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Research Program

Illinois Natural History Survey
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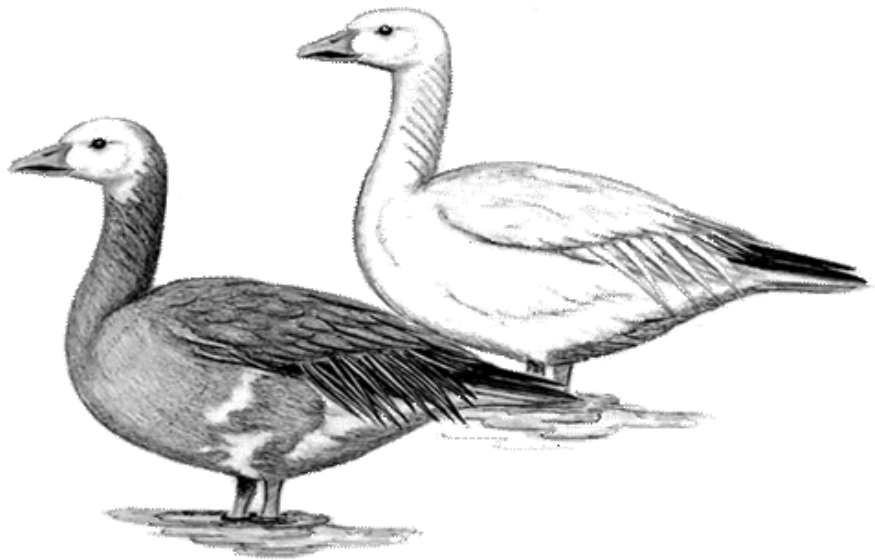
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Hunter Participation, Harvest, and Hunting Behavior During the 2022 Illinois Conservation Order



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HUNTER PARTICIPATION, HARVEST, AND HUNTING BEHAVIOR DURING THE 2022 ILLINOIS CONSERVATION ORDER

JOB COMPLETION REPORT

WILDLIFE HARVEST AND HUMAN DIMENSIONS RESEARCH PROGRAM

STATE OF ILLINOIS

PROJECT NUMBER: W-112-R-31
STUDY 101
JOB NO. 101.4

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Champaign, IL
December 12, 2022

Federal Aid in Wildlife Restoration
W-112-R-31
Illinois Department of Natural Resources

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Illinois Department of Natural Resources

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Division of Wildlife Resources

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ABSTRACT

Harvest of light geese (*Anser caerulescens*, *Anser rossii*) during the 2022 Illinois Light Goose Conservation Order was estimated at 60,768. An estimated 1,620 hunters participated in the 2022 Illinois Light Goose Conservation Order. Hunters spent an estimated 20,109 days afield during 2022, and the majority (55.2%) of the snow (light) goose harvest occurred during the month of February. Hunters were sampled from Harvest Information Program (HIP) registrants who reported they hunted snow and other light geese (including Ross' and Blue geese) during the 2021 Light Goose Conservation Order. One in 5 hunters had increased harvest of light goose over the previous 5 years. Approximately twenty percent of active light goose hunters used a guide or outfitter while hunting light geese during the 2022 Order. Due to changes in sampling of addresses and calculation of estimates, comparisons should not be made to years prior to 2014.

OBJECTIVE

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

METHODS

A total of 3,000 waterfowl hunters were randomly selected from 2021-22 HIP registrants who reported they hunted snow geese during the 2021 Light Goose Conservation Order in Illinois and purchased a state waterfowl stamp. Hunters sampled were mailed a 4-page mail-back questionnaire (Appendix A) and cover letter (Appendix B) 21 June 2022. Non-respondents were mailed a thank you/reminder postcard (Appendix C) 11 July 2022, a second copy of the questionnaire and cover letter (Appendix D) 01 August 2022, and another thank you/reminder postcard 31 August 2022. A third copy of the questionnaire and cover letter (Appendix D) were mailed 30 September 2022 and a final post card reminder mailed on 02 November 2022.

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 2022 Illinois Spring Light Goose Hunter Survey who reported hunting light geese (adjustment for non-hunters is inherent),

L_t = total number of 2021-22 Harvest Information Program (HIP) registrants who indicated they hunted light geese in Illinois during 2021 Light Goose Conservation Order,

n = number of respondents to the 2022 Illinois Spring Light 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.

The 2022 estimates for number of hunters, days hunted, and light geese harvested were based on 3,100 HIP registrants who reported they hunted during the 2021 LGCO on their 2021-22 HIP registration. Estimated light goose harvest was not adjusted for reporting bias using 0.478 as has been done in previous years (for discussion of this estimator related to waterfowl harvest, see 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 28.0 (IBM SPSS Inc. 2022). Due to changes in number of hunters sampled and calculation of estimates, comparisons to previous years' figures must be done with caution. The sample frame for this survey changed in 2014 and we recommend closely examining confidence intervals when making any comparisons of results between results prior to 2014. The 2014 Harvest Information Program (HIP) registration was the first year in which hunters were asked if they hunted

light geese during the Light Goose Conservation Order the previous year. Addition of this question allowed for more precise sampling of likely participants since the 2015 Light Goose Illinois Conservation Order than did a random sample of Illinois State Waterfowl Stamp purchasers, the sampling method used in previous light goose hunter surveys in Illinois (Williams et al. 2013).

ORDER DATES AND BAG LIMITS

The 2022 Light Goose Conservation Order took place from 21 January to 30 April in the North Zone and from 1 February to 30 April in the Central, South Central, and South Zones. The Order began in each zone the day after regular Canada goose (*Branta canadensis*) season closed. Hunters during the Light Goose Conservation Order were required to have a state waterfowl permit and hunting license, but were exempt from daily bag and possession limits, and needing a federal waterfowl stamp. Hunters were permitted to use unplugged shotguns, electronic calls, and to hunt from one half-hour before sunrise to half-hour after sunset; these liberalized regulations were not permitted during waterfowl seasons.

RESULTS

Harvest Results

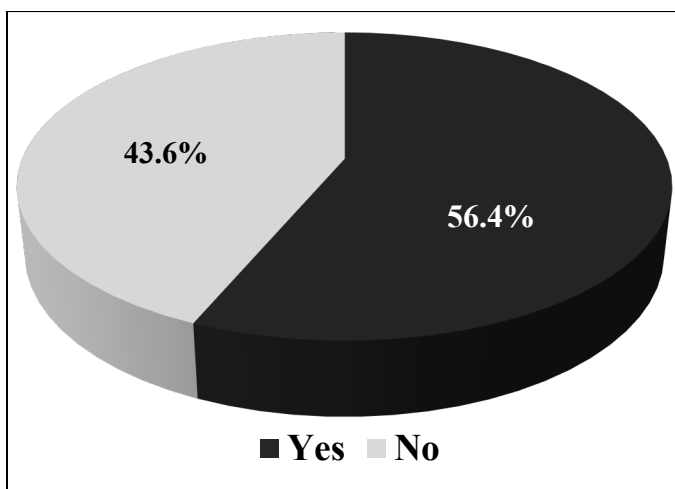


Figure 1. Percentage of survey respondents who hunted light geese in the 2022 Illinois LCGO ($n = 952$).

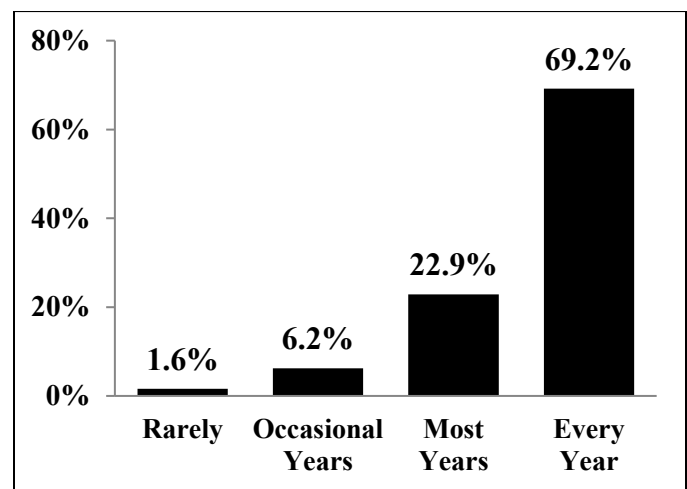


Figure 2. How often light goose hunters* hunt the LCGO in Illinois ($n = 497$).

*Hunters who reported they hunted light geese 1 day or more in Illinois during the 2022 Light Goose Conservation Order.

The questionnaire was undeliverable to 74 addresses, reducing the mailing list to 2,926 individuals. A total of 1,056 questionnaires were returned, of which 952 were considered usable, for a 33% response rate. Over half (56.4%) of respondents reported hunting light geese during the 2022 Light Goose Conservation Order (Figure 1). Two-thirds (69.2%) of active hunters, those who hunted at least one day during the 2022 LGCO, hunt light geese every year (Figure 2). Central zone was the most popular for hunters and over half (59.4%) of active hunters reported hunting the Central Zone most often for light geese (Figure 3).

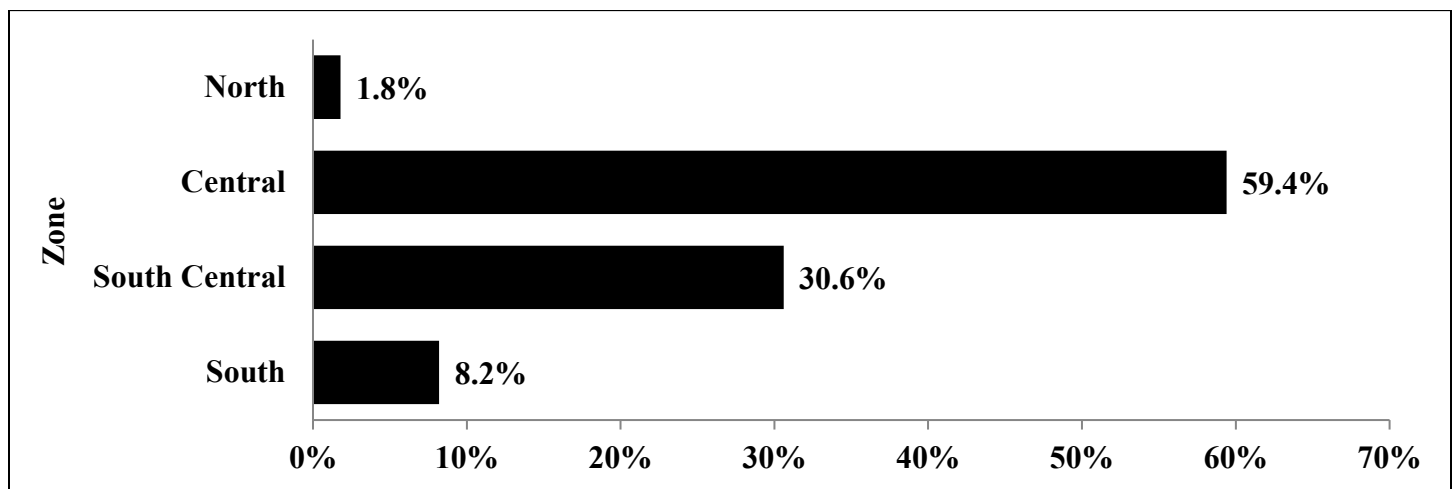


Figure 3. Zone hunted* most often during the 2022 LGCO ($n = 497$).

*Hunters who reported they hunted light geese 1 day or more in Illinois during the 2022 Light Goose Conservation Order.

During the 2022 Illinois LGCO, an estimated 1,620 participants hunted for 20,109 days and harvested 60,768 light geese (Table 1). Those who hunted most often in the Central zone were responsible for 55% of the harvest and 59% of the days hunted (Table 2). In comparison to the 2021 Order, hunter participation declined 40.7% and light goose harvest declined 32.8% (Figure 4). Among active LGCO hunters, 57.9% hunted 10 days or less (Figure 5), and 14.3% reported not harvesting any light geese, whereas 10.5% harvested ≥ 100 light geese. The fewest number of geese were harvested during January ($<1\%$), 55.2% of the harvest occurred during February, 42.9.2% percent occurred in March, and 1.9% in April (Table 3).

Mean overall harvest was 33 geese per hunter, and 44 geese per hunter when unsuccessful hunters are excluded. A total of 3,377 light geese were estimated to be downed but not retrieved by hunters this Order.

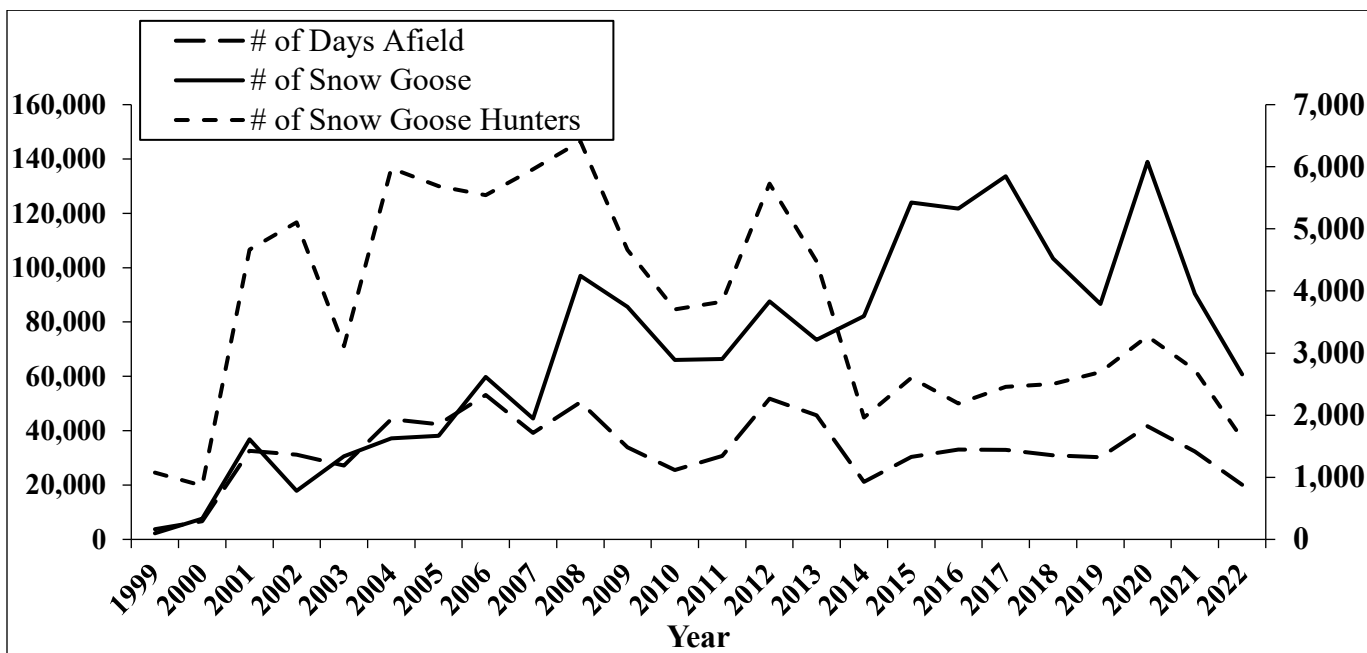


Figure 4. Estimated Illinois LGCO hunter participation and harvest across time.* Due to changes in number of hunters sampled and calculation of estimates, comparisons to previous years' figures must be done with caution.

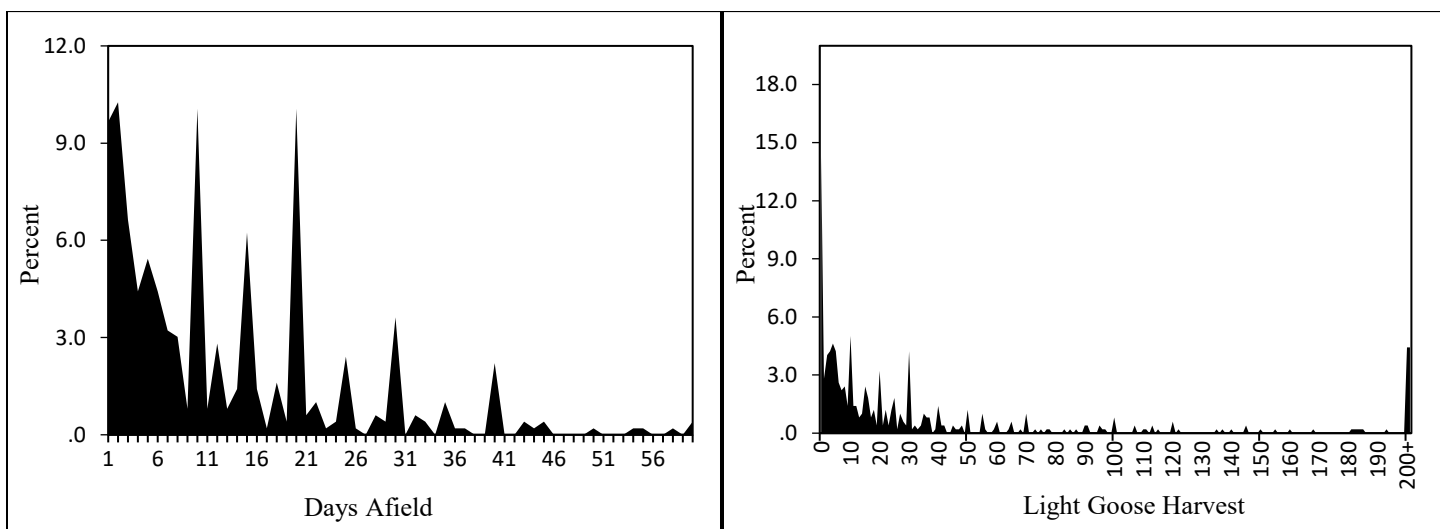


Figure 5. Distribution of days afield per hunter and light geese harvested per hunter for Illinois' during the 2022 Light Goose Conservation Order.

*Hunters who reported they hunted light geese 1 day or more in Illinois during the 2022 Light Goose Conservation Order.

Hunters hunted most frequently on private land with permission (65.2%), followed by private land for a fee (25.4%) (Figure 6). Hunters averaged 5.6 days hunting public land and 12.25 days hunting private lands, traveling an average 64.4 miles to do so. There was no significant difference in distance traveled among those who hunted this year and those who did not.

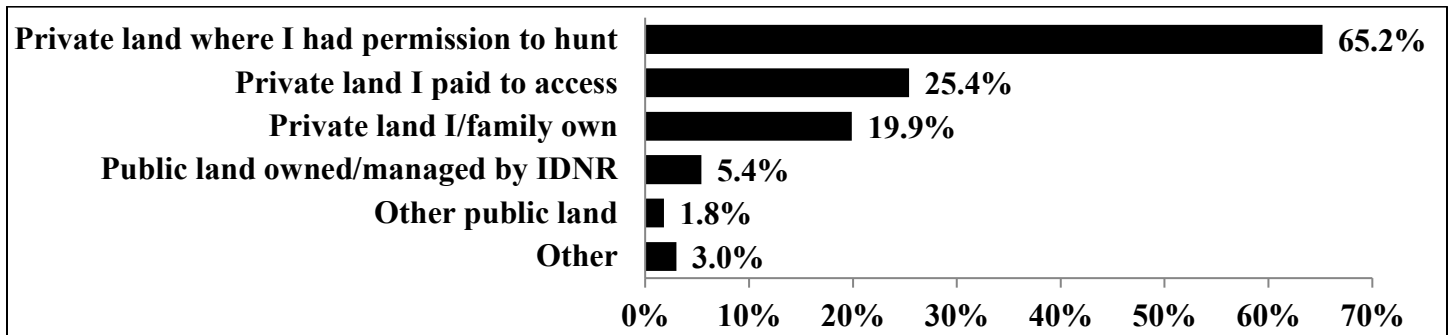


Figure 6. Type of land hunters* hunted during LGCO ($n = 497$).

*Hunters who reported they hunted light geese 1 day or more in Illinois during the 2022 Light Goose Conservation Order.

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

Satisfaction with the 2022 Light Goose Conservation Order

One quarter (25.9%) of hunters perceived an increase in the number of light geese seen during the Conservation Order over the past 5 years, whereas almost half (45%) felt there was a decrease (Table 4). One in five hunters (21.2%) harvested more light geese than they had over the past 5 years and 61.4% harvested fewer (Table 5). Those who hunted in the 2022 LGCO were much more likely to state they hunted about the same amount over the last 5 years as compared to those who did not hunt. Those who did not hunt in the 2022 LGCO were much more likely to hunt less often. When asked about the dates of the 2022 Light Goose Conservation Order, most active hunters (68.3%) felt that the dates were about right, (Figure 8). Hunters were least satisfied with the number of geese they harvested (42.3% dissatisfied) and the amount of shooting they got in (44.8%). Hunters were most satisfied (52.1%) with the number of light geese they saw (Table 6.) The most selected reason for not hunting as much as desired was due to “not enough time” those who did not hunt were much more likely to choose “no place to hunt” than those who did hunt in the 2022 LGCO (Table 7).

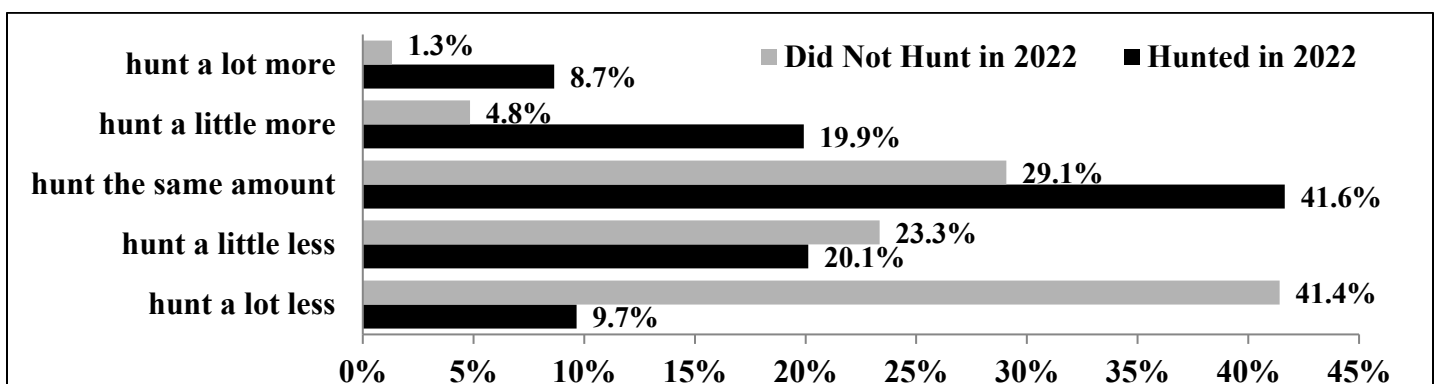


Figure 7. Change in how often hunters participated in LGCO over the last 5 years.

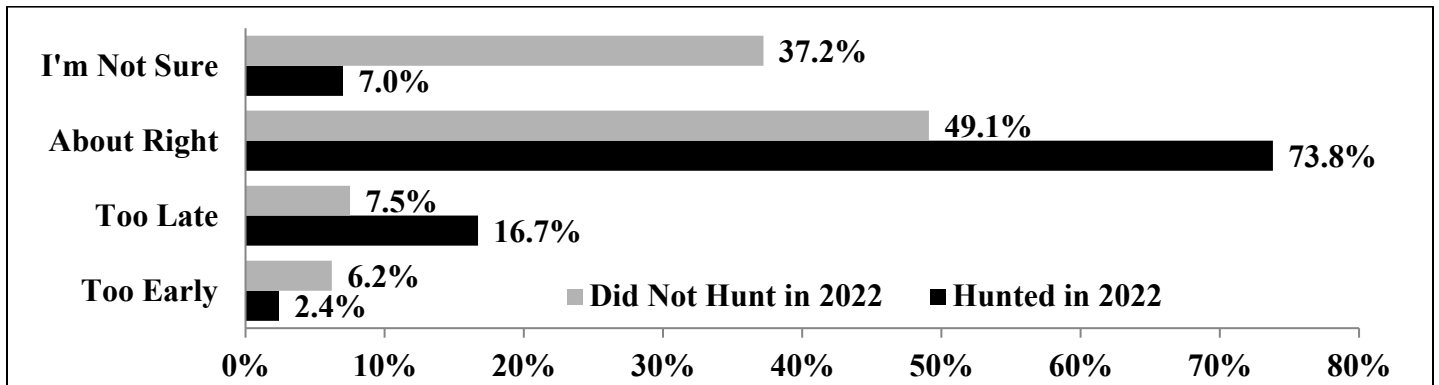


Figure 8. How hunters feel about the dates of the 2022 LGCO for the area they hunt most often.

Use of guides and outfitters

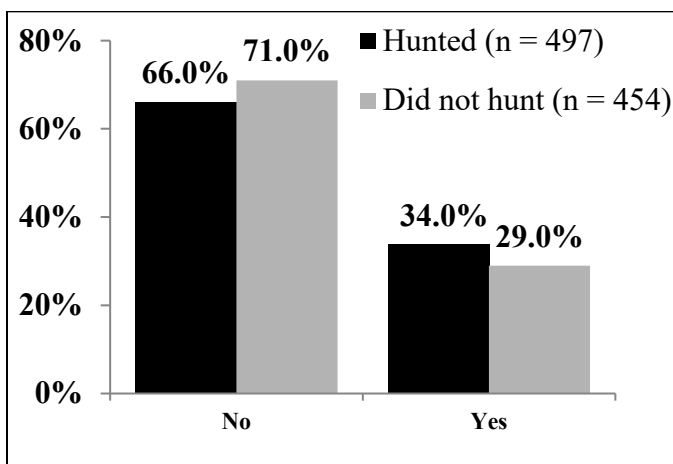


Figure 9. Percent of light goose hunters who have ever used a guide/outfitter for light goose hunting.

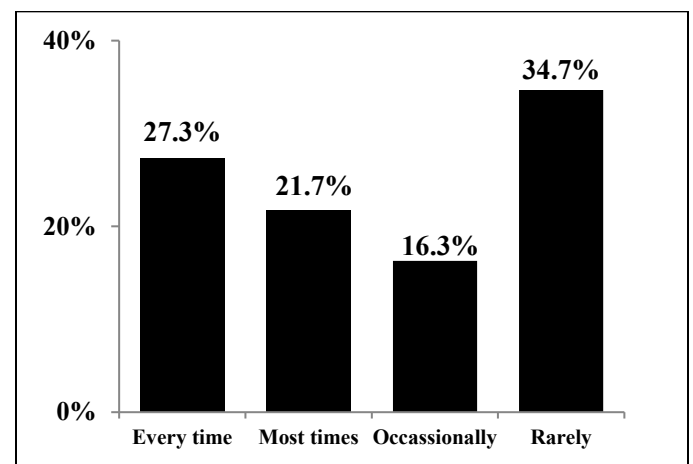


Figure 10. How frequently a guide is used for light goose hunting ($n = 300$).

Most hunters, regardless of participation in the most recent Conservation Order, have never used an outfitter to hunt light geese (Figure 9), though those who hunted this year were more likely to have used outfitters than those who did not hunt. Of those who have ever used an outfitter one in three use an outfitter/guide every time (27.3%) and 34.7% use one rarely (Figure 10). Differences in frequency of use among those who were active hunters and those who did not hunt were not reported due to small sub-sample size. Sixty percent of those who have ever used an outfitter/guide and who hunted this year did so with one this year. Approximately 20.1% of those who hunted LCGO this year used an outfitter/guide to do so. Most outfitter/guide users do so because they lack an area to hunt (58.1%) and 51.5% lack equipment (Figure 11). Most written in reasons were because hunters were new to light goose hunting, it was a free opportunity (gift, reward, etc.), and that they wanted to hunt somewhere different.

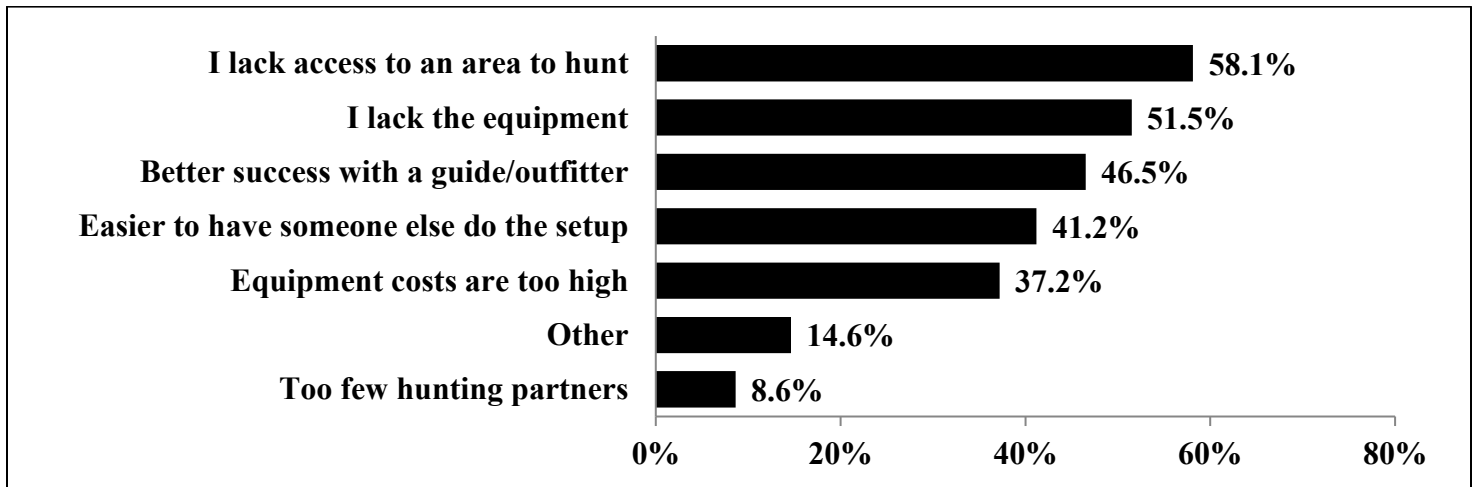


Figure 11. Reasons to use an outfitter or guide during LGCO ($n = 300$).

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

Hunter characteristics

Most were supportive of delaying the start of the conservation order to extend regular goose season into February (Figure 12). There was not a significant difference in the relationship between zone hunted most often and support for delaying the start of LCGO $\chi^2(12, 536) = [\chi^2 = 13.084]$, $p = [.363]$. Those who did not hunt in the 2022 LCGO were more likely to select “not sure” (34.5%) than those who hunted (18.1%). However, support for delaying LCGO among was consistent between those who did not hunt (56.4%) and those who did (59.1%). Active hunters were younger ($M = 46.6 \pm 15.9$ years old) than inactive hunters ($M = 49.0 \pm 16.4$ years old), and almost all (98.3%) were male (Figure 13). Those who hunted LGCO this year have been hunting light geese during the spring in Illinois for an average of 10.2 years as compared to 7.2 years for those who did not hunt. Similarly, they have hunted regular waterfowl in Illinois for an average of 27.3 years as compared to 25.9 years for those who did not. The counties with the most respondents were Madison (6.9%), St. Clair (6.2%), and Tazewell (4.3%). The locations in Illinois where light goose hunters live and concentrated their efforts are presented in Appendix E.

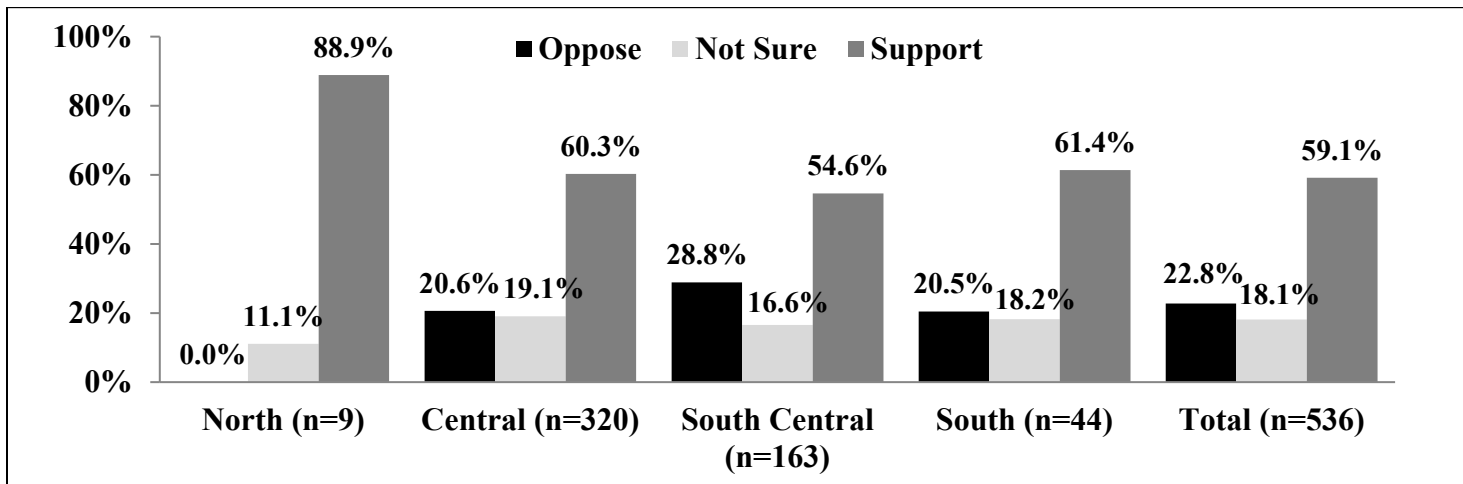


Figure 12. Support for delaying the start of LCGO to extend regular goose season into February ($n = 536^*$).

* Selected for those who spent at least one day afield during the 2022 Light Goose Season.

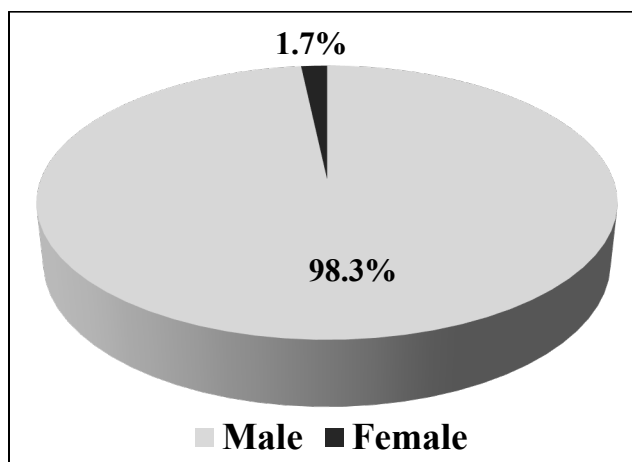


Figure 13. Gender of LGCO hunters ($n = 951$).

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Table 1. Estimates of the number of hunters, days afield, light geese harvest, and number of birds crippled from 1999-2022 during the Illinois Light Goose Conservation Order.

	Hunters	Days Afield	Harvest	Crippled
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 ^a	4,862
2006	5,543	53,154	59,799 ^a	8,892
2007	5,962 ± 1,147 ^b	39,170 ± 15,221	44,514 ± 25,794	11,078
2008	6,409 ± 1,046 ^b	50,471 ± 10,331	97,021 ± 40,811	11,050
2009	4,663 ± 950 ^b	33,947 ± 8,403	85,635 ± 36,479	5,547
2010	3,702 ± 820 ^b	25,581 ± 6,297	65,987 ± 42,519	3,561
2011	3,825 ± 826 ^b	30,753 ± 8,902	66,406 ± 30,962	7,810
2012	5,726 ± 943 ^b	51,763 ± 11,376	87,558 ± 41,316	4,157
2013	4,477 ± 1,192 ^b	45,724 ± 16,642	73,495 ± 52,191	3,686
2014	1,962 ± 188 ^b	21,170 ± 3,151	82,161 ^c ± 22,291	6,108
2015	2,599 ± 206 ^b	30,360 ± 3,213	123,944 ^c ± 29,265	5,491
2016	2,187 ± 81 ^b	33,048 ± 1,822	121,689 ^c ± 9,716	5,570
2017	2,459 ± 145 ^b	32,931 ± 2,403	133,629 ^c ± 24,576	5,774
2018	2,505 ± 141 ^b	30,989 ± 2,400	103,322 ^c ± 33,481	6,864
2019	2,694 ± 205 ^b	30,206 ± 3,138	86,683 ^c ± 34,461	5,558
2020	3,272 ± 186 ^b	41,621 ± 3,911	138,954 ^c ± 30,202	7,395
2021	2,748 ± 171 ^b	32,973 ± 2,702	91,488 ^c ± 30,313	5,630
2022	1,620 ± 100 ^b	20,109 ± 1,617	60,768 ^c ± 10,186	3,377

^a Harvest data estimates differ from the original estimates and were restricted to Conservation Order only.

^b 95% confidence intervals

^c Reporting bias of .487 was not used for these years.

Table 2. Estimated of the number of hunters, days afield, and harvest of light geese by zone hunted most often in 2022.

Zone	Hunters	Days Afield	Harvest	Crippled
North	29	290	362	72
Central	962	12,237	33,360	1,304
South Central	495	6,386	21,739	1,633
South	134	1,196	5,307	368
Total	1,620	20,109	60,768	3,377

*Estimates are based off “zone hunted most often” rather than county reported for harvest because some counties lie in multiple zones.

Table 3. Estimated light goose harvest by month during the Illinois Light Goose Conservation Order from 2004-2022.

	January ^{b,c}	February	March	April
2004 ^a	-	26,404	10,785	
2005	824	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 ^d	45,080	22,233	
2014	97	39,969	42,094	
2015	20	65,454	58,470	
2016	402	74,269	47,018	
2017	678	84,153	48,798	
2018	180	62,584	40,558	
2019	82	55,167	31,434	
2020	196	85,326	53,432	
2021	96	50,340	39,956	1,096
2022	16	33,572	26,045	1,134

^a Monthly harvest data before 2004 are not available.

^b January estimates include only North Zone harvest unless otherwise noted.

^c Harvest data are estimates for Conservation Order only.

^d Revised from reported 2013-14 harvest.

Table 4. Hunter comparison between the number of light geese SEEN during 2022 to the last 5 years ($n = 497$).

	Hunted in 2022	
	Number of Hunters	Percentage of Hunters (%)
Decreased Considerably	52	9.7
Decreased Moderately	73	13.6
Decreased Slightly	115	21.5
No Change	157	29.3
Increased Slightly	84	15.7
Increased Moderately	36	6.7
Increased Considerably	19	3.5

Table 5. Hunter comparison between the number of light geese HARVESTED during 2022 to the last 5 years ($n = 497$).

	Hunted in 2022	
	Number of Hunters	Percentage of Hunters (%)
Decreased Considerably	108	20.1
Decreased Moderately	100	18.7
Decreased Slightly	121	22.6
No Change	93	17.4
Increased Slightly	74	13.8
Increased Moderately	27	5.0
Increased Considerably	13	2.4

Table 6. Satisfaction with the 2022 Light Goose Conservation Order in Illinois.

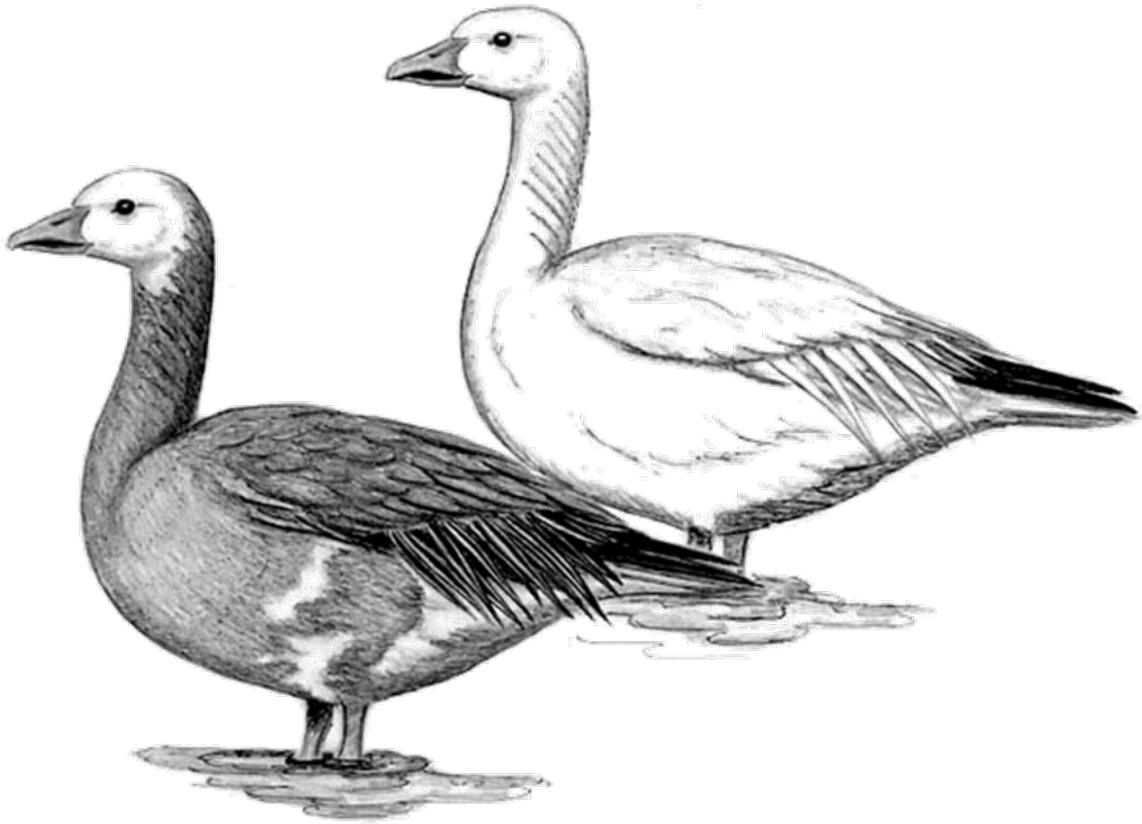
	<i>n</i>	Very Dissatisfied %	Dissatisfied %	Neither %	Satisfied %	Very Satisfied %
Number of light geese you saw.	497	6.6%	17.7%	26.0%	41.0%	8.7%
Mid-season matched peak of light goose migration.	497	5.0%	22.9%	35.2%	32.4%	4.4%
Amount of shooting you got in.	497	17.5%	32.6%	20.9%	24.1%	4.8%
Amount of time you spent light goose hunting.	497	7.4%	23.7%	27.2%	35.0%	6.6%
Number of light geese you harvested.	497	18.7%	32.8%	21.1%	22.7%	4.6%
The weather during the Conservation Order season.	497	6.4%	18.9%	32.8%	39.2%	2.6%
Number of light geese that migrated through areas you hunted.	497	9.9%	21.7%	22.1%	36.6%	9.7%

Table 7. Reasons why hunters did not hunt as much as they would prefer.

Why do you not hunt more:	Did not hunt (<i>n</i> =432) %	Hunted LG in 2022 (<i>n</i> =401) %
Not enough time	43.8	55.4
No places to hunt	33.6	15.2
Have to travel too far	27.1	20.7
Not seeing enough geese	22.5	26.9
It is too expensive	18.8	24.9
Lack of equipment	18.1	13.0
Few/no partners	11.3	12.7
Health/Safety concerns	6.7	2.2
Worried there are too few juveniles	3.0	12.0
Prefer other recreations or wild game taste	2.3	1.1
Bad weather	0.4	2.4

**Percentages add up to >100 because some hunters selected multiple reasons for not hunting more.

Illinois Light Goose Conservation Order Survey 2022



Illinois Department of Natural Resources
Division of Wildlife Resources
&
The Illinois Natural History Survey

I ILLINOIS
Illinois Natural History Survey
PRAIRIE RESEARCH INSTITUTE

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. Light Goose Conservation Order (Spring Light Goose) Hunting Effort and Harvest. Please take a few minutes to complete the following questionnaire to help us evaluate the **2022 Light Goose Conservation Order for goose hunting even if you did not hunt.**
All questions pertain to Illinois hunting. Please note: "Light geese" includes Snow, Ross', and Blue geese.

1. Did you hunt in Illinois during the **2022 LGCO** (North Zone: **Jan. 21 - April 30, 2022**; Central, South Central, and South Zones: **Feb. 1 - April 30, 2022**)?
Do not include hunting light geese during the regular Canada goose season. (Please check **one**.)
 _____ Yes _____ No (If "No," please go to **Question 8**)
2. In which zone did you **hunt light geese most often** during the **2022 LGCO**? (Please check **one**.)
 _____ North Zone _____ Central Zone _____ South Central Zone _____ South Zone
3. On which of the following types of land did you hunt light geese during the **2022 Light Goose Conservation Order**? (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): _____
- 3a. How many days did you hunt light geese on Illinois state public land and/or private land during the 2022 Light Goose Conservation Order? Please indicate number of days for each.
Public: _____ Days **Private:** _____ Days

4. Please indicate **your personal** effort (**not** your hunting party's effort) and harvest in the following table. **Include only harvest that occurred during the spring Light Goose (light, blue, & Ross') Conservation Order; do not include light geese harvested during the regular Canada goose seasons.** Report the counties in which you hunted, number of days you hunted, and light geese harvested for the time period in which you hunted light geese. Include only light geese you harvested and days you hunted in Illinois. Count part of 1 day as 1 day. **Please refer to the county/zone map on the backside of your cover letter to answer this question.**

Please note, during January only the North zone is open to hunts.

	County hunted	Days hunted	Geese harvested	Geese hit, but not retrieved
January (North only):				
February:				
March:				
April:				

5. How does the number of light geese you **saw** during the **2022 Light Goose Conservation Order** 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 |

6. How does the number of light geese you **harvested** during the **2022 Light Goose Conservation Order** 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

7. Please rate your **SATISFACTION with the 2022 Light Goose Conservation Order in Illinois** for each of the following by circling the number that matches your response.

	Very Dissatisfied	Dissatisfied	Neither Dissatisfied or Satisfied	Satisfied	Very Satisfied
Number of light geese you saw.	1	2	3	4	5
Mid-season matched peak of light goose migration.	1	2	3	4	5
Amount of shooting you got in.	1	2	3	4	5
Amount of time you spent light goose hunting.	1	2	3	4	5
Number of light geese you harvested.	1	2	3	4	5
Weather during the season.	1	2	3	4	5
Number of light geese that migrated through areas you hunt.	1	2	3	4	5

8. How has your participation in LGCO changed over the past 5 years? Please circle the number that matches your response.

I hunt a lot less	I hunt a little less	I hunt the same amount	I hunt a little more	I hunt a lot more
1	2	3	4	5

9. Which of the following best describes how often you hunt **light geese** in Illinois?

____ Every year ____ Most years ____ Occasional years ____ Rarely

10. If you hunt **light geese** less often than you want, which describes why you do not hunt more? (Please check **all** that apply)

____ Worried too few juveniles ____ Few/no partners ____ Not enough time
 ____ Not seeing enough geese ____ It is too expensive ____ Lack of equipment
 ____ Have to travel too far ____ Health/Safety concerns ____ No places to hunt
 ____ Other (Please identify): _____

11. About how far, on average, did you travel to hunt light geese in Illinois during 2022? _____ Miles

12. How did you feel about the dates of the **2022 LGCO** for the area where you hunted most often? (Please circle **one**.)

Too early	About right	Too late	I am not sure
1	2	3	4

13. Have you **ever** used a guide or outfitter while hunting light geese during the **LGCO in Illinois**?

____ Yes ____ No (If "No," please go to **Question 12**)

13. How often do you use a guide or outfitter while hunting light geese during the **LGCO**?

____ Every time ____ Most times ____ Occasionally ____ Rarely

13b. Why do you use a guide or outfitter to hunt light geese? (Please select **all** that apply)

_____ Equipment costs are too high

_____ Easier to have someone else do the setup

_____ I lack the equipment

_____ Too few hunting partners

_____ I lack access to an area

_____ Better success with a guide/outfitter

_____ (Please identify): _____

13c. Did you use a guide or outfitter while hunting light geese **during the 2022 LGCO**? _____ Yes _____ No

14. How would you rate your level of support for delaying the start of the LGCO to extend the regular Canada goose season into February?

Strongly Oppose	Oppose	Not Sure	Support	Strongly Support
1	2	3	4	5

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

1. How many years have you been **waterfowl hunting in Illinois**? _____ Years

2. How many years have you hunted during the **LGCO** in Illinois? _____ Years

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.



Appendix B

ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute

University of Illinois at Urbana-Champaign

Dear Illinois Hunter,

You have been chosen as one of a select group of Illinois light goose hunters to provide information about your hunting activities. Enclosed is a survey questionnaire regarding your hunting experiences in Illinois during the 2022 Light Goose Conservation Order (spring) season. **Even if you did not hunt in Illinois during the 2022 season, we ask that you please take a few minutes to complete the portions of the questionnaire that pertain to you.** A postage paid envelope is provided for returning the questionnaire to us.

This study by the Illinois Department of Natural Resources and the Illinois Natural History Survey is being done to gather information about the economic contributions for light goose hunting in Illinois. Results of this study will help wildlife managers make decisions to improve hunting opportunities and to better manage Illinois' wildlife populations. **Your responses are voluntary and completely confidential.** By responding you will help us more effectively manage wildlife and hunting in Illinois.

If you do not wish to participate, please return the blank questionnaire so we can remove your name from our mailing list.

You may access the results of this and other studies of hunters and hunting in Illinois at <https://publish.illinois.edu/human-dimensions/>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <http://dnr.state.illinois.gov/hunting/>.

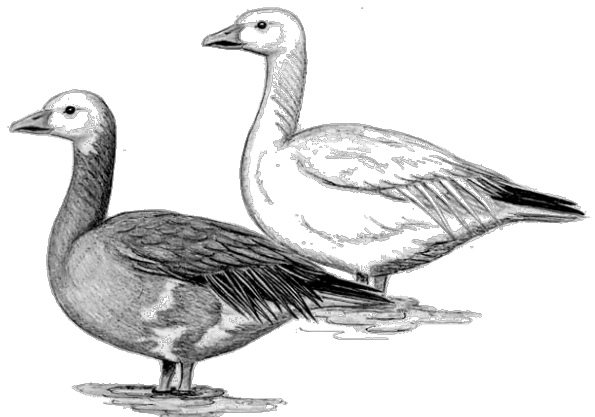
If you have questions regarding this study, please call us at (217) 244-5121 or email us at laurenjs@illinois.edu.

Thank you for your time and assistance.

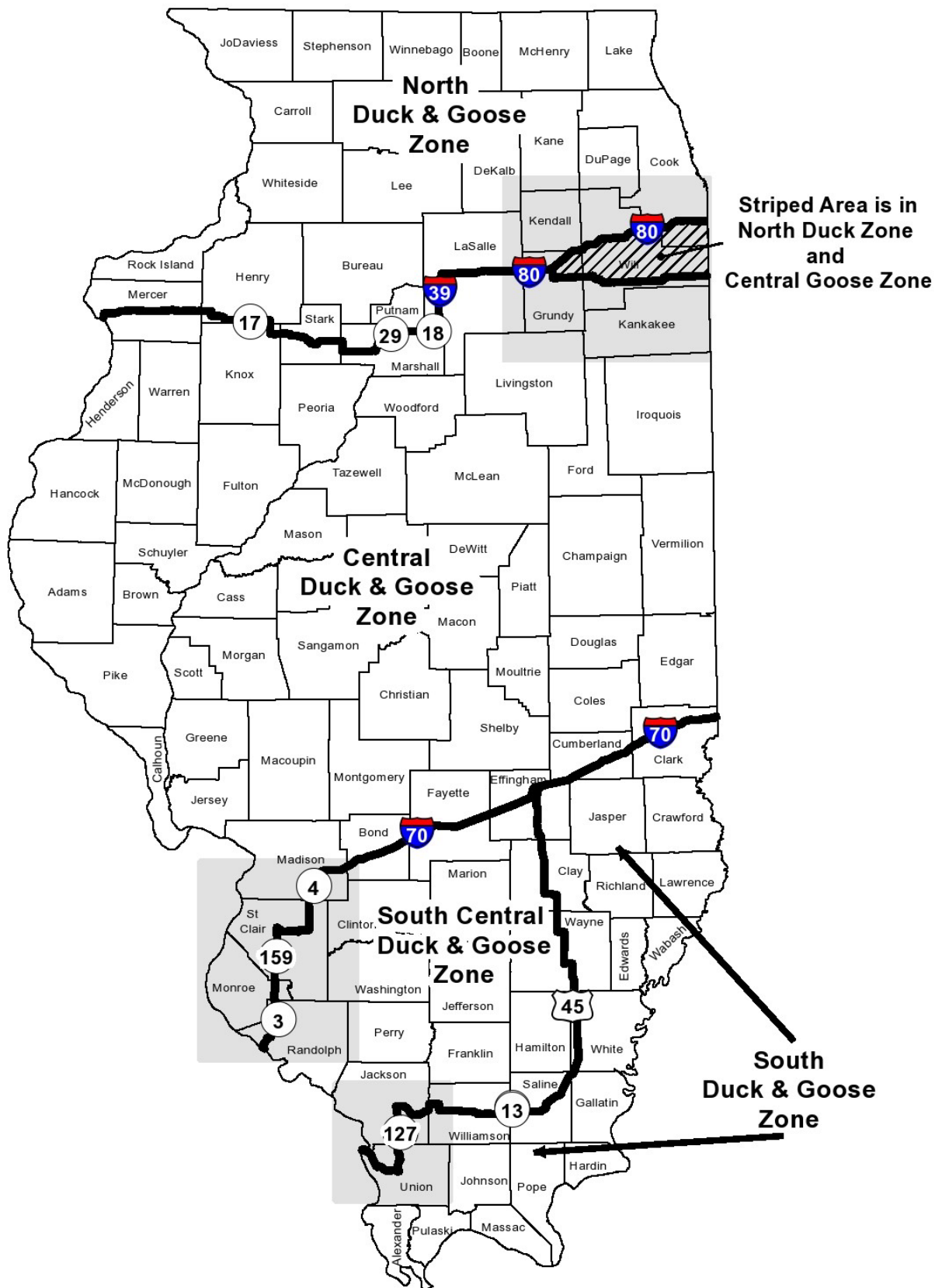
Sincerely,

A handwritten signature in black ink, appearing to read "Craig A. Miller".

Craig A. Miller
Human Dimensions Research Program



1816 South Oak Street,
Champaign, Illinois 61820 USA



Appendix C

Dear Illinois Hunter,

Recently you were mailed a questionnaire about your light goose hunting during the Illinois Light Goose 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 time and cooperation.



ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

We recently mailed you a questionnaire regarding your hunting experiences during the 2022 Light Goose Conservation Order (spring) season. **Even if you did not hunt in Illinois during the 2022 season, we ask that you please take a few minutes to complete the portions of the questionnaire that pertain to you.** A postage paid envelope is provided for returning the questionnaire to us. If you have already returned the questionnaire, we thank you.

If you have not returned your completed questionnaire, please do so as soon as possible. We have enclosed another copy for your use. This study by the Illinois Department of Natural Resources and the Illinois Natural History Survey is being done to gather information about the economic contributions for light goose hunting in Illinois. Results of this study will help wildlife managers make decisions to improve hunting opportunities and to better manage Illinois' wildlife populations. **Your responses are voluntary and completely confidential.** By responding you will help us more effectively manage wildlife and hunting in Illinois.

If you do not wish to participate, please return the blank questionnaire so we can remove your name from our mailing list.

You may access the results of this and other studies of hunters and hunting in Illinois at <https://publish.illinois.edu/human-dimensions/>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <http://dnr.state.illinois.gov/hunting/>.

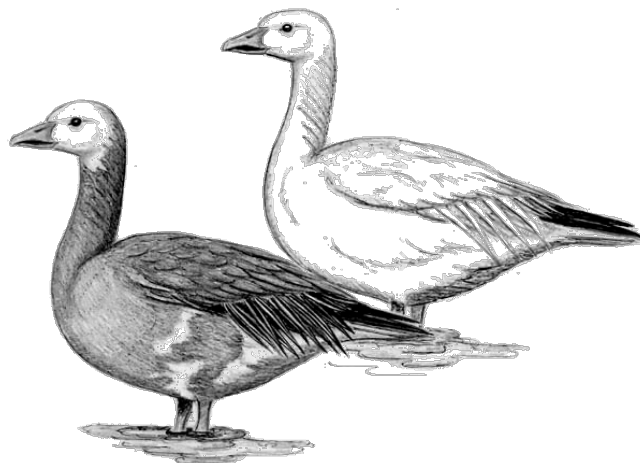
If you have questions regarding this study, please call us at (217) 244-5121 or email us at laurenjs@illinois.edu.

Thank you for your time and assistance.

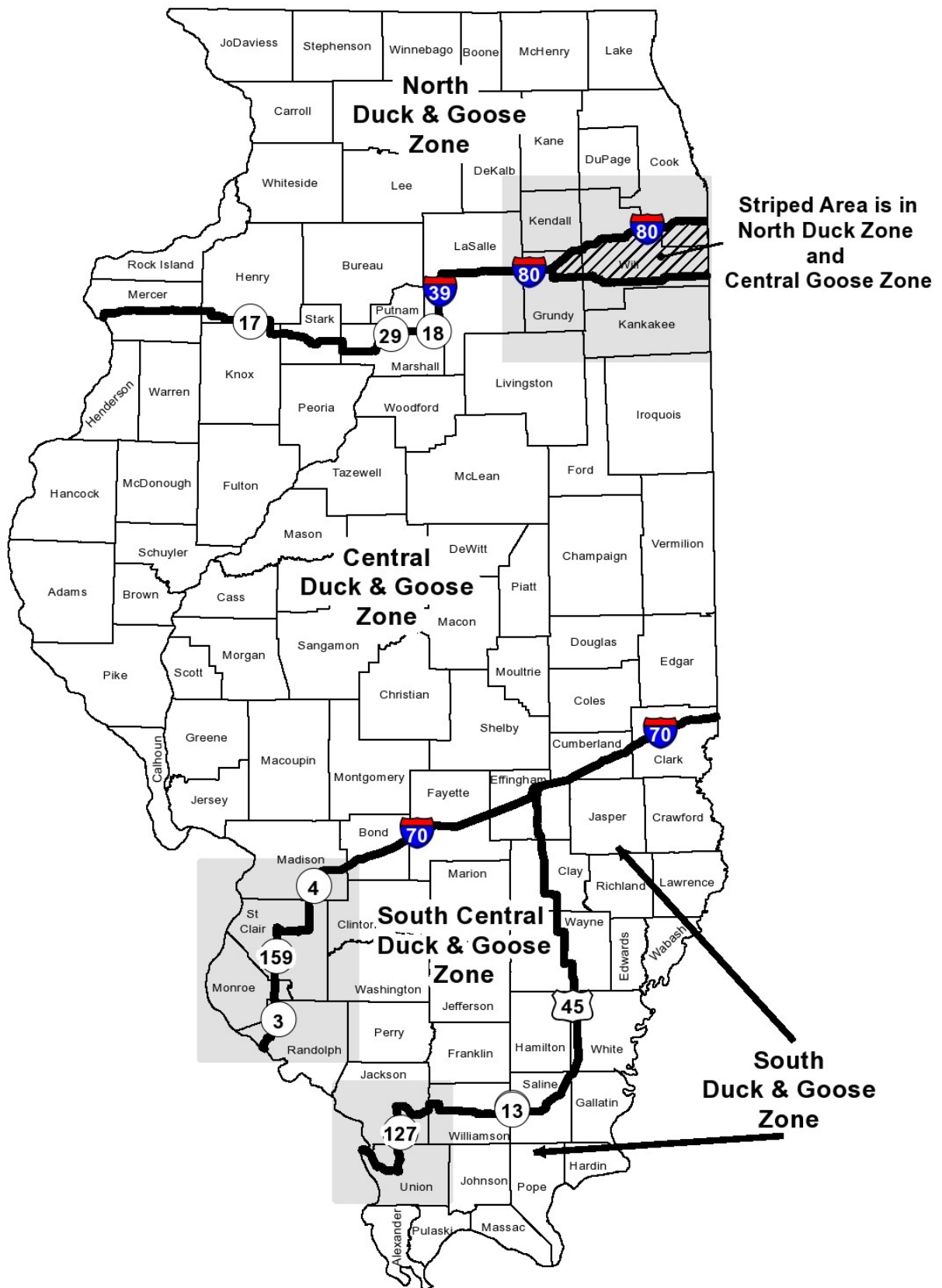
Sincerely,

A handwritten signature in black ink, appearing to read "Craig A. Miller".

Craig A. Miller
Human Dimensions Research Program



1816 South Oak Street,
Champaign, Illinois 61820 USA



Appendix E

Table E-1. Distribution of respondents by county of residence ($n = 941$).

County	<i>n</i>	County	<i>n</i>	County	<i>n</i>
Adams	25	Hardin	1	Morgan	10
Alexander	1	Henderson	3	Moultrie	7
Bond	8	Henry	7	Ogle	3
Boone	1	Iroquois	6	Peoria	21
Brown	4	Jackson	14	Perry	7
Bureau	6	Jasper	6	Piatt	5
Calhoun	19	Jefferson	13	Pike	12
Carroll	2	Jersey	-	Pope	2
Cass	15	Jo Daviess	1	Pulaski	3
Champaign	7	Johnson	2	Putnam	7
Christian	5	Kane	7	Randolph	14
Clark	2	Kankakee	4	Richland	2
Clay	3	Kendall	2	Rock Island	11
Clinton	27	Knox	9	St. Clair	59
Coles	4	Lake	5	Saline	1
Cook	18	LaSalle	12	Sangamon	25
Crawford	0	Lawrence	2	Schuyler	7
Cumberland	1	Lee	3	Scott	1
De Kalb	1	Livingston	7	Shelby	2
DeWitt	3	Logan	4	Stark	0
Douglas	5	McDonough	6	Stephenson	1
Du Page	10	McHenry	9	Tazewell	41
Edgar	6	McLean	20	Union	6
Edwards	1	Macon	14	Vermillion	6
Effingham	6	Macoupin	16	Wabash	3
Fayette	15	Madison	63	Warren	5
Ford	2	Marion	13	Washington	11
Franklin	9	Marshall	7	Wayne	2
Fulton	19	Mason	18	White	3
Gallatin	2	Massac	6	Whiteside	11
Greene	6	Menard	7	Will	24
Grundy	3	Mercer	6	Williamson	29
Hamilton	1	Monroe	29	Winnebago	4
Hancock	5	Montgomery	11	Woodford	15

Table E-2. Distribution of light geese harvested per county ($n = 497$).

County	Light Geese	County	Light Geese	County	Light Geese
Adams	255	Hardin	16	Morgan	18
Alexander	803	Henderson	12	Moultrie	111
Bond	370	Henry	64	Ogle	0
Boone	0	Iroquois	0	Peoria	43
Brown	11	Jackson	550	Perry	135
Bureau	4	Jasper	0	Piatt	16
Calhoun	329	Jefferson	400	Pike	1122
Carroll	0	Jersey	444	Pope	0
Cass	593	Jo Daviess	0	Pulaski	214
Champaign	0	Johnson	0	Putnam	0
Christian	120	Kane	0	Randolph	197
Clark	0	Kankakee	0	Richland	20
Clay	5	Kendall	0	Rock Island	0
Clinton	1799	Knox	151	St. Clair	51
Coles	10	Lake	5	Saline	8
Cook	0	LaSalle	7	Sangamon	119
Crawford	0	Lawrence	3	Schuyler	129
Cumberland	1	Lee	0	Scott	5
De Kalb	0	Livingston	51	Shelby	4
DeWitt	11	Logan	180	Stark	2
Douglas	0	McDonough	287	Stephenson	0
Du Page	0	McHenry	0	Tazewell	219
Edgar	0	McLean	33	Union	79
Edwards	0	Macon	0	Vermillion	0
Effingham	0	Macoupin	151	Wabash	8
Fayette	3899	Madison	26	Warren	0
Ford	0	Marion	373	Washington	99
Franklin	43	Marshall	0	Wayne	71
Fulton	1664	Mason	1140	White	40
Gallatin	0	Massac	73	Whiteside	7
Greene	116	Menard	16	Will	0
Grundy	52	Mercer	52	Williamson	19
Hamilton	16	Monroe	553	Winnebago	0
Hancock	17	Montgomery	489	Woodford	74

Table E-3. Distribution of days hunted per county by county hunted ($n = 497$).

County	Days	County	Days	County	Days
Adams	228	Hardin	7	Morgan	5
Alexander	124	Henderson	7	Moultrie	120
Bond	132	Henry	30	Ogle	0
Boone	0	Iroquois	0	Peoria	33
Brown	8	Jackson	145	Perry	168
Bureau	4	Jasper	3	Piatt	18
Calhoun	257	Jefferson	106	Pike	199
Carroll	0	Jersey	-	Pope	0
Cass	147	Jo Daviess	0	Pulaski	48
Champaign	0	Johnson	0	Putnam	0
Christian	20	Kane	1	Randolph	112
Clark	0	Kankakee	0	Richland	12
Clay	10	Kendall	0	Rock Island	7
Clinton	395	Knox	128	St. Clair	62
Coles	5	Lake	1	Saline	3
Cook	0	LaSalle	2	Sangamon	57
Crawford	0	Lawrence	13	Schuyler	121
Cumberland	1	Lee	0	Scott	20
De Kalb	0	Livingston	43	Shelby	17
DeWitt	8	Logan	47	Stark	3
Douglas	0	McDonough	44	Stephenson	0
Du Page	0	McHenry	0	Tazewell	91
Edgar	3	McLean	27	Union	43
Edwards	0	Macon	0	Vermillion	0
Effingham	4	Macoupin	140	Wabash	7
Fayette	676	Madison	36	Warren	0
Ford	0	Marion	135	Washington	111
Franklin	57	Marshall	0	Wayne	26
Fulton	387	Mason	392	White	10
Gallatin	0	Massac	33	Whiteside	14
Greene	65	Menard	32	Will	3
Grundy	35	Mercer	42	Williamson	25
Hamilton	10	Monroe	233	Winnebago	0
Hancock	48	Montgomery	238	Woodford	21

Table E-4. Distribution of hunters* per county ($n = 497$).

County	n	County	n	County	n
Adams	19	Hardin	1	Morgan	4
Alexander	9	Henderson	5	Moultrie	11
Bond	13	Henry	2	Ogle	0
Boone	0	Iroquois	0	Peoria	9
Brown	2	Jackson	14	Perry	14
Bureau	3	Jasper	2	Piatt	4
Calhoun	29	Jefferson	18	Pike	26
Carroll	0	Jersey	-	Pope	0
Cass	20	Jo Daviess	0	Pulaski	7
Champaign	0	Johnson	1	Putnam	1
Christian	3	Kane	1	Randolph	7
Clark	0	Kankakee	0	Richland	0
Clay	3	Kendall	0	Rock Island	2
Clinton	61	Knox	27	St. Clair	19
Coles	3	Lake	1	Saline	1
Cook	0	LaSalle	3	Sangamon	9
Crawford	0	Lawrence	2	Schuyler	13
Cumberland	0	Lee	0	Scott	5
De Kalb	0	Livingston	5	Shelby	5
DeWitt	3	Logan	2	Stark	1
Douglas	1	McDonough	7	Stephenson	0
Du Page	0	McHenry	0	Tazewell	15
Edgar	1	McLean	9	Union	15
Edwards	0	Macon	2	Vermillion	0
Effingham	4	Macoupin	16	Wabash	3
Fayette	78	Madison	13	Warren	0
Ford	0	Marion	14	Washington	12
Franklin	10	Marshall	1	Wayne	5
Fulton	50	Mason	68	White	1
Gallatin	0	Massac	3	Whiteside	4
Greene	14	Menard	2	Will	2
Grundy	2	Mercer	9	Williamson	5
Hamilton	2	Monroe	19	Winnebago	0
Hancock	7	Montgomery	29	Woodford	2

*Sum is greater than n because some hunters participated in multiple counties.

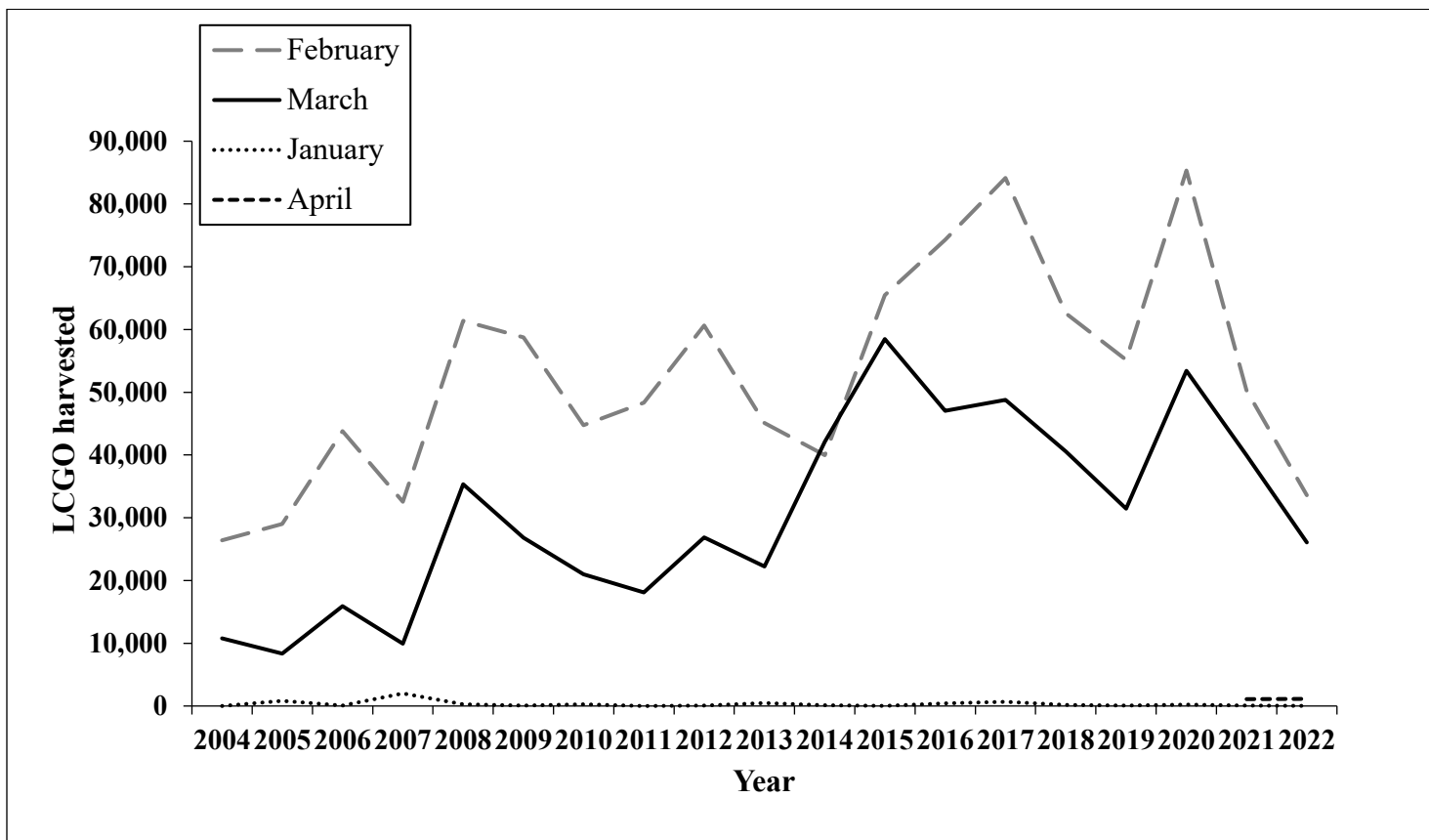


Figure E-1. Estimated number of LCGO harvested by month.* Due to changes in number of hunters sampled and calculation of estimates, comparisons to previous years' figures must be done with caution.

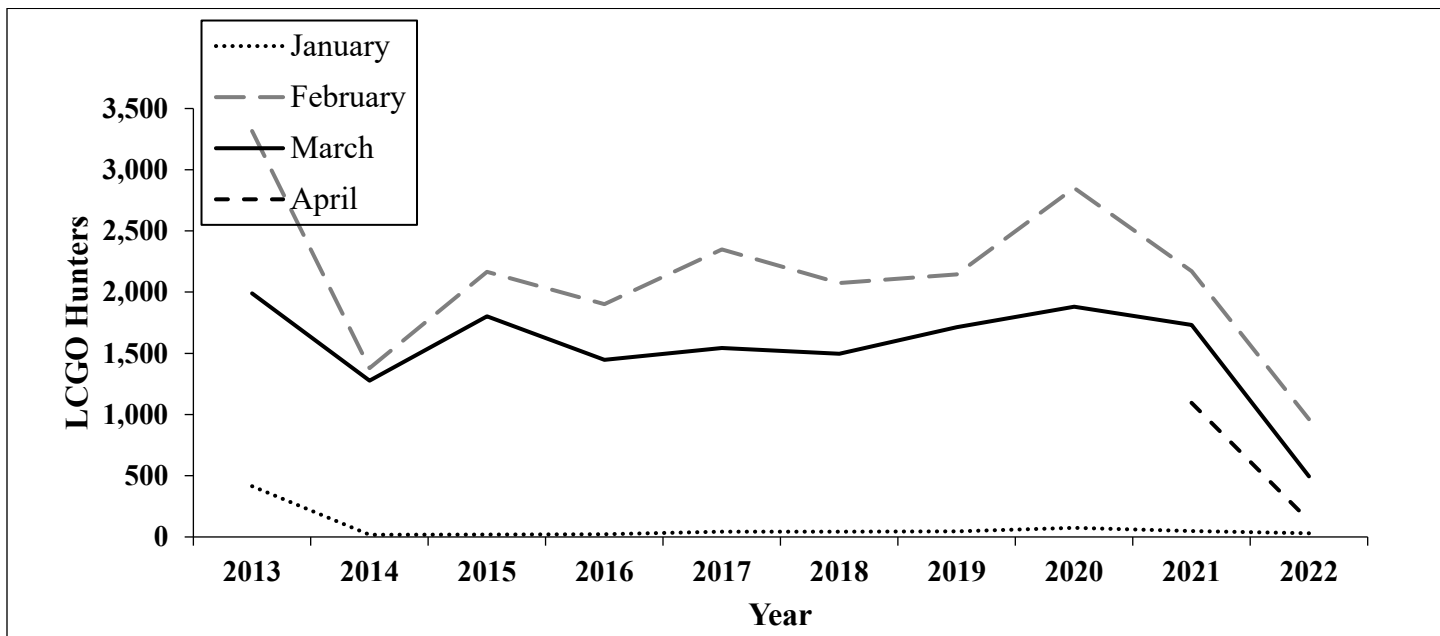


Figure E-2. Estimated number of LCGO hunters by month.* Due to changes in number of hunters sampled and calculation of estimates, comparisons to previous years' figures must be done with caution.

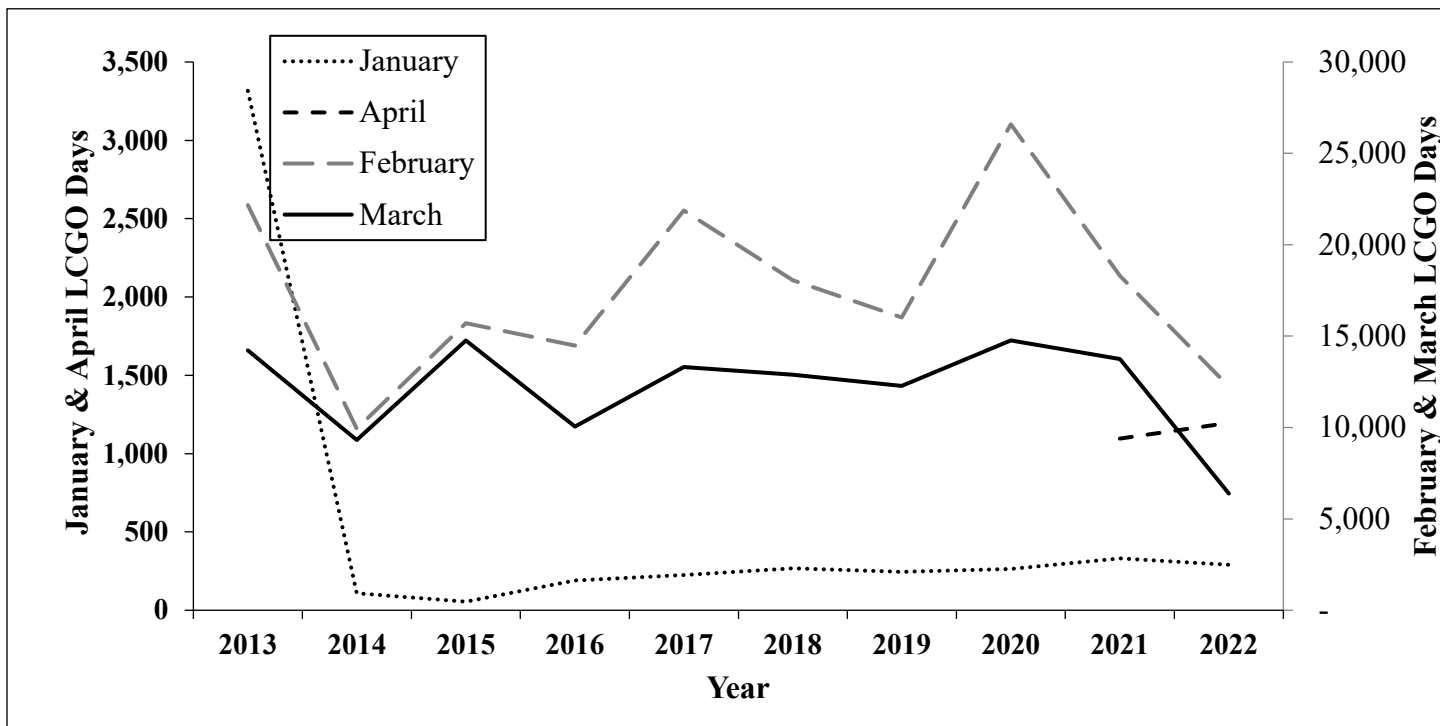


Figure E-3. Estimated number of days afield hunting LCGO by month.* Due to changes in number of hunters sampled and calculation of estimates, comparisons to previous years' figures must be done with caution.

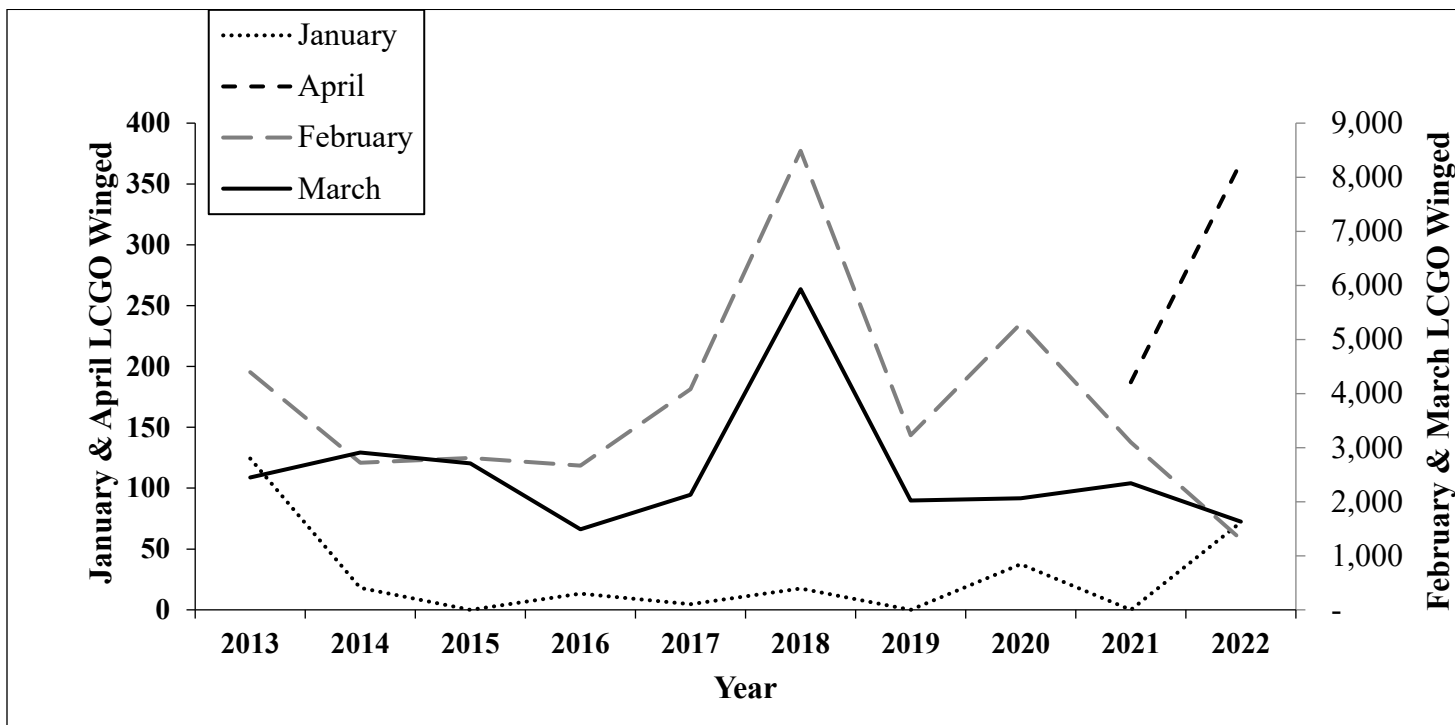


Figure E-4. Estimated number of hit but not retrieved LCGO by month.* Due to changes in number of hunters sampled and calculation of estimates, comparisons to previous years' figures must be done with caution.