The spring turkey hunter survey is conducted each year at the end of the spring season. The season closed on 31 May 2019. The objective of the survey is to obtain information on the spring turkey harvest and success. Information on age and sex composition of the harvest is also obtained and is reported elsewhere. This year’s survey was available to hunters from 14 June 2019 until 28 June 2019. A full summary of hunter responses is provided in a separate report, *Spring 2019 Turkey Hunter Survey Report*.

### Caveats
The Spring Wild Turkey Hunter Survey samples spring turkey hunters who provided valid email addresses at the time they purchased their permit(s). As such, the sample frame may be biased and not strictly generalizable to the population of all spring turkey hunters. For the spring 2019 season, however, 72.2% of unique permits sold were associated with an email address. A reminder email was sent to all non-respondents one week after the initial invitation was sent, but no further attempts were made to contact hunters who failed to respond to the survey. Therefore, results might be biased toward successful hunters, if successful hunters respond more readily to harvest surveys. There is some evidence of response bias with respect to residency, sex, and age. Non-residents and men were over represented among respondents, and respondents were older compared to all permit buyers or the survey sample (Table 1).

### Interpretations
Permit sales for the spring 2019 season were 5.8% lower than the spring of 2018. Youth permits (3,541 permits) sales fell 11.6% and regular statewide permit (24,793 permits) sales fell 4.9% compared to spring 2018 (4,004 youth and 26,058 regular permits). Youth permits continue to be a strong component of overall spring permit sales, comprising 12.7% of the total permits sold for the spring 2019 season. Spring 2019 harvest was 2.3% higher than spring 2018 harvest (17,731), with an estimated total harvest of 18,131 turkeys in 2019. Overall harvest success was 64.0% for spring 2019, compared to 58.9% for spring 2018. Spring 2019 success rates were above the management goal for spring harvest success of 50%.

**Take-home Message** Spring turkey hunters continue to enjoy a high rate of success in Nebraska, but fewer turkeys were harvested during the spring 2019 season compared to 2018. Although still strong sellers, youth permit sales dropped again compared to 2018. Non-resident hunters were more successful than their native Nebraskan counterparts were.

### Methods
This year’s survey was composed and administered in-house using Snap Survey development software (Snap v11) and Snap Webhosting service. An initial invitation to participate in the survey for the spring 2019 season was sent to 15,726 permit buyers (72.2% of unique permit buyers), but 630 were bounced back as undeliverable, giving an effective sample size of 15,096 permitted hunters. Initial invitations were emailed on 14 June 2019, and a reminder email was sent to all non-responding hunters on 21 June 2019. The survey was closed on 28 June 2019. The survey was also available on the NGPC website for hunters who did not have valid emails associated with their permits. The website survey was open over the same period as the invitation-only version. At the end of the survey period, responses had been received from 2,807 spring turkey hunters, representing 4,050 individual permits for the spring 2019 season. The raw response rate was, therefore, 18.6% and the permit response rate was 26.8%. Each survey respondent represented 7.8 spring 2019 permit buyers.

### Results
Permit sales for the spring 2019 season (n = 28,334) were 5.8% lower than spring 2018 sales (n = 30,081; Figure 1). Of permits sold, 3,541 (12.7%) were youth permits and 24,793 were statewide regular permits. Youth permits sales were 11.6% lower than in 2018 (n = 4,004), and statewide regular permit sales were 4.9% lower than in 2018 (n = 26,058). Of all unique permit buyers (n = 21,784), 76.4% bought only one permit, 17.2% bought two permits, and 6.4% bought three permits. Estimated total turkey harvest for the spring 2019 season was 18,131 turkeys. Of these, 1,297 were harvested on youth permits and 16,834 were harvested on regular statewide permits (Table 2, Figure 2). Overall, harvest was 2.3% higher during the spring 2019 season compared to spring
2018. Success during the spring 2019 season was 64.0%, with youth success lower at 36.6% and regular permit holders’ success higher at 67.9% (Figure 3). Table 3 summarizes the 2019 spring season results.

**TABLE 1.** Comparison of demographic factors among all permit buyers, permit holders sampled, and survey respondents for the spring 2019 turkey hunter survey.

<table>
<thead>
<tr>
<th>Demographic Factor</th>
<th>Permit Buyers</th>
<th>Permits Sampled</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>Resident</td>
<td>58.1%</td>
<td>55.7%</td>
</tr>
<tr>
<td></td>
<td>Non-resident</td>
<td>41.9%</td>
<td>44.3%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>93.0%</td>
<td>93.5%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Female</td>
<td>7.0%</td>
<td>6.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>38</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Mean</td>
<td>39.5</td>
<td>40.9</td>
<td>48.1</td>
</tr>
<tr>
<td>% Youth Permits</td>
<td>12.7%</td>
<td>9.9%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Type</th>
<th>Statistic</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shotgun/</td>
<td>Permits</td>
<td>30,760</td>
<td>28,854</td>
<td>28,724</td>
<td>28,899</td>
<td>28,352</td>
<td>26,058</td>
<td>24,793</td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>Harvest</td>
<td>19,040</td>
<td>16,707</td>
<td>17,378</td>
<td>20,143</td>
<td>18,569</td>
<td>16,301</td>
<td>16,834</td>
</tr>
<tr>
<td>Regular</td>
<td>Success</td>
<td>61.9%</td>
<td>57.9%</td>
<td>60.5%</td>
<td>69.7%</td>
<td>67.5%</td>
<td>64.7%</td>
<td>67.9%</td>
</tr>
<tr>
<td>Youth</td>
<td>Permits</td>
<td>6,144</td>
<td>5,576</td>
<td>5,416</td>
<td>4,932</td>
<td>4,822</td>
<td>4,004</td>
<td>3,541</td>
</tr>
<tr>
<td>Youth</td>
<td>Harvest</td>
<td>2,402</td>
<td>2,253</td>
<td>2,616</td>
<td>1,993</td>
<td>1,862</td>
<td>1,430</td>
<td>1,297</td>
</tr>
<tr>
<td>Youth</td>
<td>Success</td>
<td>39.1%</td>
<td>40.4%</td>
<td>48.3%</td>
<td>40.4%</td>
<td>41.5%</td>
<td>37.2%</td>
<td>36.6%</td>
</tr>
</tbody>
</table>

**FIGURE 1.** Spring turkey permit sales, 1964-2019.

Spring Turkey Permit Sales
1964 through 2019

<table>
<thead>
<tr>
<th>Residency</th>
<th>Permit Type</th>
<th>Permits Sold</th>
<th>Survey Permits</th>
<th>Reported Harvest</th>
<th>Success Rate</th>
<th>Estimated Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>Youth</td>
<td>2,561</td>
<td>239</td>
<td>89</td>
<td>37.2%</td>
<td>953</td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>12,400</td>
<td>1,577</td>
<td>957</td>
<td>60.7%</td>
<td>7,527</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>14,961</td>
<td>1,816</td>
<td>1,046</td>
<td>56.7%</td>
<td>8,480</td>
</tr>
<tr>
<td>Non-resident</td>
<td>Youth</td>
<td>980</td>
<td>154</td>
<td>54</td>
<td>35.1%</td>
<td>344</td>
</tr>
<tr>
<td></td>
<td>Regular</td>
<td>12,393</td>
<td>2,080</td>
<td>1,562</td>
<td>75.1%</td>
<td>9,307</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>13,373</td>
<td>2,234</td>
<td>1,616</td>
<td>72.2%</td>
<td>9,651</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>28,334</td>
<td>4,050</td>
<td>2,662</td>
<td>64.0%</td>
<td>18,131</td>
</tr>
</tbody>
</table>
