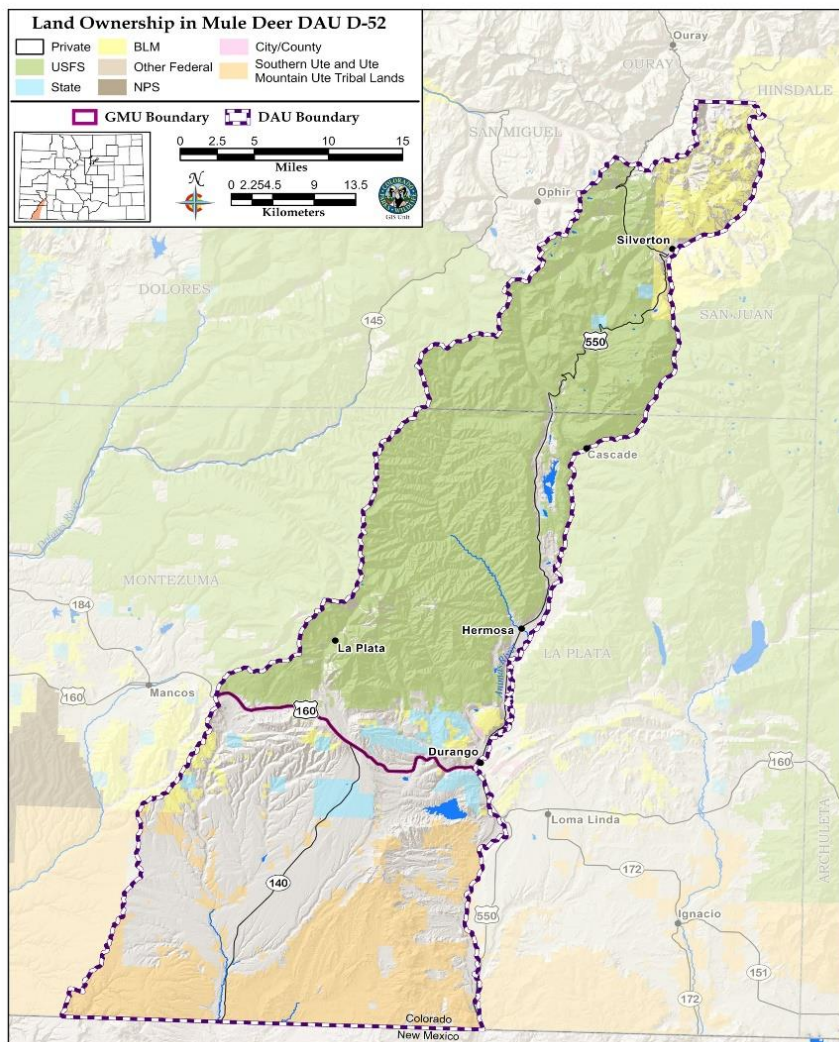


HERMOSA MULE DEER HERD MANAGEMENT PLAN

DATA ANALYSIS UNIT D-52

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October 2023

| | |
|---|-------------------------|
| Hermosa Deer Herd (DAU D-52) | GMUs: 74 and 741 |
| Post-hunt Population: Previous Objective: 4,000-6,000 2022 Estimate: 4,500 Preferred Alternative: <u>4,000-6,000 deer</u> | |
| Post-hunt Sex Ratio (bucks:100 does): Previous Objective: 25-30 2022 observed: 36; modeled: 24 Preferred Alternative: <u>25-30</u> | |



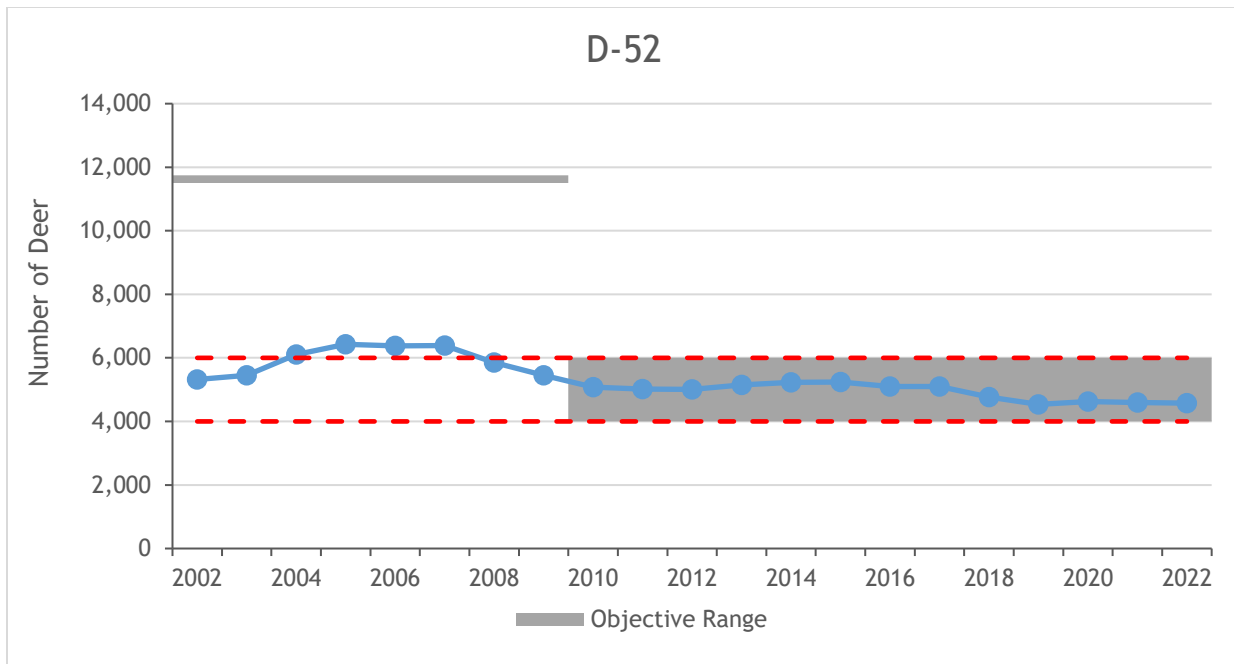


Figure D52-1. Deer DAU D-52 modeled post-hunt population estimate and objective range, years 2002-2022.

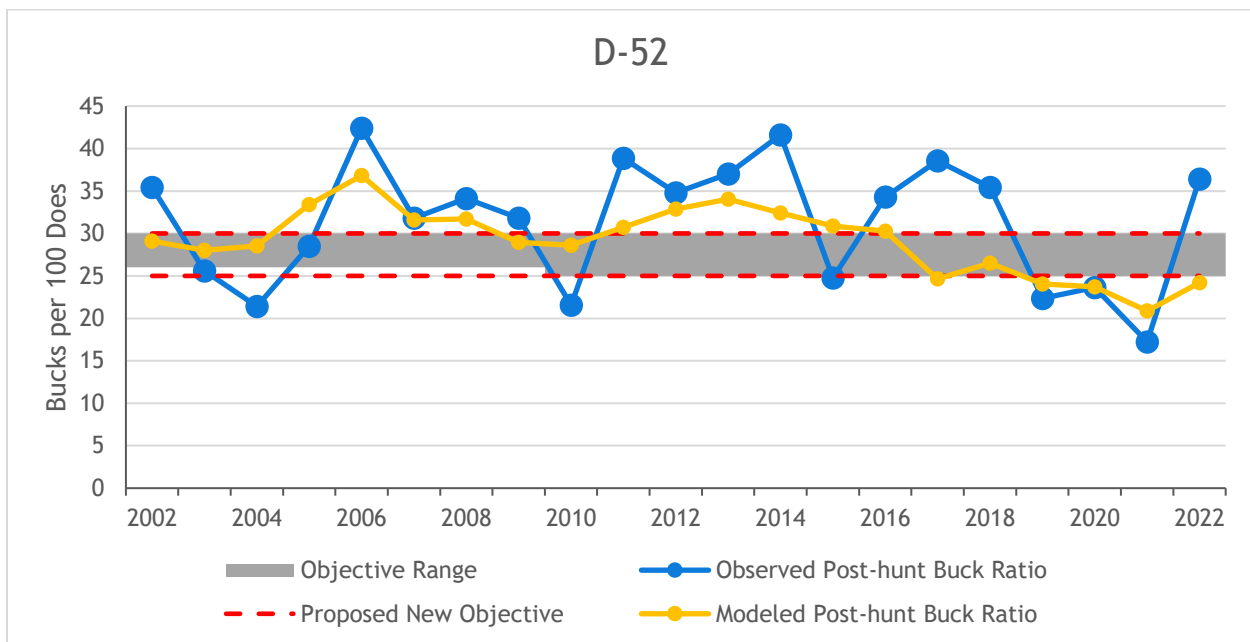


Figure D52-2. Deer DAU D-52 observed and modeled post-hunt sex ratio (bucks:100 does), years 2002-2022.

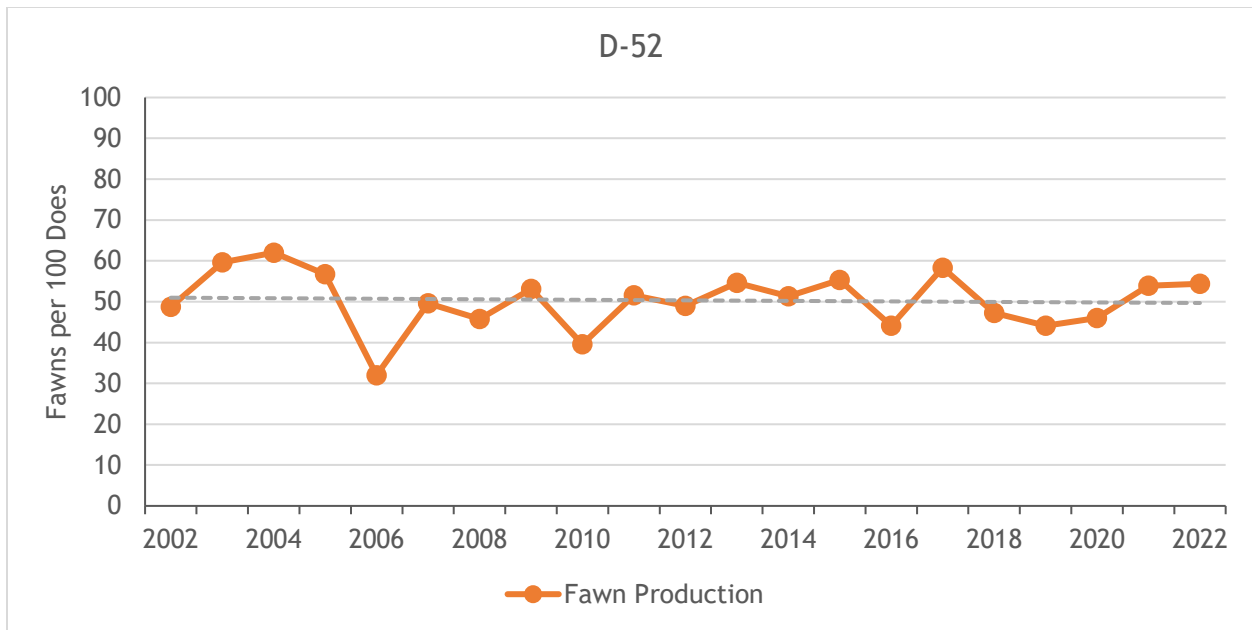


Figure D52-3. Deer DAU D-52 fawn production (observed post-hunt fawns:100 does ratio, years 2002-2022).

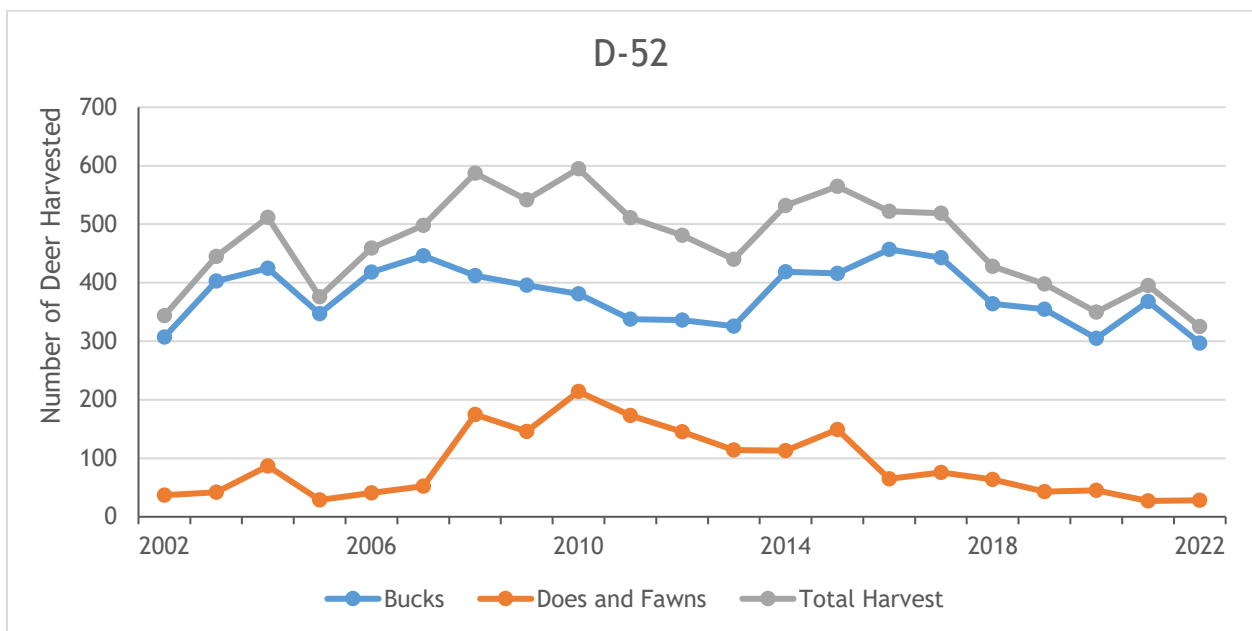


Figure D52-4. Deer harvest estimates in D-52, years 2002-2022.

Background Information

The Hermosa Deer Population consists of Data Analysis Unit (DAU) D-52. It is located in the southwest corner of Colorado and contains Game Management Units (GMUs) 74 and 741. The DAU is 1,000 square miles and includes portions of La Plata and San Juan counties. D-52 is bounded on the north by the Continental Divide, on the south by the New Mexico state line, on the east by the Animas River, and on the west by the Dolores/Animas watershed divide. The towns of Durango, Silverton, Hesperus, and Breen occur within the DAU. Land ownership is composed of 42% U.S. Forest Service (which includes the Hermosa Creek Special Management Area and Wilderness Area), 5% Bureau of Land Management, 32% private land, and 17% Southern Ute Tribal (SUIT) land.

The current post-hunt population objective of 4,000-6,000 deer was set in 2010. Over the past 20 years the deer population has been on a declining trend and has been estimated between 4,500 (2019) and 6,400 (2005) (Figure D52-1). The population has been stable over the past three years and the 2022 population was estimated at 4,600 deer.

The average observed post-hunt buck ratio from 2002 to 2022 was 31 bucks:100 does (Figure D52-2). The observed three-year average (2020-2022) of 26 bucks:100 does is at the lower end of the post-hunt buck ratio management objective. Observed buck numbers have fluctuated a lot, most likely from observer bias or error rather than from changes in buck numbers. Observed post-hunt fawn ratios averaged 50 fawns:100 does (range 32-62) between 2002 and 2022 (Figure D52-3). The three-year and five-year averages were 51:100 and 49:100, respectively.

Buck harvest has varied over the last 20 years with a low of 297 bucks harvested (2022) to a high of 457 (2016), averaging 379 bucks annually (Figure D52-3). Success rates for hunters do not vary much and the number of bucks harvested is primarily a factor of 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 26 (2021) to 206 (2010) with an average of 86 (Figure D52-4). An estimated 28 does were harvested in 2022.

The last revision of the D-52 herd management plan was done in 2010. The management objectives have been working well for this population and there was overall satisfaction with this management. Based on this, CPW recommends maintaining the current management strategy in the new HMP.

Buck licenses were limited in the DAU in 1999 when all over-the-counter buck licenses changed to limited. A fourth season buck hunt is available in the DAU with limited opportunity. CPW proposes maintaining the same sex 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 La Plata and San Juan Counties and homes are replacing open lands currently supporting wintering 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 to expand in La Plata and San Juan Counties, placing more people in areas important to deer. Increased recreational trails

and recreation use is decreasing the amount of effective deer habitat. Managers and the public are concerned over the cumulative and prolonged impacts of development and recreation, which is disrupting migration and decreasing quality and quantity of habitat. Actions to enhance and protect important deer habitat will be essential to maintain a healthy deer population.

Drought has been present in southwest Colorado for more than two decades. This has negatively impacted deer habitat and has decreased the amount and quality of forage. Quality habitat provides food, shelter, space, and water and is essential to produce robust mule deer populations.

Chronic Wasting Disease (CWD) has not been detected in the DAU, but is in adjacent DAUs to the west, north and east. It can be expected that CWD will arrive in the DAU in the near future. Hemorrhagic disease is present in D-52. Within the DAU, the disease can cause die-offs of mule deer in the driest years. More common though are infection and sometimes death of individual animals with minimal impacts to the overall population.

Management Objectives

CPW staff recommends maintaining the current population objective to meet stakeholder and CPW staff desires. There is overall satisfaction with the current management of this population. The majority of hunters who responded to CPW surveys in 2021 and 2022 indicated that they are generally satisfied with the number of deer in the population, supporting CPW's current and proposed alternative.

The current sex ratio objective for D-52 is 25-30 bucks per 100 does. CPW proposes keeping this objective in the plan revision. Results from the 2021 and 2022 surveys show that hunters were evenly split regarding their satisfaction with the number of bucks in the population.

Management Alternatives

Three post-hunt population objective alternatives were considered for D-52:

Table D52-1. Proposed and recommended population objective ranges for the 2024 D-52 revised HMP.

| Population Objective Alternatives: | |
|------------------------------------|---|
| 5,000 to 7,000 (midpoint 6,000) | (1) Approximately 20% increase in the proposed objective range midpoint |
| 4,000 to 6,000 (midpoint 5,000) | (2) Status Quo (Maintain current population) |
| 3,000 to 5,000 (midpoint 4,000) | (3) Approximately 20% decrease in the proposed objective range midpoint |

Three post-hunt sex ratio objective alternatives were considered for D-52:

Table D52-2. Proposed and recommended sex ratio objective ranges for the 2024 D-52 revised HMP.

| Sex Ratio Objective Alternatives: | |
|-----------------------------------|---|
| 30-35 | (1) Approximately 15% increase in the proposed objective range midpoint |
| 25-30 | (2) Status Quo (Maintain current sex ratio) |
| 20-25 | (3) Approximately 15% decrease in the proposed objective range midpoint |

CPW Commission Approved Objectives:

Post-hunt Population: Pending

Post-hunt buck ratio: Pending