Results of the 2018 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 area is the eastern plains of Colorado, east of Interstate 25. The conservation order period in 2018 was February 19 – 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 2017-2018 HIP registrants. The sample was stratified into HIP registrants that responded they did not hunt light geese during the 2016-2017 seasons and conservation order, light goose hunters that did not bag any light geese during 2016-2017, light goose hunters that bagged 1-30 birds during 2016-2017, and light goose hunters that bagged >30 birds during 2016-2017. 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 1,552 (34% of the original sample) hunters responded to the survey. In 2018, 74% of participants hunted north of Interstate 70 and harvested 65% of the total conservation order harvest, and 34% of participants hunted and harvested 35% of total geese south of I-70 in eastern Colorado. Compared to 2017, the 2018 estimate of hunter numbers was similar, but hunters hunted more days and the estimate of harvest was substantially higher (Table 1); 2018 results were higher than the 1999-2017 averages for hunter numbers (2,280), days hunted (11,2017), and harvest (20,180). In 2018, the average harvest per hunter was 20.1 (a record high) and the average number of days hunted per hunter was 6.4.

Electronic calls were used by 25% of participants (705 \pm 145) and 32% of harvest was obtained using electronic calls. Twenty-six percent of participants (732 \pm 155) hunted after sunset and 2% of the total harvest was obtained through hunting after sunset. Unplugged shotguns were used by 31% of participants (863 \pm 159) and 50% of total harvest was obtained using unplugged shotguns. Based on reported wounding loss by participants, we estimate that 1,059 \pm 58 light geese were wounded but not retrieved during the 2018 conservation order (8% of reported retrieved harvest).

In 2018, 67% of respondents indicated they were very likely and 25% 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.

| | | | | | | | Harves | t Using | | | | st with ugged | |
|------|---------|-------|---------------|---------|---------|---------------|--------|----------------------------|-------|----------------------|---------------|------------------|--|
| Year | Hunters | | s Total-Hunto | | Total H | Total Harvest | | Electronic Calls | | Harvest After Sunset | | shotguns | |
| ' | | | | | | | | | | | | | |
| 1999 | 1,638 | (179) | 6,709 | (62) | 13,417 | (550) | Not pe | ot 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 pern | nitted | |
| 2005 | 1,281 | (157) | 6,593 | (1,194) | 16,135 | (3,620) | 12,417 | (3,473) | 1,886 | (323) | Not pern | nitted | |
| 2006 | 2,704 | (511) | 12,568 | (3,406) | 18,535 | (751) | 8,357 | (466) | 2,338 | (170) | Not pern | nitted | |
| 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) | |
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