

2013 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-20

Kansas Department of Wildlife, Parks and Tourism

Robin Jennison
Secretary

Prepared by

Matt Peek
Wildlife Research Biologist

Joe Kramer
Director

Mike Mitchener
Wildlife Section Chief



August 2013

PERMISSION TO QUOTE

This is an annual progress report that may contain information that is 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 and Parks, 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**

2013 Pronghorn Production Surveys

Matt Peek
Pronghorn program coordinator

The 2013 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**. The production survey was not conducted in Chase County in 2013. Survey routes and location of pronghorn observations for each hunting unit are provided in **Figures 1-3**. Trends in buck:doe and doe:fawn ratios since 2001 can be found in **Figures 4 and 5**, respectively.

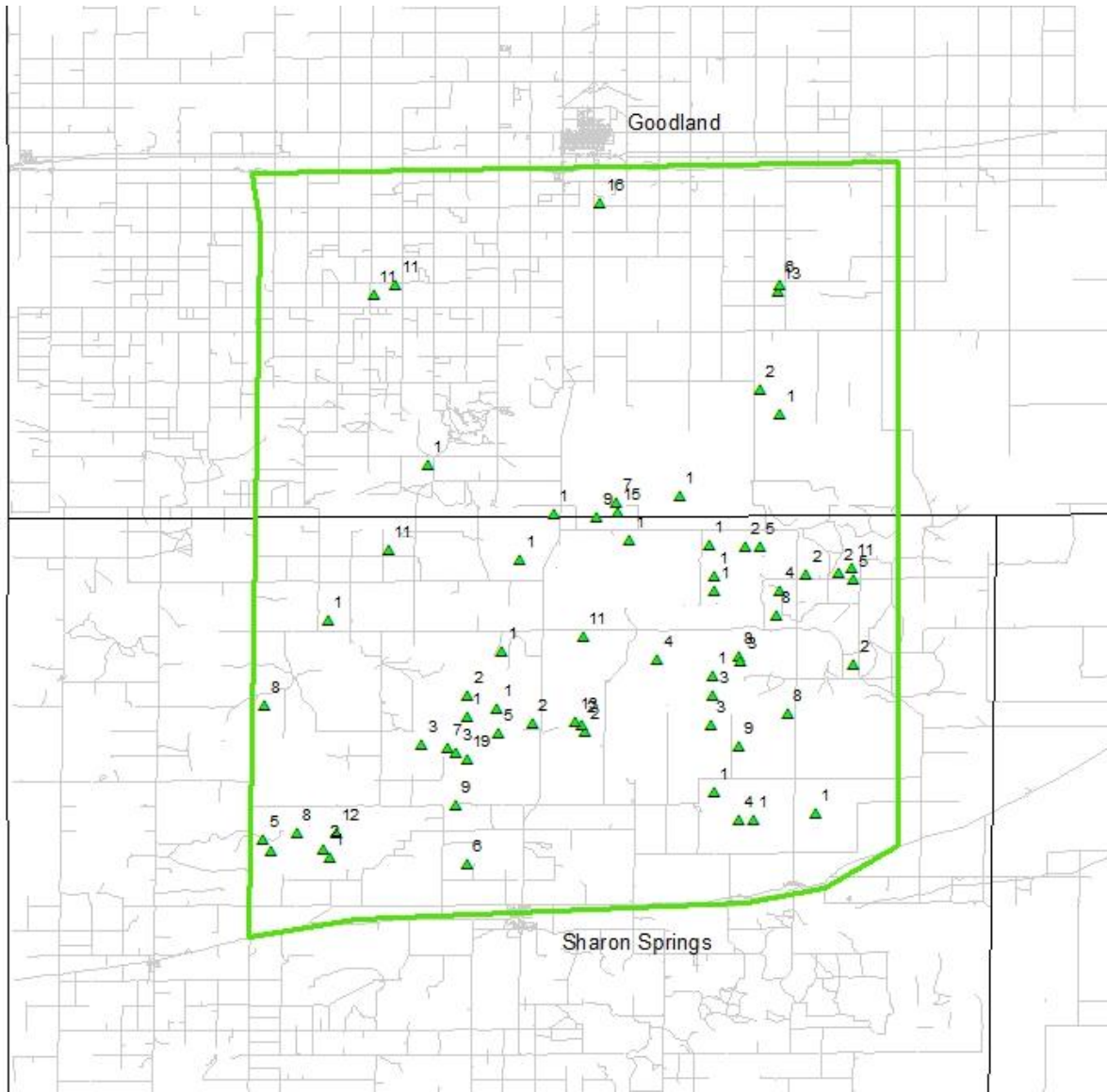
Drought in western Kansas appears to be driving pronghorn population dynamics at the current time. Buck ratios in two of three units are below our objective of 35 bucks per 100 does. This is likely the result of increased harvest pressure on the buck population as a result of poor production the last couple years. Though limited draw permits were reduced and firearm and muzzleloader success rates declined in 2012, archery harvest has increased the last couple years such that high harvest levels have been maintained. As a result, we are anticipating a younger buck population than in previous years. Mature bucks were observed during surveys in all units, but there may be fewer and hunters may have to work harder to find them than in years past.

In recent weeks, most of the pronghorn range has experienced much needed rainfall. However, it was after the most critical time for fawn survival, and fawn ratios remained poor, though improved in Units 2 and 18. Fawn ratios don't greatly influence hunter satisfaction with the current year's hunt (though poor production means fewer pronghorn seen in a given year), but may better serve as a predictor of things to come. Fawn ratios over the past several years predict a population in decline. Limited permit quotas were further reduced from 2012 levels in 2013, but based on these survey results, additional and deeper permit cuts will be in order for 2014.

It is important to remember that these production surveys are not intended to determine population size, but rather to evaluate sex and age ratios of the population. Due to smaller 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). This year, one survey was partially conducted with only one spotter plus the pilot when there are typically 3 spotters. Consequently, the percent of pronghorn observed within a given survey area is unknown.

Table 1. Results of summer 2013 aerial pronghorn production survey for each pronghorn hunting unit.

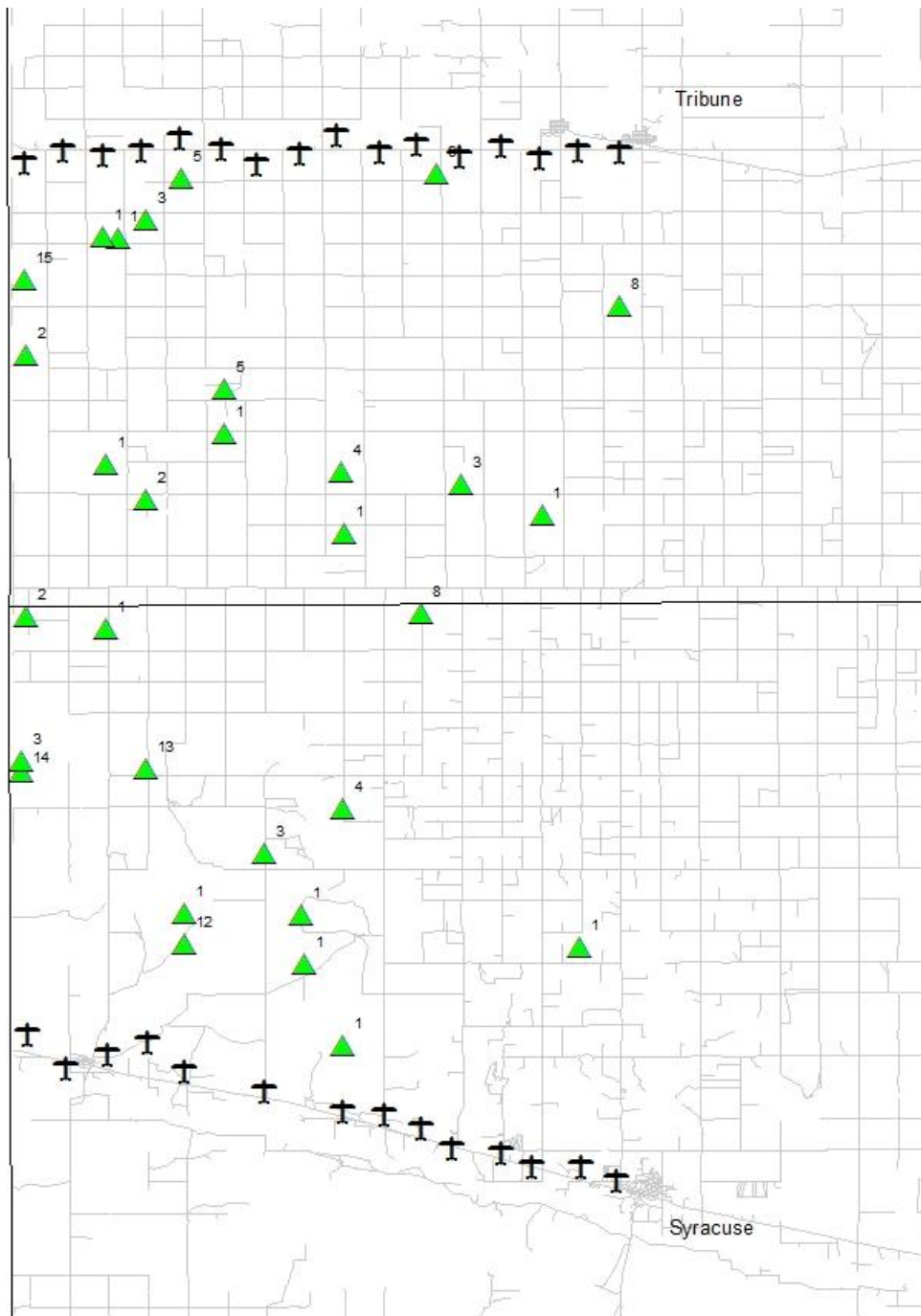
Unit	Ratio			Actual Number		
	Bucks	Does	Fawns	Bucks	Does	Fawns
2	24	100	42	47	193	82
17	38	100	17	31	82	14
18	30	100	27	25	82	22
Total	29	100	33	103	357	118



▲ Location and number of pronghorn observed

— 2013 Summer Survey Area

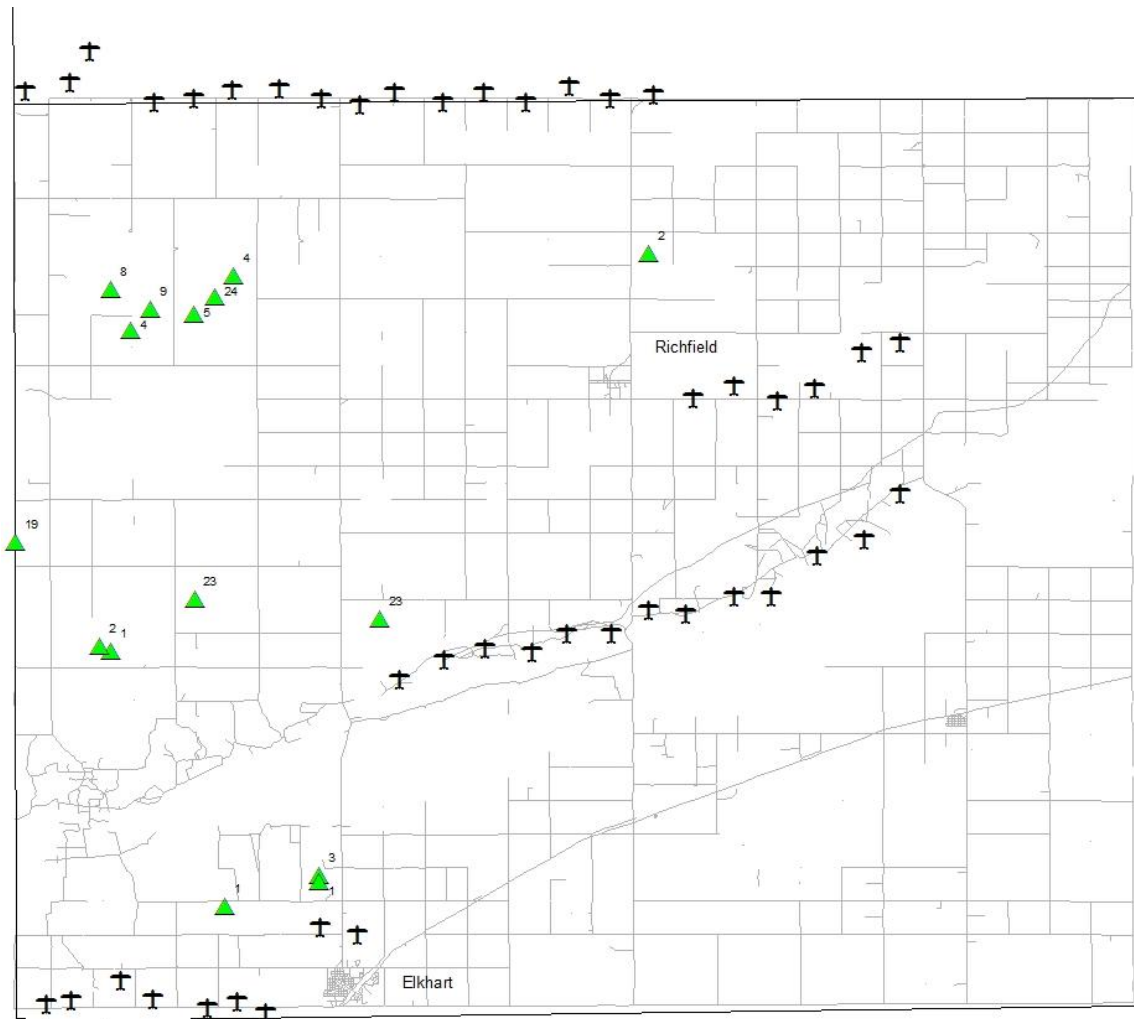
Figure 1. Unit 2 – Survey area and pronghorn observations (Sherman and Wallace Counties).



▲ Location and number of pronghorn observed

† 2013 Summer Route

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



▲ Location and number of pronghorn observed

† 2013 Summer Route

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

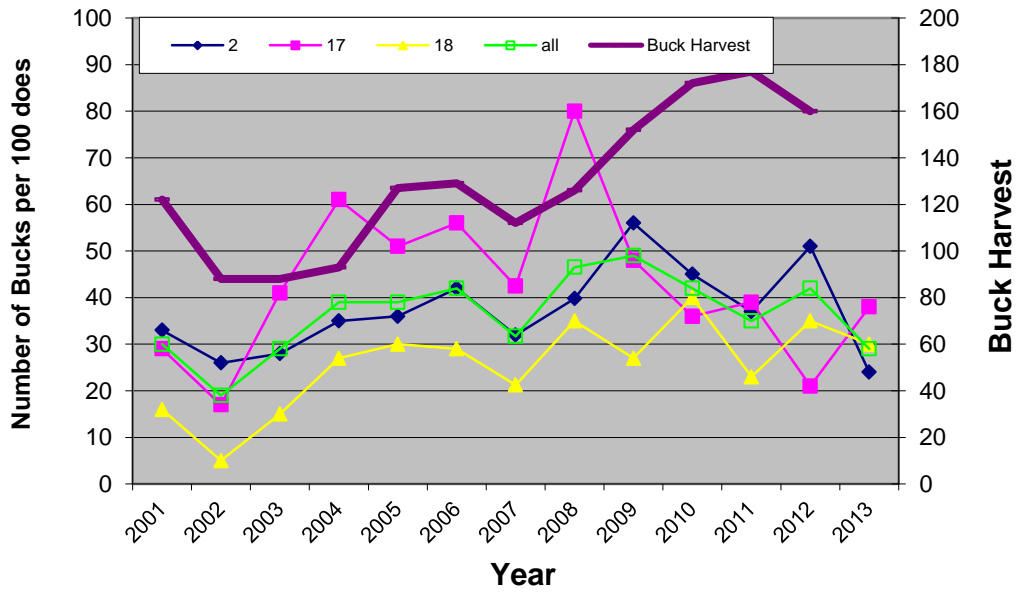


Figure 4. Number of pronghorn bucks per 100 does for each unit since 2001, and total annual buck harvest.

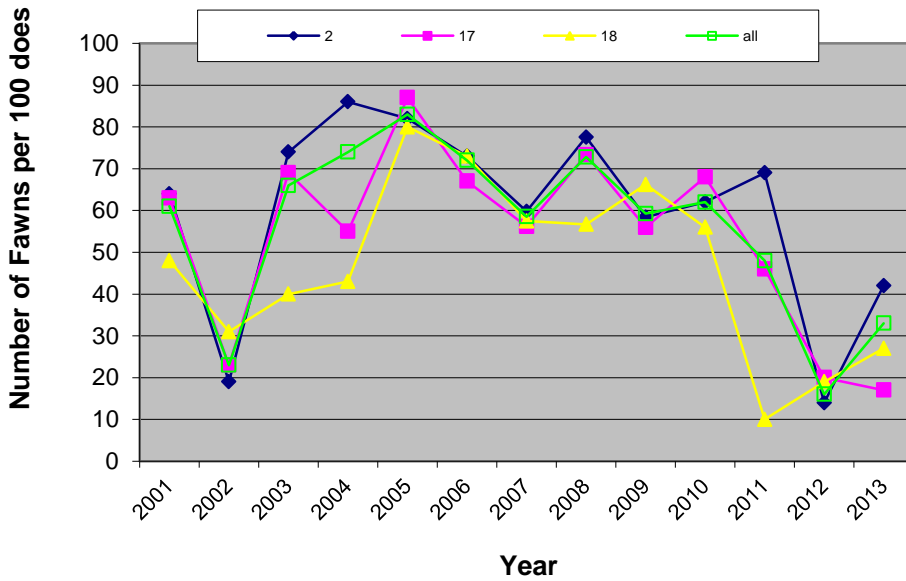


Figure 5. Number of pronghorn fawns per 100 does for each unit since 2001.