

COLLEGIATE RANGE PRONGHORN HERD MANAGEMENT PLAN

DATA ANALYSIS UNIT PH-39

GAME MANAGEMENT UNITS
48, 56, and 481



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Approved Date, Year by the Colorado Parks and Wildlife Commission



EXECUTIVE SUMMARY

Collegiate Range Pronghorn Herd (DAU PH-39)	GMUs: 48, 56, 481
Post-hunt Population: Previous Objective: 150; Estimate for 2019: ~200	
Preferred Alternative: <u>Increase population objective to 150-200 pronghorn</u>	
Post-hunt Sex Ratio (Bucks:100 Does): Previous Objective: 50:100 (Pre-hunt);	
Post-hunt 2018 modeled estimate: 19; Preferred Alternative: <u>20-25:100 post-hunt</u>	

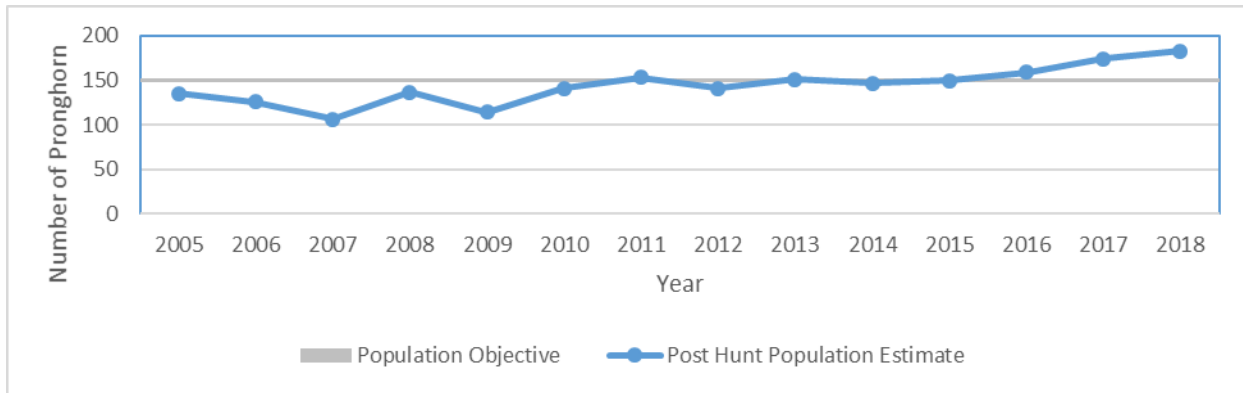


Figure 1. Pronghorn DAU PH-39 DAU modeled post-hunt population, 2005-2018.

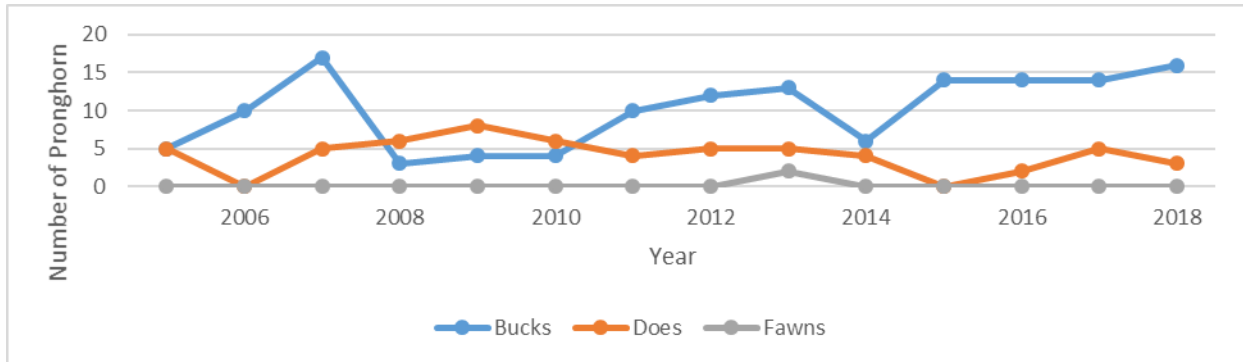


Figure 2. Pronghorn harvest estimates in PH-39, 2005-2018.

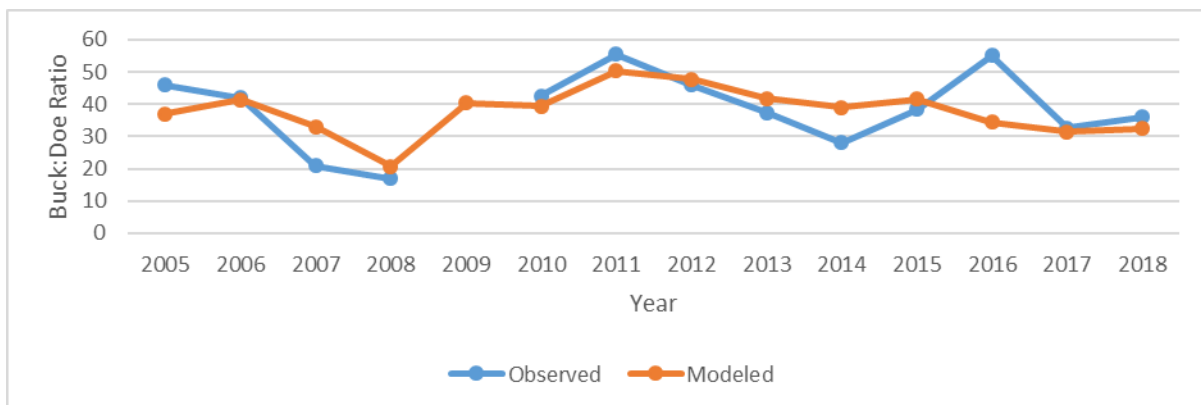


Figure 3. Pronghorn DAU PH-39 observed and modeled pre-hunt sex ratio (Bucks:100 Does), 2005-2018.

Background Information

The Collegiate Range pronghorn Data Analysis Unit (DAU PH-39), located in central Colorado along the eastern edge of the Continental Divide, covers 820 mi² ranging in elevation from 7,500 ft. in the Arkansas River valley up to 14,440 ft. at the summit of Mt Elbert. Pronghorn generally occupy the lower-elevation grassland/shrub habitats, agricultural properties, and ranches along the valley bottom. Almost 80% (656 mi²) of the DAU consists of public lands, though only 12% (96 mi²) of the DAU is considered pronghorn habitat and pronghorn use a disproportionate amount of the private lands in the valley bottom. Hay is the primary crop produced on farmlands and cattle grazing occurs throughout the DAU.

Pronghorn harvest management in the DAU consists of unlimited Over-The-Counter (OTC) archery licenses and limited buck and doe rifle and muzzleloader licenses. Game damage concerns related to pronghorn in the valley are minimal due to the small population size.

In developing this Herd Management Plan (HMP), Colorado Parks and Wildlife (CPW) sought input from stakeholders and staff on the desired population and sex ratio objectives along with identifying significant management issues. This DAU likely is not capable of supporting many more pronghorn than the current population estimate of ~200, and hunters and landowners generally seem satisfied with the current population level. Issues identified regarding this population include: 1) hunter crowding on public lands during the archery season, 2) pronghorn taking refuge on private lands, 3) declining hunter access to private lands, 4) loss of habitat due to human development and loss of irrigated agriculture, and 5) noxious weed proliferation and associated habitat changes.

Recommendation to the Colorado Parks and Wildlife Commission

Alternatives for Population Objective

- 1) (Status quo) ~150 pronghorn
- 2) Increase the population objective to 150-200 pronghorn (**Preferred Alternative**)
- 3) Decrease the population objective to 100-150 pronghorn

Alternatives Herd Composition (Posthunt sex ratio) Objective

- 1) 30-35 bucks:100 does
- 2) 20-25 bucks:100 does (**Preferred Alternative**)

Strategies for Addressing Management Issues and Achieving Objectives

CPW has limited ability to affect many of the issues identified through the plan's public outreach process. However, CPW will seek opportunities to conserve land through fee title purchase or conservation easements, especially when hunting access is included. We will look for opportunities, working with land management agencies and private landowners, to improve habitat quality and increase hunter access. This DAU has limited pronghorn habitat and the population is likely at or near its carrying capacity, but CPW will work to maintain a viable pronghorn population and some hunter opportunity in the upper Arkansas River valley while addressing any localized game damage concerns.

CPW is also considering switching this DAU from unlimited Over-The-Counter for archery to limited archery to alleviate hunter crowding issues on public lands and hold more pronghorn on public lands. The current pronghorn population size (~200) and sex ratio (19 bucks per 100 does) are within the ranges for the respective preferred alternatives, so we would expect to maintain current rifle and muzzleloader license levels if those alternatives are selected.