

2011 Pronghorn Production Surveys

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2011 Pronghorn Production Surveys

Matt Peek
Pronghorn program coordinator

The 2011 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**, and data from Chase County can be found in **Table 2**. 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.

Buck:doe ratios averaged 35 per 100 within the three hunting units. This falls between the published ratios for maximum recruitment (25:100) and maximum trophy production (50:100), and is on target with our current objectives. The current ratios are lower than they have been in over the past several years, partly as a result of increased firearm and muzzleloader permit allocations intended to better meet demand for permits (currently seven or eight preference points are required to obtain a permit to firearm hunt unit 2), which was done with the knowledge that buck ratios would be reduced. Another likely factor in this year's decreased ratios is increasing archery permit sales and abnormally high harvest success by archery hunters in 2010. From 2009 to 2010, success rates increased from 11 to 23% and harvest increased from 27 to 60 pronghorn. Buck ratios in unit 18 fell to about ½ of what they were the previous season. This decline cannot be adequately explained by legal hunting pressure. The area is under extreme drought, and the change in ratios may partly be the result of natural pronghorn movements.

Fawn:doe ratios were fair on average (48:100), but ranged from good (69:100) in the northernmost unit (2) to very poor (10:100) in the southernmost unit (18). These ratios are probably reflective of precipitation levels, which increased from south to north. Fawn ratios don't greatly influence hunter satisfaction with the current year's hunt, but are a predictor of things to come. Such poor production in the south will likely need to be accounted for in future years' permit allocations.

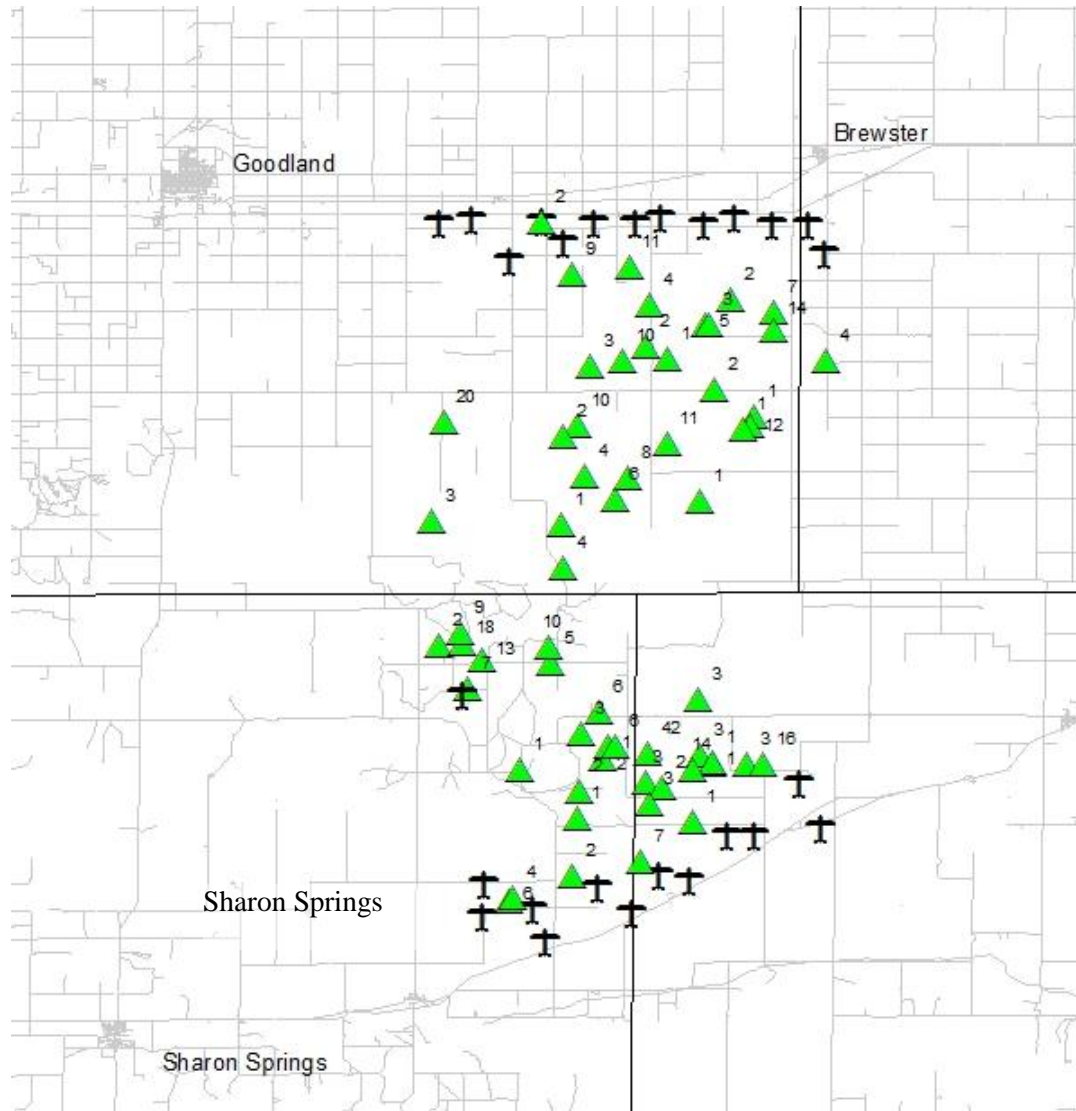
The small Flinthills population continues to persist, and production has been fair to good in that unit. Six of the seven times this population has been surveyed since 2003, production ratios have been at or over 50 fawns per 100 does. Plans are in place to survey this population in the winter to get a better idea of its actual size.

Table 1. Results of summer 2011 aerial pronghorn production survey for each pronghorn hunting unit.

Unit	Ratio			Actual Number		
	Bucks	Does	Fawns	Bucks	Does	Fawns
2	37	100	69	65	175	120
17	39	100	46	46	117	54
18	23	100	10	20	86	9
Total	35	100	48	131	378	183

Table 2. Results of summer 2011 aerial pronghorn production survey for the Chase County (Flinthills) population.

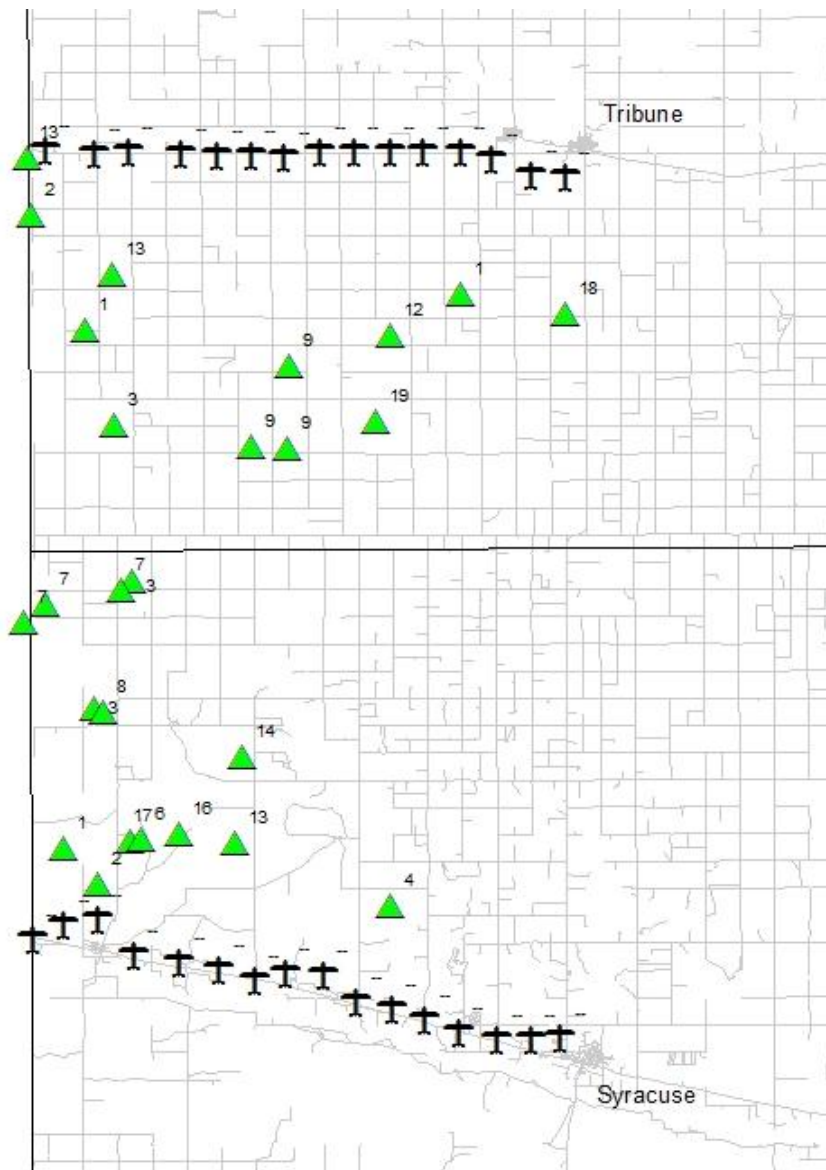
Unit	Ratio			Actual Number		
	Bucks	Does	Fawns	Bucks	Does	Fawns
2	38	100	54	5	13	7



▲ Location and number of pronghorn observed

† 2011 Summer Route

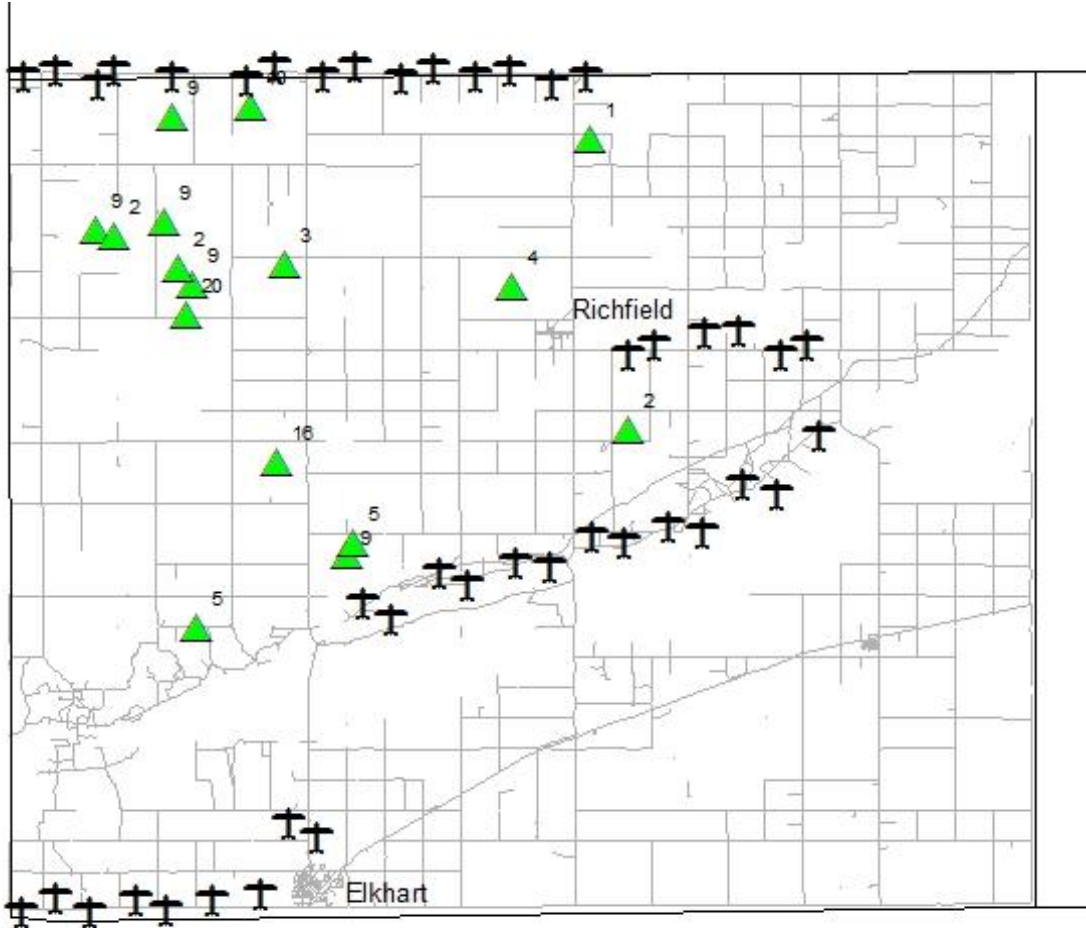
Figure 1. Unit 2 – Survey route and pronghorn observations (Sherman, Wallace, Thomas and Logan Counties).



▲ Location and number of pronghorn observed

⊥ 2011 Summer Route

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



▲ Location and number of pronghorn observed

† 2011 Summer Route

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

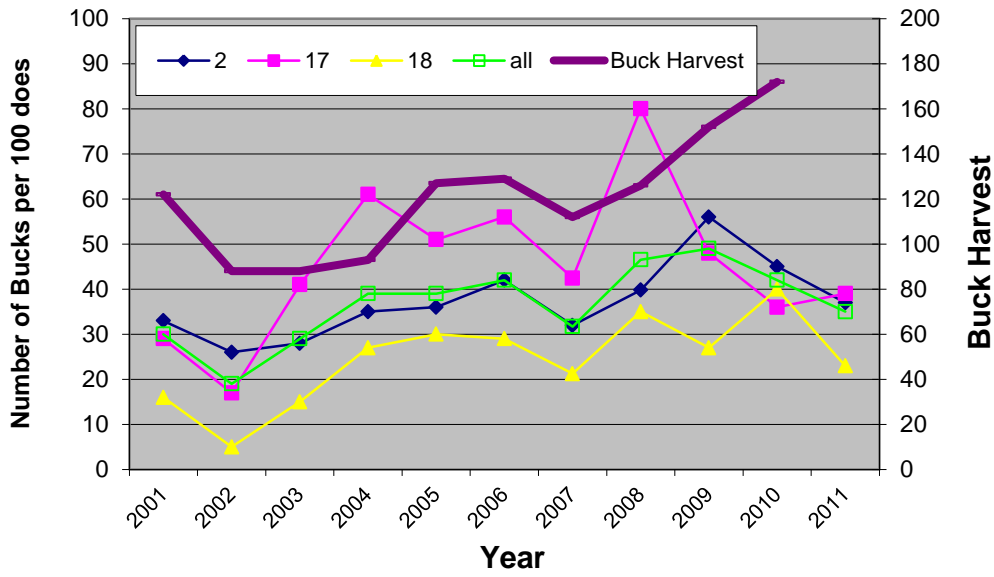


Figure 4. Number of pronghorn bucks per 100 does for each unit since 2001, and total annual buck harvest

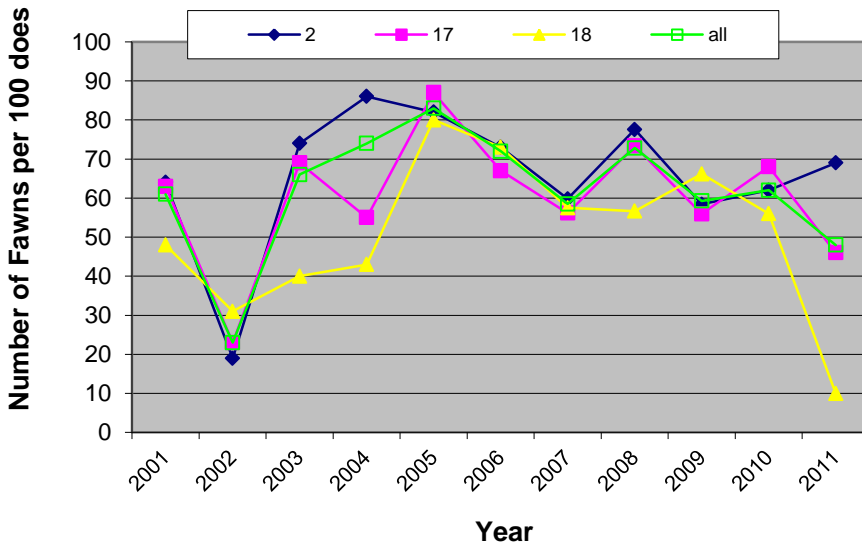


Figure 5. Number of pronghorn fawns per 100 does for each unit since 2001.