

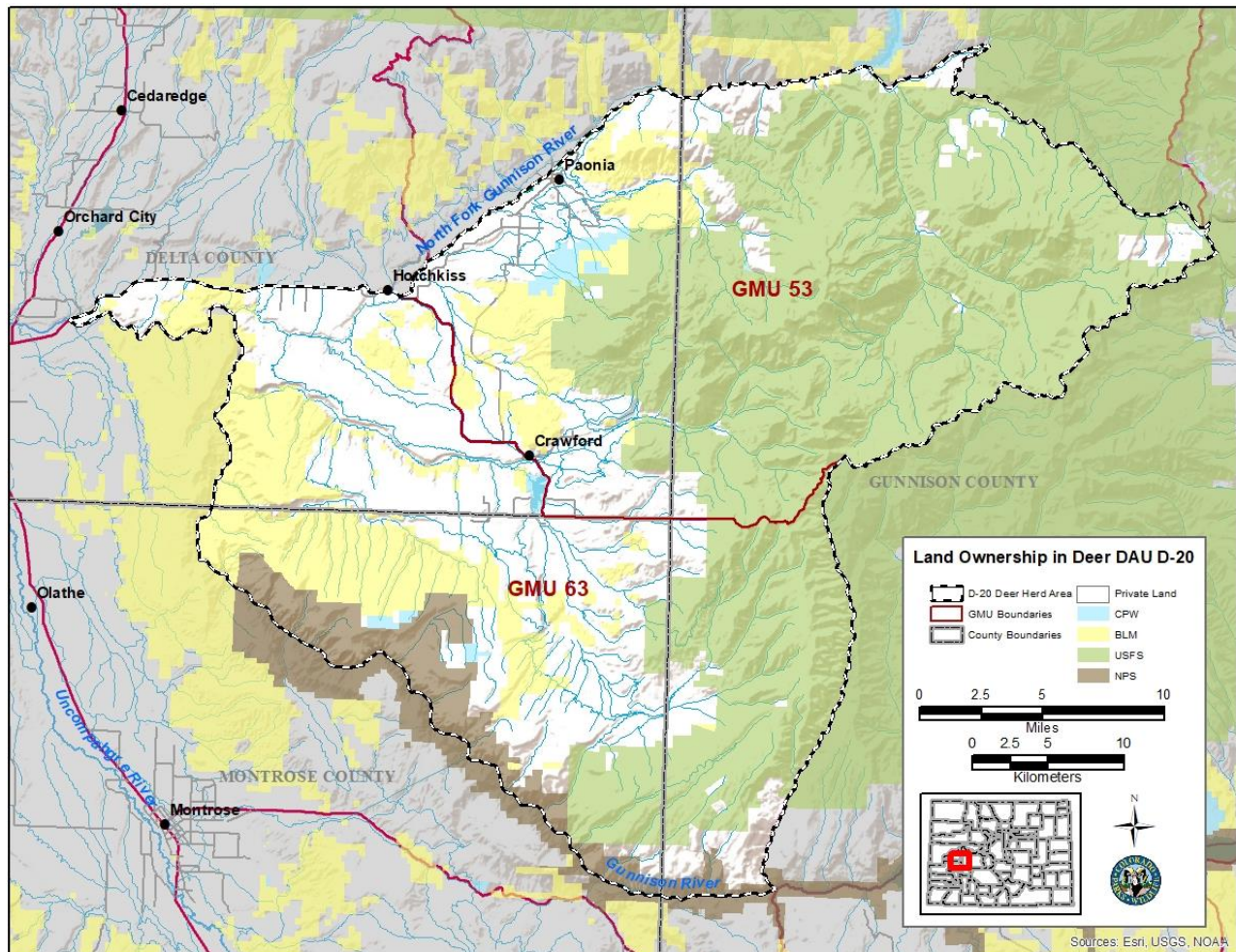
# NORTH FORK GUNNISON RIVER DEER HERD MANAGEMENT PLAN EXTENSION DATA ANALYSIS UNIT D-20

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GMUs: 53, 63  
Last HMP Approval Year: 2018

Post-hunt Population: 7,500 - 9,500; 2022 Estimate: 8,700.  
**Preferred Alternative: Extend the current population objective of 7,500 - 9,500 Deer**

Post-hunt Observed Sex Ratio (bucks:100 does): Previous Objective: 33-38;  
2022 observed: 39; modeled: 41  
**Preferred Alternative: Extend the current sex ratio objective of 33-38 bucks:100 does**



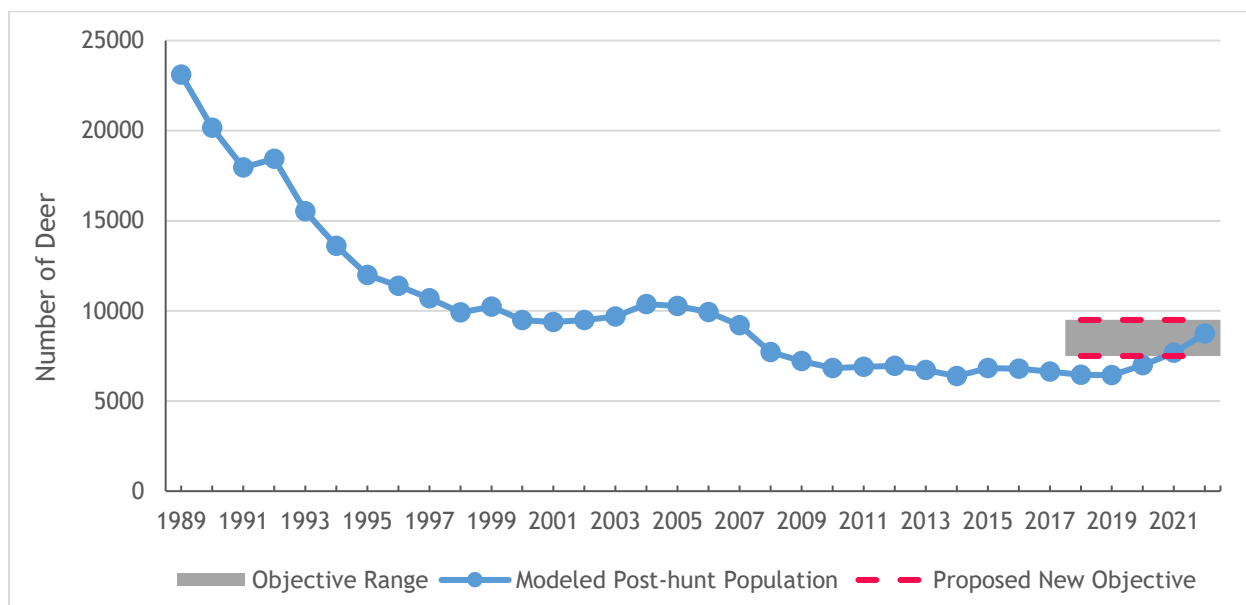


Figure D20-1. Deer DAU D-20 modeled post-hunt population and objective range, years 1989-2022.

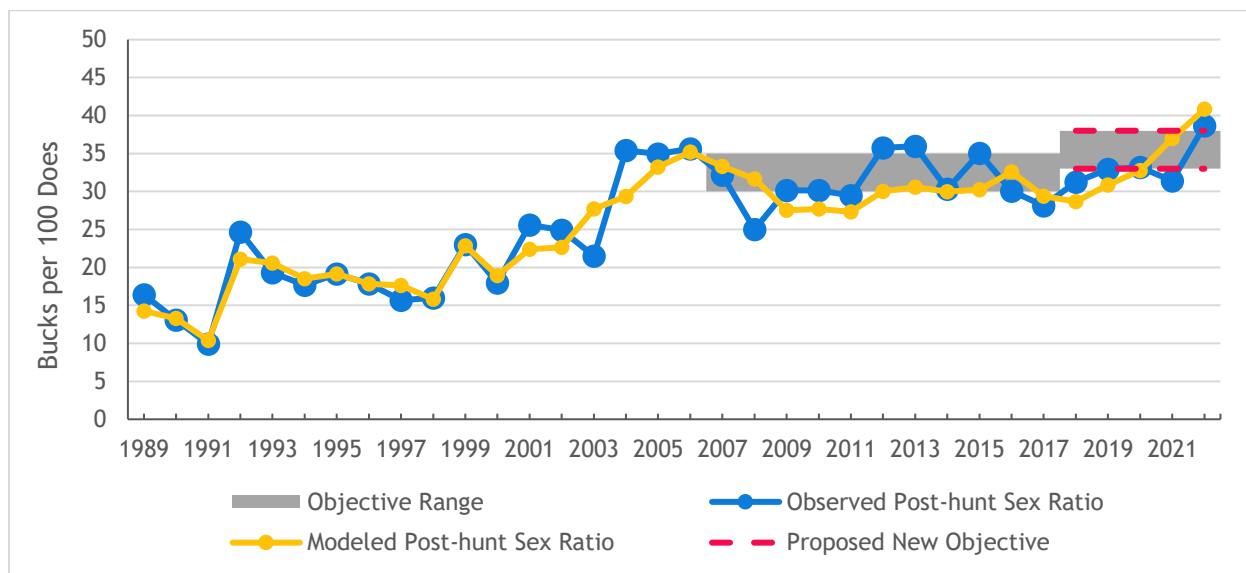


Figure D20-2. Deer DAU D-20 observed and modeled post-hunt sex ratio (bucks:100 does), years 1989-2022.

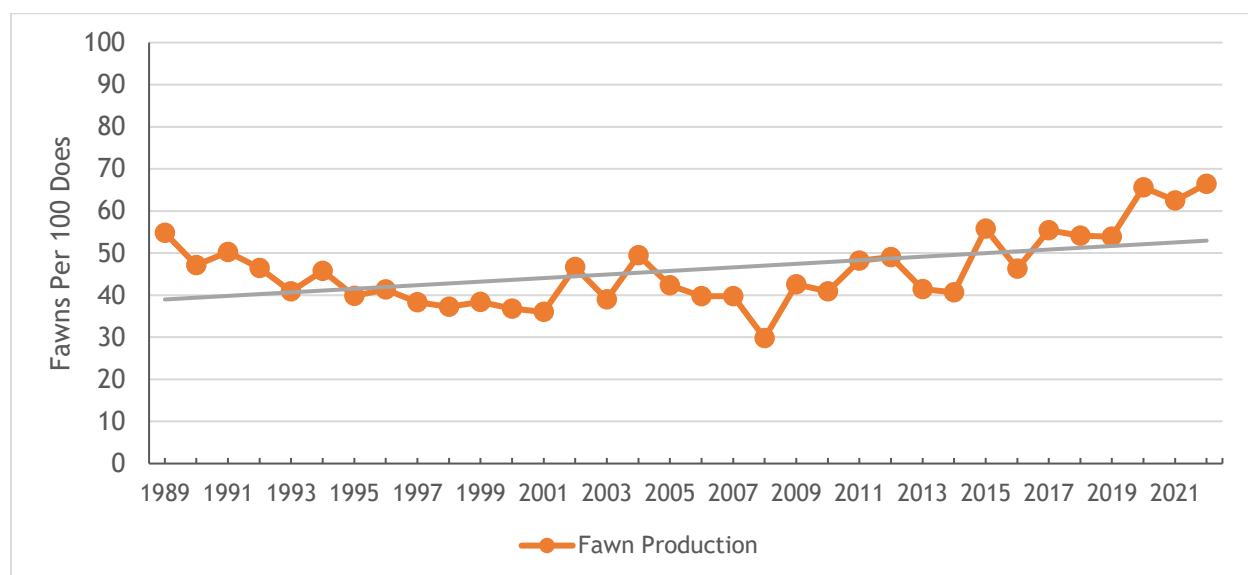


Figure D20-3. Deer DAU D-20 fawn production (observed post-hunt fawns:100 does ratio), years 1989-2022.

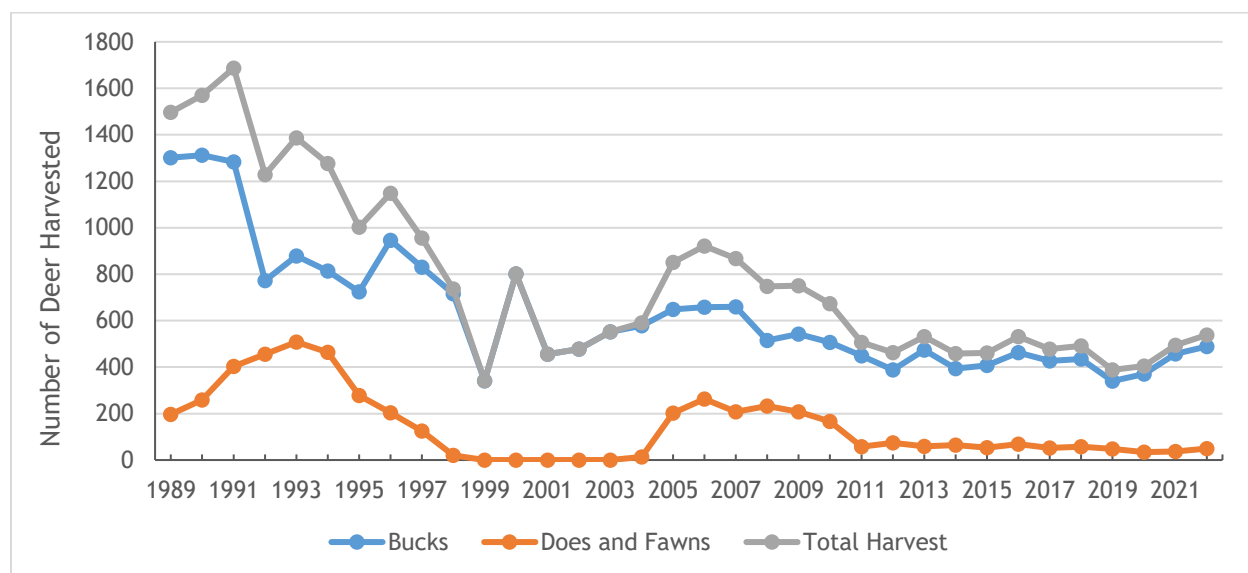


Figure D20-4. Deer harvest estimates in D-20, years 1989-2022.

### Background Information

Data Analysis Unit (DAU) D-20 is 766 square miles in southwestern Colorado and includes parts of Gunnison, Delta, and Montrose Counties. DAU D-20 consists of Game Management Units (GMUs) 53 and 63. Land ownership in DAU E-43 is 32% private and 68% public (US Forest Service, Bureau of Land Management, National Park Service, and the State of Colorado). There are three wilderness areas within the DAU: West Elk Wilderness, Black Canyon of the Gunnison Wilderness, and Gunnison Gorge Wilderness.

Deer occur throughout GMUs 53 and 63, but migratory behavior determine spatial and temporal density across the units. Prior to 2018, GMU 53 and 63 were managed as separate herds with similar management objectives. The herd management plans were revised and combined in 2018 and the population objective was set to 7,500 to 9,500, which, following public input, targeted increasing the population from the current population at that time. It is well documented that overall, the population of mule deer in the North Fork Gunnison River Valley, and most of Colorado, has seen significant declines since the 1980s (Gill et al. 2001). From 2008 to 2019, the North Fork Gunnison River deer herd population was estimated to be relatively stable at an average of 6,700 deer (Figure D20-1). The estimated population has increased slightly in the last few years; the 2022 post-hunt population was 8,700 deer, which is within the population objective range.

The average observed post-hunt sex ratio between 1989 and 2022 was 26 bucks:100 does. The average observed post-hunt sex ratio from 2018 to 2022 was 34 bucks:100 does (Figure D20-2), within the current sex ratio objective of 33-38 bucks:100 does. The 2018 - 2022 fawn: doe ratio was 61 fawns per 100 does. This fawn: doe ratio has increased by approximately 15 fawns per 100 does in a 10-year period; the 2007-2017 average was 46 fawns per 100 does (Figure D20-3).

Deer harvest since 1999, when deer licenses in GMUs 53 and 63 were changed from unlimited to limited, is a function primarily of license allocation and season structure. Weather also plays a role in harvest by affecting success rates. From 2018 to 2022 an average of 418 bucks were harvested annually in D-20 (Figure D20-4). Antlerless licenses were not issued from 1998 to 2005 in an attempt to address deer population declines from the 1980s through the 1990s. In 2005 antlerless deer licenses were issued with private-land-only restrictions to help private landowners alleviate agricultural and private land damage due to deer.

### **Significant Issues**

Habitat loss and degradation is occurring in D-20 due to increased pressures of human population growth and development and recreation uses of the land, similar to the rest of the Southwest Region of Colorado. Ongoing drought and climate change also negatively impacts the quality of deer habitat that remains.

Diseases are an issue in the North Fork Valley deer herd. Epizootic Hemorrhagic Disease Virus (EHDV) has been documented in this area and although mule deer are relatively more resistant than other species, it can impact the population in some cases. Chronic wasting disease (CWD) has not been documented in GMU 53 or 63 so far, but has been documented in the neighboring GMUs in close proximity.

## Management Alternatives

Three post-hunt population objective alternatives and four post-hunt sex ratio objectives were considered in 2018 for D-20:

**Table D20-1.** Proposed population objective ranges considered in 2018 for the D-20 HMP.

Post-hunt Population Objective Alternatives:	
7,500 to 9,500 (midpoint 8,500)	(1) Approximately 10% increase in the current population estimate (STAFF PREFERRED)
6,500 to 8,500 (midpoint 7,500)	(2) Maintain current population size
5,500 to 7,500 (midpoint 6,500)	(3) Approximately 10% decrease in the current population estimate

**Table D20-2.** Proposed sex ratio (bucks:100 does) objectives ranges considered for the 2018 D-20 HMP.

Post-hunt Sex Ratio Objective Alternatives:	
25-30 bucks:100 does	(1) Decrease from the current sex ratio objective range
30-35 bucks:100 does	(2) Maintain the current sex ratio objective range
33-38 bucks:100 does	(3) Slight increase in the current sex ratio objective (STAFF PREFERRED)
40-45 bucks:100 does	(4) Increase in the current sex ratio objective range

## Management Objectives

CPW's staff-preferred objective is to extend the D-20 management objectives approved in the 2018 HMP. Continuing to manage to the deer population objectives set in 2018 should not significantly increase conflicts with agriculture producers and aligns with the public's desire for this herd based on public involvement. Managing for 33-38 bucks:100 does also corresponds to the majority of responses from public involvement.

## Stakeholder Outreach

In 2017, an extensive stakeholder outreach process was conducted, which included input from County Commissions and the local Habitat Partnership Program committee, a public scoping meeting, a public input survey, and a survey of landowners and randomly selected license holders from 2015-2017. The draft plan was also posted on the CPW website and sent out to stakeholders for a 30-day open comment period (Appendix D20-A).

## CPW Commission Approved Objectives:

*Post-hunt Population: Pending*

*Post-hunt buck: doe ratio: Pending*