# DRAFT CRIPPLE CREEK DEER MANAGEMENT PLAN EXTENSION

DATA ANALYSIS UNIT D-16

GAME MANAGEMENT UNITS 49, 57, 58, 581

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Approved XXXX, 2020 by the Colorado Parks and Wildlife Commission

## **EXECUTIVE SUMMARY**

Cripple Creek Deer Herd (DAU D-16)

GMUs: 49, 57, 58, & 581

<u>Posthunt Population</u>: Previous Objective: 16,000-20,000 deer; Estimate for 2019: 11,700. Preferred Alternative: Maintain population objective of 16,000-20,000

<u>Posthunt Sex Ratio (Bucks:100 Does)</u>: Previous Objective: 30-35. Posthunt 2019 observed: 23; modeled: 22. **Preferred Alternative: Status Quo 30-35** 

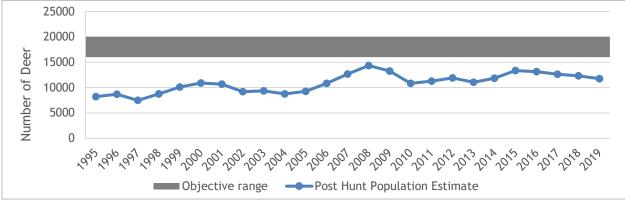


Figure 1. D-16 Post-hunt population estimate since 1995.

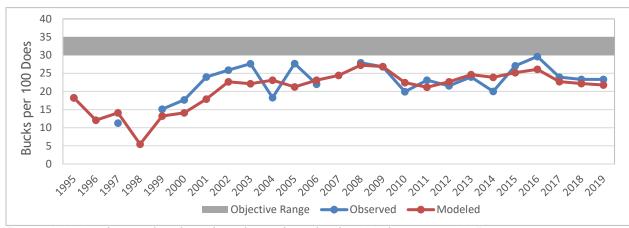


Figure 2. D-16 observed and predicted post-hunt bucks: 100 does since 1995.

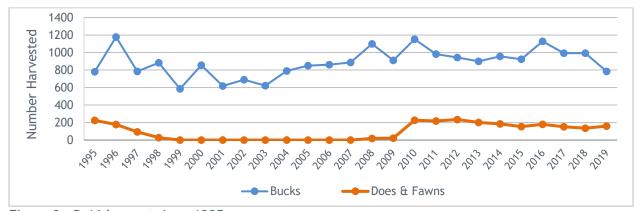


Figure 3. D-16 harvest since 1995.

### D-16 Background

Like much of Colorado, the Cripple Creek (D-16) deer herd reached peak population levels in the 1960s and 1970s before declining through the 1980s and 1990s. It is estimated this population peaked in the 1960s at approximately 27,000; however, that estimate included GMUs 59 and 591, which are no longer considered part of this population. In the decades since, the population and associated harvest have declined by approximately 50%. Since bottoming out in the early 1990s at approximately 8,000 deer, the D-16 population has gradually increased to its current population estimate of approximately 11,700 deer. The current management objective is 16,000-20,000 deer. The population is below the current objective due to low annual adult doe survival, over winter fawn survival, and productivity. Since 1999, when buck licenses went limited statewide, sex ratios have increased from 11 bucks per 100 does to 25-30 bucks per 100 does.

Since 1999, D-16 has been one of five deer herds in the state in which annual doe and overwinter fawn survival are monitored annually using radio collars. Since 1999, the leading cause of known deer mortality in D-16 has been cougar predation, which led to the initiation of a nine-year, three-staged research project in D-16 and neighboring herd D-34 to examine mule deer population response to changes in cougar density and how cougar/deer populations respond to various harvest levels. This project will provide better understanding of how cougar harvest could be used as a deer management tool. In addition, it will provide valuable information on deer body condition, neonate fawn survival and mortality, migration patterns, and habitat use. In 2017, the first sample of cougars, does, and fawns were captured and fitted with GPS radio collars for this study.

D-16 Significant Issues: 1) Ongoing deer/cougar research study, 2) Conversion of agricultural pastures and other habitats for human development, 3) Increasing human recreational use of public lands, and 4) Urban deer issues.

In developing this Herd Management Plan (HMP) Extension, Colorado Parks and Wildlife (CPW) sought input from the Arkansas River Habitat Partnership Program (HPP) Committee, and posted the draft HMP Extension on the CPW website for a 30-day comment period.

### CPW Recommendation to the Wildlife Commission

<u>Population and Sex Ratio Objectives:</u> The CPW recommendation is to extend the current D-16 post-hunt population objectives of 16-20,000 deer with a sex ratio of 30-35 bucks per 100 does for the life of this plan. This will allow CPW to evaluate the results of the ongoing deer/cougar research study.

# Strategies for Addressing Management Issues and Achieving Objectives

CPW has limited ability to affect several of the management issues identified in D-16, including conversion of agricultural pastures and other habitats for human development. However, we are consulting with land management agencies, non-governmental organizations, and local governments to find opportunities to balance the needs of wildlife with recreation on public lands. For urban deer issues, local wildlife managers are working with each community to establish methodologies that will attempt to alleviate residential concerns. Annually, we will evaluate where the D-16 deer herd is relative to the population and sex ratio objectives set forth in this plan. We will set hunting licenses numbers with the goal of moving the population towards the objectives.