

Results of the 2019 Light Goose Conservation Order in Colorado

Jim Gammonley, Jon Runge, and Ed Gorman
Colorado Parks and Wildlife
5 July 2019

The Colorado Division of Parks and Wildlife 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 2019 was February 18 – 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 2018-2019 HIP registrants. The sample was stratified into HIP registrants that responded they did not hunt light geese during the 2017-2018 seasons and conservation order, light goose hunters that did not bag any light geese during 2017-2018, light goose hunters that bagged 1-30 birds during 2017-2018, and light goose hunters that bagged >30 birds during 2017-2018. 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 1,549 (34% of the original sample) hunters responded to the survey. Compared to 2018, the 2019 estimates of hunter numbers and days hunted during the conservation order period were slightly lower, and the estimate of harvest was substantially lower (Table 1). The 2019 estimates were higher than the 1999-2018 averages for hunter numbers (2,307) and days hunted (11,551), but lower than the 1999-2018 average for harvest (22,004). In 2019, the average harvest per hunter was 8.3 and the average number of days hunted per hunter was 5.7. In 2019, 76% of participants hunted north of Interstate 70 and harvested 51% of the total conservation order harvest, and 34% of participants hunted and harvested 49% of total geese south of I-70 in eastern Colorado.

Electronic calls were used by 22% of participants (540 ± 103) and 54% of harvest was obtained using electronic calls. Nineteen percent of participants (481 ± 94) hunted after sunset and 9% of the total harvest was obtained through hunting after sunset. Unplugged shotguns were used by 20% of participants (427 ± 92) and 50% of total harvest was obtained using unplugged shotguns. Based on reported wounding loss by participants, we estimate that $1,068 \pm 73$ light geese were wounded but not retrieved during the 2018 conservation order (14% of reported retrieved harvest).

In 2019, 62% 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)
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)