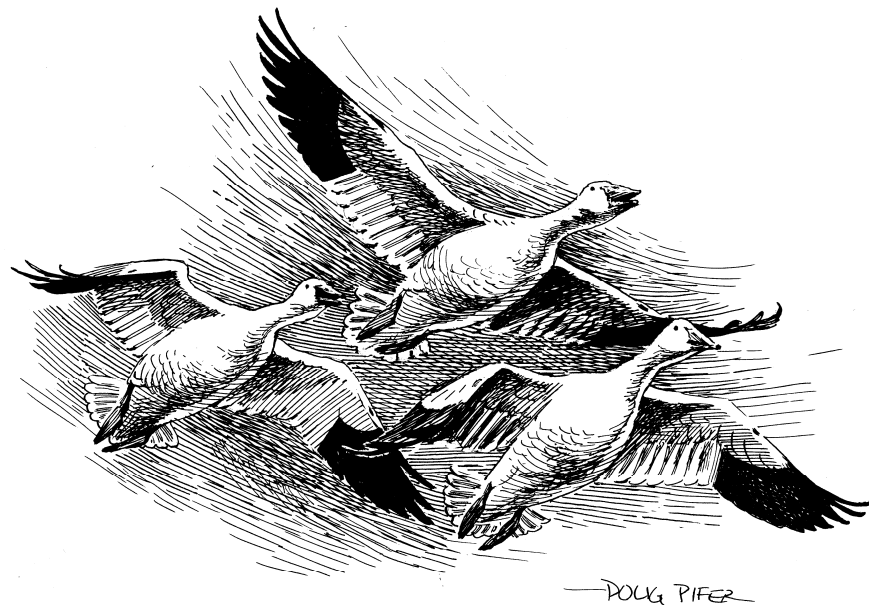


2023 Light Goose Conservation Season in
Pennsylvania
Harvest Summary Report



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May 25, 2023

Introduction

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) (U.S. Fish and Wildlife Service 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 Order 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) during the conservation order. In addition, in January 2011 the BOC legalized electronic decoys (otherwise prohibited under state regulations at that time) for the conservation season only, beginning with the 2011 season. (In September 2017 the BOC legalized electronic decoys for all waterfowl hunting seasons.)

Methods

As in 2012-2022, season dates for the 2023 conservation season varied by goose hunting zone, 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 30 – April 21, 2023
Resident Population (RP) Zone:	February 27 – April 21, 2023

The daily bag limit was 25 geese, with no possession limit. Additional hunting methods allowed included the use of electronic calls, and expanded hunting hours (½ hour after sunset). Unplugged guns were not permitted. Hunters were required to obtain a \$1.90 Light Goose Conservation Permit online. 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.

Compliance with the mandatory reporting requirement in Pennsylvania's conservation season declined each year from 2009-2012. To boost reporting rates, we used e-mail reminders from 2013-2021 (except 2018). In 2022, no email reminders were sent. A new reporting website was implemented in 2022 for all species. Additionally, in 2023, an online only survey was sent to anyone who purchased a Light Goose Conservation Permit and provided an email.

Results and Discussion

We issued 7,712 permits to hunters to participate in the 2023 Light Goose Conservation Season. This total was the highest total issued. In December 2019, permit acquisition was transitioned from a separate process on the Game Commission website to an “add-on” permit included as an option on the regular license purchase page. Because most hunting licenses are sold during summer and early fall, the 2021 conservation season was the first for which availability of permits was highly visible during peak general license purchase periods. In 2022, a new licensing website was implemented that further increased visibility. The record high number of permits issued is likely due to this higher visibility to license buyers. We received 1,921 participation / harvest reports (24.9% reporting rate).

Of the 1,921 reports received, 655 (34% of respondents or 9% of all permit holders, if non-respondents were assumed to be non-participants) indicated hunting during the conservation season. Their total retrieved harvest was 4,691 (Table 1). Total hunter days were 2,691 and the number of geese bagged per hunter day was 1.74.

Analyses conducted in 2013 and 2014 of the per capita hunting activity and harvests of permit holders reporting after the distribution of reminders compared to those of earlier respondents showed that assuming non-respondents to be non-participants is probably inaccurate. However, we have not attempted to introduce correction factors. Thus, the overall percentage of permit holders participating in the season is likely somewhere between the calculations of 9% based on all permit holders and the 34% based on reports received, and the harvest totals presented herein should be considered minimum estimates that may not be completely comparable between years.

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 annual total snow goose harvest (HIP regular season estimate + Pennsylvania Game Commission conservation season minimum estimate) in Pennsylvania for the first 14 years with a conservation season were 14% higher than those for the 9 years prior to initiation of the conservation season (Table 2).

Literature Cited

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 2023 Light Goose Conservation Season in Pennsylvania.

Year	Permits Issued	No. Hunted	% Hunted based on all permits	% Hunted based on reports submitted	Days Hunted	Grand Total Geese Bagged	Grand Total Geese Lost	After Sunset	W/ e ^a calls	W/ e ^a decoys
2009 ^b	3,276	1,724	53	59	3,840	5,903	317	736	1,522	- ^f
2010 ^c	3,107	668	21	50	2,409	2,985	141	330	1,101	- ^f
2011 ^c	3,401	900	26	69	2,959	5,197	259	475	1,845	Unknown ^g
2012 ^c	2,649	568	21	62	2,123	3,420	134	542	1,356	1,091
2013 ^d	2,606	578	22	59	2,051	3,162	162	457	1,049	739
2014 ^e	2,741	773	28	66	2,011	3,433	155	521	1,336	1,027
2015 ^e	2,661	806	30	66	2,260	4,684	147	475	1,452	1,130
2016 ^d	2,000	501	25	63	1,311	1,953	78	Unknown ^g	Unknown ^g	Unknown ^g
2017 ^d	1,632	351	22	62	1,043	1,852	62	Unknown ^g	Unknown ^g	Unknown ^g
2018 ^c	1,634	260	16	67	770	1,170	31	Unknown ^g	Unknown ^g	Unknown ^g
2019 ^d	1,656	417	25	70	1,046	2,240	81	Unknown ^g	Unknown ^g	Unknown ^g
2020 ^d	2,284	306	13	69	1,402	2,584	123	Unknown ^g	Unknown ^g	Unknown ^g
2021 ^d	3,993	379	10	52	1,264	2,955	157	Unknown ^g	Unknown ^g	Unknown ^g
2022 ^h	7,449	67	1	57	375	546	35	Unknown ^g	Unknown ^g	Unknown ^g
2023 ⁱ	7,712	655	9	34	2,691	4,691	254	Unknown ^g	Unknown ^g	Unknown ^g

^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 24-43%

^d Reporting reminder sent to non-respondents for whom we had an e-mail address; overall 18-40% reporting rate by permit holders

^e One reporting reminder sent to all permit holders for whom we had an e-mail address at the close of the season, and a second reporting reminder sent after the close of the mandatory reporting period to non-respondents for whom we had an e-mail address; overall 43-46% reporting rate by permit holders

^f Method prohibited by state regulation

^g No data collected on this method

^h No reminder email sent; new reporting system; reporting rate 1.51%

ⁱ Results include a summary of mandatory reports and online survey responses

Table 2. Snow goose harvest estimates for Pennsylvania, 1999-2000 through 2021-22 hunting seasons.

Season	Regular Season Harvest Estimate ^a	Conservation Season Harvest Estimate ^b	Total Harvest Estimate	Average total harvest estimate
1999-2000	4,700		4,700	7,111
2000-01	10,500		10,500	
2001-02	5,900		5,900	
2002-03	1,900		1,900	
2003-04	5,700		5,700	
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	8,290
2009-10	6,800	2,985	9,785	
2010-11	2,200	5,197	7,397	
2011-12	21,700	3,420	25,120	
2012-13	11,200	3,162	14,362	
2013-14	5,300	3,433	8,733	
2014-15	2,300	4,684	6,984	
2015-16	2,300	1,953	4,253	
2016-17	3,700	1,852	5,552	
2017-18	1,800	1,170	2,970	
2018-19	1,216	2,240	3,456	
2019-20	2,743	2,584	5,327	
2020-21	0	2,955	2,955	
2021-22	2,723	546	3,269	

^a USFWS Harvest Information Program

^b Pennsylvania Game Commission data