

SANGRE DE CRISTO ELK HERD MANAGEMENT PLAN DATA ANALYSIS UNIT E-27

GAME MANAGEMENT UNITS

86, 691, 861

PREPARED FOR

COLORADO PARKS AND WILDLIFE



BY

ALLEN VITT
BRIAN DREHER
JULIE STIVER

19 NOVEMBER 2019

EXECUTIVE SUMMARY

Sangre de Cristo Elk Herd (DAU E-27)	GMUs: 86, 691, 861
Posthunt Population: Previous Objective: 1,450-1,650 elk; Estimate for 2018: 2,100.	
Preferred Alternative: Increase population objective to 1,800-2,200 elk	
Posthunt Sex Ratio (Bulls:100 Cows): Expected posthunt sex ratio range: 18-30;	
Posthunt 2018 observed: 24; modeled: 22. Designated Unlimited Over-The Counter DAU	

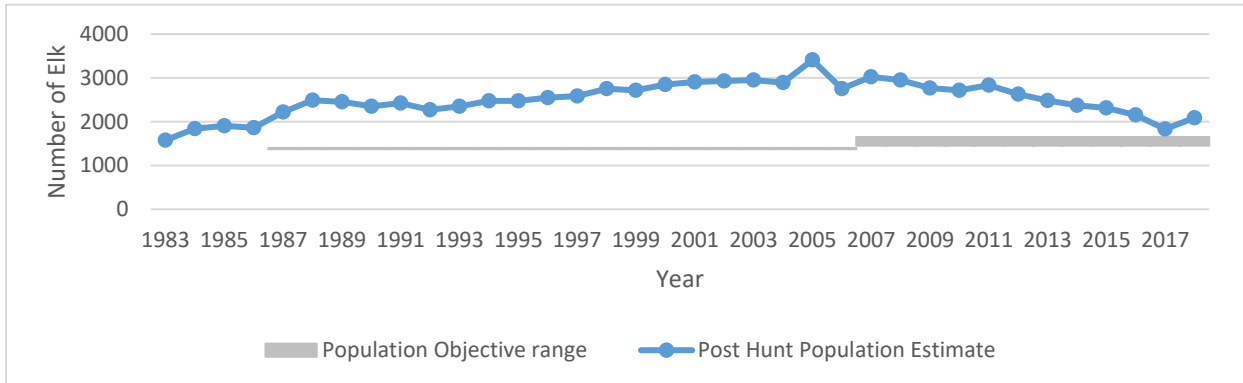


Figure 1. Elk DAU E-27 DAU modeled posthunt population and objective range, 1983-2018.

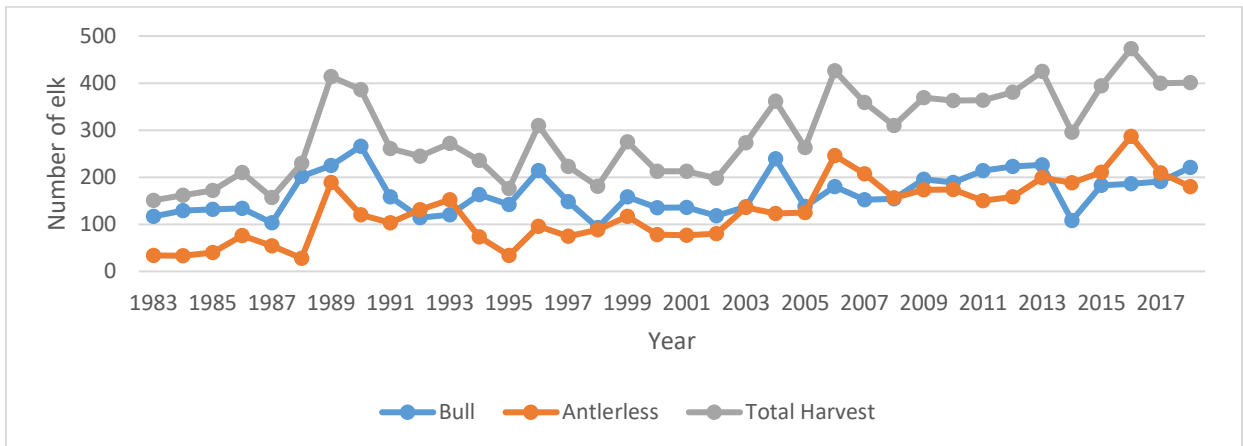


Figure 2. Elk DAU E-27 harvest estimates, 1983-2018.

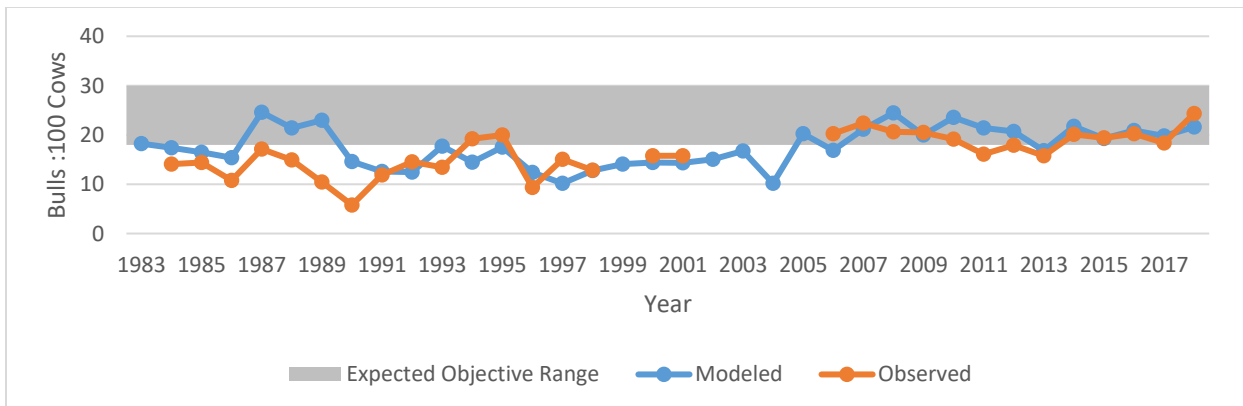


Figure 3. Elk DAU E-27 observed and modeled posthunt sex ratio (Bulls:100 Cows), 1983-2018.

Background Information

The Sangre de Cristo elk Data Analysis Unit (DAU E-27), located in southcentral Colorado, covers 940 mi² ranging in elevation from 5,400 ft. to 14,345 ft. Elk generally occupy the area from grassland/shrub winter range adjacent to the foothills on the east side of the unit to above timberline on the western boundary. Over 50% (510 mi²) of the DAU is private ownership, including low density housing developments, agricultural properties, and large ranches. Hay is the primary crop produced on farmlands and cattle grazing occurs throughout the DAU.

Elk harvest management in the unit is two pronged. First, the unit is managed for hunter opportunity through unlimited Over-the-Counter (OTC) licenses in both the archery and regular rifle seasons. Second, elk harvest is managed to mitigate human-elk conflict, including game damage on agricultural fields. This is achieved with antlerless licenses in extended private-land-only (PLO) seasons and dispersal permits.

In developing this Herd Management Plan (HMP), Colorado Parks and Wildlife (CPW) sought input from stakeholders and staff on the desired population objective and to identify significant management issues. Despite game damage concerns on hay fields, landowners supported an increase in the population objective for the unit. This aligned with hunter feedback. Other issues identified included: 1) loss of habitat and restricted hunter access due to development, 2) hunter crowding, 3) forage competition with livestock, 4) noxious weeds and habitat changes due to lack of forest management, and 5) elk interchange between E-27 and E-11, the unit directly west of E-27.

CPW Recommendation to the Colorado Parks and Wildlife Commission

Based on stakeholder feedback, CPW is recommending an increase in the E-27 population objective to 1,800-2,200 elk, which encompasses the DAU's 2018 posthunt estimate (2,085 elk). The historic objective, 1,450-1,650 elk, was set in 2007 at a level thought necessary to mitigate human-elk conflicts and licenses were increased accordingly. Despite years of high harvest, the population has remained above the 2007 objective. However, game damage conflicts have generally been mitigated and landowner tolerance for the current population has increased as we have attempted to drive the population towards the objective.

Strategies for Achieving Objectives and Addressing Management Issues

Since the elk population is currently within the objective range, the population can be maintained through current or slightly lower license numbers. Annually, license numbers will be reevaluated as new data becomes available.

CPW has limited ability to affect many of the issues identified through the plan's scoping process. However, we will seek opportunities to conserve land through fee title purchase or conservation easements, especially those with hunting access components. CPW will maintain the current extended PLO hunting season to disperse elk from private property and will continue to offer dispersal licenses for landowners experiencing elk conflicts. We will look for opportunities, working with land management agencies and private landowners, to improve habitat and increase hunter access. Finally, we will work collaboratively with partners to address elk management concerns between E-27 and E-11.