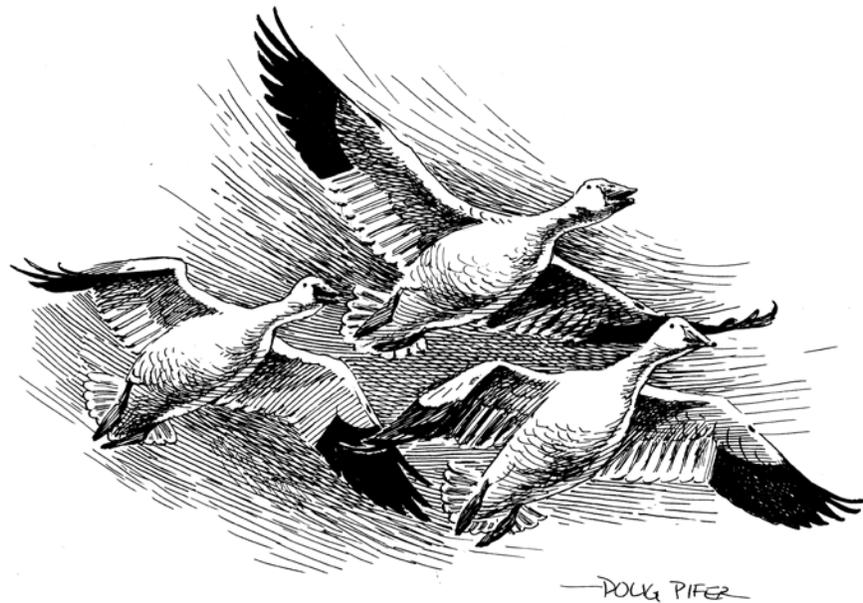


2013 Light Goose Conservation Season in
Pennsylvania
Harvest Summary Report



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Introduction

Over the past 3 decades the greater snow goose population has increased dramatically to nearly 1 million birds. The Atlantic Flyway Greater Snow Goose Management Plan (Atlantic Flyway Council 2009) calls for a population goal of 500,000 to 750,000 greater snow geese to bring the birds in balance with their natural habitats and associated biodiversity, and to reduce crop damage on wintering and staging areas.

Concern surrounding the overabundance of snow and Ross's goose populations and the problems associated with high populations of these birds prompted the U. S. Fish and Wildlife Service (USFWS) to develop a Light Goose Environmental Impact Statement (EIS) (USFWS 2007) aimed at addressing the overabundance of light geese. The Final EIS recommended federal regulations be modified to allow for additional hunting methods to increase harvest rates on snow geese and Ross's geese.

On November 5, 2008, the USFWS published a final rule (Federal Register 73:215) implementing a Conservation Order for light geese which included allowing the use of special hunting methods to increase the harvest of light geese across the country. Pennsylvania elected to participate in the Light Goose Conservation Season and state regulations were amended by the Board of Commissioners (BOC) in January 2009 to allow the use of electronic calls and extended hunting hours (to ½ hour after sunset). In addition, in January 2011 the BOC legalized electronic decoys (otherwise illegal under state regulations) for the conservation season only, beginning with the 2011 season.

Methods

As in 2012, season dates for the 2013 conservation season varied by goose hunting zone, in order to allow the expanded hunting methods to go into effect as soon as all other waterfowl seasons closed in a particular zone. Dates were as follows:

Atlantic Population (AP) Zone:	January 28 – April 26, 2013
Southern James Bay Population (SJBP) Zone:	January 19 – April 26, 2013
Resident Population (RP) Zone:	March 1 – April 26, 2013

The daily bag limit was 25 geese, with no possession limit. Additional hunting methods allowed included the use of electronic calls and decoys, and expanded hunting hours (½ hour after sunset). Unplugged guns were not permitted. Hunters were required to obtain a free Light Goose Conservation Permit either online or by mail. Along with the permit, all hunters were required to possess a general hunting license and a migratory game bird license (Harvest Information Program [HIP] registration), and those 16 and older were required to possess a federal duck stamp. Reporting of harvest and hunter activity was mandatory for all permit holders, even if they did not hunt, and harvest reports were due within 30 days of the close of the light goose conservation season.

In an effort to boost reporting rates, which had been declining from 2009-2012, we sent an e-mail reminder on June 6, 2013 to those permit holders: a) who had not responded within the

initial 30-day reporting period and b) for whom we had an e-mail address on file. Approximately 34% of initial non-respondents did not have an e-mail address in our license database and thus were not sent a reminder.

Results and Discussion

We issued 2,606 permits to hunters to participate in the 2013 Light Goose Conservation Season. This included 100 nonresident hunters. We received 698 reports by May 28 (26.8% initial reporting rate), and an additional 283 reports following distribution of the e-mail reminder for a total of 981 harvest reports (37.6% overall reporting rate).

Of the 981 reports received, 403 (41.1% of respondents) indicated they did not hunt at all during the conservation season. Of the 578 individuals that indicated they hunted during the conservation season their total retrieved harvest was 3,162 (Table 1). The additional hunting methods of extended hours, electronic calls, and electronic decoys resulted in a harvest (retrieved + unretrieved) of 457, 1,049, and 739 geese, respectively. Total hunter days were 2,051 and the number of geese bagged per hunter day was 1.54. Electronic calls were used for 32% of the snow geese taken (similar to the 2009-12 average) and electronic decoys were used for 22% of geese taken (31% in 2012), while extended hunting hours had less effect, with 14% of the total geese taken after sunset (2009-12 average was 11%). (It should be noted that these expanded methods categories are not mutually exclusive; for example, a goose taken after sunset while using both electronic calls and electronic decoys would be recorded as harvested under all 3 methods).

Respondents to the e-mail reminder accounted for 29% of total respondents, 20% of hunter days, and 17% of harvest. Although their per capita hunting activity and harvests were lower than those of initial respondents, they still accounted for a substantial amount of effort and harvest. Previously, we theorized that most non-respondents were non-participants, but the 2013 results suggest this is not the case and therefore that we have been underestimating participation and harvest from 2010-present. We have not attempted to introduce a correction factor, so the data presented herein reflects only actual reported activity and harvest (i.e., minimum estimates) and may not be completely comparable between years. We will investigate options to improve our harvest estimates and/or revise previous estimates as we prepare for the 2014 conservation season.

The conservation season has provided additional recreational opportunity for Pennsylvania hunters, and increased the harvest of greater snow geese in Pennsylvania, thus meeting the objectives of the Conservation Order. These effects are difficult to fully quantify in light of the reporting rate issues noted above, the limitations of USFWS HIP data at the individual state level, and the significant effects of annual weather variations on availability of snow geese for harvest in Pennsylvania. However, it is noteworthy that estimates of average total snow goose harvest (HIP regular season estimate + Pennsylvania Game Commission conservation season minimum estimate) in Pennsylvania for the first 5 years with a conservation season are 77% higher than those for the 5 years prior to initiation of the conservation season (Table 2).

Literature Cited

Atlantic Flyway Council. 2009. Management plan for Greater Snow Geese in the Atlantic Flyway. Snow Goose, Swan and Brant Committee of the Atlantic Flyway Migratory Game Bird Technical Section.

U. S. Fish and Wildlife Service. 2007. Final Environmental Impact Statement – Light Goose Management. Washington, D.C., USA.

Table 1. Number of permits issued, reports received, hunter days and number of geese taken by hunting method during the 2009 to 2013 Light Goose Conservation Season in Pennsylvania.

Year	Permits Issued	No. Hunted	% Hunted	Days Hunted	Geese Bagged	Geese Lost	After Sunset	W/ e ^a calls	W/ e ^a decoys
2009 ^b	3,276	1,724	53	3,840	5,903	317	736	1,522	- ^e
2010 ^c	3,107	668	21	2,409	2,985	141	330	1,101	- ^e
2011 ^c	3,401	900	26	2,959	5,197	259	475	1,845	Unknown ^f
2012 ^c	2,649	568	21	2,123	3,420	134	542	1,356	1,091
2013 ^d	2,606	578	22	2,051	3,162	162	457	1,049	739

^a e = electronic

^b Reporting reminder postcard sent; 89% reporting rate by permit holders

^c No reminders used; reporting rates by permit holders varied between 35-43%

^d Reporting reminder sent to non-respondents for whom we had an e-mail address; overall 38% reporting rate by permit holders

^e Method prohibited by state regulation

^f No data collected on this method during 2011 conservation season

Table 2. Snow goose harvest estimates for Pennsylvania, 2003-04 through 2012-13 hunting seasons.

Season	Regular Season Harvest Estimate ^a	Conservation Season Harvest Estimate ^b	Total Harvest Estimate	5-year average total harvest estimate
2003-04	5,700		5,700	8,200
2004-05	3,600		3,600	
2005-06	8,300		8,300	
2006-07	11,400		11,400	
2007-08	12,000		12,000	
2008-09	10,000	5,903	15,903	14,521
2009-10	6,800	2,985	9,785	
2010-11	2,200	5,197	7,397	
2011-12	21,738	3,420	25,158	
2012-13	11,200	3,162	14,362	

^a USFWS Harvest Information Program

^b Pennsylvania Game Commission data