## Results of the 2024 Light Goose Conservation Order in Colorado

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The Colorado Division of Parks and Wildlife (CPW) established a conservation order for light geese in 1999. The conservation order area is the eastern plains of Colorado, east of Interstate 25. The conservation order period in 2024 was February 12–April 30. Shooting hours were from one-half hour before sunrise to one-half hour after sunset. There was no bag or possession limit. Electronic calls and unplugged shotguns were allowed. Participants were required to be registered for the Harvest Information Program (HIP) and to have a Colorado state duck stamp. All other federal and state regulations pertaining to the take of migratory birds were in effect during the conservation order.

A stratified random sample of 6,000 potential light goose hunters was drawn from among 2023-2024 HIP registrants. The sample was stratified into Harvest Information Program (HIP) registrants that responded they hunted light geese during the 2002-2023 season and conservation order but did not bag any light geese, light goose hunters that bagged 1-30 birds during 2022-2023, and light goose hunters that bagged >30 birds during 2022-2023. A post-season harvest survey was conducted by phone; individuals within the sample that provided email addresses when registering for HIP were sent email surveys as well.

A total of 1,757 (29% of the original sample) hunters responded to the survey. Estimates of hunter numbers, total hunter-days, and harvest in 2024 were lower than estimates in 2023, and lower than the 1999-2022 averages (Table 1). In 2024, the average light goose harvest per hunter was 12.1, higher than the 1999-2023 average of 9.3. The average number of days hunted per hunter in 2023 was 6.1, higher than the 1999-2022 average of 5.1 days. Estimates of hunter numbers, hunter-days, and harvest have remained stable or slightly increasing throughout the 24-year history of the light goose conservation order in Colorado (Figs. 1-3). In 2024, 75% of participants hunted north of Interstate 70 and harvested 73% of the total conservation order harvest, and 25% of participants hunted and harvested 27% of total geese south of I-70 in eastern Colorado.

Electronic calls were used by 23% of participants (398  $\pm$  89) and 41% of harvest was obtained using electronic calls. Sixteen percent of participants (266  $\pm$  24) hunted after sunset and 11% of the total harvest was obtained through hunting after sunset. Unplugged shotguns were used by 31% of participants (534  $\pm$  124) and 33% of total harvest was obtained using unplugged shotguns. Based on reported wounding loss by participants, we estimate that 815  $\pm$  70 light geese were wounded but not retrieved during the 2023 conservation order (7% of reported retrieved harvest).

In 2024, 75% of respondents indicated they were very likely and 23% responded they were somewhat likely to participate in a light goose conservation order if it is offered in future years.

Table 1. Estimates (± SE) of participation and harvest during the light goose conservation action in Colorado.

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Year	Hunters		Total-Hunter Days		Total Harvest		Electronic Calls		Sunset		Unplugged shotguns	
1999	1,638	(179)	6,709	(62)	13,417	(550)	Not permitted		Not permitted		Not permitted	
2000	3,276	(511)	15,316	(3,178)	31,783	(7,877)	17,441	(5,607)	3,364	(1,417)	Not permitted	
2001	2,495	(616)	8,836	(2,521)	22,457	(8,673)	16,671	(7,068)	2,060	(964)	Not permitted	
2002	1,323	(351)	5,016	(1,502)	7,594	(1,923)	3,445	(1,011)	1,153	(505)	Not permitted	
2003	2,162	(205)	10,193	(1,563)	27,395	(5,336)	19,828	(5,044)	3,658	(809)	Not permitted	
2004	1,877	(184)	8,547	(911)	24,497	(3,286)	13,467	(2,457)	3,051	(652)	Not permitted	
2005	1,281	(157)	6,593	(1,194)	16,135	(3,620)	12,417	(3,473)	1,886	(323)	Not permitted	
2006	2,704	(511)	12,568	(3,406)	18,535	(751)	8,357	(466)	2,338	(170)	Not permitted	
2007	2,367	(229)	10,847	(1,613)	23,375	(1,362)	16,041	(6,210)	3,509	(1,232)	Not perm	itted
2008	2,555	(250)	11,886	(1,595)	13,745	(1,268)	7,212	(896)	1,381	(233)	Not perm	itted
2009	1,951	(208)	8,744	(936)	23,072	(1,246)	15,190	(5,669)	6,485	(3,155)	Not permitted	
2010	1,899	(200)	8,829	(1,343)	11,473	(861)	6,149	(1,260)	2,058	(468)	2,443	(639)
2011	1,385	(157)	10,905	(1,884)	28,193	(1,853)	14,438	(4,651)	3,066	(974)	3,246	(655)
2012	1,847	(203)	8,659	(1,215)	18,971	(1,316)	13,168	(2,921)	1,916	(337)	2,785	(580)
2013	2,461	(285)	7,533	(1,027)	13,246	(868)	8,821	(1,963)	2,049	(586)	2,766	(1,157)
2014	3,555	(310)	25,311	(4,035)	34,216	(1,435)	14,774	(3,217)	3,878	(1,461)	7,956	(1,912)
2015	2,693	(298)	13,907	(1,996)	15,719	(732)	8,075	(2,525)	2,981	(1,148)	4,478	(2,171)
2016	2,933	(261)	16,903	(2,360)	23,499	(1,457)	10,613	(3,624)	1,750	(811)	7,415	(3,387)
2017	2,921	(275)	15,637	(2,356)	16,102	(611)	7,645	(2,132)	796	(489)	3,477	(1,211)
2018	2,821	(259)	18,076	(5,294)	56,647	(2,819)	18,021	(6,298)	1,396	(841)	28,542	(13,302)
2019	2,506	(223)	14,336	(2,128)	20,719	(893)	11,202	(3,434)	1,764	(1,057)	4,136	(2,293)
2020	2,075	(198)	11,154	(1,637)	16,813	(1,117)	3,564	(1,390)	550	(277)	3,974	(1,308)
2021	2,833	(286)	14,220	(1,946)	15,164	(600)	6,617	(1,752)	1,980	(688)	3,929	(1,201)
2022	2,787	(217)	15,997	(2,046)	23,226	(1,009)	9,557	(2,457)	3,018	(1,015)	4,535	(1,175)
2023	1,966	(169)	11,164	(1,701)	24,118	(1,678)	9,622	(3,468)	200	(126)	7,325	(2,619)
1999-2023 average	2,332		11,915		21,604		11,347		2,345		6,215	
2024	1,716	(260)	10,488	(2,526)	20,732	(1,598)	8,448	(2,022)	2,228	(894)	6,886	(1682)

Figure 1. Annual estimates of numbers of hunters participating in the light goose conservation order in Colorado, 1999-2024.

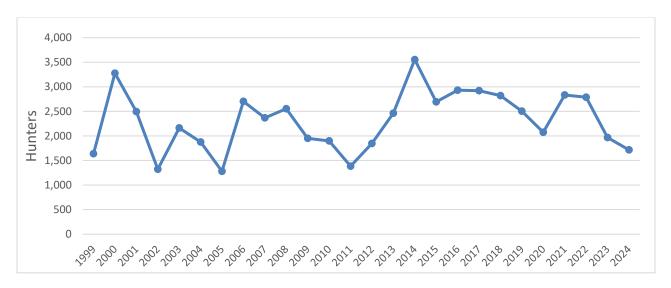


Figure 2. Annual estimates of numbers of the total number of hunter-days in the light goose conservation order in Colorado, 1999-2024.

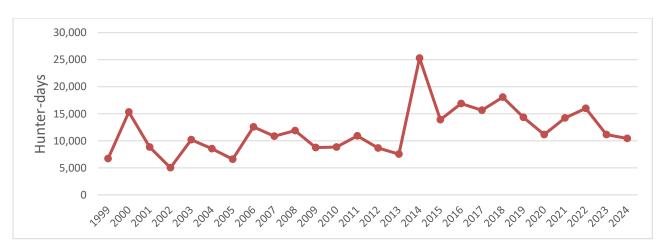


Figure 3. Annual estimates of total harvest in the light goose conservation order in Colorado, 1999-2024.

