2017 Pronghorn Production Surveys

PERFORMANCE REPORT
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2017 Pronghorn Production Surveys

Matt Peek
Pronghorn program coordinator

The 2017 aerial pronghorn production surveys have been completed. Total numbers of pronghorn observed in each pronghorn hunting unit and their respective buck:doe:fawn ratios are presented in Table 1. Survey routes and location of pronghorn observations for hunting units 2, 17 and 18 are provided in Figures 1-3, respectively. Trends in buck:doe and doe:fawn ratios since 2001 can be found in Figures 4 and 5.

We attempt to maintain a buck ratio of 35 bucks per 100 does. The combined total in all units fell just below this objective. With a larger sample than the other units, Unit 2 has the greatest influence on this total and happened to be the same as the combined total (34:100). For two of the last three years, the ratios in Unit 17 were the highest and hunting forecast in this unit appears best. Ratios in Unit 18 remained the lowest and below objective for the past 4 years. Limited draw permits were reduced in this unit for 2017.

Fawn ratios decreased substantially in Unit 2, increased in Unit 17, and were stable in Unit 18. Fawn ratios don’t greatly influence hunter satisfaction with the current year’s hunt (though they do influence number of pronghorn observed in a given year), but serve as a predictor of future opportunity. Units 2 and 17 have both seen good fawn production in recent years and it appears some of this good production has been realized in the form of increased buck harvest. Conversely, production has remained low in Unit 18 and is partly responsible for the current low buck ratios and reduced harvest opportunity.

Traditional production surveys are not intended to determine population size, but rather to evaluate sex and age ratios of the population. Due to smaller average herd size and habitat conditions, pronghorn visibility is lower than during winter counts. This survey may also be conducted when conditions are less suitable for observing pronghorn than permitted in winter (i.e. during midday or when there’s cloud cover).

<table>
<thead>
<tr>
<th>Unit</th>
<th>Ratio</th>
<th>Actual Number</th>
</tr>
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<tr>
<td></td>
<td>Bucks</td>
<td>Does</td>
</tr>
<tr>
<td>2</td>
<td>34</td>
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</tr>
<tr>
<td>17</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>18</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100</td>
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</table>

Table 1. Results of summer 2017 aerial pronghorn production survey for each pronghorn hunting unit.
Location and number of pronghorn observed

2017 Summer Route

Figure 1. Unit 2 – Survey area and pronghorn observations (Sherman, Wallace, Thomas and Logan Counties).
Figure 2. Unit 17 – Survey route and pronghorn observations (Hamilton & Greeley Counties).
Location and number of pronghorn observed

2017 Summer Route

Figure 3. Unit 18 – Survey route and pronghorn observations (Morton County).
Figure 4. Number of pronghorn bucks per 100 does for each unit since 2001, and total annual buck harvest.

Figure 5. Number of pronghorn fawns per 100 does for each unit since 2001.