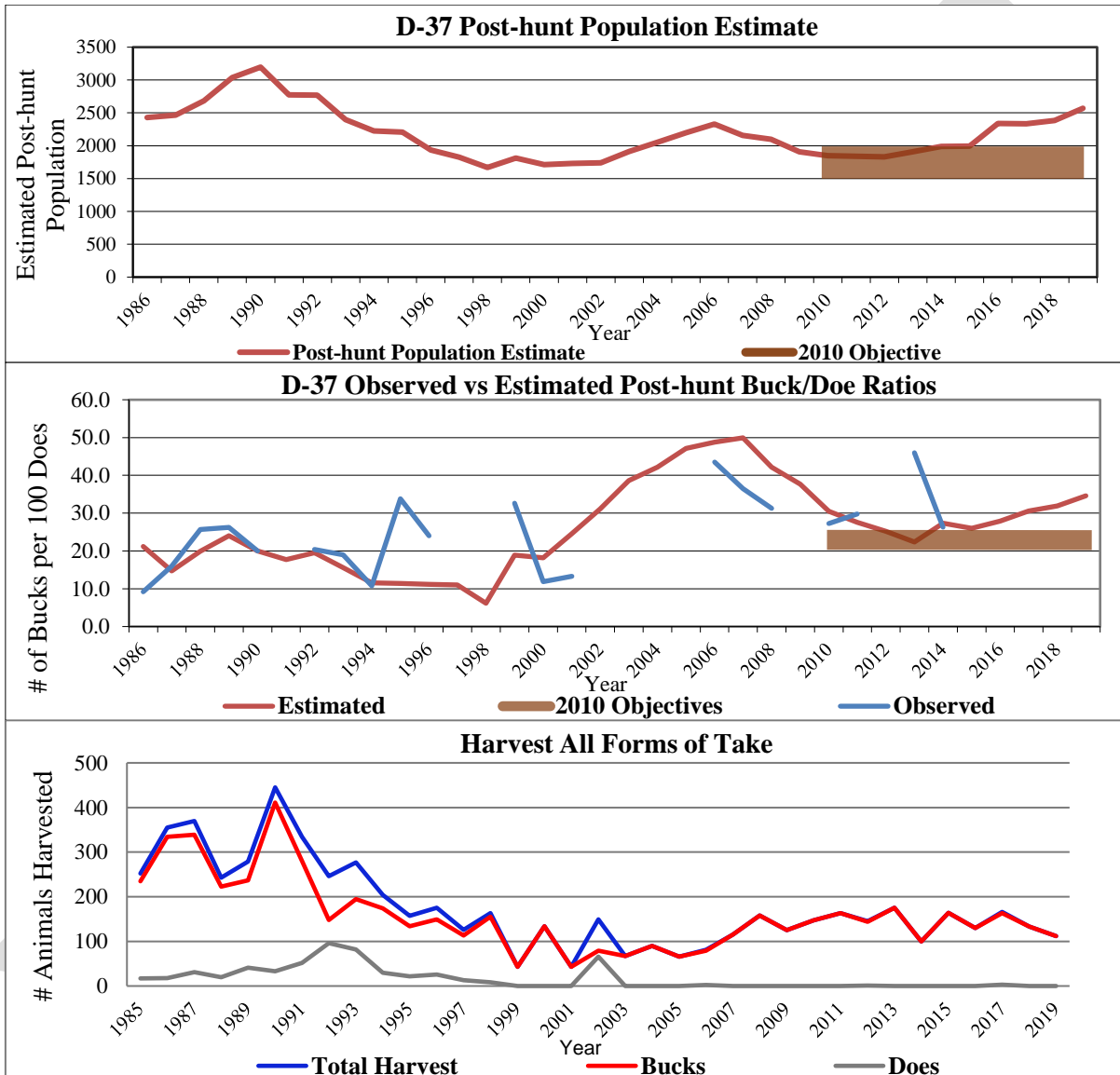


## Sand Dunes Deer D-37 HMP Extension Executive Summary

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|--|---|
| GMU: 82  | <b>Land Ownership:</b> 10% BLM, 20% GRSA, 19% USFS, 12% USFWS, 8% State Land Trust, 3% CO State, and 29% Private. |
| <b>2019 Post-hunt Population Estimate:</b> 2,570   | <b>Post-hunt Sex Ratio (Bucks to 100 Does):</b> 36 (Observed 3-yr. average).                                      |
| <b>2010-2020 (Previous Herd Plan Objectives):</b>  | 1,500 to 2,000 deer; 20-25 Bucks per 100 Does.  |
| <b>2020-2030 (Preferred Herd Plan Objectives):</b> | 2,300 to 3,000 deer; 25-29 Bucks per 100 Does.  |



The D-37 mule deer herd is in the northeastern region of the San Luis Valley. The DAU (geographic area) comprises a single Game Management Unit, GMU 82, approximately 1,088 square miles. Mule deer winter range within the DAU includes roughly 203 square miles, whereas summer range encompasses about 310 square miles. Portions of Alamosa and Saguache counties make up the entire area. Public land constitutes about 71% of the DAU, while the private sector owns almost 29% of the area.

The estimated post-hunt population size for D-37 reached its peak at almost 3,200 animals in the early 1990s. Since then, the population declined to roughly 1,600 animals in 1998. The population remained relatively stable until 2002, then climbed through to 2006. Thereafter, the population declined through to 2012, likely due to reduced fawn ratios. Since 2012, with a recovery in observed fawn recruitment, the population appears to be increasing.

The observed sex ratio was relatively stable until 1999, around 22 bucks per 100 does. Since then, the sex ratio has climbed through to 2019, reaching approximately 36 bucks per 100 does. The sex ratio has been above the objective range since 2006. Most stakeholders, who have asserted their opinions and desires to local field personnel, would prefer a slightly higher sex ratio objective in the DAU. A higher objective would reduce the need for an aggressive harvest on the buck population.

Before CPW limited buck licenses in 1999, the annual buck harvest averaged approximately 223 animals. Over the past ten years, buck harvest has averaged about 143 animals yearly. With a rising observed sex ratio, CPW began increasing the buck license numbers slightly from 2008, particularly in the second and third rifle seasons. The addition of buck licenses was to reduce the buck population to the objective range. However, harvest from the increased licenses may not have been sufficient, and the sex ratio continues to rise. A more aggressive buck harvest may be necessary.

CPW also removed all doe licenses from 1999. The exception was in 2002, during which CPW implemented a doe harvest because of the drought conditions. Before 1999, doe harvest averaged about 35 animals per year. Over the past ten years, the only doe hunter-harvest occurred from private land conflict issues.

The combined hunting season success rates from 2010 to 2019 have averaged around 48%. However, harvest success rates are skewed between the archery, muzzleloader, and rifle seasons. The average archery success since 2010 is around 18%. Second and third rifle season success rates have averaged almost 54%, and the fourth rifle season success has averaged about 83% over the past ten years.

The two most significant factors limiting the D-37 population are the quantity and quality of winter range habitat. CPW field personnel have observed relatively high fawn recruitment over the last ten years. The strong fawn recruitment is encouraging for the growth of the population. Winter range habitat continues to diminish with increased development on private land and competition with domestic livestock. The reduction in the winter range may restrict population growth. In addition, the D-37 sex ratio has been trending above the present objective range. CPW detected a low prevalence of CWD in the neighboring DAU (D-34), which raises concerns for the heightened sex ratio.

Mule deer are not a significant problem on agricultural land in the DAU, and any depredation concerns are minimal. CPW continues to provide game damage and dispersal licenses to private landowners to address issues. Localized problems may result from restricted mule deer distribution during the winter months. Private landowners who experience mule deer depredation issues can access various management tools offered by CPW; each is dealt with individually.

#### **Preferred Objectives:**

##### ***Post-hunt Population***

The preferred management objective for D-37 is a **population of 2,300 to 3,000 mule deer**, aiming to increase the population.

##### ***Three-year Average Observed Post-hunt Sex Ratio***

The preferred post-hunt sex ratio objective for this herd is to increase the current objective to **25-29 bucks per 100 does**. This range supports the desires of the stakeholder community. A higher objective would reduce the need for an aggressive harvest from what CPW has observed recently. The preferred range would continue to allow for satisfactory hunting experiences and the desired hunting opportunities.

#### **Strategies for Achieving the Preferred Objectives:**

***Post-hunt Population*** – Managing to the preferred mule deer population objective, CPW will collect annual inventory data for the models to function more accurately and conduct appropriate management. As long as fawn recruitment remains strong without public land doe hunting licenses, the population should continue to grow. Tools to control private land depredation issues will stay in place. CPW would consider doe harvest opportunities once the population estimate is within the upper region of the objective range or a significant deterioration in habitat conditions occurs.

***Post-hunt Sex Ratio*** – CPW will increase buck-hunting opportunities until the observed sex ratio falls within the preferred objective range. After that, CPW will monitor the herd closely to maintain a balance between buck hunting opportunity and a mature buck level within the preferred objective range. Harvest from these licenses should sustain the desired adult buck population at acceptable levels and maintain stakeholder satisfaction. This preferred objective would also help reduce the risk of CWD from the sex ratio levels CPW has observed in recent years.