2023 Pronghorn Production Surveys

PERFORMANCE REPORT STATEWIDE WILDLIFE RESEARCH AND SURVEYS

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

Grant W-39-R-29

Kansas Department of Wildlife, Parks and Tourism

Brad Loveless Secretary

Prepared by

Matt Peek Wildlife Research Biologist

Jake George Wildlife Division Director Rich Schultheis Wildlife Research Supervisor





2023 Pronghorn Production Surveys

Matt Peek Pronghorn program coordinator

The 2023 aerial pronghorn production surveys have been completed. These surveys are conducted in each of the three pronghorn hunting units with a target date range of July 15-31, but pushing into the first half of August as needed. These surveys are intended to evaluate sex and age ratios of the population and are not intended to be population estimates. With smaller average herd size and habitat conditions typically less favorable for observing pronghorn, pronghorn visibility is lower during production surveys than during the winter counts, which have traditionally been used to determine population size.

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**.

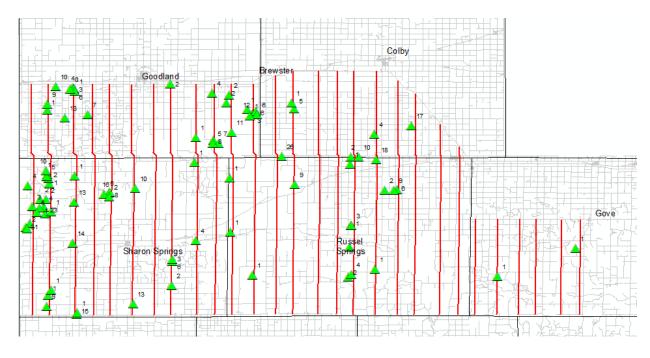
Buck and fawn ratios generally improved this survey period. The main exception was Unit 18 buck ratios, but unusually high vegetation and some specific survey complications combined to result in a very low sample size in that unit. Consequently, Unit 18 results including the high fawn ratio should be viewed cautiously for this survey period.

We attempt to maintain a buck ratio of 35 bucks per 100 does. We had fallen below this objective rangewide in recent years, especially in Units 17 and 18. As a result, we have reduced firearm and muzzleloader permits and have more recently taken steps to limit archery harvest, which had been at all-time highs in recent years. Between these changes and some rainfall in parts of the range, buck ratios appear to be improving.

Total fawn ratios were quite improved over recent years as indicated by comparing to the 5-year average, but those in Unit 17 remained poor. Unit 18 has been plagued by poor production which has resulted in a major population decline. Though production was very good in Unit 18 this year, the sample size was small bringing the accuracy of the survey into question. There were very favorable conditions in that unit this year though in terms of rainfall and cover. Fawn ratios don't greatly influence hunter satisfaction with the current year's hunt since hunters rarely harvest fawns, but they do serve as a predictor of future opportunity.

Table 1. Results of summer 2023 aerial pronghorn production survey for each pronghorn hunting unit.

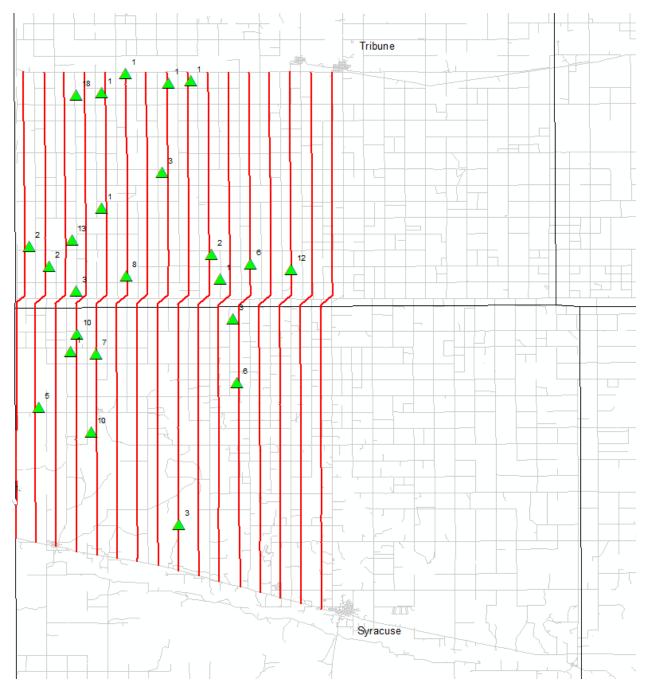
	Number Observed			Ratio			Ratio – 5 year average		
Unit	Bucks	Does	Fawns	Bucks	Does	Fawns	Bucks	Does	Fawns
2	100	230	121	43	100	53	38	100	41
17	30	67	23	45	100	34	38	100	37
18	5	22	18	23	100	82	24	100	46
Total	135	319	162	42	100	51	36	100	40



▲ Location and number of pronghorn observed

2023 Summer Route

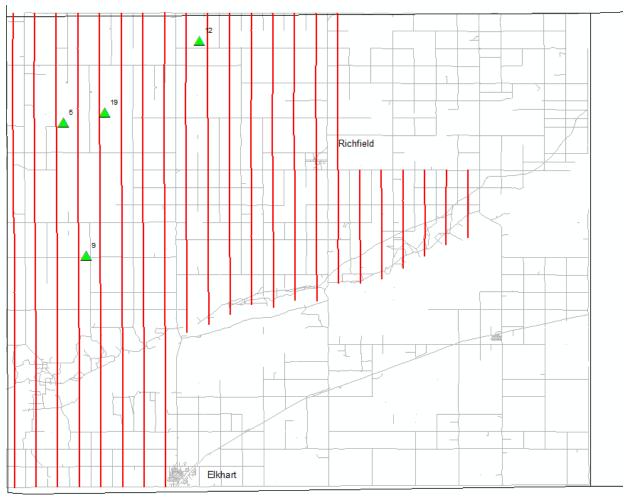
Figure 1. Unit 2 – Survey area and pronghorn observations (Sherman, Wallace, Thomas and Logan Counties).



Location and number of pronghorn observed

2023 Summer Route

Figure 2. Unit 17 – Survey route and pronghorn observations (Hamilton & Greeley Counties).



▲ Location and number of pronghorn observed

— 2023 Summer Route

Figure 3. Unit 18 – Survey route and pronghorn observations (Morton County).

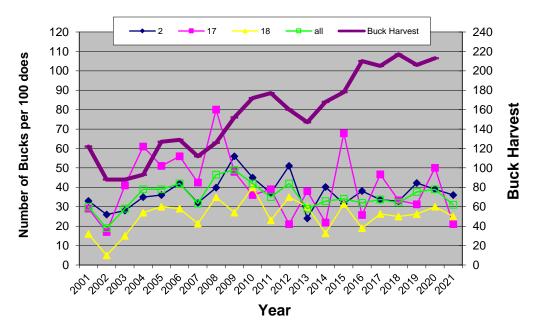


Figure 4. Number of pronghorn bucks per 100 does for each unit since 2001, and total annual buck harvest.

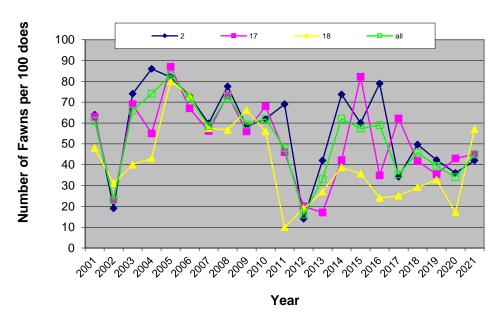


Figure 5. Number of pronghorn fawns per 100 does for each unit since 2001.

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: