | 60.7% |
| 30 | 38.0% |
| 1  | 1.3%  |
| 0  | 0.0%  |
|    | 48    |

Table 7. Methods used to hunt snow geese and harvest using selected methods during the Conservation Order snow goose season in Illinois, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season (n = 83).

|  | Hunters |       | Estimated                 | Estimated        |
|--|---------|-------|---------------------------|------------------|
| Method   | п       | %     | Hunters<br>That Used Each | Total<br>Harvest |
| Electronic calls                                       | 39      | 47.0% | 2,802                     | 25,880           |
| Unplugged shotgun                                      | 40      | 48.2% | 2,862                     | 26,229           |
| Hunting from sunset to $\frac{1}{2}$ hour after sunset | 23      | 27.7% | 1,669                     | 15,499           |
| Did not use any of the above                           | 22      | 26.5% | 1,610                     |                  |

|                           |  | Effectiveness |                         |           |                   |          |
|---------------------------|--|---------------|-------------------------|-----------|-------------------|----------|
| Technique                 | % of Hunters<br>that used<br>each (n = 83) | п             | Not at All<br>Effective | Effective | Very<br>Effective | Not Sure |
| Sneaking/creeping         | 27.7%                                      | 54            | 25.9%                   | 16.7%     | 29.6%             | 27.8%    |
| Decoying over water       | 34.9%                                      | 57            | 19.3%                   | 40.4%     | 10.5%             | 29.8%    |
| Decoying over land        | 65.0%                                      | 65            | 6.2%                    | 53.8%     | 27.7%             | 12.3%    |
| Pass shooting             | 27.7%                                      | 52            | 17.3%                   | 40.4%     | 13.5%             | 28.8%    |
| Other                     | 1.2%                                       |               |                         |           |                   |          |
| Did not use any technique | 3.6%                                       |               |                         |           |                   |          |

Table 8. Percentage of hunters using various hunting techniques and the effectiveness of each technique during the Conservation Order snow goose season in Illinois, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season.

Table 9. Types of decoys used during the Conservation Order snow goose season in Illinois, and effectiveness of each, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season.

|  |  | Effectiveness |                         |           |                   |          |
|--|--|---------------|-------------------------|-----------|-------------------|----------|
| Decoy Type                             | % of Hunters<br>that used<br>each (n = 83) | п             | Not at All<br>Effective | Effective | Very<br>Effective | Not Sure |
| Rags                                   | 43.3%                                      | 56            | 19.6%                   | 51.8%     | 8.9%              | 19.6%    |
| Shells                                 | 66.2%                                      | 68            | 8.8%                    | 51.5%     | 26.5%             | 13.2%    |
| Silhouettes                            | 48.1%                                      | 59            | 6.8%                    | 62.7%     | 10.2%             | 20.3%    |
| Windsocks and/or kites                 | 37.3%                                      | 52            | 7.7%                    | 38.5%     | 26.9%             | 26.9%    |
| Mechanical or rotating-<br>wing decoys | 18.0%                                      | 47            | 12.8%                   | 21.3%     | 19.1%             | 46.8%    |
| Did not use decoys                     | 13.2%                                      |               |                         |           |                   |          |

|  | п  | Very<br>Important | Somewhat<br>Important | Not at All<br>Important | Not<br>Sure |
|--|----|-------------------|-----------------------|-------------------------|-------------|
| Having an unlimited bag limit for light geese                                | 78 | 46.2%             | 33.3%                 | 17.9%                   | 2.6%        |
| Hunting light geese and Canada geese at the same time                        | 80 | 43.8%             | 40.0%                 | 13.8%                   | 2.5%        |
| Hunting light geese and white-fronted (specklebelly) geese at the same time  | 78 | 55.1%             | 29.5%                 | 11.5%                   | 3.8%        |
| Hunting Canada geese and white-fronted (specklebelly) geese at the same time | 78 | 61.5%             | 25.6%                 | 10.3%                   | 2.6%        |

Table 10. Relative importance of selected aspects of goose hunting in Illinois, as reported by respondents to the Illinois Light Goose Hunter Survey: 2007 season.

Appendix A. Survey instrument and results summary for the Illinois Light Goose Hunter Survey: 2007 season.

# Illinois Light Goose Hunter Survey: 2007 Season Results Summary



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



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.

 Did you hunt light geese in Illinois during the 2007 Conservation Order light goose season (North Zone: Jan. 15-March 31, 2007; Central and South Zones: Feb. 1- March 31, 2007)? Do not include hunting light geese during the regular Canada goose season. (*Please check one.*) n = 841

> **9.9%** Yes (*Please skip to question 3.*) **90.1%** No

2. For which of the following reasons did you not participate in the 2007 Conservation Order light goose season in Illinois? (*Please check all that apply.*) n = 758

24.0% I did not have the proper equipment to hunt light geese (decoys, calls, etc.).
19.6% I did not know any other hunters who hunted light geese in Illinois.
17.4% I did not have enough knowledge of light goose habits.
36.6% I did not have a place to hunt light geese in Illinois.
22.8% There are no light geese in the area in which I hunt.
28.7% I did not have enough time to hunt light geese.
24.4% I was not interested in hunting light geese.
9.0% My past experience hunting light geese in Illinois was unsatisfactory.
4.0% Other (*Please indicate.*)

3. If you did hunt light geese in Illinois during the 2007 Conservation Order light goose season, please indicate your effort and harvest in the following table. Include only harvest that occurred during the Conservation Order light goose season (North Zone: Jan. 15-March 31, 2007; Central and South Zones: Feb. 1- March 31, 2007); 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 each month 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 | Light geese<br>harvested | Light geese<br>hit, but not<br>retrieved |
|-----------|-------------------|-------------|--------------------------|--|
| January:  | See Tables 2 & 3. |             |                          |  |
|           |                   |             |                          |  |
|           |                   |             |                          |  |
| February: |                   |             |                          |  |
|           |                   |             |                          |  |
|           |                   |             |                          |  |
| March:    |                   |             |                          |  |
|           |                   |             |                          |  |
|           |                   |             |                          |  |
|           |                   |             |                          |  |

4. On how many days during the 2007 Conservation Order light goose season did you harvest the following number of light geese? (*Please indicate the number of days in which you harvested the given number of geese.*) n = 83

| Light geese harvested  | Number of days | % of Reported days |
|------------------------|----------------|--------------------|
| 0 light geese          | 226            | 38.6%              |
| 1-5 light geese        | 261            | 44.6%              |
| 6-10 light geese       | 65             | 11.1%              |
| 11-20 light geese      | 21             | 3.6%               |
| 21-30 light geese      | 3              | 0.5%               |
| 31 or more light geese | 9              | 1.5%               |
| l                      |                | ļ                  |

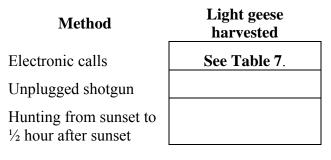
5. With what type of shotgun did you hunt light geese most often during the 2007 Conservation Order light goose season? (*Please check one.*) n = 79

1.3% Single shot0.0% Double barreled38.0% Pump action60.7% Automatic loading

6. Which of the following methods did you use to hunt light geese during the 2007 Conservation Order light goose season? (*Please check all that apply.*) n = 83

46.9% Electronic calls
48.1% Unplugged shotgun
27.7% Hunting from sunset to ½ hour after sunset
26.5% I did not use any of the listed methods. (*Skip to question 8.*)

7. How many light geese did you harvest using the following methods during the 2007 Conservation Order light goose season? (*Please indicate for each method you used. If you used a method, but its aid did not result in any goose harvest, enter zero.*) n = 83



**8.** Which of the following techniques did you use to hunt light geese during the 2007 Conservation Order light goose season? (*Please check all that apply.*) n = 83

27.7% Sneaking or creeping
34.9% Using decoys over water
65.0% Using decoys over land
27.7% Pass shooting

1.2% Other (*Please indicate*. \_\_\_\_\_)
3.6% I did not use any techniques to hunt light geese.

**9.** How effective do you think each of the following techniques was at increasing your harvest of light geese during the 2007 Conservation Order light goose season? (*Please check one for each item.*)

|                     |    | Not at all |           | Very      |          |
|---------------------|----|------------|-----------|-----------|----------|
| How effective was   | п  | effective  | Effective | effective | Not sure |
| Sneaking/creeping   | 54 | 25.9%      | 16.7%     | 29.6%     | 27.8%    |
| Decoying over water | 57 | 19.3%      | 40.4%     | 10.5%     | 29.8%    |
| Decoying over land  | 65 | 6.2%       | 53.8%     | 27.7%     | 12.3%    |
| Pass shooting       | 52 | 17.3%      | 40.4%     | 13.5%     | 28.8%    |
| Other               |    |            |           |           |          |

10. Which of the following types of decoys did you use to hunt light geese during the 2007 Conservation Order light goose season in Illinois? (*Please check all that apply.*) n = 83

13.2% I did not use any decoys to hunt light geese. (*Skip to question 12.*)
43.3% Rags
66.2% Shells
48.1% Silhouettes
37.3% Windsocks or kites
18.0% Mechanical or rotating wing decoys

**11.** How effective do you feel the following types of decoys was at increasing your harvest of light geese during the 2007 Conservation Order light goose season? (*Please check one for each item*).

| How effective were                    |    | Not at all effective | Effective | Very<br>effective | I am not sure. |  |
|---------------------------------------|----|----------------------|-----------|-------------------|----------------|--|
| a. Rags?                              | 56 | 19.6%                | 51.8%     | 8.9%              | 19.6%          |  |
| b. Shells?                            | 68 | 8.8%                 | 51.5%     | 26.5%             | 13.2%          |  |
| c. Silhouettes?                       | 59 | 6.8%                 | 62.7%     | 10.2%             | 20.3%          |  |
| d. Windsocks or kites                 | 52 | 7.7%                 | 38.5%     | 26.9%             | 26.9%          |  |
| e. Mechanical or rotating wing decoys | 47 | 12.8%                | 21.3%     | 19.1%             | 46.8%          |  |

**Satisfaction with goose hunting seasons in Illinois.** Illinois goose hunters have access to a variety of species of geese over the course of a year. Timing of multiple goose seasons in relation to each other may affect hunters' satisfaction with their ability to hunt these species. Please answer the following questions to help Illinois waterfowl biologists learn about your preferences for goose hunting opportunity in Illinois.

**12.** Many aspects of a goose hunt affect hunters' satisfaction with the quality of that hunt. Please answer the following question to help us understand the characteristics of goose hunting seasons which contribute to your satisfaction with a hunt. (*Please check one for each item.*)

| How important to you is   | п  | Very<br>important | Somewhat<br>t important |       | I am<br>not sure. |
|---|----|-------------------|-------------------------|-------|-------------------|
| <b>a.</b> having an unlimited bag limit for light geese?                                      | 78 | 46.2%             | 33.3%                   | 17.9% | 2.6%              |
| <b>b.</b> hunting light geese and Canada geese at the same time?                              | 80 | 43.8%             | 40.0%                   | 13.8% | 2.5%              |
| <b>c.</b> hunting light geese and white-<br>fronted (specklebelly) geese at<br>the same time? | 78 | 55.1%             | 29.5%                   | 11.5% | 3.8%              |
| <b>d.</b> hunting Canada geese and<br>white-fronted (specklebelly)<br>geese at the same time? | 78 | 61.5%             | 25.6%                   | 10.3% | 2.6%              |

13. Illinois may choose between a long white-fronted (specklebelly) goose hunting season with a low daily bag limit and a shorter white-fronted (specklebelly) goose season with a higher daily bag limit in 2007-2008. Please indicate which season stucture you prefer. (*Please check one.*) n = 81

**49.4%** 72-day white-fronted (specklebelly) goose season with 2-goose daily bag limit **34.6%** 85-day white-fronted (specklebelly) goose season with 1-goose daily bag limit **16.0%** I am not sure.

14. Do you plan to participate in the Conservation Order light goose season next year (January-March 2008)? (*Please check one.*) n = 79

**92.4%** Yes (*Please skip to question 16.*) **7.6%** No

**15.** If you do not plan to participate in the Conservation Order light goose season next year, please explain why in the space provided below.

See Table 4.

**Information about you.** The following questions provide important information to help us understand more about the people who hunt light geese in Illinois. Please tell us about yourself by completing the following questions. All responses will be kept confidential.

16. As of January 1, 2007, what was your age? (*Please indicate.*) n = 95

Ave. 38.4 years

17. What is your county of residence. (*Please indicate.*) n = 841

See Appendix G. County

**18.** What is your approximate annual household income? (*Please check one.*) n = 80

10.0% Less than \$20,000 per year
17.5% \$20,000 to \$39,999 per year
27.5% \$40,000 to \$59,999 per year
21.3% \$60,000 to \$79,999 per year
10.0% \$80,000 to \$99,999 per year
10.0% \$100,000 to \$149,999 per year
3.8% Over \$150,000 per year

20. How would you describe the area where you currently live? (*Please check one.*)n = 80

**15.0%** Rural setting, on a farm **20.0%** Rural setting, not on a farm

10.0% Rural subdivision

6.3% Suburban area at the edge of a town or city

- 30.0% Within a small town (Population less than 25,000)
- **15.0%** Within an urban area (Population between 25,000 and 100,000)
- **3.8%** Within a metropolitan area (Population greater than 100,000)

## THANK YOU FOR YOUR TIME AND ASSISTANCE!

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

Appendix B. Cover letter #1, mailed with full questionnaire for the Illinois Light Goose Hunter Survey: 2007 season.





April 16, 2007

Dear Light Goose Hunter,

I am writing to ask for your help in a study of Illinois hunters who participated in the 2007 Conservation Order light 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 2007 Conservation Order light 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 2007 season. Your responses are completely confidential and will not be associated in any way with your name or address. While your response to this questionnaire and any of the questions is completely voluntary, you can help us effectively manage waterfowl hunting in Illinois by sharing your experiences and views. We look forward to hearing from you soon. Please return the questionnaire in the postage-paid envelope provided.

If you have any questions or comments about this study, we would be happy to talk with you. Please feel free to call Linda Campbell, Survey Administrator, at (217) 244-5121 or write her at the address listed below. You may access the results of this and other studies of wildlife use in Illinois at <u>http://www.inhs.uiuc.edu/cwpe/hd/</u>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <u>http://dnr.state.il.us/orc/wildliferesources/</u>.

Thank you very much for helping with this important study.

Sincerely,

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Stacy A. Lischka Human Dimensions Specialist Illinois Natural History Survey

Appendix C. Thank you/reminder postcard mailed after full questionnaire for the Illinois Light Goose Hunter Survey: 2007 season.



Dear Illinois Waterfowl Hunter,

You have been selected to participate in the Illinois Snow Goose Hunter Survey. A survey questionnaire was recently mailed to you. We have not received your questionnaire at this time. If you have returned the questionnaire, we thank you and please disregard this reminder. If you have <u>not</u> returned the questionnaire, please do so as soon as possible. Your input is very important!

Thank you for your cooperation.

Appendix D. Cover letter #2, mailed with second mailing of full questionnaire for the Illinois Light Goose Hunter Survey: 2007 season.





May 16, 2007

Dear Light Goose Hunter,

A few weeks ago, we sent you a questionnaire asking about your light goose hunting activities in Illinois during 2007. 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 geese in Illinois during 2007. 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 in any way with your name or address. 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. We look forward to hearing from you soon. Please return the questionnaire in the postage-paid envelope provided.

If you have any questions or comments about this study, we would be happy to talk with you. Please feel free to call Linda Campbell, Survey Administrator, at (217) 244-5121 or write her at the address listed below. You may access the results of this and other studies of wildlife use in Illinois at <u>http://www.inhs.uiuc.edu/cwpe/hd/</u>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <u>http://dnr.state.il.us/orc/wildliferesources/</u>.

Thank you very much for helping with this important study.

Sincerely,

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Stacy A. Lischka Human Dimensions Specialist Illinois Natural History Survey

Appendix E. Follow-up questionnaire and results summary for the Illinois Light Goose Hunter Survey: 2007 season.



Follow-up to Illinois Light Goose Hunter Survey: 2007 Season Results Summary



- 1. Was there a particular reason you did not respond to our survey about the 2007 Conservation Order light goose hunting season? (*Please check one.*) n = 211
  - **4.3%** I did not receive the survey.
  - **18.0%** I do not like answering surveys.
  - **50.7%** I did not hunt during the 2007 Conservation Order light goose season.
  - **34.1%** I have never hunted light geese in Illinois.
  - **1.0%** I was not interested in the issues covered in the survey.
  - 1.4% The survey looked too long and/or complicated.
  - **1.0%** I prefer to be contacted by phone.
  - 9.0% Other (*Please indicate.*)

**Light Goose Hunting Effort and Harvest.** Please answer the following questions about the 2007 Conservation Order light goose hunting season in Illinois. Answer questions 2 and 3 even if you did not hunt snow geese in 2007. Throughout this survey, the term "light geese" includes Snow, Ross' and Blue geese. Only report your activities during the Conservation Order light goose season (North Zone: Jan. 15-March 31, 2007; Central and South Zones: Feb. 1- March 31, 2007); do not report light goose hunting during the regular Canada goose seasons.

Did you hunt light geese in Illinois during the 2007 Conservation Order light goose season (North Zone: Jan. 15-March 31, 2007; Central and South Zones: Feb. 1- March 31, 2007)? Do not include hunting light geese during the regular Canada goose season. (*Please check one.*) n = 211

**7.1%** Yes (*Please skip to question 4.*) **92.9%** No

**3.** For which of the following reasons did you not participate in the 2007 Conservation Order light goose season in Illinois? (*Please check all that apply.*) n = 196

22.3% I did not have the proper equipment to hunt light geese (decoys, calls, etc.).
16.1% I did not know any other hunters who hunted light geese in Illinois.
14.2% I did not have enough knowledge of light goose habits.
29.9% I did not have a place to hunt light geese in Illinois.
15.2% There are no light geese in the area in which I hunt.
29.4% I did not have enough time to hunt light geese.

- **34.6%** I was not interested in hunting light geese.
- 5.7% My past experience hunting light geese in Illinois was unsatisfactory.
- 2.4% Other (Please indicate.)

**4.** If you did hunt light geese in Illinois during the 2007 Conservation Order light goose season, please indicate your effort and harvest in the following table. Include only geese you harvested and days you hunted in Illinois. Count part of 1 day as 1 day.

|           | County hunted     | Days<br>hunted | Light geese<br>harvested | Light geese hit, but<br>not retrieved |
|-----------|-------------------|----------------|--------------------------|---------------------------------------|
| January:  | See Tables 2 & 3. |                |                          |                                       |
| February: |                   |                |                          |                                       |
| March:    |                   |                |                          |                                       |
|           |                   |                |                          |                                       |

**5.** Do you plan to participate in the Conservation Order light goose season next year (January-March 2008)? (*Please check one.*) n = 173

**34.7%** Yes (*Please skip to question 7.*) **65.3%** No

**6.** If you do not plan to participate in the Conservation Order light goose season next year, please explain why in the space provided below.

**Information about you.** The following questions provide important information to help us understand more about the people who hunt light geese in Illinois. Please tell us about yourself by completing the following questions. All responses will be kept confidential.

**7.** As of January 1, 2007, what was your age? (*Please indicate.*) n = 171

Ave. 38.5\_\_\_\_\_\_ years

**8.** What is your county of residence. (*Please indicate.*) n = 211

See Appendix G. County

**9.** Are you **98.6%** male or **1.4%** female? (*Please check one.*) *n* = **211** 

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

## THANK YOU FOR YOUR TIME AND ASSISTANCE!

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

Appendix F. Cover letter #3, mailed with follow-up questionnaire for the Illinois Light Goose Hunter Survey: 2007 season.



# ILLINOIS NATURAL HISTORY SURVEY



July 11, 2007

Dear Goose Hunter,

Over the last two months we have sent you several mailings about an important research study we are conducting for the Illinois Department of Natural Resources. The purpose of this study is to learn about light goose hunting activities in Illinois. Results of this study will guide waterfowl management decisions to optimize hunting opportunity and maintain or improve hunter satisfaction.

This study is drawing to a close, and this is the last contact we will make with you. Your views are crucially important, even if you did not hunt light geese in Illinois during 2007. Please take a moment to fill out this **shortened survey** and return it to us in the postage-paid envelope we have enclosed. If you did not hunt light geese in Illinois in 2007, please let us know by answering questions 1-3 of this shortened survey and returning in the postage-paid envelope.

We are sending this final contact because of our concern that people who have not responded may have different views than those who have. Hearing from everyone in this small, statewide sample helps assure that the survey results are as accurate as possible. Your participation is voluntary, your responses are completely confidential and they will not be associated in any way with your name or address.

We appreciate your willingness to consider our request as we conclude this effort to learn about light goose hunters in Illinois. If you have any questions or comments about this study, we would be happy to talk with you. Please feel free to call Linda Campbell, Survey Administrator, at (217) 244-5121 or write her at the address listed below.

Thank you very much for helping with this important study.

Sincerely,

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Stacy A. Lischka Human Dimensions Specialist Illinois Natural History Survey

| County     | п  | % of<br>total | County        | п  | % of<br>total | County      | п  | % of<br>total | County     | п     | % of<br>total |
|------------|----|---------------|---------------|----|---------------|-------------|----|---------------|------------|-------|---------------|
| Adams      | 16 | 1.52          | Fulton        | 16 | 1.52          | McLean      | 24 | 2.28          | Schuyler   | 0     | 0.00          |
| Alexander  | 0  | 0.00          | Gallatin      | 0  | 0.00          | Macon       | 6  | 0.57          | Scott      | 2     | 0.19          |
| Bond       | 3  | 0.29          | Greene        | 4  | 0.38          | Macoupin    | 10 | 0.95          | Shelby     | 4     | 0.38          |
| Boone      | 9  | 0.86          | Grundy        | 12 | 1.14          | Madison     | 35 | 3.33          | Stark      | 1     | 0.10          |
| Brown      | 1  | 0.10          | Hamilton      | 1  | 0.10          | Marion      | 5  | 0.48          | Stephenson | 12    | 1.14          |
| Bureau     | 16 | 1.52          | Hancock       | 8  | 0.76          | Marshall    | 8  | 0.76          | Tazewell   | 56    | 5.32          |
| Calhoun    | 4  | 0.38          | Hardin        | 0  | 0.00          | Mason       | 9  | 0.86          | Union      | 12    | 1.14          |
| Carroll    | 9  | 0.86          | Henderson     | 1  | 0.10          | Massac      | 3  | 0.29          | Vermilion  | 13    | 1.24          |
| Cass       | 5  | 0.48          | Henry         | 11 | 1.05          | Menard      | 2  | 0.19          | Wabash     | 1     | 0.10          |
| Champaign  | 15 | 1.43          | Iroquois      | 14 | 1.33          | Mercer      | 7  | 0.67          | Warren     | 1     | 0.10          |
| Christian  | 9  | 0.86          | Jackson       | 18 | 1.71          | Monroe      | 12 | 1.14          | Washington | 7     | 0.67          |
| Clark      | 2  | 0.19          | Jasper        | 3  | 0.29          | Montgomery  | 5  | 0.48          | Wayne      | 1     | 0.10          |
| Clay       | 1  | 0.10          | Jefferson     | 6  | 0.57          | Morgan      | 8  | 0.76          | White      | 2     | 0.19          |
| Clinton    | 16 | 1.52          | Jersey        | 9  | 0.86          | Moultrie    | 5  | 0.48          | Whiteside  | 7     | 0.67          |
| Coles      | 4  | 0.38          | JoDaviess     | 4  | 0.38          | Ogle        | 9  | 0.86          | Will       | 35    | 3.33          |
| Cook       | 68 | 6.46          | Johnson       | 3  | 0.29          | Peoria      | 40 | 3.80          | Williamson | 23    | 2.19          |
| Crawford   | 2  | 0.19          | Kane          | 18 | 1.71          | Perry       | 11 | 1.05          | Winnebago  | 9     | 0.86          |
| Cumberland | 1  | 0.10          | Kankakee      | 8  | 0.76          | Piatt       | 4  | 0.38          | Woodford   | 9     | 0.86          |
| DeKalb     | 8  | 0.76          | Kendall       | 4  | 0.38          | Pike        | 2  | 0.19          | Unknown    | 0     | 0.00          |
| DeWitt     | 3  | 0.29          | Knox          | 16 | 1.52          | Pope        | 0  | 0.00          | Total      | 1,052 | 100%          |
| Douglas    | 4  | 0.38          | Lake          | 23 | 2.19          | Pulaski     | 2  | 0.19          |            |       |               |
| DuPage     | 24 | 2.28          | LaSalle       | 18 | 1.71          | Putnam      | 10 | 0.95          |            |       |               |
| Edgar      | 0  | 0.00          | Lawrence      | 1  | 0.10          | Randolph    | 20 | 1.90          |            |       |               |
| Edwards    | 2  | 0.19          | Lee           | 6  | 0.57          | Richland    | 4  | 0.38          |            |       |               |
| Effingham  | 13 | 1.24          | Livingston    | 4  | 0.38          | Rock Island | 7  | 0.67          |            |       |               |
| Fayette    | 7  | 0.67          | Logan         | 6  | 0.57          | St. Clair   | 55 | 5.23          |            |       |               |
| Ford       | 5  | 0.48          | McDonoug<br>h | 9  | 0.86          | Saline      | 8  | 0.76          |            |       |               |
| Franklin   | 17 | 1.62          | McHenry       | 30 | 2.85          | Sangamon    | 29 | 2.76          |            |       |               |

Appendix G. County of residence of hunters who responded to the Illinois Light Goose Hunter Survey: 2007 season.