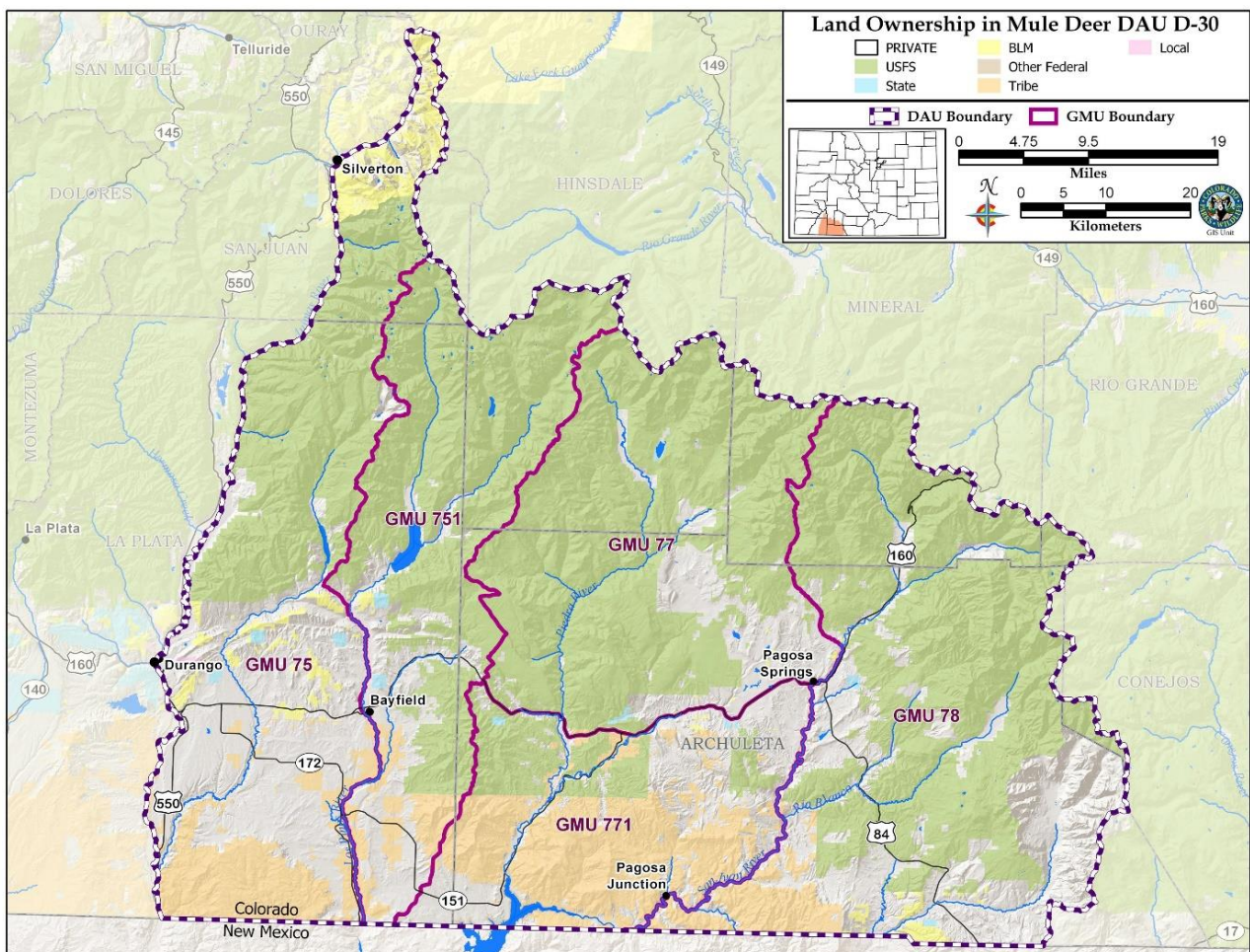


SAN JUAN BASIN MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-30

Brad Weinmeister, Wildlife Biologist, Durango
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| | |
|---|---------------------------------------|
| San Juan Basin Deer Herd (DAU D-30) | GMUs: 75, 77, 78, 751, and 771 |
| Post-hunt Population: Previous Objective: 23,000-27,000 2022 Estimate: 22,700 Preferred Alternative: <u>23,000-27,000 deer</u> | |
| Post-hunt Sex Ratio (bucks:100 does): Previous Objective: 26-30 2022 observed: 29; modeled: 32 Preferred Alternative: <u>25-30</u> | |



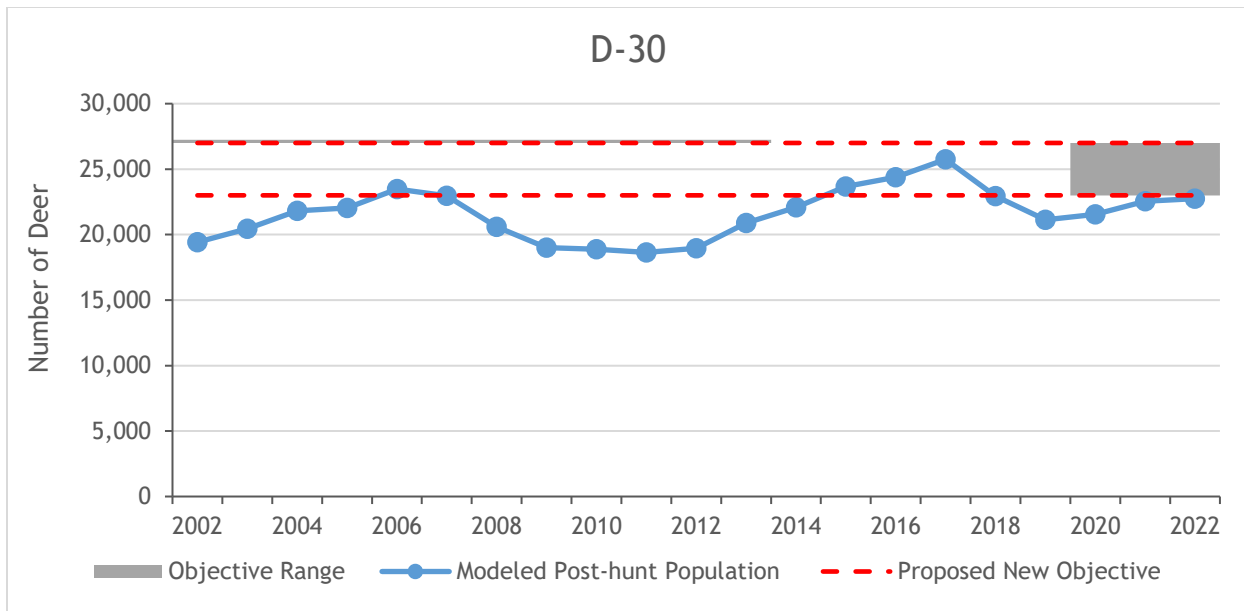


Figure D30-1. Deer DAU D-30 modeled post-hunt population estimate and objective range, years 2002-2022.

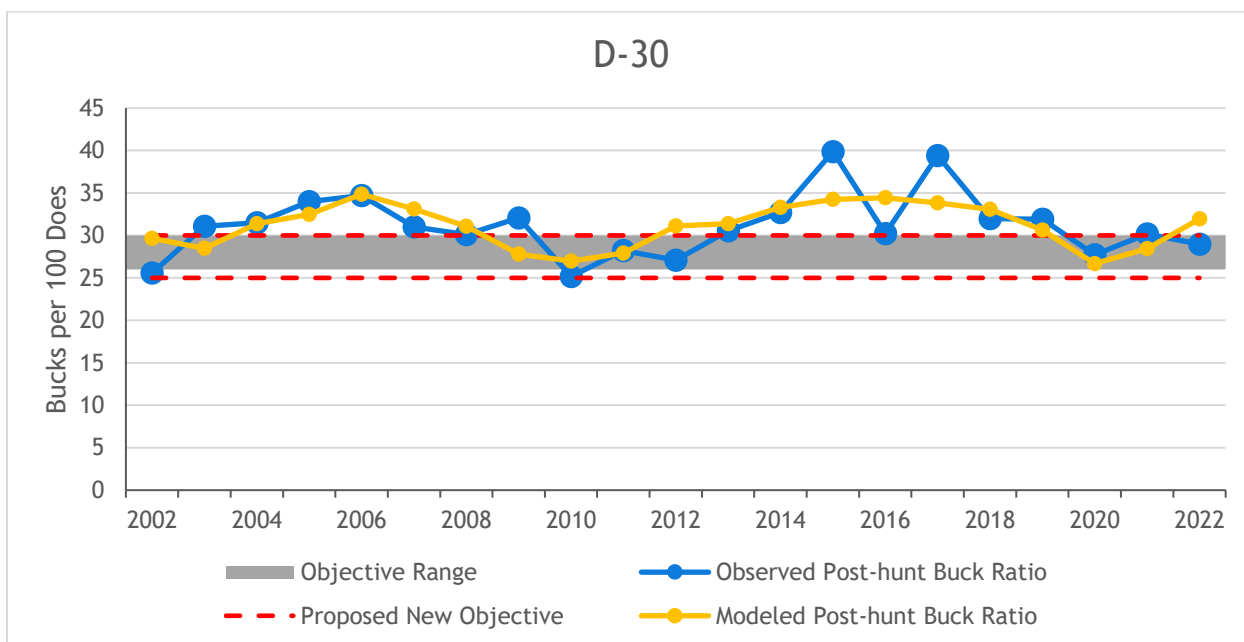


Figure D30-2. Deer DAU D-30 observed and modeled post-hunt sex ratio (bucks:100 does), years 2002-2022.

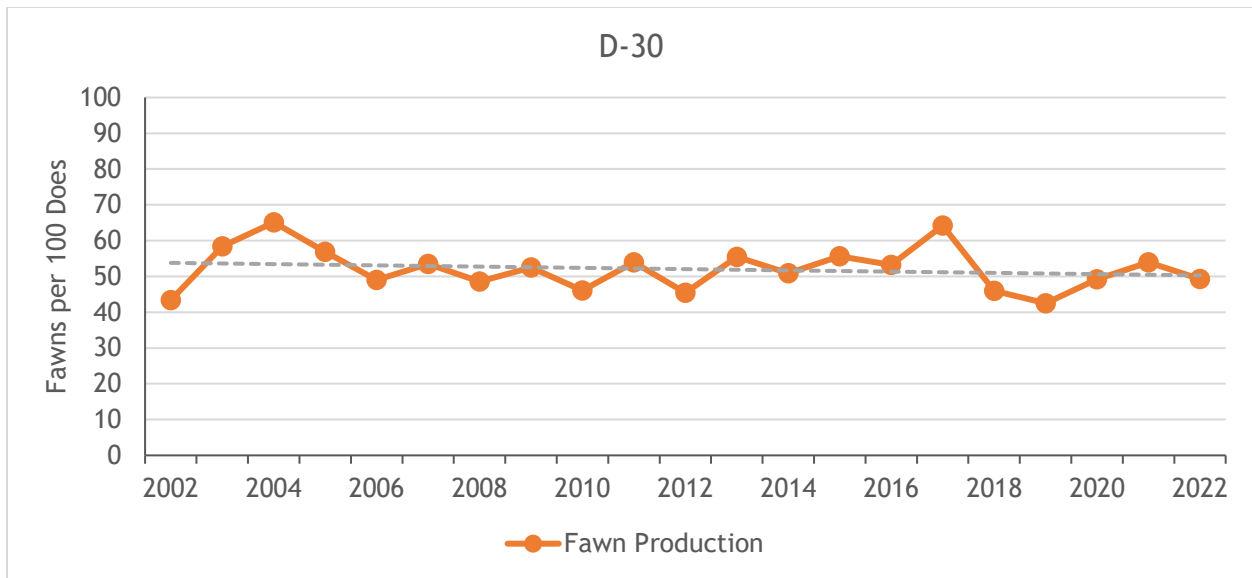


Figure D30-3. Deer DAU D-30 fawn production (observed post-hunt fawns:100 does ratio, years 2002-2022).

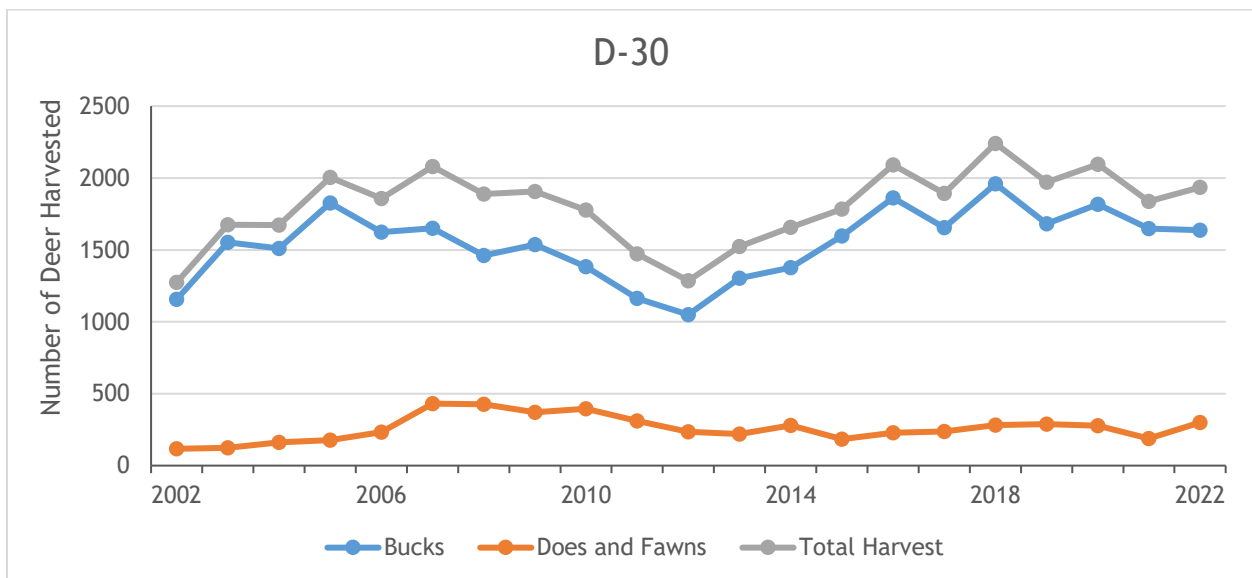


Figure D30-4. Deer harvest estimates in D-30, years 2002-2022.

Background Information

The San Juan Basin Deer Population consists of Data Analysis Unit (DAU) D-30. It is located in the southwest corner of Colorado and contains Game Management Units (GMUs) 75, 77, 78, 751, and 771. The DAU is 2,800 square miles and includes portions of La Plata, San Juan, Hinsdale, Mineral, and Archuleta counties. D-30 is bounded on the north and east by the Continental Divide, on the south by the New Mexico state line, and on the west by the Animas River and contains the towns of Durango, Bayfield, Ignacio, Allison, and Pagosa Springs. Land ownership is composed of U.S. Forest Service (55%), Bureau of Land Management (2%), private land (30%), and Southern Ute Tribal lands (12%).

The current post-hunt population objective of 23,000-27,000 deer was set in 2020. Over the past 20 years, the deer population has fluctuated between 18,000 (2011) and 26,000 (2017) (Figure D30-1). The population has been increasing over the past three years and the 2022 population was estimated at 22,700 deer.

The average observed post-hunt buck ratio from 2002 to 2022 was 31 bucks:100 does (Figure D30-2). The observed three-year (2020-2022) average of 29 bucks:100 does is at the upper end of the post-hunt buck ratio management objective. Buck numbers were high and over objective from 2013 to 2019, averaging 34:100 during that time period. Hunting licenses for bucks were increased, and since then, the ratio has dropped to an observed ratio of 29:100 in 2022. Observed post-hunt fawn ratios averaged 52 fawns:100 does (range 43-65) between 2002 and 2022 (Figure D30-3). The three-year and five-year averages were 51:100 and 48:100, respectively.

Buck harvest has varied over the last 20 years, with a low of 1050 bucks harvested (2012) to a high of 1959 (2018), averaging 1545 annually. In 2022 an estimated 1636 bucks were harvested in the DAU (Figure D30-4). Success rates for hunters do not vary much and the number of bucks harvested is primarily a factor of the number of licenses available. The years with the highest harvest were 2016-2020, and this was done to bring down the buck ratio as mentioned previously. Doe harvest is primarily on private land through Private Land Only (PLO) licenses or game damage permits, although there are a limited number of general licenses too. In the past 20 years, doe harvest has ranged from 111 (2002) to 422 (2008) with an average of 251 (Figure 5). An estimated 292 does were harvested in 2022.

A revision of the D-30 herd management plan was completed in 2020. At that time Colorado Parks and Wildlife staff and stakeholders felt that the previous objective worked well for this population. The only change made at that time was to add a range to the population objective and the Colorado Parks and Wildlife Commission (Commission) approved the recommendations. The proposed objectives for this plan maintains the current objectives recently approved by the Commission in 2020.

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. The sex ratio objective approved by the Commission in 2020 is the same as what is proposed for this plan update.

Significant Issues

Due to human population growth, a significant concern in the DAU is the accumulative impacts to critical habitat, including winter ranges, migration corridors, production areas, and high-elevation summer ranges. Exurban development is occurring in La Plata and Archuleta Counties and homes are replacing open lands that support 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 Archuleta Counties, placing more people in areas important to deer. Increased recreational trails and recreation use is decreasing the amount of effective 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 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 are important for producing robust mule deer populations.

Chronic Wasting Disease (CWD) was detected in the DAU in 2020 with a prevalence rate of less than 1%. Guidelines in CPW's CWD Response Plan (December 2018) will be used to address the spread and increase in prevalence rates. Hemorrhagic disease is also present in D-30. Within the DAU, the disease can cause die-offs of mule deer in the driest years. More common though are infections 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-30 is 26-30 bucks per 100 does. CPW proposes maintaining this sex ratio objective, with a minor change of changing the lower end from 26 to 25. This will make the objective consistent with other nearby herds. 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-30:

Table D30-1. Proposed and recommended population objective ranges for the 2024 D-30 revised HMP.

| Population Objective Alternatives: | |
|------------------------------------|---|
| 27,000 to 31,000 (midpoint 29,000) | (1) Approximately 15% increase in the proposed objective range midpoint |
| 23,000 to 27,000 (midpoint 25,000) | (2) Status Quo (Maintain current population) |
| 19,000 to 23,000 (midpoint 21,000) | (3) Approximately 15% decrease in the proposed objective range midpoint |

Three post-hunt sex ratio objective alternatives were considered for D-30:

Table D30-2. Proposed and recommended sex ratio objective ranges for the 2024 D-30 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