LIGHT GOOSE CONSERVATION ORDER REPORT
2014

PERFORMANCE REPORT
STATEWIDE WILDLIFE RESEARCH AND SURVEYS

A Contribution of Pittman-Robertson Funds
Federal Aid in Wildlife Restoration

Grant W-39-R-20

Kansas Department of Wildlife, Parks & Tourism
Robin Jennison
Secretary

Prepared by
Tom Bidrowski
Migratory Game Bird Coordinator
&
Rich Schultheis
Migratory Game Bird Specialist

Joe Kramer, Director
Fisheries & Wildlife Division

Mike Mitchener, Chief
Wildlife Section

July 2014
PERMISSION TO QUOTE

This is an annual progress report that may contain information subject to future modification or revision. Persons wishing to quote from this report, for reproduction or reference, should first obtain permission from the Chief of the Wildlife Section, Kansas Department of Wildlife, Parks & Tourism, 512 SE 25th Avenue, Pratt, KS, 67124.

EQUAL OPPORTUNITY STATEMENT

This program receives Federal financial assistance from the U.S. Fish and Wildlife Service. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972, the U.S. Department of the Interior and its bureaus prohibit discrimination on the basis of race, color, national origin, age, disability or sex (in educational programs). If you believe that you have been discriminated against in any program, activity or facility, or if you desire further information, please write to:

The U.S. Fish and Wildlife Service
Office of Diversity and Civil Rights Programs - External Programs
4040 North Fairfax Drive, Suite 130
Arlington, VA, 22203
**Introduction**

In an effort to reduce the mid-continent light goose (MCLG) population, the United States Fish and Wildlife Service (FWS) issued a Conservation Order for MCLG in February 1999 (Federal Register 64(30): 7517-7529). The Conservation Order allows expanded measures, including electronic calls, unplugged shotguns, and extended shooting hours. States are required to collect information on the total number of participants, total number of birds killed, number of birds shot but not retrieved, and number of birds taken with each of the special methods of take allowed by the Order.

**Methods**

A paper survey was mailed to a sample of hunters who purchased a Kansas Waterfowl Stamp between July 1, 2013 and April 30, 2014. All waterfowl hunters 16 and older who are required to obtain a hunting license must also have a Kansas Waterfowl Stamp before hunting ducks, geese, or mergansers in the state.

The survey (Appendix A) asked hunters if they attempted to hunt during the 2014 Conservation Order, the county in which they primarily hunted, number of birds harvested, number of birds they shot but did not recover, and the number of days hunted. In addition, hunters were asked whether they used special hunting methods authorized by the Conservation Order (electronic calls, unplugged shotguns, and hunting after sunset) and to quantify the number of birds harvested with each method.

**Results**

*Licenses and Responses*

A total of 32,197 individuals between the ages of 16 and 74 purchased a Kansas Waterfowl Stamp between July 1, 2013 and April 30, 2014. A paper survey was mailed on May 1, 2014 to a randomly selected 2,531 stamp purchasers. A second mailing of 1,685 was sent out June 1, 2014 to the non-respondents. As of July 15, 2014 1,174 survey responses (46.4%) were received.

*Number of Light Goose Hunters in Kansas Conservation Order*

A total of 11.53% of the respondents indicated that they had participated in Kansas’s 2014 Light Goose Conservation Order. Extrapolation to the total number of waterfowl stamp purchasers yields a statewide estimate of Conservation Order participants of 3,697, which is an increase of 36.2% from the 2013 estimate and 105% above the long-term average. As displayed in Table 1, participation can greatly vary from year to year, likely resulting from variation in light goose numbers, distribution and length of spring stopover in Kansas.
Participant Activity in Kansas Conservation Order

Based on responses, a mean of 4.5 days per hunter and range of 1 to 35 days was spent afield during Kansas 2014 Light Goose Conservation Order. This is slightly below 2013 where the mean days per hunter were 5.0 and range of 1 to 30 days. Of the respondents, 77.4% hunted 1 to 5 days, 17.3% hunted 6 to 10 days, and 5.3% hunted 11 or more days (Figure 1). The extrapolated estimate of the number of days hunted in Kansas was 16,748, which was 22.7% greater than 2013 and 91.0% above the long-term average.

Hunting was reported in 50 of 105 Kansas counties. Jewell (8.2%), Brown (6.7%), Sedgwick (4.5%), and Barton (4.5%), were the most reported counties. This slightly differed from previous years where Miami, Butler, Harvey, and Mitchell were popular counties to participate in the Spring Conservation Order. Like hunter participation, hunt location can greatly vary from year to year, likely resulting from variation in light goose numbers, distribution and length of spring stopover in Kansas.

Harvest in Kansas Conservation Order

The mean seasonal bag (24.6 geese per hunter) was 3.1% lower than 2013. The seasonal bag per hunter in 2014 ranged from 0 to 604, with a median of 5.0 geese per hunter (Figure 2). The 2014 extrapolated estimate for statewide retrieved harvest is 90,990 geese, which is 31.9% greater than the 2013 season estimate (68,974 geese). An estimated 4,773 light geese were shot but not retrieved during the 2014 Light Goose Conservation Order. This brings the total estimated harvest (retrieved and unretrieved) for the 2014 Kansas Conservation season to 95,772, which is 32.2% greater than 2013.

Conservation Order Methods in Kansas Conservation Order

Hunter reported use of special methods allowed during the Conservation Order varied. Forty-four percent of hunters reported using electronic calls, 39.6% reported using unplugged shotguns, and 12.7% reported hunting after sunset. An estimated 1,628 hunters harvested 52,862 light geese by aid of electronic calls. An estimated 1,462 hunters used unplugged shotguns to harvest 19,809 geese with the 4th, 5th, or 6th shell, and an estimated 469 hunters harvested 5,739 geese after sunset. Electronic calls were used in 58.1% of the estimated retrieved take, unplugged shotguns in 21.8%, and after sunset 6.3%.
Figure 1. Distribution of number of participation days during the 2014 Light Goose Conservation Order, February 10 – April 30, 2014.

![Bar graph showing distribution of participation days](image1)

Figure 2. Distribution of seasonal take during the 2014 Light Goose Conservation Order, February 10 – April 30, 2014.

![Bar graph showing distribution of seasonal harvest](image2)
Table 1. Estimated take of light geese (Snow, Blue, and Ross’s) in Kansas, during the Light Goose Conservation Order, 2000-2014.

<table>
<thead>
<tr>
<th>Year</th>
<th>Dates</th>
<th>No. of Hunters</th>
<th>Hunter Days</th>
<th>Electronic Calls</th>
<th>No. of Hunters</th>
<th>Harvest</th>
<th>Unplugged Guns</th>
<th>No. of Hunters</th>
<th>Harvest</th>
<th>After Sunset</th>
<th>No. of Hunters</th>
<th>Harvest</th>
<th>Unretrieved Harvest</th>
<th>Total Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Mar 11 - Apr 30</td>
<td>2,207</td>
<td>9,528</td>
<td>201</td>
<td>651</td>
<td>402</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,165</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>Feb 5 - Apr 30</td>
<td>1,798</td>
<td>7,354</td>
<td>187</td>
<td>819</td>
<td>174</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,937</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>Feb 4 - Apr 30</td>
<td>1,939</td>
<td>10,704</td>
<td>413</td>
<td>980</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35,138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Feb 3 - Apr 30</td>
<td>1,579</td>
<td>8,100</td>
<td>473</td>
<td>717</td>
<td>183</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17,087</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Feb 2 - Apr 30</td>
<td>3,270</td>
<td>15,548</td>
<td>969</td>
<td>1,582</td>
<td>361</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65,608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>Feb 7 - Apr 30</td>
<td>1,400</td>
<td>8,679</td>
<td>450</td>
<td>876</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25,272</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>Feb 13 - Apr 30</td>
<td>1,575</td>
<td>7,136</td>
<td>282</td>
<td>845</td>
<td>253</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18,802</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Feb 12 - Apr 30</td>
<td>863</td>
<td>2,509</td>
<td>261</td>
<td>393</td>
<td>131</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12,711</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>Feb 18 - Apr 30</td>
<td>354</td>
<td>1,193</td>
<td>167</td>
<td>40</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,260</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Feb 16 - Apr 30</td>
<td>931</td>
<td>3,613</td>
<td>237</td>
<td>426</td>
<td>132</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Feb 15 - Apr 30</td>
<td>1,024</td>
<td>6,367</td>
<td>325</td>
<td>5,424</td>
<td>536</td>
<td>3,734</td>
<td>228</td>
<td>1,692</td>
<td></td>
<td></td>
<td>853</td>
<td>15,244</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Feb 14 - Apr 20</td>
<td>1,753</td>
<td>9,098</td>
<td>673</td>
<td>23,258</td>
<td>754</td>
<td>11,659</td>
<td>347</td>
<td>2,202</td>
<td></td>
<td></td>
<td>53,863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Feb 13 - Apr 30</td>
<td>1,944</td>
<td>11,273</td>
<td>666</td>
<td>33,534</td>
<td>958</td>
<td>22,572</td>
<td>237</td>
<td>6,142</td>
<td></td>
<td></td>
<td>2,436</td>
<td>62,092</td>
<td></td>
</tr>
<tr>
<td>2013*</td>
<td>Feb 11 - Apr 30</td>
<td>2,715</td>
<td>13,654</td>
<td>780</td>
<td>32,958</td>
<td>1,030</td>
<td>10,924</td>
<td>312</td>
<td>7,834</td>
<td></td>
<td></td>
<td>3,473</td>
<td>72,447</td>
<td></td>
</tr>
<tr>
<td>2014*</td>
<td>Feb 10 – Apr 30</td>
<td>3,697</td>
<td>16,748</td>
<td>1,916</td>
<td>52,866</td>
<td>1,462</td>
<td>19,811</td>
<td>469</td>
<td>5,739</td>
<td></td>
<td></td>
<td>4,773</td>
<td>95,772</td>
<td></td>
</tr>
</tbody>
</table>

Long-term Average (LTA) 1,803 8,767 533 29,608 805 13,740 232 4,722 3,371 34,221
% Change from LTA 105% 91% 259% 79% 82% 44% 102% 22% 42% 180%
% change from previous +36% +23% +146% +60% +42% +81% +50% -27% +37% +32%

*Sample of survey participants were drawn Kansas Waterfowl Stamp instead of Kansas Harvest Information Program.
Dear Waterfowl Hunter:

We need your assistance in obtaining harvest and hunter activity information for this past spring’s Light Goose Conservation Order Season (February 10 through April 30, 2014). This information is a federal requirement that must be met to conduct this season. Please complete and return this short survey, even if you did not hunt or did not harvest any geese during this season. Only report light geese (snow goose, blue goose, and Ross’ goose) you took during the Conservation Order Season in Kansas on this form. To eliminate the need for additional mailings, please return the completed survey in the stamped, self-addressed envelope provided by June 1st. The survey can also be completed online at https://www.surveymonkey.com/s/lightgoose2014.

1. Did you attempt to hunt during the 2014 Light Goose Conservation Order Season in Kansas?
   - ☐ NO, I did not hunt light geese in the 2014 Conservation Order Season in Kansas.
     *End of survey; please return survey in envelope provided*
   - ☐ YES, I hunted light geese in the 2014 Conservation Order Season in Kansas.
     *Please respond to all questions below and return survey in envelope provided*

2. How many days did you hunt light geese in Kansas between February 10 and April 30, 2014? ______

3. How many light geese did you harvest in Kansas from February 10 through April 30, 2014? ______

4. How many geese did you shoot but were unable to retrieve? __________

5. County where you did most of your light goose hunting during the 2014 Light Goose Conservation Order Season in Kansas? ____________________________

6. Did you use electronic callers?  ☐ YES  ☐ NO
   ________ Number of geese harvested while using electronic callers

7. Did you use unplugged shotguns?  ☐ YES  ☐ NO
   ________ Number of geese harvested with the 4th, 5th, or 6th shell

8. Did you hunt light geese after sunset?  ☐ YES  ☐ NO
   ________ Number of geese harvested after sunset

Thank you for your cooperation!