

DRAFT CHEYENNE PRONGHORN HERD MANAGEMENT PLAN

DATA ANALYSIS UNIT PH-12, CHEYENNE

GAME MANAGEMENT UNITS 116, 117, 122, 127



Created for:



By:
Jonathan Reitz
Wildlife Biologist
December 2019

EXECUTIVE SUMMARY

Cheyenne Pronghorn Herd (DAU PH12)	GMUs: 116, 117, 122, 127
Post-Hunt Population: Previous Objective: 1,100-1,350; Estimate for 2018: 1,500	
CPW Recommendation: 1,500-2,000	
Post-Hunt Sex Ratio (Bucks:100 Does): Previous Objective: 33-40; Estimate for 2018: 59.7	
CPW Recommendation: 35-45	

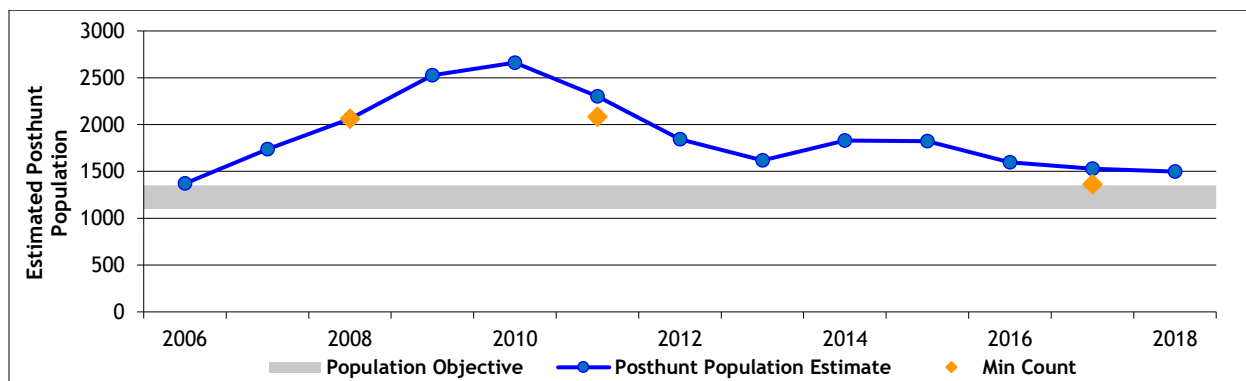


Figure 1. Cheyenne DAU modeled posthunt population, objective, and postseason minimum counts from 2006-2018.

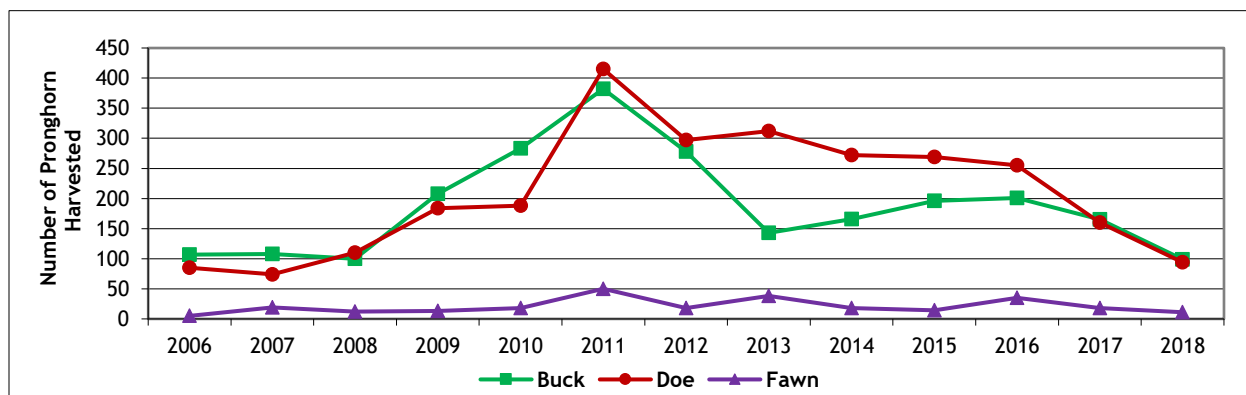


Figure 2. Cheyenne DAU buck, doe, and fawn harvest estimates from 2006-2018.

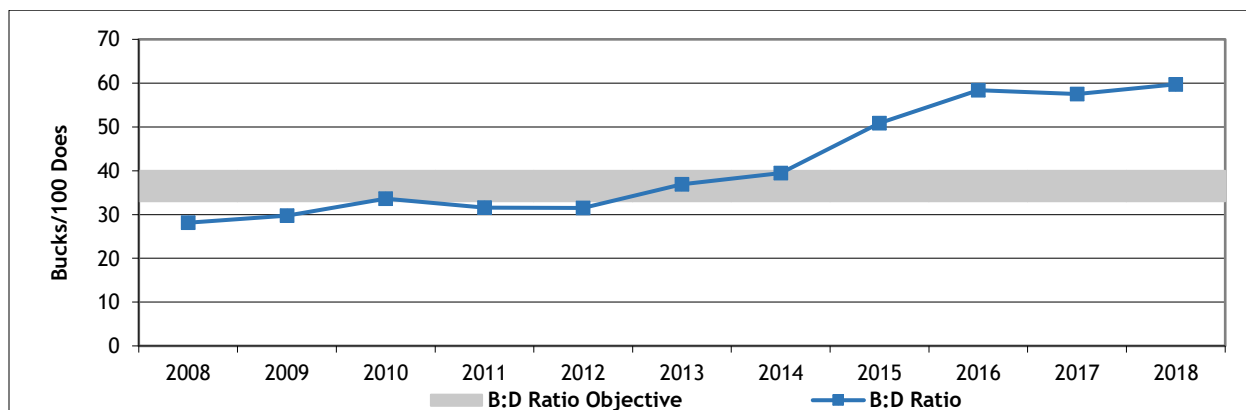


Figure 3. Cheyenne DAU buck:doe ratio objective and post-hunt predicted buck:doe ratio from 2008-2018 .

Background Information

The Cheyenne Data Analysis Unit (DAU), hereafter referred to as Cheyenne, encompasses a large area between the Arkansas River and Interstate Highway 70. Approximately 95% of the DAU is comprised of private lands. The primary public land holder is the State Land Board, owning 4% of the DAU. Only 0.4% of the DAU offers public pronghorn hunting opportunity.

Since 2006, Cheyenne's post season population estimates have ranged from 1,400-2,700 pronghorn. Historically, game damage has been the greatest significant issue in Cheyenne, and population objectives in previous herd management plans were set at levels to minimize game damage conflict. During the duration of the previous herd management plan, not a single pronghorn damage complaint was received by CPW personnel, even though the population reached a record high in 2008-2011.

To solicit input for this herd management plan, we sent mail surveys to 500 randomly selected landowners in the DAU (i.e. ~25% of the DAU's landowners). In addition, we surveyed 500 hunters who had hunted in Cheyenne in recent years. Survey results suggest that the pronghorn population and sex ratios should be managed close to levels observed in recent years.

Population Objective Alternatives

Alternative 1: 1,500-2,000 pronghorn (preferred alternative): This alternative would maintain the population at the level observed in recent years. The survey suggests that this is the preferred alternative by the majority of landowners in Cheyenne.

Alternative 2: 1,100-1,350 pronghorn (status quo): This alternative was the objective of the previous plan, and would call for a ~15% decrease of the current estimated population. The majority of landowners and hunters do not support this alternative.

Alternative 3: 2,000-2,600 pronghorn: This alternative represents a ~25% increase in population size over current levels. The majority (70%) of hunters indicated that they would like to minimally see a 25% increase to population. The majority of landowners do not support this.

Sex Ratio Objective Alternatives (Post-Hunt)

Alternative 1: 35-45 bucks per 100 does (preferred alternative): This alternative represents a sex ratio range that lines up fairly well with post-hunt buck:doe ratios over the last 10 years. CPW staff believes this to be a practicable ratio to manage for, while maintaining the population at the preferred level, and while maintaining buck permit numbers close to those issued in recent years. The majority of both hunters and landowners prefer to see buck permit numbers maintained close to their current levels.

Alternative 2: 33-40 bucks per 100 does (status quo): This alternative calls for a decrease below levels observed in recent years. This is not supported by the majority of landowners or hunters.

Alternative 3: 45-61 bucks per 100 does: This alternative is based off of the 5 year average for predicted buck:doe ratios. This ratio can only be achieved by driving doe numbers below preferred levels or by further limiting buck license numbers. Neither option is supported by the majority of landowners and hunters.

No significant changes in licenses would be needed to achieve the preferred objectives. Annual fluctuations in population due to weather (droughts, severe winters) will be addressed through adjustments in license allocations. Significant issues such as hunter crowding will be addressed by maintaining the population within the preferred objective, by adjusting the length of the regular rifle season, use of list B doe licenses, and/or maintaining a late doe season. Game damage issues will be addressed by conducting dispersal hunts when needed.