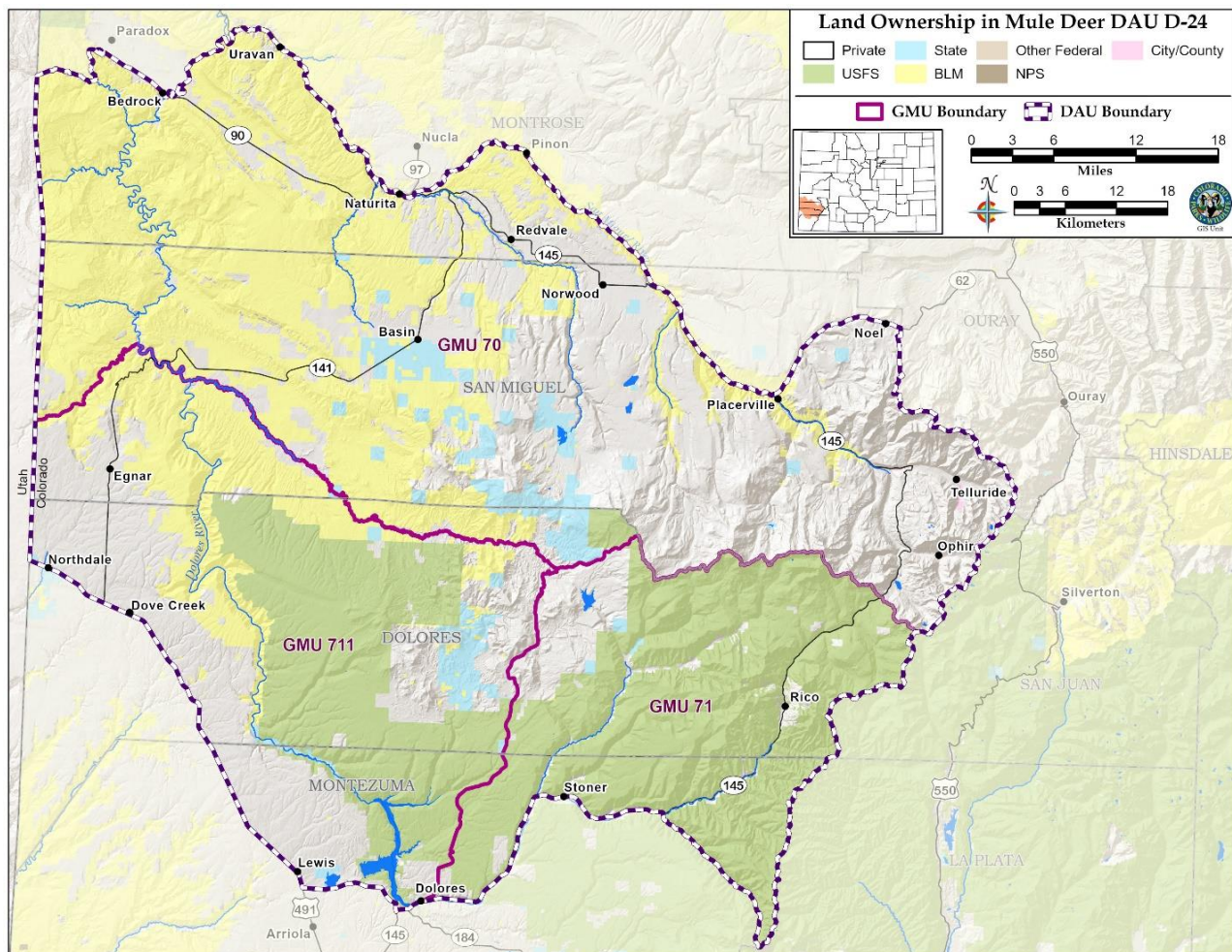
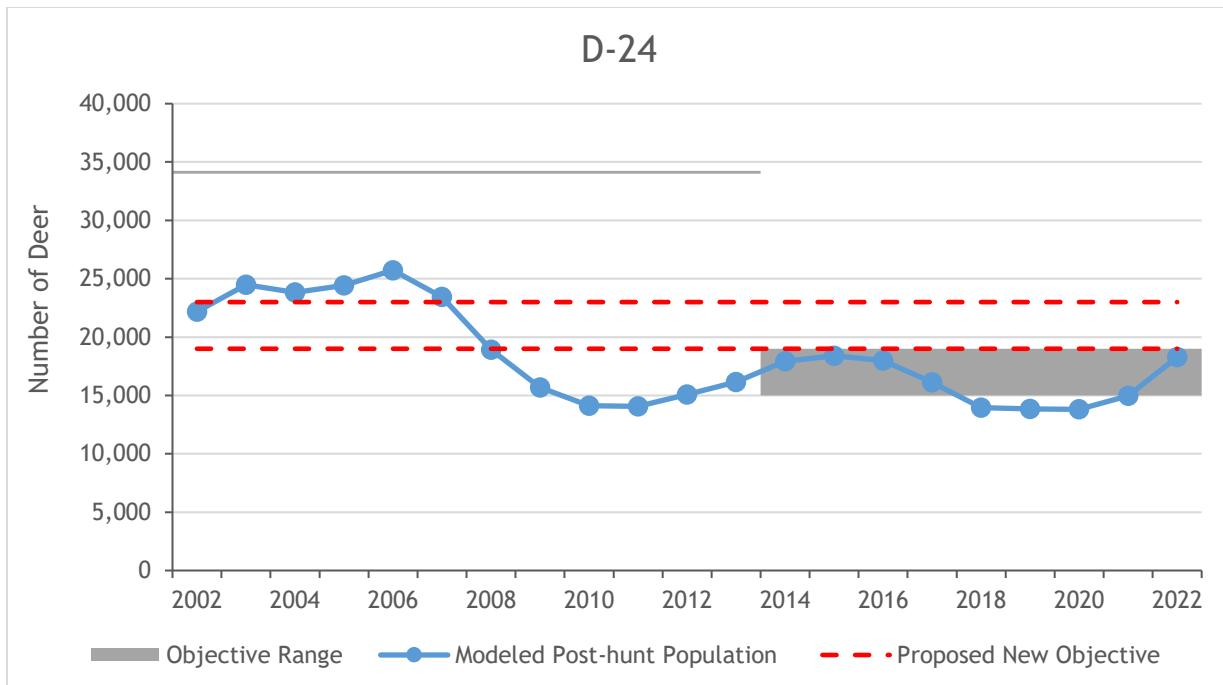


# GROUNDHOG MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-24

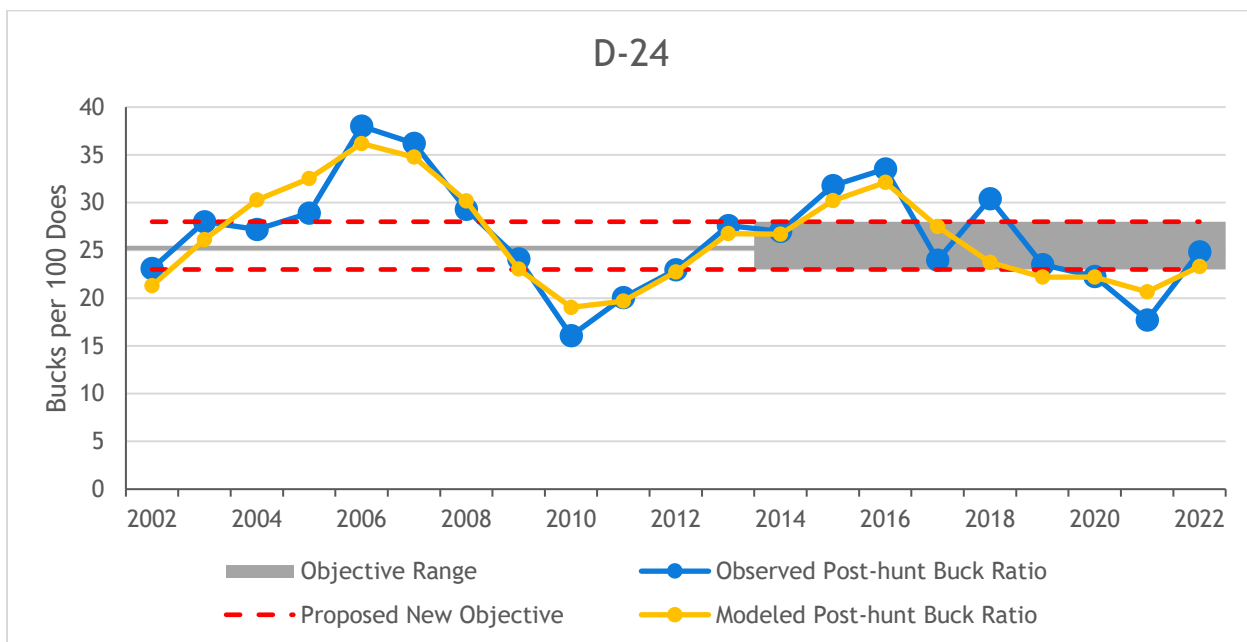
Brad Weinmeister, Wildlife Biologist, Durango  
October 2023

|   |                             |
|---|-----------------------------|
| <b>Groundhog Deer Herd (DAU D-24)</b>   | <b>GMUs: 70, 71 and 711</b> |
| Post-hunt Population: Previous Objective: 15,000-19,000<br>2022 Estimate: 18,300<br><b>Preferred Alternative: <u>19,000-23,000 deer</u></b>     |                             |
| Post-hunt Sex Ratio (bucks:100 does): Previous Objective: 23-28<br>2022 observed: 25; modeled: 23<br><b>Preferred Alternative: <u>23-28</u></b> |                             |

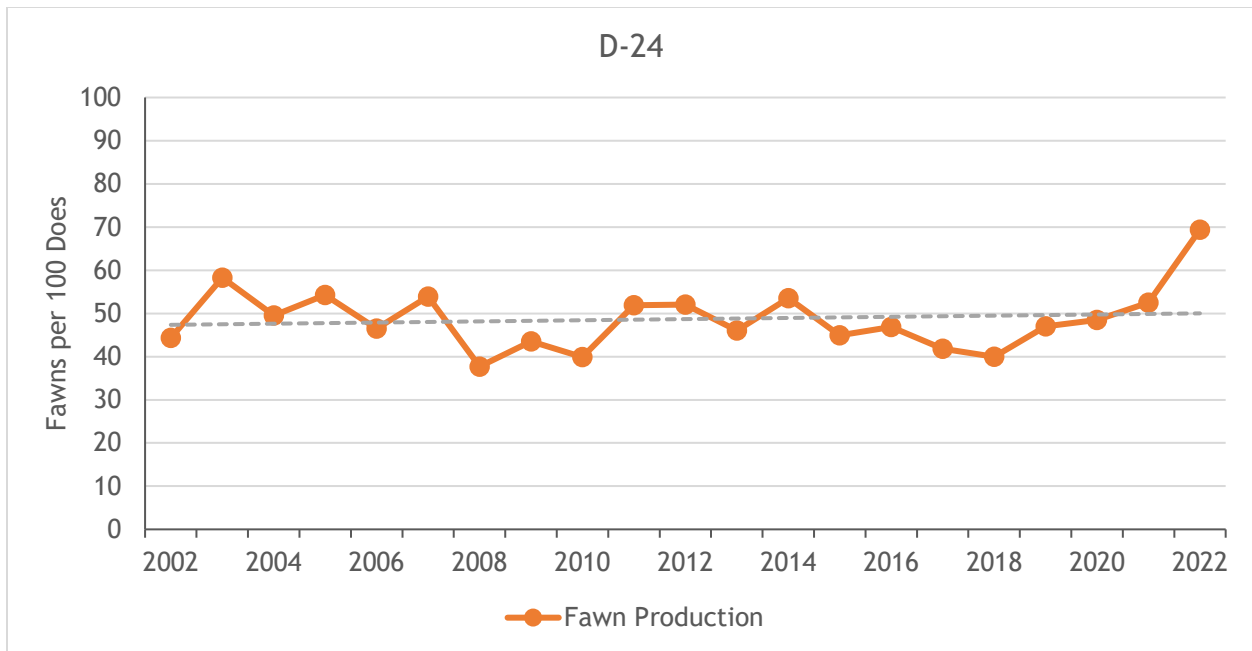




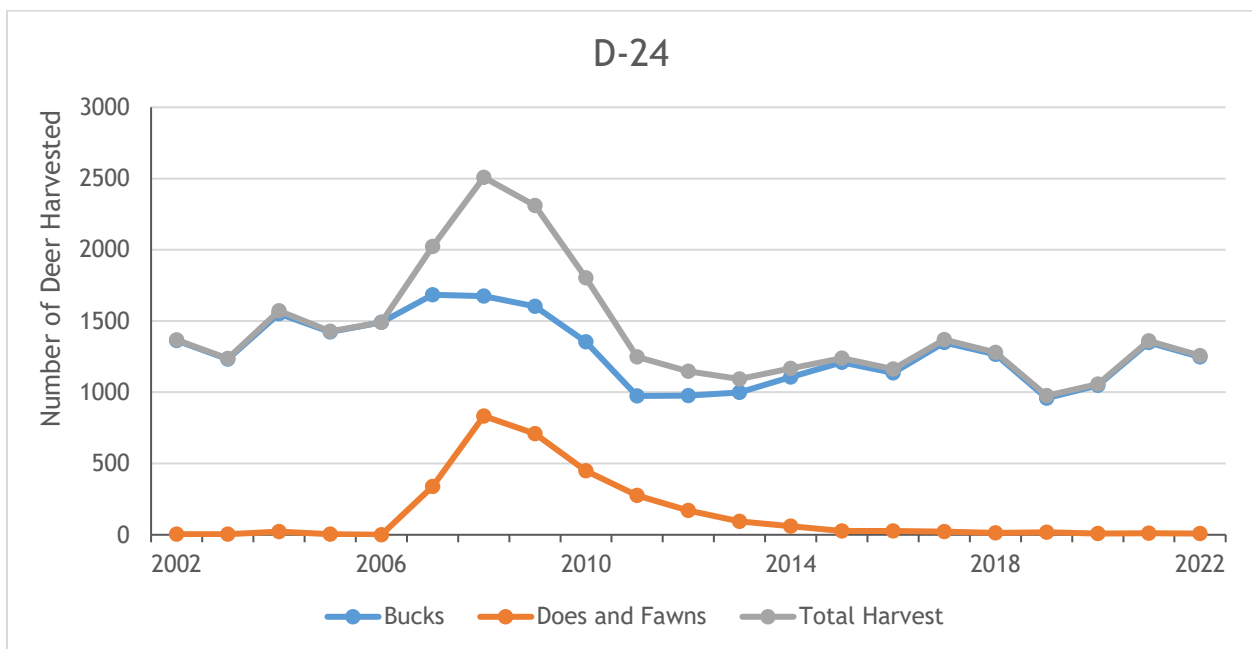
**Figure D24-1.** Deer DAU D-24 modeled post-hunt population estimate and objective range, years 2002-2022.



**Figure D24-2.** Deer DAU D-24 observed and modeled post-hunt sex ratio (bucks:100 does), years 2002-2022.



**Figure D24-3.** Deer DAU D-24 fawn production (observed post-hunt fawns:100 does ratio, years 2002-2022).



**Figure D24-4.** Deer harvest estimates in D-24, years 2002-2022.

## Background Information

The Groundhog Deer Population consists of Data Analysis Unit (DAU) D-24. It is located in the southwest corner of Colorado and contains Game Management Units (GMUs) 70, 71, and 711. The DAU is 2,852 square miles and includes portions of Dolores, Montezuma, Montrose, and San Miguel counties. The DAU is bounded on the north by the Dolores and San Miguel Rivers, State Highways 90 and 62, on the east by the Ouray/San Miguel, San Juan/San Miguel, Dolores/San Juan, Montezuma/La Plata County lines, on the south by Bear Creek, State Highways 145 and 184, and on the west by US Highway 491 and Utah. The towns of Rico, Norwood, and Telluride occur within the DAU, while Dove Creek and Dolores are on the southern boundary. Land ownership in the DAU is 34% U.S. Forest Service, 32% BLM, 30% private, and 2% CPW and State Land Board each.

The current post-hunt population objective of 15,000-19,000 deer was set in 2014. The deer population overall has been stable for the past 15 years following a previous decline. It was estimated between 13,800 (2020) and 25,700 (2006) and in 2022 the estimate was 18,300 deer (Figure D24-1).

The average observed post-hunt buck ratio from 2002 to 2022 was 27 bucks:100 does, with a range of 16-38 (Figure D24-2). The observed three-year (2020-2022) average of 22 bucks:100 does was below the post-hunt buck ratio management objective. Observed post-hunt fawn ratios averaged 49 fawns:100 does (range 38-69) between 2002 and 2022 (Figure 4). The three-year and five-year averages in 2022 were 57:100 and 52:100, respectively.

Buck harvest has varied over the last 20 years with a low of 959 bucks harvested (2019) to a high of 1,684 (2007), and has averaged 1,285 annually (Figure D24-3). Success rates for hunters do not vary much, and the number of bucks harvested is driven more by the number of licenses available. Doe harvest is on private land through Private Land Only (PLO) licenses or game damage permits. In the past 20 years, doe harvest has ranged from zero (2006) to 776 (2008) with an average of 142 (Figure 5). An estimated nine does were harvested in 2022.

When the previous management objectives were determined for this population in 2014, deer populations statewide were on a long-term decreasing trend. At the time the HMP was being written for D-24, the deer herd had reached its lowest recorded population level. The deer population has fluctuated since, but has remained essentially stable. Based on the herd performance over the past ten years, minimal game damage issues, and the desire for more deer on public lands, CPW recommends increasing the population objective.

Buck licenses were limited in the DAU in 1999 when all over-the-counter buck licenses in Colorado were made limited. A fourth-season buck hunt is available in the DAU with limited opportunity. CPW proposes keeping the same buck ratio objective from the previous plan.

## Significant Issues

Due to human population growth, a significant concern in the DAU is the cumulative impacts to critical habitat, including winter ranges, migration corridors, production areas, and high-elevation summer ranges. Exurban development is occurring in the DAU and homes are replacing open lands that currently support deer. Energy development has also increased in deer habitat on private and public lands, resulting in direct and indirect habitat loss. Lastly, outdoor recreation continues growing, placing more people in important deer habitat. The

increase in recreational trails and recreation use is decreasing the amount of adequate habitat. Managers and the public are concerned over the cumulative and prolonged impacts of development and recreation, which is disrupting migration and decreasing the quality and quantity of habitat. Actions to enhance and protect important deer habitat will be essential to increase the deer population.

Drought has been present in southwest Colorado for more than two decades, negatively impacting deer habitat and decreasing the amount and quality of forage. Quality habitat provides food, shelter, space, and water and are important to producing robust mule deer populations.

Game damage caused by deer is present but minimal in the DAU. However, there are concerns about the distribution and harvest of deer. Portions of the deer population are more robust on agricultural fields and less so on public lands. To address this managers would like to continue current harvest on those animals in agricultural areas and non-migratory deer and have reduced harvest pressure on migratory deer and those using public lands.

Chronic Wasting Disease (CWD) was detected in the DAU in 2020 with a prevalence rate of 2.6%. Guidelines in CPW's CWD Response Plan (December 2018) will be used to address the spread of the disease. Hemorrhagic disease is also present in D-24. Within the DAU, the disease can cause die-offs of mule deer in the driest years. However, infection and sometimes death of individual animals are more common, with minimal impacts to the overall population.

### **Management Objectives**

CPW staff recommends increasing the population objective from the previous objective. Game damage is minimal in the DAU and would continue to be addressed as needed through game damage permits and PLO licenses. Management would allow the population to grow on public lands and the migratory herd while maintaining the resident populations of deer occurring on and around agriculture fields. The majority of hunters who responded to CPW surveys in 2021 and 2022 indicated that they would like to see a slight or moderate increase in the population, supporting CPW's proposed alternative.

The current sex ratio objective for D-24 is 23-28 bucks per 100 does. CPW proposes to keep the same objective. The majority of hunters who responded to a CPW survey in 2021 and 2022 were generally satisfied with the number of bucks in the population.

## Management Alternatives

Three post-hunt population objective alternatives were considered for D-24:

**Table D24-1.** Proposed and recommended population objective ranges for the 2024 D-24 revised HMP.

| Population Objective Alternatives: |   |
|------------------------------------|---|
| 19,000 to 23,000 (midpoint 21,000) | (1) Approximately 25% increase in the proposed objective range midpoint |
| 15,000 to 19,000 (midpoint 17,000) | (2) Status Quo (Maintain current population)                            |
| 11,000 to 15,000 (midpoint 13,000) | (3) Approximately 25% decrease in the proposed objective range midpoint |

Three post-hunt sex ratio objective alternatives were considered for D-24:

**Table D24-2.** Proposed and recommended sex ratio objective ranges for the 2024 D-24 revised HMP.

| Sex Ratio Objective Alternatives: |   |
|-----------------------------------|---|
| 25-30                             | (1) Approximately 10% increase in the proposed objective range midpoint |
| 23-28                             | (2) Status Quo (Maintain current sex ratio)                             |
| 20-25                             | (3) Approximately 10% decrease in the proposed objective range midpoint |

### CPW Commission Approved Objectives:

*Post-hunt Population:* Pending

*Post-hunt buck ratio :* Pending