

Results of the 2016 Light Goose Conservation Order in Colorado

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The Colorado Division of Wildlife (now Colorado Parks and Wildlife) established a conservation order for light geese in 1999. The conservation order period was again held in 2016 during February 15 – 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 4,500 potential light goose hunters was drawn from among 2015-2016 HIP registrants. The sample was stratified into HIP registrants that responded they did not hunt light geese during the 2014-2015 seasons and conservation order, light goose hunters that did not bag any light geese during 2014-2015, light goose hunters that bagged 1-30 birds during 2014-2015, and light goose hunters that bagged >30 birds during 2014-2015. 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 1,520 (34% of the original sample) hunters responded to the survey. In 2016, 77% of participants hunted north of Interstate 70 but harvested only 40% of the total conservation order harvest, and 23% hunted and harvested 60% of total geese south of I-70 in eastern Colorado. The 2016 estimates of hunter numbers, hunter days, and harvest were highest than in 2015 (Table 1); hunter numbers, days hunted, and harvest were higher than the 1999-2015 averages (2,204 hunters, 10,612 days, and 20,225 geese harvested). In 2016, the average harvest per hunter was 8.0 and the average number of days hunted per hunter was 5.8.

Electronic calls were used by 21% of participants (609 ± 119) and 45% of harvest was obtained using electronic calls. Twenty percent of participants (594 ± 118) hunted after sunset and 7% of the total harvest was obtained through hunting after sunset. Unplugged shotguns were used by 24% of participants (704 ± 129) and 32% of total harvest was obtained using unplugged shotguns. Based on reported wounding loss by participants, we estimate that $1,290 \pm 74$ light geese were wounded but not retrieved during the 2016 conservation order (13% of reported retrieved harvest).

In 2016, 60% of respondents indicated they were very likely and 31% responded they were somewhat likely to participate in a light goose conservation order if it is offered in future years.

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

Year	Hunters		Total-Hunter Days		Total Harvest		Harvest Using Electronic Calls	Harvest After Sunset		Harvest with 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 permitted
2008	2,555	(250)	11,886	(1,595)	13,745	(1,268)	7,212 (896)	1,381	(233)	Not permitted
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)