SUMMARY OF THE 2017 KANSAS’ LIGHT GOOSE CONSERVATION ORDER

PERFORMANCE REPORT
STATEWIDE WILDLIFE RESEARCH AND SURVEYS
A Contribution of Pittman-Robertson Funds
Federal Aid in Wildlife Restoration
Grant W-39-R-23

Kansas Department of Wildlife, Parks & Tourism

Robin Jennison
Secretary

Keith Sexson
Assistant Secretary
Wildlife, Fisheries, and Boating

Jake George
Wildlife Division Director

Rich Schultheis
Wildlife Research Supervisor

Prepared by
Tom Bidrowski
Migratory Game Bird Program Manager

June 2017
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 methods (electronic calls and unplugged shotguns) of taking light geese, allows shooting hours for light geese to end one-half hour after sunset, and imposes no daily bag limits for light geese inside or outside the migratory bird hunting season frameworks. States participating in the Conservation Order are required to collect information on participation and total take under the Conservation Order.

**METHODS**

A one-page paper survey (Appendix A) was mailed to a sample of hunters who purchased a Kansas Waterfowl Stamp between July 1, 2016 and April 30, 2017. This sampling includes all waterfowl hunters 16 and older who are required to obtain a hunting license and Kansas Waterfowl Stamp before hunting ducks, geese, or mergansers in the state. The survey asked stamp purchasers if they attempted to pursue light geese during the 2017 Conservation Order, and if so 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.

**RESULTS**

**Licenses Sales and Survey Responses**

A total of 32,218 Kansas Waterfowl Stamps were purchased between July 1, 2016 and April 30, 2017 (a 7% decrease from previous year but 11% above the long-term average) from which a randomly drawn sample of 3,500 stamp purchasers were mailed a questionnaire on May 1, 2017. A second mailing of 2,330 was sent out May 30, 2017 to the non-respondents of the first mailing. As of July 1, 2017, 1,762 survey responses (50.3% response rate) were received.

**Number of Light Goose Hunters in Kansas Light Goose Conservation Order**

A total of 7.5% of the respondents indicated that they had participated in Kansas’s 2017 Light Goose Conservation Order. Extrapolation to the total number of waterfowl stamp purchasers yields a statewide estimate of Conservation Order participants of 2,430, which is a similar to 2016 participation (2,475) but is 23.1% above the long-term average (1,974). 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 Light Goose Conservation Order**

Based on responses, a mean of 4.1 days per hunter and a range of 1 to 21 days were spent afield during Kansas 2017 Light Goose Conservation Order. This is above 2016 where the mean days per hunter were 3.1 and but the range was the same of 1 to 25 days. Of the respondents, 79.7% hunted 1 to 5 days, 15.4% hunted 6 to 10 days, and 4.9% hunted 11 or more days (Figure 1). The 2017 extrapolated estimate of the number of days hunted in Kansas was 9,765, which was 25.6% more than 2016 and 8.0% above the long-term average.

Hunting was reported in 43 of 105 Kansas counties. Brown (10.0%), Barton (8.8%), Jewell (6.3%), Mitchell (5.0%), and Reno (5.0%) were the most reported counties, similar to previous year. 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 Light Goose Conservation Order**

The mean seasonal bag (18.5 geese per hunter) was 13.5% greater than 2016. The seasonal bag per hunter in 2017 ranged from 0 to 500 (Figure 2), with a median of 3.0 geese per hunter. The 2017 extrapolated estimate for statewide retrieved harvest is 44,521 geese, which is 10.4% more than the 2016 season estimate. An estimated 980 light geese were shot but not retrieved during the 2017 Light Goose Conservation Order; this was a decrease of 8.6% to the 2016 unretrieved estimate. This brings the total estimated harvest (retrieved and unretrieved) for the 2017 Kansas Conservation season to 45,501, which is 9.9% more than 2016 and 23.6% above the long term average.
Figure 1. Distribution of number of participation days during the 2017 Light Goose Conservation Order, February 13 – April 30, 2017.

Figure 2. Distribution of seasonal take during the 2017 Light Goose Conservation Order, February 13 – April 30, 2017.
Table 1. Estimated take of light geese (Snow, Blue, and Ross's) in Kansas during the Light Goose Conservation Order, 2000-2016.

<table>
<thead>
<tr>
<th>Year</th>
<th>Dates</th>
<th>No. of Hunters</th>
<th>Hunter Days</th>
<th>No. of Hunters</th>
<th>Harvest</th>
<th>No. of Hunters</th>
<th>Harvest</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>–</td>
<td>651</td>
<td>–</td>
<td>402</td>
<td>–</td>
<td>–</td>
<td>11,165</td>
</tr>
<tr>
<td>2002</td>
<td>Feb 4 – Apr 30</td>
<td>1,939</td>
<td>10,704</td>
<td>413</td>
<td>–</td>
<td>980</td>
<td>–</td>
<td>185</td>
<td>–</td>
<td>–</td>
<td>35,138</td>
</tr>
<tr>
<td>2003</td>
<td>Feb 3 – Apr 30</td>
<td>1,579</td>
<td>8,100</td>
<td>473</td>
<td>–</td>
<td>717</td>
<td>–</td>
<td>183</td>
<td>–</td>
<td>–</td>
<td>17,087</td>
</tr>
<tr>
<td>2004</td>
<td>Feb 2 – Apr 30</td>
<td>3,270</td>
<td>15,548</td>
<td>969</td>
<td>–</td>
<td>1,582</td>
<td>–</td>
<td>361</td>
<td>–</td>
<td>–</td>
<td>65,608</td>
</tr>
<tr>
<td>2005</td>
<td>Feb 7 – Apr 30</td>
<td>1,400</td>
<td>8,679</td>
<td>450</td>
<td>–</td>
<td>876</td>
<td>–</td>
<td>53</td>
<td>–</td>
<td>–</td>
<td>25,272</td>
</tr>
<tr>
<td>2006</td>
<td>Feb 13 – Apr 30</td>
<td>1,575</td>
<td>7,136</td>
<td>282</td>
<td>–</td>
<td>845</td>
<td>–</td>
<td>253</td>
<td>–</td>
<td>–</td>
<td>18,802</td>
</tr>
<tr>
<td>2007</td>
<td>Feb 12 – Apr 30</td>
<td>863</td>
<td>2,509</td>
<td>261</td>
<td>–</td>
<td>393</td>
<td>–</td>
<td>131</td>
<td>–</td>
<td>–</td>
<td>12,711</td>
</tr>
<tr>
<td>2008</td>
<td>Feb 18 – Apr 30</td>
<td>354</td>
<td>1,193</td>
<td>167</td>
<td>–</td>
<td>40</td>
<td>–</td>
<td>11</td>
<td>–</td>
<td>–</td>
<td>4,260</td>
</tr>
<tr>
<td>2009</td>
<td>Feb 16 – Apr 30</td>
<td>931</td>
<td>3,613</td>
<td>237</td>
<td>–</td>
<td>426</td>
<td>–</td>
<td>132</td>
<td>–</td>
<td>–</td>
<td>11,924</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>853</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>53,863</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>62,092</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>3,473</td>
<td>72,447</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>4,773</td>
<td>95,772</td>
</tr>
<tr>
<td>2015*</td>
<td>Feb 16 – Apr 30</td>
<td>3,584</td>
<td>13,659</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>4,115</td>
<td>55,271</td>
</tr>
<tr>
<td>2016*</td>
<td>Feb 15 – Apr 30</td>
<td>2,475</td>
<td>7,777</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,072</td>
<td>41,416</td>
</tr>
<tr>
<td>2017*</td>
<td>Feb 13 – Apr 30</td>
<td>2,430</td>
<td>9,765</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>980</td>
<td>45,501</td>
</tr>
</tbody>
</table>

Long-term Average (LTA) 1,974 9,073 533 29,608 805 13,740 232 4,722 2,878 36,813
% Change from LTA 23.1% 8.0% – – – – – – –65.9% 23.6%
% change from previous -1.8% 25.6% – – – – – – –8.6% 9.9%

*Sample of survey participants were drawn from Kansas Waterfowl Stamp instead of Kansas Harvest Information Program.

**Special Harvested Methods were not offered prior to 2010. After 2014, harvest information reporting was no longer required.
Appendix A. Kansas 2017 Light Goose Conservation Order Survey

May 1, 2017

<<Name>>
<<Address1>> <<Address2>>
<<City>> <<State>>
<<Zip>>

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 13 through April 30, 2017). 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 geese, blue geese, and Ross’ geese) 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.research.net/r/lightgoose2017

1. Did you attempt to hunt during the 2017 Light Goose Conservation Order Season in Kansas?
   □ NO, I did not hunt during the 2017 Conservation Order Season in Kansas.
   If NO, END OF SURVEY; PLEASE RETURN SURVEY IN ENVELOPE PROVIDED
   □ YES, I hunted light geese in the 2017 Conservation Order Season in Kansas.
   If YES, PLEASE RESPOND TO ALL QUESTIONS BELOW AND RETURN SURVEY IN ENVELOPE PROVIDED

2. How many days did you hunt light geese between February 13 and April 30, 2017 in Kansas? _____

3. How many light geese did you harvest from February 13 through April 30, 2017 in Kansas? _____

4. How many geese did you shoot but were unable to retrieve from February 13 through April 30, 2017 in Kansas? ____________

5. County where you did most of your light goose hunting during the 2017 Light Goose Conservation Order Season in Kansas? ________________________

Thank you for your cooperation!