

TRINIDAD DEER HERD MANAGEMENT PLAN EXTENSION

DATA ANALYSIS UNIT D-32

GAME MANAGEMENT UNITS

85, 140, 851

PREPARED FOR

COLORADO PARKS AND WILDLIFE



BY

ALLEN VITT
BRIAN DREHER
JULIE STIVER

7 February 2020

EXECUTIVE SUMMARY

Trinidad Deer Herd (DAU D-32)	GMUs: 85, 851, 140
Posthunt Population: Previous Objective: 9,800-10,800 deer; Estimate for 2018: 8,400. Preferred Alternative: <u>Maintain population objective of 9,800-10,800</u>	
Posthunt Sex Ratio (Bucks:100 Does): Previous Objective: 25-29; Posthunt 2018 observed: 40; modeled: 35. Preferred Alternative: <u>Status Quo 25-29</u>	

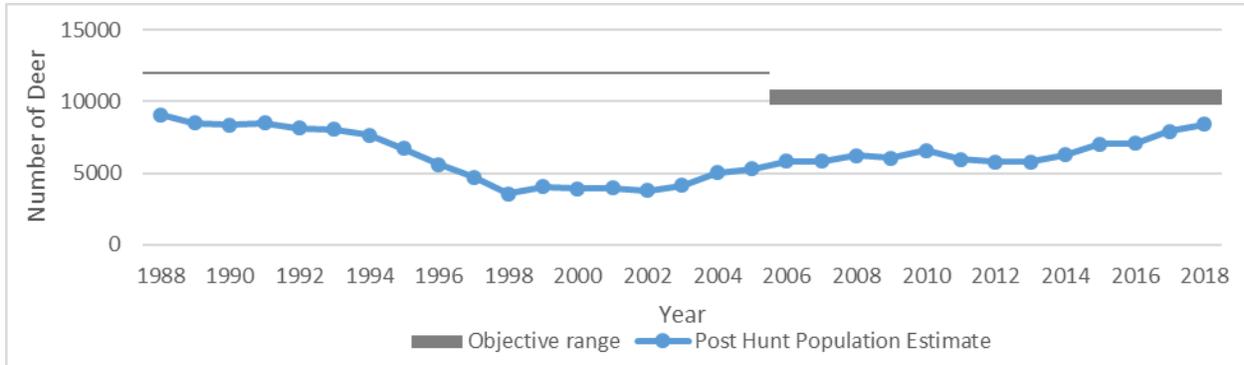


Figure 1. Deer DAU D-32 modeled posthunt population and objective range, 1988-2018.

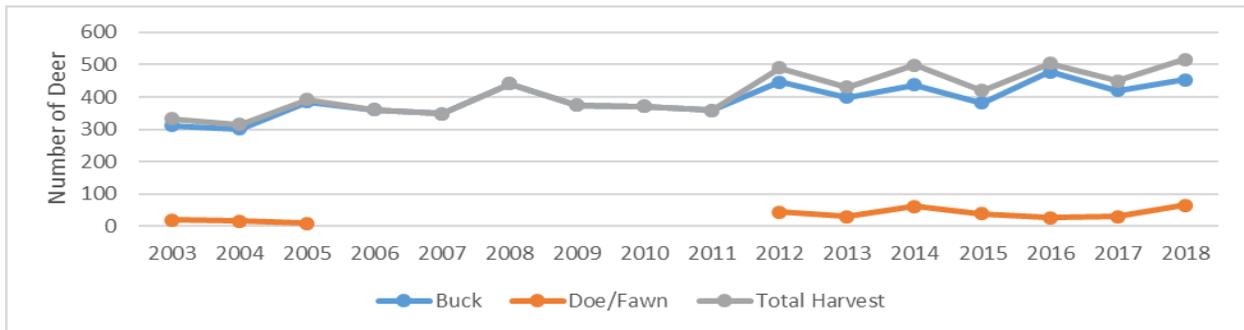


Figure 2. Deer harvest estimates in D-32, 2003-2018.

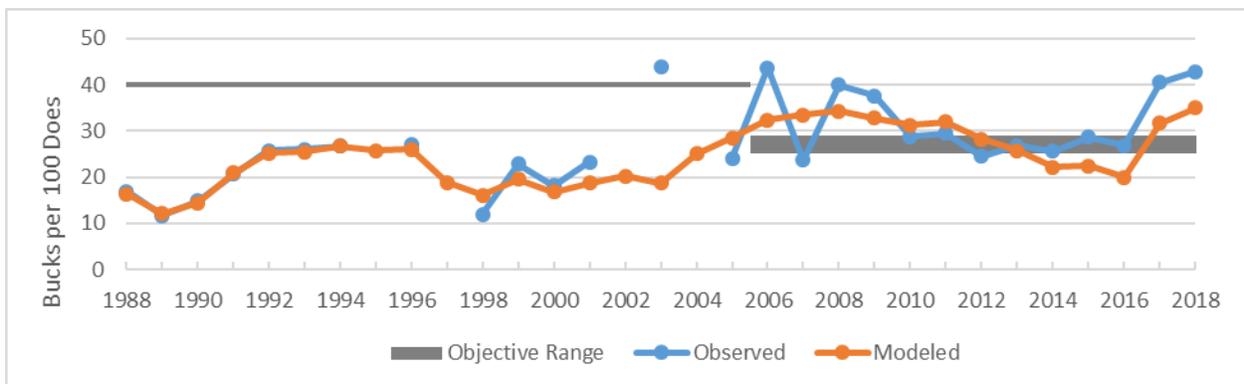


Figure 3. Deer DAU D-32 observed and modeled posthunt sex ratio (Bucks:100 Does), 1988-2018.

Background Information

The Trinidad Deer DAU is located in south central Colorado and lies within portions of Costilla, Huerfano and Las Animas Counties. It is 2,044 mi² and consists of Game Management Units (GMUs) 85, 140 and 851. Almost 86% (1,772 mi²) of the DAU is privately owned, including low-density housing developments, agricultural properties, and large ranches. Hay is the primary crop produced on farmlands and cattle grazing occurs throughout the DAU.

Deer generally occupy the entire DAU from the grassland\shrub and pinion\juniper areas of the foothills through all vegetative zones up to the alpine tundra during the summer and early fall. Another distinct population of deer spends the majority of the year in the riparian and agricultural areas at lower elevations throughout most of the drainages

In developing this Herd Management Plan (HMP), Colorado Parks and Wildlife (CPW) sought input from stakeholders and staff on the desired population and sex ratio objectives along with identifying significant management issues. A public meeting was held in Trinidad in November 2019 to gather input and the plan was posted on CPW's website for a 30-day comment period in November and December 2019.

CPW staff think the deer population in D-32 is doing well, with the population showing increases and satisfaction amongst hunters is very high. Therefore, we are proposing to maintain the current population and sex ratio objectives for another 10-year period.

Recommendation to the Colorado Parks and Wildlife Commission

Population and Sex Ratio Objectives: CPW recommends an extension of the current D-32 post-hunt population objectives of 9,800-10,800 deer with a sex ratio of 25-29 bucks per 100 does for the life of this plan.

Strategies for Addressing Management Issues and Achieving Objectives

Significant management issues identified through the public input process include housing and methane development, lack of private land hunting access, and urban deer. CPW has limited ability to affect many of these issues. However, we will seek opportunities to conserve land through fee title purchase or conservation easements, especially ones with hunting access. We will look for opportunities, working with land management agencies and private landowners, to improve habitat and increase hunter access.

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

INTRODUCTION AND PURPOSE 1

TRINIDAD DEER DATA ANALYSIS UNIT 2

Location..... 2

Population Dynamics 4

Herd Management History..... 5

 Post-hunt Herd Composition..... 5

 Game Damage 6

 Harvest 6

Current Herd Management Status 8

Chronic Wasting Disease..... 8

ISSUES AND STRATEGIES 8

Public Involvement 9

Current Management Issues..... 9

RECOMMENDED OBJECTIVES..... 11

Strategies to Address Issues and Management Concerns 11

Strategies for Achieving Objectives 11

LITERATURE CITED 11

Appendix A - Sangre de Cristo HPP Letter of Support..... 12

Appendix B - Trinidad Public Meeting 14

INTRODUCTION AND PURPOSE

Colorado Parks and Wildlife (CPW) manages big game for the use, benefit, and enjoyment of the people of the state in accordance with the CPW’s 2015 Strategic Plan. Deer management is also determined by mandates from the Colorado Parks and Wildlife Commission (PWC) and the Colorado Legislature. Colorado’s wildlife species require careful and increasingly intensive management to accommodate the many and varied public demands and growing human impacts. The CPW uses a “Management by Objective” approach to manage the state’s big game populations (Figure 4).

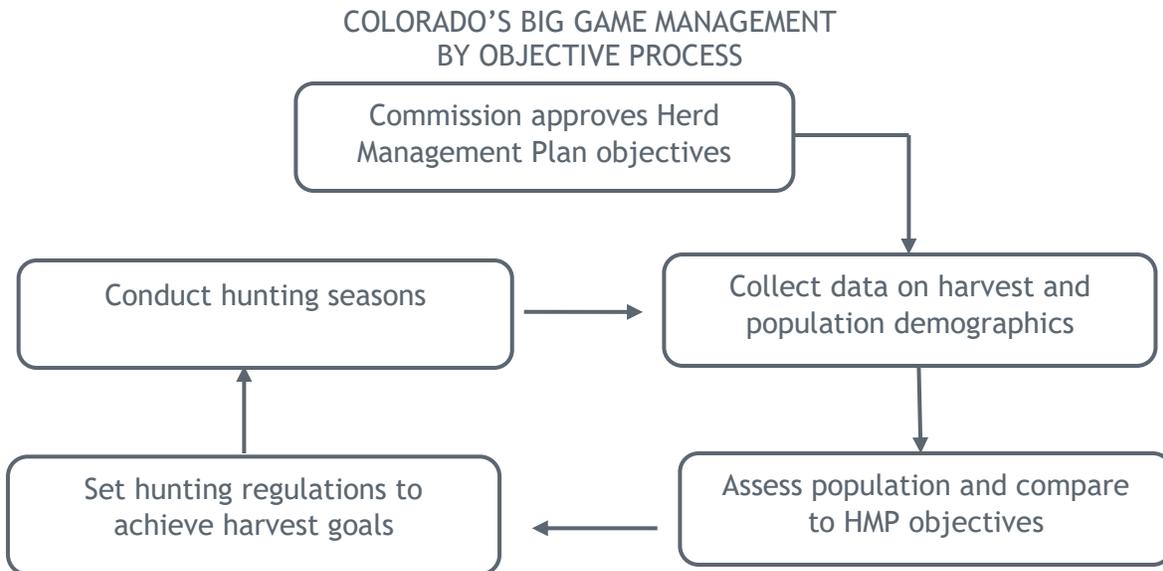


Figure 4. Management by Objective process used by Colorado Parks and Wildlife to manage big game populations by Data Analysis Unit.

With the Management by Objective approach, big game populations are managed to achieve the population objective established for a Data Analysis Unit (DAU). A DAU is the geographic area that includes the year-round range of a big game herd. A DAU includes the area where most of the animals in a herd are born, live, and die. DAU boundaries are delineated to minimize interchange of animals between adjacent DAUs. A DAU may be divided into several Game Management Units (GMUs) to distribute hunters and harvest within a DAU.

Management decisions within a DAU are based on a herd management plan. The primary purpose of a herd management plan is to establish population and sex ratio (i.e., the number of males per 100 females) objectives for the DAU. The herd management plan also describes the strategies and techniques that will be used to reach these objectives. During the herd management planning process, public input can be solicited and collected through questionnaires, public meetings, and comments to CPW staff and the PWC. The intentions of the CPW are integrated with the concerns and ideas of various stakeholders including the United States Forest Service (USFS), the Bureau of Land Management (BLM), city and county governments, hunters, guides and outfitters, private landowners, local chambers of commerce and the public. In preparing a herd management plan, agency personnel attempt to balance the biological capabilities of the herd and its habitat with the public’s demand for

wildlife recreational opportunities. Herd management plans are approved by the PWC and are reviewed and updated every 10 years.

The herd management plan serves as the basis for the annual herd management cycle. In this cycle, the size and composition of the herd is assessed and compared to the objectives defined in the herd management plan. Removal goals are set. Based on these goals, specific removal strategies are made for the coming year to either maintain the population or move it towards the established objectives (e.g., license numbers and allocation are set, translocation plans are made). Hunting seasons and/or translocations are then conducted and evaluated. The annual management cycle then begins again (Figure 4).

The purpose of this herd management plan is to set population and harvest objectives for the Trinidad deer herd (D-32; GMUs 85, 851, 140). The herd management plan will be in place from 2020-2030 with the expectation that it will be reviewed and updated in 2030.

TRINIDAD DEER DATA ANALYSIS UNIT

LOCATION

The Trinidad DAU is located in south central Colorado and lies within portions of Costilla, Huerfano and Las Animas Counties (Figure 5). It consists of Game Management Units (GMU's) 85, 140 and 851. The DAU is bounded on the north by US highway 69, Interstate 25 and Colorado 160; on the east by Colorado 389; on the south by the New Mexico and Colorado State line; and on the west by the Sangre de Cristo Divide, Huerfano County Roads #570 and #572 (Pass Creek Road) and Huerfano County Road #555 (Muddy Creek Road).

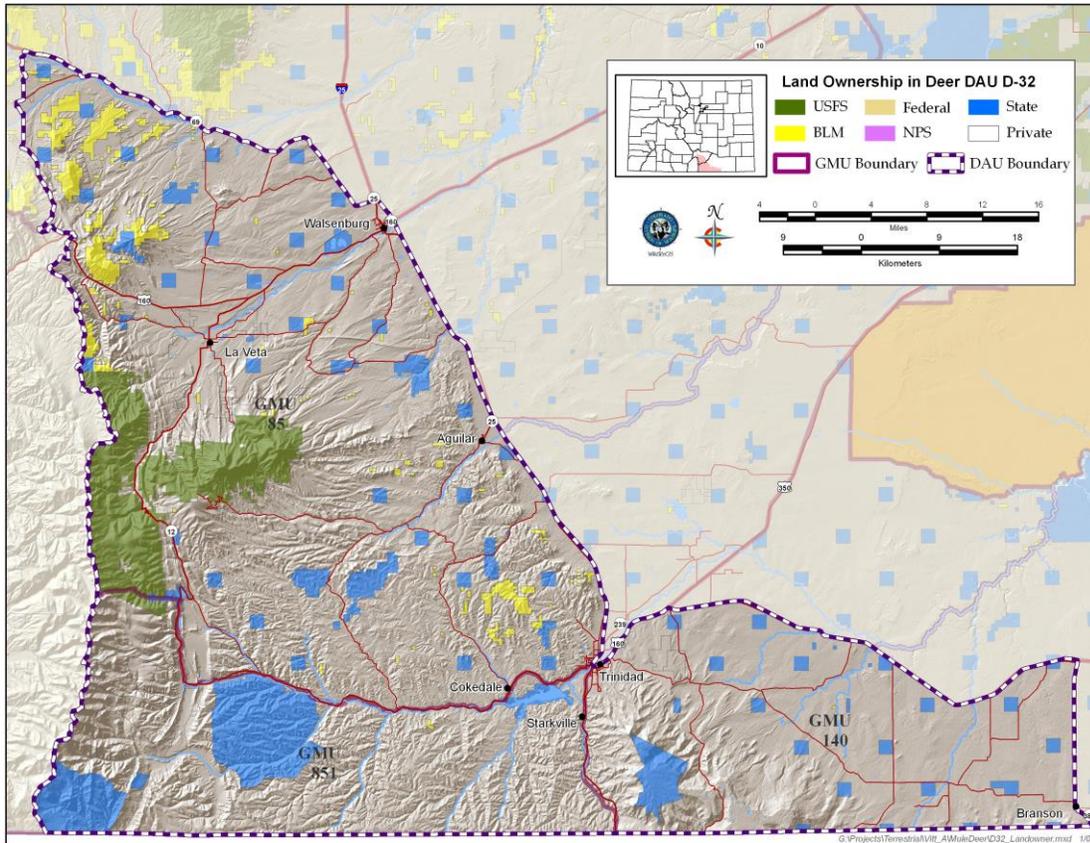


Figure 5. Mule Deer DAU D-32

This DAU covers 2,044 mi² ranging in elevation from 14,047 ft at the summit of Culebra Peak to about 5,364 ft where San Francisco Creek flows under Colorado 160. Topography ranges from flat short-grass prairie to rolling hills, steep foothills with cliffs, to mountain meadows, and steep ridges to alpine meadows. Two mountain ranges, the Culebra range of the Sangre de Cristo Mountains and the Raton Mesa complex dominate the area. Higher elevations may receive in excess of 20 in of moisture while lower elevations may receive less than 6 in, with precipitation falling mainly as winter snow and spring and summer rains. Major rivers in D-32 include the various forks of the Purgatorie River, Cuchara River, Raton Creek, Frijole Creek, San Francisco Creek, and the Apishapa River. Predominate biotic communities are: alpine tundra, sub-alpine conifer, montane conifer, montane shrub, mountain meadow, and plains grassland.

Landownerships in D-32 includes: Colorado Parks and Wildlife 71 mi² (3.4%), U. S. Forest Service 110 mi² (5.2%), Bureau of Land Management 47 mi² (2.2%), State Land Board 67 mi² (3.1%), and 1,772 mi² (85.6%) is privately owned (Figure 5).

CPW currently possesses the recreational lease on 6,314 ac (<10 mi²) of State Land Board property in D-32. These leased properties include Aguilar TV hill (500 ac) in Las Animas County; Black Hawk (1511 ac), Guillermo Ranch (2118 ac), Little Sheep Mountain (640 ac), Schultz Canyon (960 ac) and South Middle Creek (585 ac) in Huerfano County.

Agriculture is the dominate land use in the Trinidad Deer DAU with livestock grazing, primarily cattle and horses, occurring throughout the DAU on native rangeland.

Irrigated hay and alfalfa occurs along many rivers with the majority of row crops confined to small farms. Large ranches are being developed into 40 ac or smaller “ranchettes”. Habitat loss to development and a decline in habitat quality will be the major concerns in the future for this DAU.

POPULATION DYNAMICS

Deer generally occupy the entire DAU from the grassland\shrub and pinion\juniper areas of the foothills through all vegetative zones up to the alpine tundra during the summer and early fall. Another distinct population of deer spends the majority of the year in the riparian and agricultural areas at lower elevations throughout most of the drainages described above. Deer movement to winter range is dictated by weather with snow and limited forage availability driving the deer to winter range (Figure 6). Deer that summer in the mountainous western part of the DAU migrate to the lower elevation winter ranges to the east. Many areas of this DAU have little distinction between overall range and winter range, with the deer in the agricultural and riparian areas wintering in the same areas they occupied during the rest of the year. Wind and mild winter weather will often open up south facing slopes and influence deer movements into many areas within the DAU not necessarily classified as winter range.

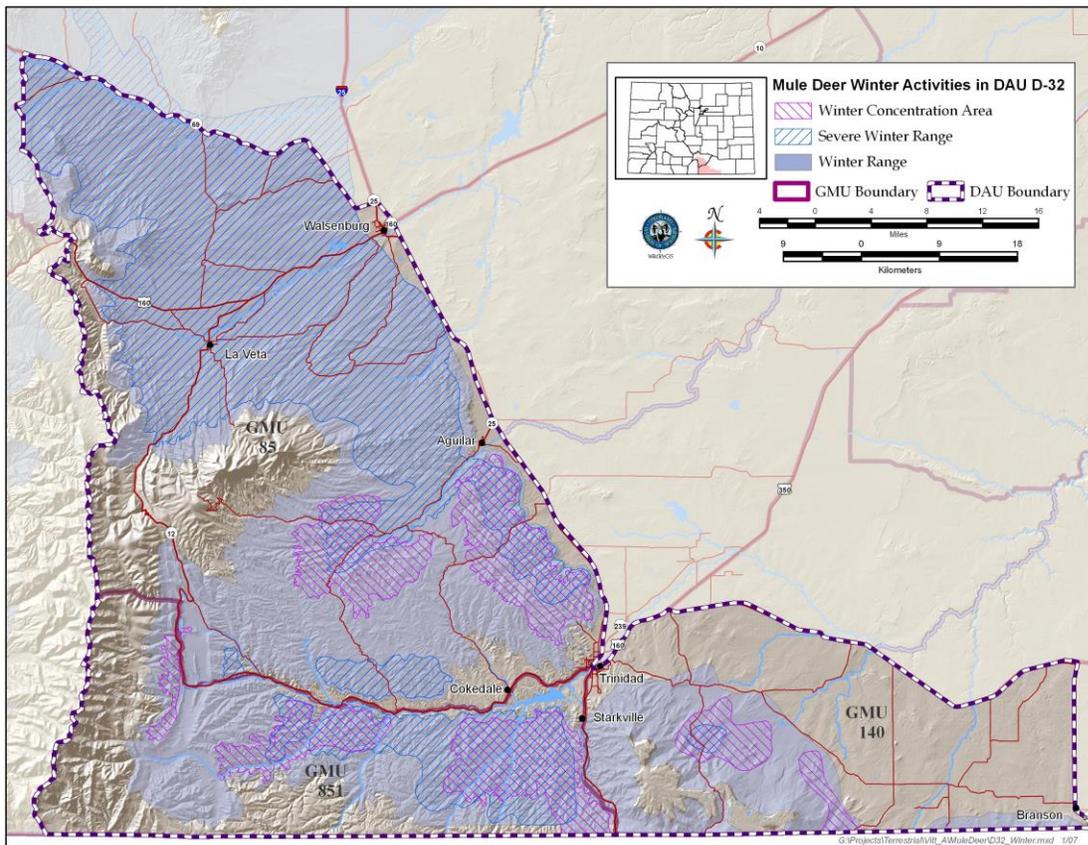


Figure 6. Mule Deer Winter Range in DAU D-32

HERD MANAGEMENT HISTORY

Post-hunt Herd Composition

Prior to 2005, post-hunt herd composition data was limited to aerial surveys conducted in GMU 140. Starting in 2005, additional funds were allocated to the inventory flights in D-32. The flights have been conducted annually in all GMUs within D-32 since that time.

Statewide deer seasons have varied in season length and the implementation of antler point restrictions. These changes have put different harvest pressures on the male segment of the population. From 1980 until 1985 deer seasons were generally short with any buck being legal. Between 1985 and 1999 there have been longer seasons and a variety of antler restrictions imposed on deer. In 1999, the Colorado Wildlife Commission limited all deer hunting license allocation, issuing licenses only through the drawing process to allow CPW better control of hunting harvest to increase buck/doe ratios. At this same time doe harvest was curtailed in any DAU that was under its population objective except for very limited circumstances.

The observed buck/doe ratio between 1988 and 2018 averaged 27 bucks/100 does. The observed post-hunt buck/doe ratio between 2009 and 2018 was 31 bucks/100 does. The current long-range buck/doe ratio objective is 25-29 bucks per 100 does (Figure 7).

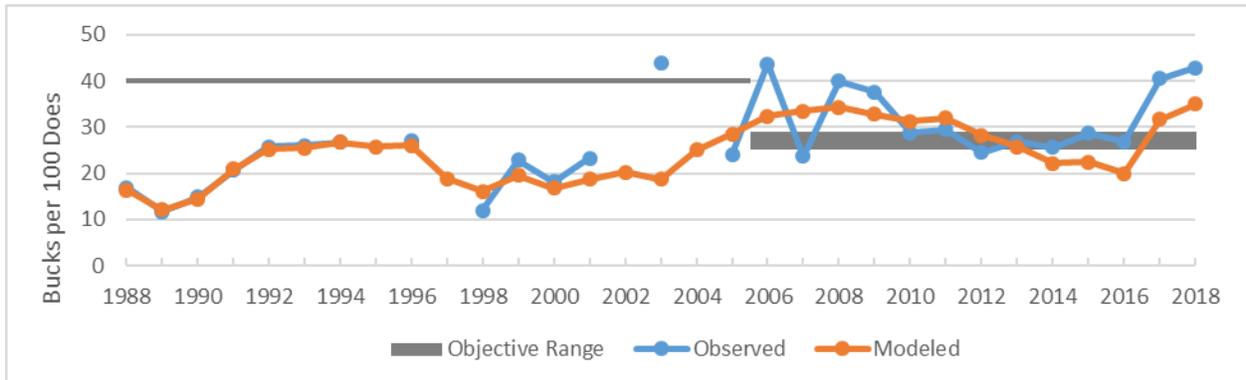


Figure 7. Deer DAU D-32 observed and modeled posthunt sex ratio (Bucks: 100 Does), 1988-2018.

The observed fawn/doe ratio between 1988 and 2018 averaged 51 fawns/100 does. The observed post-hunt fawn/doe ratio between 2009 and 2018 was 45 fawns/100 does (Figure 8).

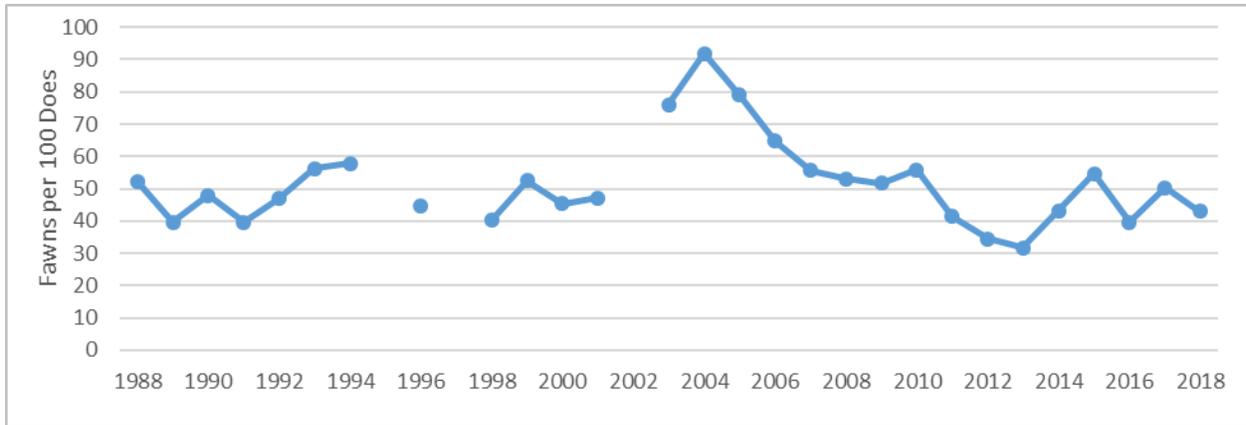


Figure 8. Deer DAU D-32 Observed posthunt age ratio (Fawns: 100 Does), 1988-2018

Game Damage

Since 2009, CPW has paid a total of \$32,819.71 for 12 deer game damage claims in D-32 (Table 1). All of the claims were for damage to growing crops, mostly hay or alfalfa.

Table 1. Summary of deer-caused Game Damage claims in D-32, 2009-2019.

Claim Date	Damage Type	Claim Paid	GMU
9 /22/2009	Growing Crops	\$472.81	85
10/18/2013	Growing Crops	\$9,913.76	85
12/6 /2017	Growing Crops	\$1,875.75	851
11/15/2018	Growing Crops	\$1,144.00	851
11/26/2016	Growing Crops	\$5,040.37	851
1 /16/2019	Growing Crops	\$2,433.75	851
1 /30/2018	Growing Crops	\$2,220.91	85
12/27/2017	Growing Crops	\$2,045.07	85
12/17/2018	Growing Crops	\$2,807.20	85
12/3 /2016	Growing Crops	\$2,105.40	85
9 /29/2017	Growing Crops	\$1,373.60	85
10/5 /2016	Growing Crops	\$1,387.10	85

Harvest

Hunter harvest is impacted by several variables including: hunter pressure, the availability of antlerless permits, season structure, weather, hunting access and the deer population size. Harvest from 2003 to 2018 ranged from a low of 316 in 2004 to a high of 517 in 2018 and has averaged about 413 deer, with buck harvest averaging 392 (Figure 9). The yearly success rate for all manners of take within the DAU averaged 48% from 2003 to 2018, with a low of 38% in 2003 (Figure 10). The number of hunters from 2003 to 2018 ranged from a low of 742 in 2005 to a high of 1208 in 2014 averaging about 860 (Figure 11).

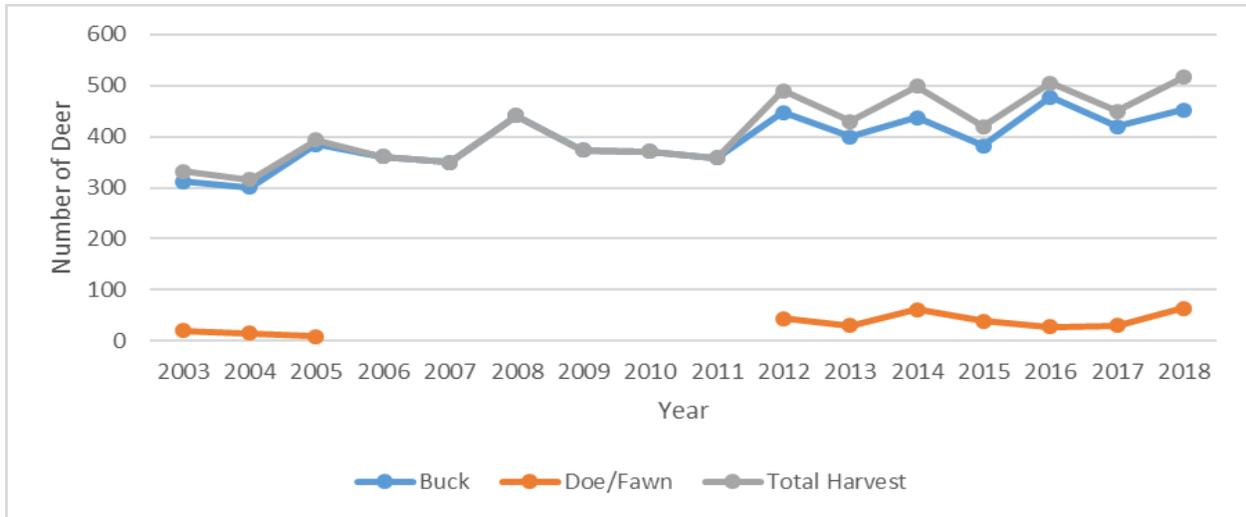


Figure 9. DAU D-32 Harvest, 2003-2018.

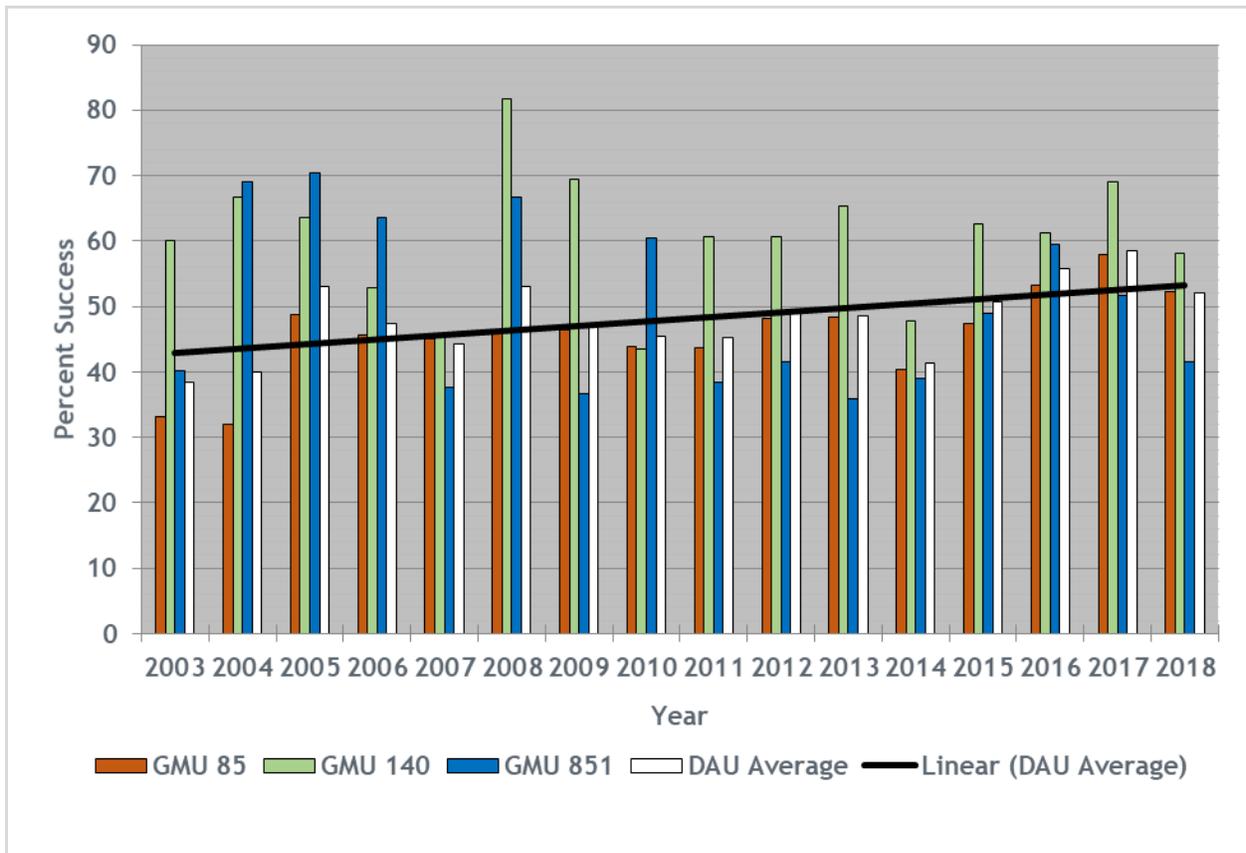


Figure 10. Hunter success by GMU and DAU Average, 2003-2018.

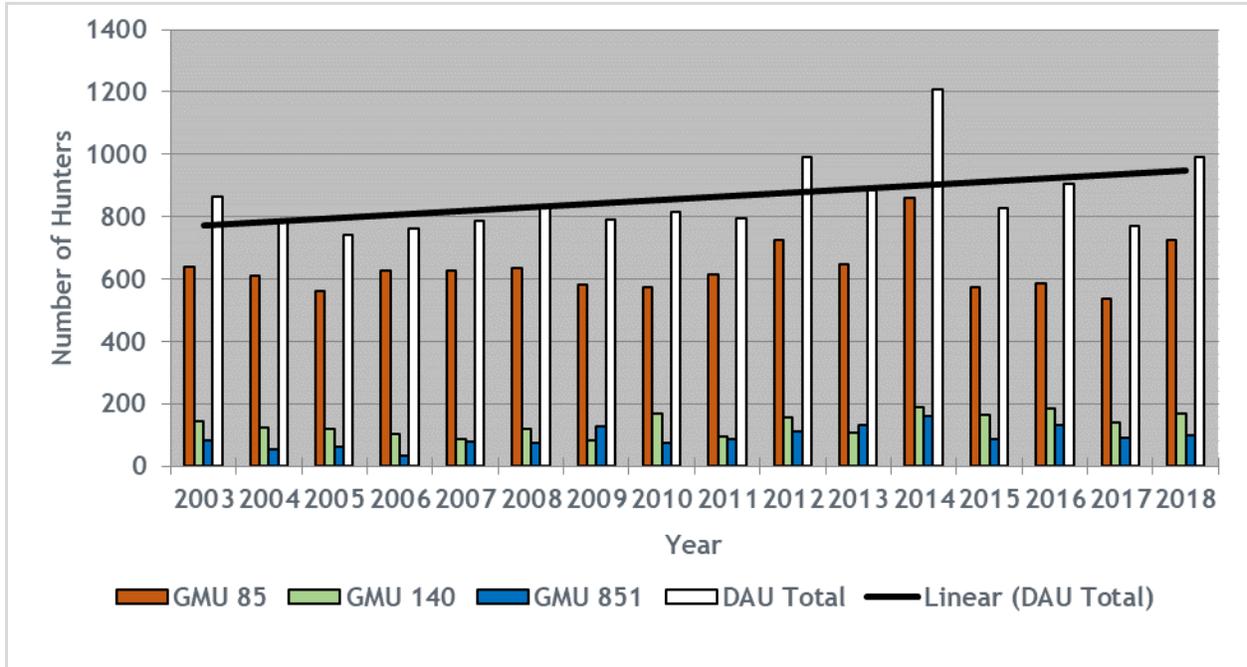


Figure 11. Hunter Numbers by GMU with DAU total, 2003-2018.

CURRENT HERD MANAGEMENT STATUS

The 2018 post-hunt population estimate for the Trinidad DAU is approximately 8,400 deer. This is below the long-term objective of 9,800-10,800 animals.

The long-term sex ratio objective is 25-29 bucks/100 does. Since 2003, the observed number of bucks per 100 does has ranged from 24 bucks/100 does in 2007 to the current observed ratio of approximately 40 bucks/100 does. We have increased licenses to bring the population closer to the sex ratio objective.

CHRONIC WASTING DISEASE

Chronic wasting disease (CWD) was first detected in D-32 in 2005, when a doe that was attacking dogs tested positive for the disease. CWD testing was mandatory for D-32 rifle hunters for the 2019 deer season. The prevalence rate for adult bucks was 1% (95% Confidence Interval 0-4%; n=206 samples), which falls below the 5% prevalence threshold for compulsory management outlined in the Colorado Chronic Wasting Disease Response Plan (CPW 2018).

ISSUES AND STRATEGIES

In developing this draft plan, we identified issues through both stakeholder and staff involvement. Stakeholders included hunters, landowners, and the local Habitat Partnership Program (HPP) committee.

PUBLIC INVOLVEMENT

CPW annually surveys a subset of licensed deer hunters to obtain harvest data. In addition to asking questions about their hunting success, we ask several questions related to their experience and perception of hunter crowding. To begin the public involvement process we looked at the hunter satisfaction and crowding perception for D-32 over the last 3 years.

Hunter satisfaction is high in D-32. Over the last 3 years, the percentage of D-32 hunters who indicated that they were satisfied with their hunt ranged from 77% (2017) to 79% (2016 & 2018). During that same timeframe, on average, only 14% of hunters reported feeling moderately or extremely crowded during their hunt.

The plan was presented to the Sangre de Cristo Habitat Partnership Program Committee on October 3, 2019. They supported the staff recommendation to extend the plans objectives for another 10 years (Appendix A).

A public meeting was held in Trinidad, on November 7, 2019 to take public comments about management of this herd. Nine members of the public attended the meeting. Meeting attendees asked CPW to consider predator management to help the deer herd. They also asked if private landowners could receive incentives for youth hunting opportunities (Appendix B).

The plan was posted on the CPW website for a 30-day comment period from November 6, 2019 through December 5, 2019. We did not receive any comments during this period.

CPW staff believes that the deer population in D-32 is doing very well since the population appears to be increasing. Taken together with the high public satisfaction with deer management in D-32, we are proposing to maintain the current population and sex ratio objectives for another 10-year period.

CURRENT MANAGEMENT ISSUES

CPW staff identified a number of management issues when writing this plan. These issues include housing development, methane development, and private land access.

1. Housing Development - In the last several decades, this DAU has seen a rapid development of housing in areas that were once part of deer ranges. Ranches have sub-divided and natural habitats have been permanently altered or eliminated. Investigations into the effects of housing development have discovered that housing development had a negative correlation with doe fawn ratios (Johnson et al. 2016; Figure 12). These declines can be directly attributed to direct loss of habitat and also effective loss of habitat due to harassment from people and pets.

Colorado is expected to double its human population by 2050; this trend is expected to be one of the main areas of concern for managers, both with trying to maintain mule deer populations and allowing population management in an increasingly developed landscape.

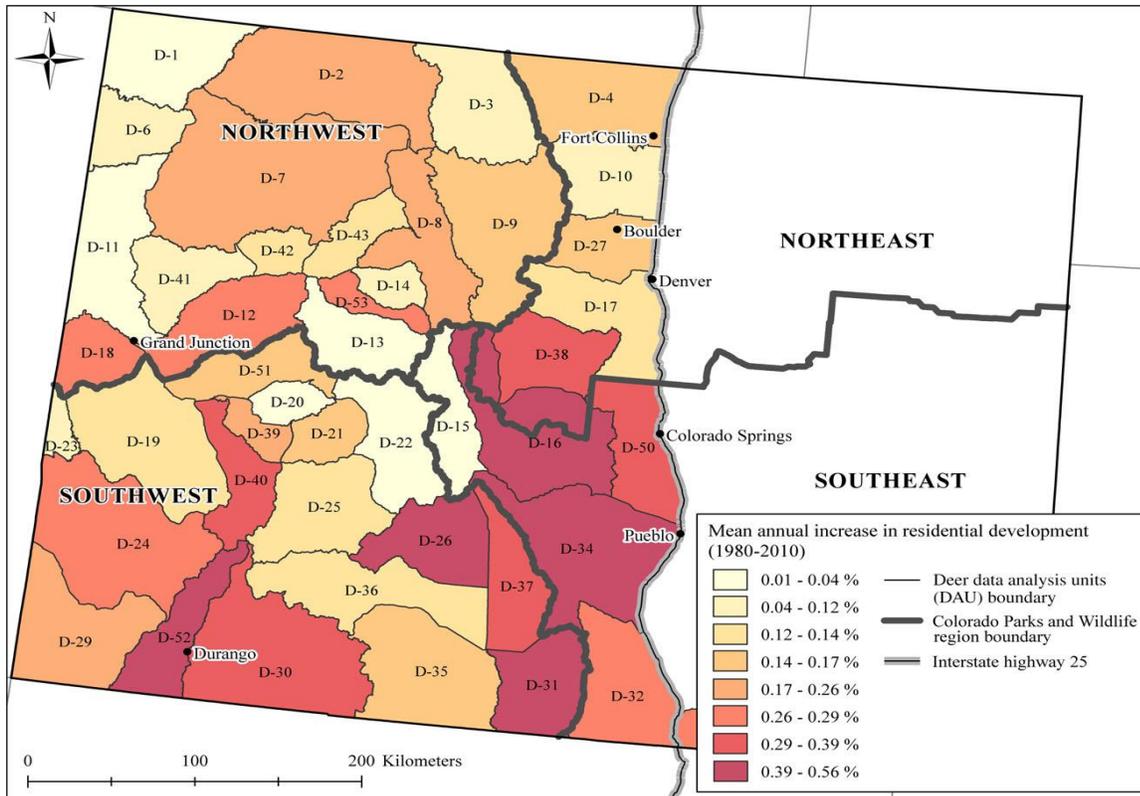


Figure 12. Map of deer data analysis units (DAUs) and regions in Colorado designated by Colorado Parks and Wildlife, and the percent increase in residential development from 1980-2010 (Johnson et al. 2016).

2. Methane Development- Methane development within the DAU began in the in the late 1980's but did not become have a large impact to the deer habitat until extraction techniques improved in the late 1990's. Since that time development has increased dramatically with wells being drilled on an average density of six wells per section. With the corresponding maintenance and drilling human activity levels have shown the same dramatic increase. Road densities have increased substantially in those areas affected by methane development within the DAU.
3. Private land access - With over 86% of the DAU in private ownership, hunter access is a continuing concern in the DAU. Trespass issues and private landowner rights were identified as problems in the area, especially in GMU's 140 and 851. Colorado Parks and Wildlife is in the process of purchasing another 18,000+ ac to help with hunter access in the area.
4. Urban deer - Several communities within D-32 have expressed concern over the increasing population of urban deer. The communities of La Veta, Cuchara, Walsenburg, Stonewall, and Trinidad have various complaints and varying densities of deer within city limits. Complaints within each community vary, but most are composed of damage to ornamental landscaping, damage to trees and shrubs, loss or damage to family gardens, human/pet safety during the fawning and rut portions of the year, and damage to vehicles from collisions. District Wildlife Managers are

working with each community individually to identify strategies to mitigate urban deer conflicts.

RECOMMENDED OBJECTIVES

Colorado Parks and Wildlife recommends the extension of the following objectives for D-32:

Population Objective: Maintain the current post-hunt population objective of 9,800-10,800.

Sex-Ratio Objective: Maintain the post-hunt sex ratio objective of 25 to 29 bucks per 100 does.

STRATEGIES TO ADDRESS ISSUES AND MANAGEMENT CONCERNS

CPW has limited ability to affect several of the issues identified by stakeholders and staff, including housing development, methane development, and hunter access. However, we will seek any opportunities available to conserve large tracts of land through fee title purchase or conservation easements, which may contain a hunting access component. Additionally, we will continue to look for opportunities for hunter access on or through private property.

Deer habitat in D-32 has been lost through development, forest encroachment, and noxious weeds. While we cannot mitigate every change to deer habitat, CPW will work with land management agencies and landowners to make habitat improvements where possible. There have been improvements to deer habitat in the DAU since the last plan was approved. Several fires have burned within D-32. In 2011, the Track Fire burned 7,822 ac in Colorado, the 2013 East Spanish Peak fire burned 13,572 ac and the 2018 Spring Fire burned 108,045 ac with a portion of those acres in D-32. These fires have improved deer habitat within the burn scar. This has drastically increased habitat quality in these areas, especially on summer range.

STRATEGIES FOR ACHIEVING OBJECTIVES

The current deer population size (8,400 deer) is slightly below objective, and the deer population has been slowly increasing over the past several years. We do not expect any management changes until the population reaches objective. D-32 has been above the sex ratio objective over the last several years. We have been slowly increasing the buck licenses to bring the population towards objective. We will evaluate the post-hunt sex ratio annually, and adjust antlered licenses as needed to meet sex ratio objectives.

LITERATURE CITED

Colorado Parks and Wildlife. 2018. Colorado Chronic Wasting Disease Response Plan. Denver, CO. 41 pp.

Johnson, H. E., J. Sushinsky, A. Holland, E. J. Bergman, T. Blazer, J. Garner, and S. E. Reed. 2016. Increases in residential and energy development are associated with reductions in recruitment for a large ungulate. *Global Change Biology*. 23:578-591.

Appendix A - Sangre de Cristo HPP Letter of Support



October 9, 2019

Allen Vitt
Colorado Parks and Wildlife
600 Reservoir Road
Pueblo, CO 81005

RE: Sangre de Cristo Habitat Partnership Program Comments - DAU D-32

Dear Allen:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity for input into big game management in their areas. The diverse makeup of local HPP committees (3 livestock growers, Forest Service, BLM, CPW and sportsmen representatives) provide a good cross section of local interests to review DAU proposals and respond accordingly for CPW consideration.

HPP has two purposes; to resolve big game wildlife (deer, elk, pronghorn, moose) conflicts with agricultural landowners and to assist CPW to meet game management objectives for those same species. From those perspectives, the Sangre de Cristo HPP committee has discussed your presentation and reviewed the draft alternatives and offers these comments for consideration.

The Sangre de Cristo HPP committee is in agreement with the following comments pertaining to proposals for the population range and sex ratio objectives for the above DAU plan.

The Sangre de Cristo committee supports the draft alternative to keep the current population objective. We believe this alternative responsibly balances local range and habitat conditions with sportsmen desires and landowner concerns. As the current population is currently below objective, we believe there is room for the population to grow and keeping the current objective will allow that growth. Hunter satisfaction is high and there have been minimal game damage claims in the area, so we feel that growing the population to meet the objective is optimal. Any issues we have are more likely related to distribution of the herds in the area and not the overall population size.

The Sangre de Cristo committee also discussed the proposed sex ratio alternative. We believe the current sex ratio objective is a good balance and provides ample hunting opportunity while also providing for a reasonable number of mature animals for those hunters who want to take a larger buck.

As stated above, HPP is also directed by statute to assist the Division to meet game management objectives. The Sangre de Cristo committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat in DAU D-32. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area.

Our committee is confident about CPW being able to achieve the proposed objectives for the following reasons:

We have worked with numerous landowners who want to implement positive improvements for big game on their property.

Federal land managing agencies place a high priority on habitat improvement and have worked successfully with our committee on valuable projects in the past and have expressed a desire to continue this.

The population is currently under objective, but the herd is healthy and growing so we feel confident that CPW will be able to manage the population to meet the proposed objectives.

The Sangre de Cristo committee feels there is adequate habitat with adequate protections in place, such as seasonal closures, use restrictions, and conservation easements, all of which will help to achieve the desired objectives. We are confident that the proposed alternative will be positive for the area, and we have confidence in the plan's objectives over the next ten years. Residential growth and increased recreation demands could hinder future population objectives, so the committee will continue to work with landowners on resolving conflicts and protecting and enhancing wildlife habitat in the area.

Thank you for the presentation and the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "John Ströb II", written over a circular stamp or seal.

John Ströb II, Chair
Sangre de Cristo HPP Committee

Appendix B - Trinidad Public Meeting

We held a public meeting in Trinidad on November 7, 2019 (see press release below). Nine members of the public attended. We presented background information about the deer herd including: 1) geographic boundaries, 2) landownership, 3) current management objectives, 4) modeled posthunt population size, 5) important issues, 6) CWD management, and 7) proposed objectives. Following the presentation, members of the public were provided with an opportunity to provide written comments and were also asked if they would like a copy of the final plan. Five people asked for a copy of the final plan and three people provided written comments:

1. Class very well taught (*note: hand writing was difficult to read*)
2. Increase Mt. Lion quotas to help ungulate critters to be more dispersed. Kill coyotes haha
3. How about consideration of some kind of incentive for the private landowner to allow youth to hunt.

10/17/2019

Public input is being sought by Colorado Parks and Wildlife about how it plans to manage mule deer herds in the Trinidad area over the next decade.

FOR IMMEDIATE RELEASE



Bill Vogrin
CPW SE Region PIO
719-227-5211
bill.vogrin@state.co.us



Oct. 17, 2019

Public opinion sought on deer management plan at Nov. 7 meeting in Trinidad

TRINIDAD, Colo. – Public input is being sought by Colorado Parks and Wildlife about how it plans to manage mule deer herds in the Trinidad area over the next decade.

Hunters, ranchers and the general public are invited to voice their opinions at a public meeting scheduled 6-8:30 p.m., Thursday, Nov. 7, in the Pioneer Room at Trinidad State Junior College.

The meeting will focus on deer management in Game Management Units (GMUs) 85, 140 and 851 in the Trinidad region.

GMU 85 stretches from Gardner and Walsenburg in Huerfano County south past La Veta and Aguilar down to Trinidad in Las Animas County and takes in the Spanish Peaks State Wildlife

Area (SWA) west of Interstate 25. GMU 851 runs west of Trinidad to Costilla County and includes the 30,000-acre Bosco del Oso SWA. GMU 140 spreads out east of Trinidad taking in the James M. John and Lake Dorothea SWAs and the 19,200-acre Fisher's Peak property.

Big-game management plans are updated every 10 years. CPW is proposing no change in its management of deer in these three GMUs because its biologists believe the deer population is doing well.

CPW estimates there are 8,400 deer in these units and the population appears to be increasing. The new plan would carry forward the current objectives of between 9,800 to 10,800 deer, with a buck-to-doe ratio of between 25 and 29 bucks per 100 does. CPW believes those ratios strike a balance between hunter opportunity and trophy quality.

The management plan reflects CPW's efforts to balance the biological capabilities of the herd and its habitat with the public's demand for wildlife recreational opportunities.

Interested stakeholders are encouraged to come and listen to background information and fill out a questionnaire/comment form at the meeting. CPW staff will be on-hand to answer questions after the meeting.

For those who cannot attend the meeting, comments can be emailed to Allen Vitt, Terrestrial Wildlife Biologist based in Pueblo at: allen.vitt@state.co.us; or sent by letter mailed to him at the CPW office, 600 Reservoir Road, Pueblo CO, 81005.

BOX:

What: Colorado Parks and Wildlife to host a public hearing on its 10-year mule deer population management plan for Trinidad-area herds

When: 6-8:30 p.m., Thursday, Nov. 7

Where: Student Center, Pioneer Room, Trinidad State Junior College, 600 Prospect St, Trinidad, CO 81082