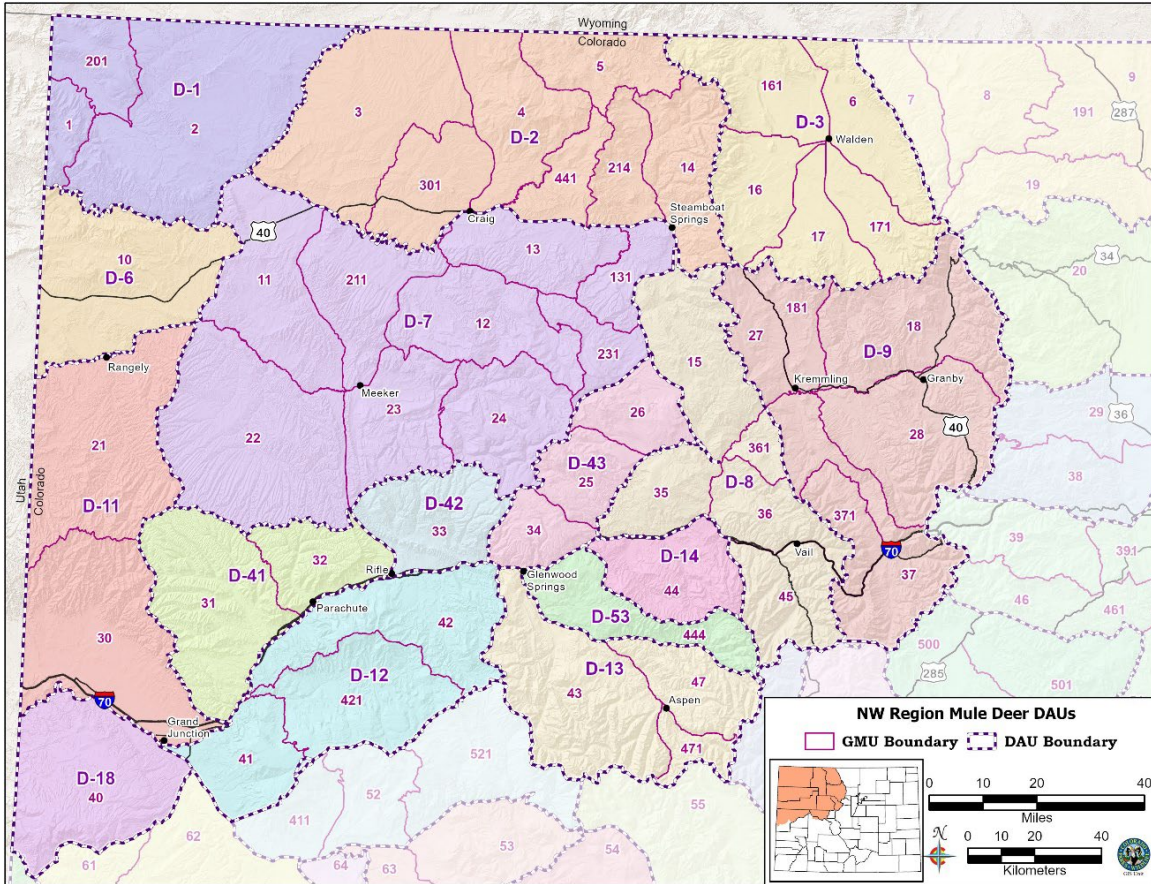


Final Northwest Colorado Mule Deer Herd Management Plans

Data Analysis Units:
D-01, D-02, D-03, D-06, D-07, D-08, D-09, D-11, D-12,
D-13, D-14, D-18, D-41, D-42, D-43, D-53



PREPARED FOR
COLORADO PARKS AND WILDLIFE



BY

NW Terrestrial Staff
NW Area Staff
NW Land use Staff

This plan was approved by the Colorado Parks and Wildlife Commission on 05.04.2023

Executive Summary

The 2021 post-hunt population estimate for mule deer in the Northwest Region of Colorado totaled 165,510, which represented almost 40% of the mule deer in all of Colorado. There are 16 mule deer data analysis units (DAUs) across northwest Colorado, with 7 herd management plans (HMPs) that are up-to-date with approved population and sex ratio objectives in the last 3 years. The other nine HMPs are either out-of-date or have never had official plans approved. Traditionally, Colorado Parks and Wildlife (CPW) staff have presented one HMP at a time for approval to the Parks and Wildlife Commission (PWC). In order to address the large numbers of HMPs that need to be updated, staff have taken a new approach to develop a Regional roll-up of all HMPs in a CPW region for a single big game species to update or establish new population and sex ratio objectives. This document presents the final objectives for all 16 northwest deer DAUs, including the new proposed and recently approved objectives. Table 1, below lists the 9 DAUs with objectives to be updated followed by the 7 DAUs that have been approved in the last 3 years that we want to extend. The plan also describes the significant management issues for mule deer herds in the northwest part of the state as well as what public input was used to develop proposed objectives and the individual HMPs for each of the deer herds.

While deer populations are down from historic high numbers in the 1960's to 1980's, populations in northwest Colorado are still some of the largest in the state and North America. Based on declining deer populations since the 1990's, CPW (then Colorado Division of Wildlife) has taken numerous measures over the years to attempt to slow down and understand population declines. Mule deer have been one of the most studied species in wildlife conservation, but there still is no single factor that has been identified to fix the decline and grow populations. We have implemented mule deer monitoring studies in 5 herds across the state including 2 in northwest Colorado (the White River, D-7, and Middle Park, D-9, herds) to monitor annual adult doe survival and over-winter fawn survival annually since the year 1998. The state has conducted numerous studies to understand the relationship of habitat and predators on mule deer populations. We have completed thousands of acres of conservation easements to protect private lands from development. The state also developed a West Slope Mule Deer Strategy in 2014, which incorporated public input, to guide the stabilization and recovery of deer populations that would in turn increase hunting and other wildlife-related recreation opportunities in the state. Following the guidance of the mule deer strategy, funds have also been made available and matched, to improve habitat across large parts of western Colorado. All of the efforts have contributed greatly to mule deer conservation and management and also to the benefit of other species using similar habitat types.

Through all of the monitoring efforts, research, and public input, we have identified a list of issues that impact deer populations and herd health in northwest Colorado. Chronic Wasting Disease has become one of the greatest issues affecting deer survival and has become a significant driver in establishing population and sex ratio objectives. Habitat quality and quantity are the other biggest factors affecting the potential for deer population size and growth based on carrying capacity, nutritional value, competition for forage with other grazers, and protection from disturbance, weather, and predators. Oil and gas development, renewable energy development, recreation, and residential development can impact deer populations through direct loss of habitat and indirectly by affecting behavior and use of quality habitat. There's also competition with free-roaming horses, elk, and livestock. Highway fencing and crossing structures have become a greater focus on deer management as

well, as fencing is being used to minimize vehicle collisions, but those fences also create barriers to migration and suitable habitat. Finally, predation is always a factor for deer management with coyotes, lions, and bears on the landscape, and following Proposition 114 wolves will be a factor as well in the future.

Public outreach and associated input have been conducted and evaluated to help establish proposed population objectives. Evaluation of newly available optional hunter satisfaction data from our annual hunter harvest surveys as well as public meetings held around the state have been invaluable to understanding hunter perspectives. The optional hunter satisfaction data will also be valuable information to gauge hunter satisfaction in the different deer DAUs from year to year since these questions will be asked every year. In addition, the draft plan was posted for 30 days for a public comment period to evaluate the proposed objectives. Ultimately, most hunters in public meetings and in the harvest data would like to see more deer across the landscape, but also recognize the challenges of habitat conditions, habitat loss, predators, competition for forage, and game damage conflict. The plan was presented to the Colorado Parks and Wildlife Commission meeting in Steamboat, CO on April 6th, 2023 and will be voted on for approval at the May Commission meeting.

Based on chronic wasting disease prevalence, habitat conditions with persistent drought conditions, public input, competition for forage, disturbance on important seasonal habitats, and changes to population models, most proposed population objectives are going to be the same or lower than historic objectives (Table 1). Additionally, some sex ratio objectives have increased in range breadth and lowered values to provide hunting opportunity and to manage CWD prevalence, which is highest in older age class bucks (Table 1).

Table 1. Population and management status of 16 deer herds occurring in NW Colorado. There are nine plans in the table updated with new approved population and sex ratio objectives (clear rows), while objectives from the remaining 7 plans completed since 2020 were extended (shaded rows).

DAU	Mule Deer Herd	Current DAU Plan Approved	Current Population Objective	2021 Post-hunt Population Estimate	Current Sex Ratio Objective	3-Yr Avg Observed Sex Ratio	Male CWD Prevalence (Female 2021)	Approved Population Objective	Approved Observed Sex Ratio Objective
D-01	Little Snake	No plan	13,500	2,419	15	28.4	5%	1,500-3,500	15-25
D-02	Bear's Ears	1994	37,800	38,859	22	25.5	18% (10%)	30,000-40,000	15-25
D-03	North Park	2002	5,400-6,400	5,747	30-40	47.4	9%	4,400 - 6,400	Status Quo
D-06	Rangely	No plan	7,000	957	20	44.5	4%	1,500-3,500	15-25
D-07	White River	2020	25,000-35,000	32,279	18-25	25.8	15% (9%)	Extension	Extension
D-08	State Bridge	2020	10,000-14,000	14,463	26-30	23.1	4%	Extension	Extension
D-09	Middle Park	2020	10,500-14,000	13,994	30-35	36.8	3% (2%)	Extension	Extension
D-11	Bookcliffs	2022	5,000-8,000	8,662	27-32	31.2	3%	Extension	Extension
D-12	North Grand Mesa	2010	17,000-23,000	16,550	25-30	21.3	1%	Status Quo	Status Quo
D-13	Maroon Bells	2011	7,500-8,500	5,931	30-35	31.5	0%	7,000-9,000	27-32
D-14	Brush Creek	2020	1,500-3,500	2,190	35-45	40.2	0%	Extension	Extension
D-18	Glade Park	2010	6,500-8,500	3,904	30-35	29.9	0%	4,300-6,500	30-40
D-41	Logan Mountain	2012	6,500-8,500	4,478	25-30	26.8	6%	Status Quo	Status Quo
D-42	Rifle Creek	2022	6,200-8,200	6,390	25-32	24.5	10%	Extension	Extension
D-43	Sweetwater Creek	2011	5,000-6,000	5,464	28-32	24.2	14%	4,000-6,000	18-25
D-53	Basalt	2020	4,000-6,000	4,262	32-40	30.5	1%	Extension	Extension

Table of Contents

Executive Summary	i
Introduction and Purpose	6
Description of the Northwest Region Deer Data Analysis Units	8
Common Management Issues and Strategies	9
Deer Herd Management Plans for Northwest Colorado: Public Input	32
LITTLE SNAKE MULE DEER HERD MANAGEMENT PLAN (D-1).....	35
BEAR’S EARS MULE DEER HERD MANAGEMENT PLAN (D-2)	40
NORTH PARK DEER HERD MANAGEMENT PLAN (D-3)	46
RANGELY MULE DEER HERD MANAGEMENT PLAN (D-6)	54
WHITE RIVER MULE DEER HERD MANAGEMENT PLAN (D-7)	58
STATE BRIDGE MULE DEER HERD MANAGEMENT PLAN (D-8)	64
MIDDLE PARK MULE DEER HERD MANAGEMENT PLAN (D-9)	69
BOOKCLIFFS HERD MANAGEMENT PLAN (D-11)	86
GRAND MESA NORTH HERD MANAGEMENT PLAN (D-12)	92
MAROON BELLS MULE DEER HERD MANAGEMENT PLAN (D-13)	97
BRUSH CREEK MULE DEER HERD MANAGEMENT PLAN (D-14)	102
GLADE PARK HERD MANAGEMENT PLAN (D-18)	107
LOGAN MOUNTAIN HERD MANAGEMENT PLAN (D-41)	112
RIFLE CREEK HERD MANAGEMENT PLAN (D-42).....	118
SWEETWATER CREEK MULE DEER HERD MANAGEMENT PLAN (D-43).....	123
BASALT MULE DEER HERD MANAGEMENT PLAN (D-53).....	129
Literature Cited	134
APPENDIX A: 30 Day Comment Period General Responses.....	135
APPENDIX D1: Stakeholder Input	137
APPENDIX D2: Stakeholder Input	138
APPENDIX D3: Stakeholder Input	140
APPENDIX D6: Stakeholder Input	141
APPENDIX D7: Stakeholder Input	142
APPENDIX D8: Stakeholder Input	203
APPENDIX D9: Stakeholder Input	209
APPENDIX D11: Stakeholder Input.....	240
APPENDIX D12: Stakeholder Input.....	272
APPENDIX D13: Stakeholder Input.....	274
APPENDIX D14: Stakeholder Input.....	275

APPENDIX D42: Stakeholder Input.....278
APPENDIX D43: Stakeholder Input.....313
APPENDIX D53: Stakeholder Input.....316

Introduction and Purpose

Colorado Parks and Wildlife (CPW) manages wildlife for the use, benefit and enjoyment of the people of the state in accordance with the CPW's Strategic Plan and mandates from the Parks and Wildlife Commission and the Colorado Legislature. Colorado's wildlife resources require careful and increasingly intensive management to accommodate the many and varied changes occurring across Colorado's landscapes from natural events like drought, wildfire, and severe winters to increasing public demands and growing impacts from people.

The purpose of this document and the Herd Management Planning (HMP) process is to provide CPW with long-term objectives that support and accomplish the broader objectives of CPW's Strategic Plan. The HMP planning process incorporates public input, habitat capabilities, CWD prevalence, and herd considerations into management objectives for each of Colorado's big game herds. Specifically, the HMP identifies desired population and sex ratio objectives that guide CPW's deer management practices. CPW is required by statute to manage all wildlife species for the benefit of all Colorado residents and visitors to the state. To ensure public needs are met, the general public, sportspersons, livestock producers, guides and outfitters, federal land management agencies, landowners, wildlife viewers, recreationists, and local businesses are involved in determining HMP plan objectives through surveys, public meetings, comments on draft plans, and input to the Colorado Parks and Wildlife Commission. Secondly, the HMP collects and organizes most of the important management data for the herd into one utilitarian planning document; determines deer herd issues through a public scoping process; identifies alternative solutions to the issues and problems identified in the scoping process; and selects the preferred alternative. HMP objectives are set for 10 years.

In Colorado, each big game population is managed as a herd, which is called a Data Analysis Unit (DAU). Generally each DAU is composed of multiple game management units (GMUs); however, in some cases a DAU is composed of just a single GMU. DAU boundaries are drawn in an effort to approximate the year-round range of that herd to include the areas where the majority of the animals in that population are born and raised and where they die, with minimal interchange between other herds.

CPW uses a "management by objective" approach to manage the state's big game populations (Figure 1). The objectives set forth in the HMP drive the most important decision in the annual big game license setting process: How many animals need to be harvested to maintain or move the population toward those objectives? The management by objective approach is an annual cycle of information collection, information analysis, and decision making that culminates each year in a hunting season. Data used in this process are collected through hunter harvest survey estimates, aerial herd composition surveys, radio telemetry studies to determine survival, wounding loss, and illegal kill estimates. These data are then used to estimate population size through a computer modeling analysis. The population modeling analysis generates harvest recommendations that align population estimates and herd composition with long-term HMP objectives. The cyclical objective-setting approach is designed to guide the decision-making process to data collection and analysis. It also focuses the Parks and Wildlife Commission on goals and objectives.

The purpose of this document is to set management objectives for all deer herds (DAUs) in the Northwest Region of Colorado. There are 16 individual deer DAUs in the Northwest Region, seven of which have HMP objectives that have been approved by the CO Parks and

Wildlife Commission within the last three years, while the remaining DAUs have HMP's that are expired or have never been written. The goal of this regional planning process is to establish current population and sex ratio objectives for all of the deer DAUs in the Northwest Region with the intent of having these objectives set for the next 10 years. The seven HMPs approved within the last three years will be extended for another 10 years. Management objectives can always be updated sooner, if the need arises.

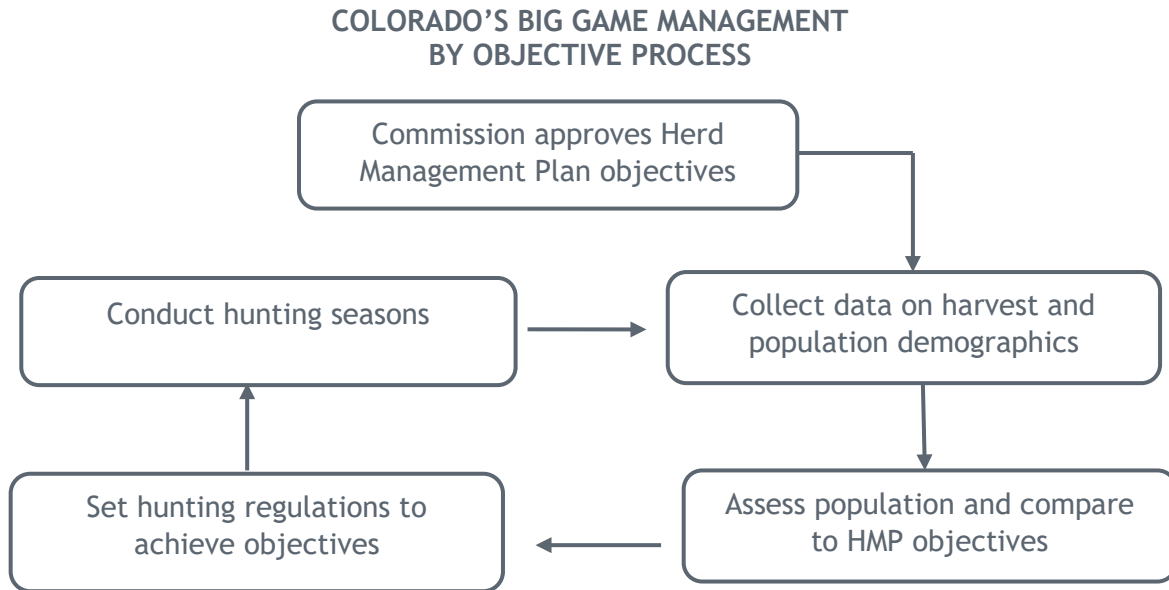


Figure 1. Management by objectives process used by the CPW to manage big game populations on a DAU scale.

Description of the Northwest Region Deer Data Analysis Units

There are 16 deer DAUs in the Northwest Region of Colorado. The herds are spread across the counties of Eagle, Garfield, Grand, Jackson, Mesa, Moffat, Pitkin, Rio Blanco, Routt, and Summit, and a small portion of Gunnison County. The counties span 14,556,058 acres with a total human population of 385,487. The major cities, towns, and communities in NW Colorado include Grand Junction, Rifle, Glenwood Springs, Meeker, Craig, Steamboat, Walden, Kremmling, Hot Sulphur Springs, Silverthorne, Frisco, Breckenridge, Vail, and Aspen. The NW Region of Colorado has large expanses of public lands (Figure 2) managed by the Bureau of Land Management (BLM, 32.6%), United States Forest Service (USFS, 28.9%), National Park Service (1.9%), State-managed lands (CO Parks and Wildlife-managed State Parks and State Wildlife Areas, 0.75%), as well as State Trust Lands, 2.8%). Private lands make up 32.4% of the land ownership.

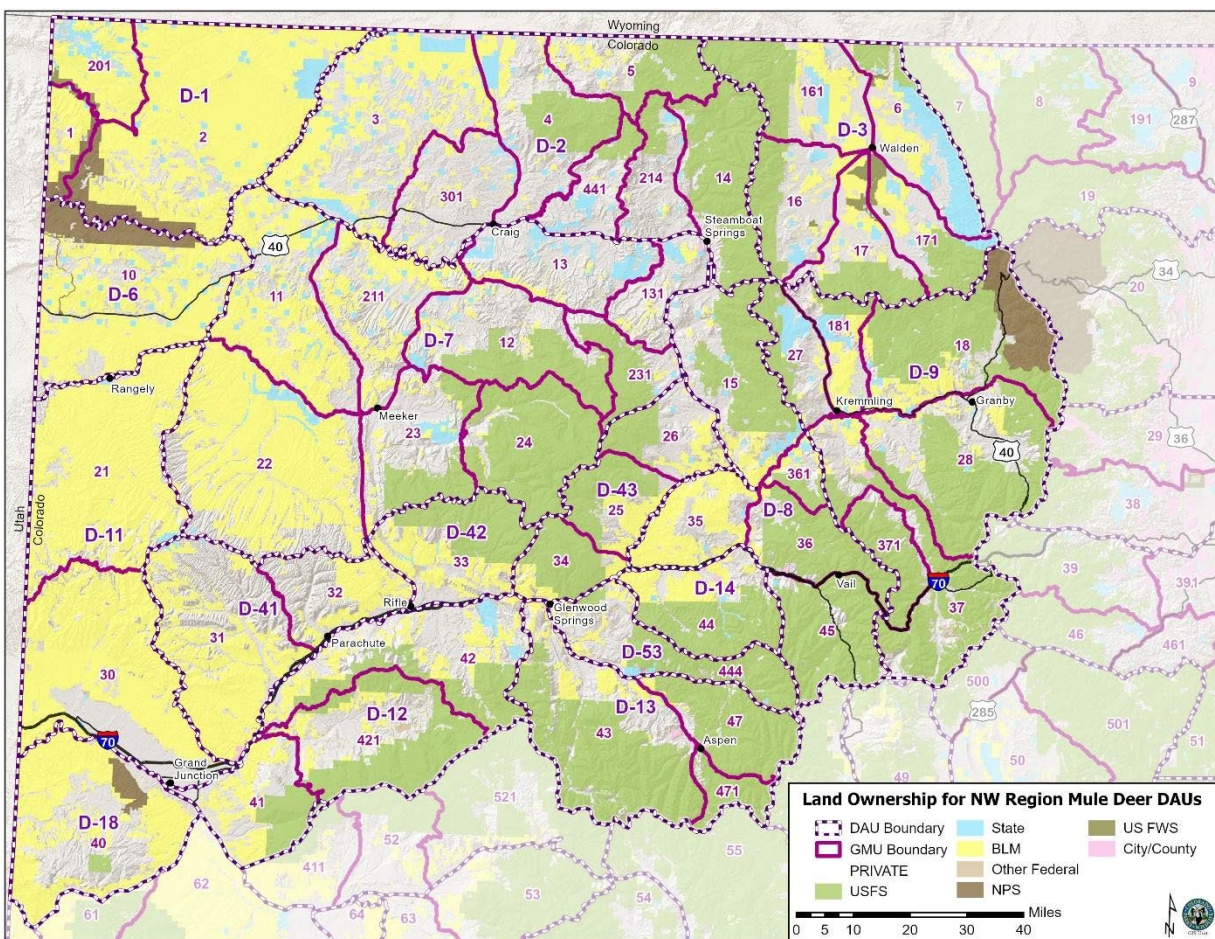


Figure 2. Land ownership across CPW’s Northwest Region in relation to deer herds.

Common Management Issues and Strategies

Mule deer and their habitat can be impacted by a variety of issues including predation, disease, disturbance and quality and quantity. The following section will provide information outlining the primary issues affecting mule deer populations in northwest Colorado. There may be other issues or concerns that are more minor or that may be of greater interest in the future. Keep in mind, most mule deer herds are affected by a variety of issues or concerns that make it difficult to find a single solution to manage mule deer populations. Table 2 provides a matrix depicting the primary and secondary management issues affecting the growth or productivity of the 16 different mule deer populations in the Northwest Region.

Table 2. Issues affecting mule deer populations in northwest Colorado, rated as either primary (dark blue) or secondary (light blue) concerns for each deer herd (DAU).

Mule Deer Management Issues	Data Analysis Units (DAU)															
	Little Snake D-1	Bears Ears D-2	North Park D-3	Rangely D-6	White River D-7	State Bridge D-8	Middle Park D-9	Book-cliffs D-11	North Grand Mesa D-12	Maroon Bells D-13	Red Table Mountain D-14	Glade Park D-18	Logan Mountain D-41	Rifle Creek D-42	Sweet-water Creek D-43	Basalt D-53
Chronic Wasting Disease																
Habitat quality/quantity																
Drought/Severe Winter/Climate																
Oil and Gas Development																
Renewable Energy Development																
Residential Development																
Elk competition																
Free-roaming horses																
Recreation																
Predation																
Fencing																

Chronic Wasting Disease

Chronic wasting disease (CWD) is a fatal neurological disease of deer, elk, and moose. CWD has likely been in Colorado since the 1960's; however, it was not confirmed in Northwest Colorado till 2002. Prevalence was low in the early 2000's (Table 3), and at that time was not

found throughout many areas of the NW Region. Since 2017, CPW has been conducting mandatory CWD testing across different deer herds to determine prevalence (Figure 3). CWD has been found in more herds and at higher levels than first found in the early 2000’s.

Table 3. Chronic wasting in northwest Colorado deer herds with the year it was first detected in hunter harvest and recent prevalence estimates from mandatory testing.

DAU	Mule Deer Herd	Year CWD first documented	Male Prevalence	Mandatory Testing	Male CWD Prevalence (Female 2021)
D-01	Little Snake	2020	*	2021	5%
D-02	Bear's Ears	2002	2%	2018	18% (10%)
D-03	North Park	2003	1%	2021	9%
D-06	Rangely	2004	*	2020	4%
D-07	White River	2002	1%	2017	15% (9%)
D-08	State Bridge	2004	1%	2018	4%
D-09	Middle Park	2002	2%	2018	3% (2%)
D-11	Bookcliffs	2009	*	2020	3%
D-12	North Grand Mesa	2002	1%	2018	1%
D-13	Maroon Bells	2020	<1%	2020	<1%
D-14	Brush Creek			2020	0%
D-18	Glade Park			2020	0%
D-41	Logan Mountain	2016	*	2021	6%
D-42	Rifle Creek	2015	*	2017	10%
D-43	Sweetwater Creek	2018	*	2020	14%
D-53	Basalt	2021	1%	2021	1%

*DAUs D-1, D-6, D-11, D-41, D-42, and D-43 had small samples sizes for testing when CWD was first documented so prevalence estimates are not available.

CPW developed the Colorado Chronic Wasting Disease Response Plan in 2018 to provide direction for CWD surveillance and management of mule deer herds in response to the growing detection and prevalence of CWD across the state (CPW 2018). The plan established a schedule to monitor deer herds every 5 years for prevalence rates. In addition, if prevalence is determined to be at 5% or great in the 2 year old and older adult male segment of the population, then management actions should be taken to reduce that prevalence to below the 5% benchmark. The primary recommendations to manage CWD prevalence in deer herds are: 1) Reduce population and density, 2) Reduce male/female ratios, 3) Change age structure, 4) Maximize ability to remove diseased animals at the smallest scale possible (hot spot management), 5) Remove motivations that cause animals to congregate, 6) Minimize prion point sources, and 7) Incorporate CWD management actions and prevalence threshold into herd management plans.

The Northwest deer management plan objectives have been developed to reflect the recommendations from the CWD response plan and attempt to reduce prevalence rates to or below the 5% benchmark. The primary tool for CWD management at the herd level is to manage for lower buck:doe ratios as bucks carry CWD at approximately 2 times the rate of females. Furthermore, managing for lower population densities can also help reduce the prevalence of CWD. When possible, license allocation will be directed to later seasons and locations to best address hot spots of higher CWD prevalence. When harvest is sufficient and sustained, it can be a tool for attenuating CWD prevalence in adult male mule deer, especially early in the course of an epidemic (Miller et al. 2020 and Conner et al. 2021). Increasing male harvest reduces male and overall deer abundance and density, male age structure, and the number of infected deer, all of which appear to reduce disease. Likewise, timing hunting seasons closer to the breeding season when mature males are more vulnerable to harvest is another strategy to reduce CWD prevalence (Miller et al. 2020 and Conner et al. 2021).

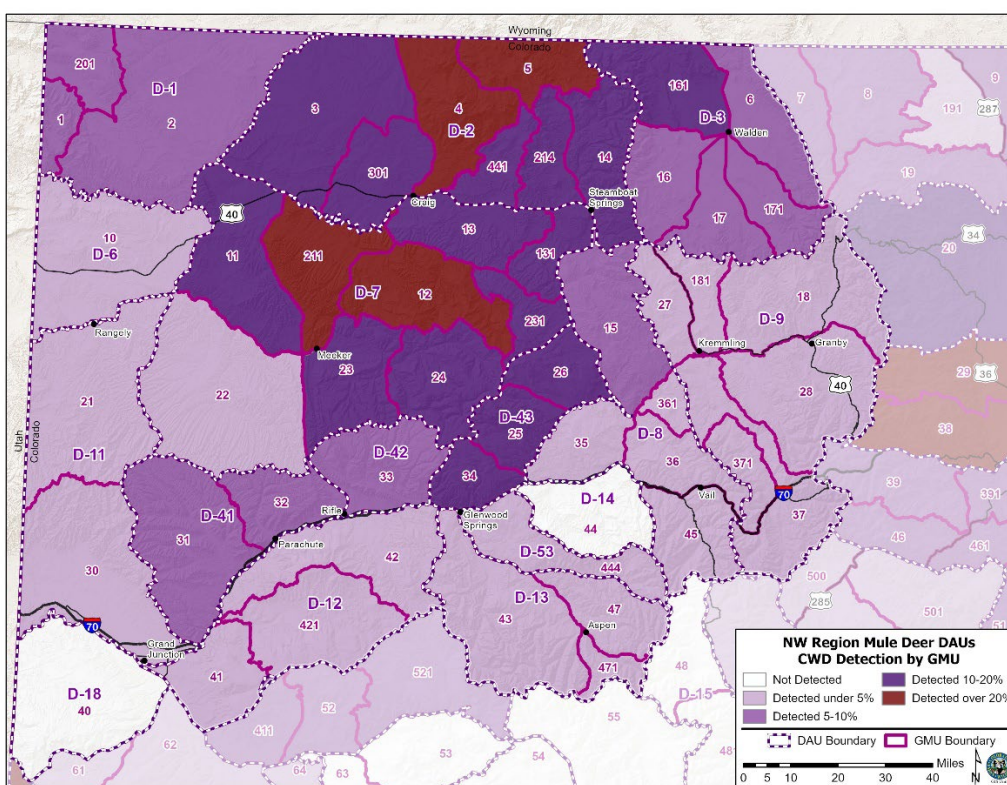


Figure 3. Chronic wasting disease detection rates in Northwest Region mule deer herds from mandatory testing efforts between 2017 and 2021.

Habitat Quality

Mule deer abundance is ultimately limited by the quality and availability of habitat. Factors that influence habitat quality include extreme weather conditions, invasive noxious weeds, fire, shrub eradication, overgrazing, and fragmentation. Quality habitat allows an animal to physically access the biological components for survival, including nutritious vegetation for growth and sustenance and security cover for thermal protection and predator avoidance. Mule deer are selective feeders with a diverse diet. Functionally, a mule deer’s digestive system is dependent upon relatively high quality forage and low consumption rates

when compared to more generalist grazers, such as cattle and elk. Nutritional requirements for mule deer require a variety of plant types including shrubs, forbs, and grasses, which vary across seasonal ranges.

Influence of Weather on Habitat Quality

Many of the factors affecting habitat quality for mule deer are driven by natural climatic events. Annual variations in seasonal precipitation affect habitat conditions, which drives distribution, reproduction, survival and ultimately abundance of mule deer. Furthermore, weather influences plant abundance, digestibility, and distribution. Perhaps the most critical weather-related periods affecting herd performance are from April to June and December to March. Seasonal precipitation from April through June affects woody plant growth on lower elevation winter ranges that deer rely on for winter forage in December-March. Snow depths and minimum temperatures affect winter survival. Summer drought cycles can have lasting effects on plant characteristics and the health of vegetative communities. During periods of prolonged drought, native plant communities become less productive and more vulnerable to invasive weeds, fire, shrub mortality, disease, and overutilization. This loss in diversity and productivity affects mule deer distribution, reproduction, survival, and relative abundance across seasonal ranges.

The effects of weather on habitat quality can be amplified by the timing of management actions. Management actions aimed at growing mule deer populations during periods of prolonged drought and the cumulative effect these actions can have on habitat quality often do not receive adequate consideration. The combination of summer drought, severe winter, and trying to maintain deer populations at too high of a level results in a lower nutritional carrying capacity on winter ranges.

Habitat Quality and Mule Deer Nutrition

Nutrition influences every life process of mule deer including ovulation, conception, gestation, lactation, and survival. Habitat quality is directly related to the nutritional carrying capacity of mule deer seasonal ranges. Poor habitat quality impacts the nutritional status of individuals in a population subsequently increasing an animal's susceptibility to additional factors such as predation, competition for food, disease, and survival during severe weather conditions.

To obtain sufficient nutrients mule deer require a high quality diet. Growth-promoting, high protein diets are needed in the spring from newly emerging grasses and forbs. Summer through fall deer select for leaves, new leader growth from shrubs, grasses, and flowering forbs high in carbohydrates as they attempt to put on fat to sustain the winter. Deer try to minimize energy expenditures and burn fat reserves to get through winter months. Winter diets are composed of low protein forage including leader growth from shrubs, dried forbs and grasses. Nutritional deficiencies realized from poor quality seasonal habitats can negatively affect productivity within a herd.

Seasonal Ranges and Habitat Quality

Many mule deer populations in Colorado migrate from higher elevation summer ranges to lower elevation winter ranges. The plant communities vary dramatically across these seasonal ranges, as do the dietary requirements for mule deer across these landscapes. Mule deer will preferentially select for areas with seasonally important forage resources within close

proximity to cover and water. Seasonal availability of various plants and seasonal metabolic requirements of deer influence the selection of forages throughout their range.

Spring Transition

Migrations through transitional ranges are traditional, learned behaviors passed on generationally within family groups of deer. The seasonal transition from winter to spring can be extremely challenging for mule deer as a dietary shift occurs from a low nutrition winter diet of woody shrubs to a high nutrition spring diet of emergent green grasses and forbs. Energy reserves are lowest and animals are generally in their poorest nutritional condition at the end of winter. The transition from a low quality diet to consuming highly palatable, succulent herbaceous plants rich in protein is important for recovering body condition this time of year. Migratory deer are able to capitalize on these emerging highly nutritious plants by following spring green-up back to higher elevation summer ranges. However, delays in snowmelt and cold, wet spring storms can be devastating to deer at this critical stage. Energy costs are highest for female mule deer through the spring and early summer. Does are trying to recover their body condition when nutritional forage resources are marginal all while migrating to summer range, preparing for parturition, and experiencing an exponential increase in energy required for lactation and the successful rearing of one or more fawns. Thus, a doe's over-winter body condition and the timing of spring green-up are both critical to increasing the success of a doe's pregnancy.

As landscape fragmentation increases because of human development and land-use changes, conserving the integrity of these transitional habitats is critical to the continuity of migratory movement throughout these ranges.

Summer Range

Mule deer summer ranges are generally expansive and can vary widely across the landscape. Most deer summer at higher elevations; however, some deer are resident and occupy lower elevations year-round. Habitat types at lower elevations include Wyoming big sagebrush and pinyon-juniper, mid-elevations contain mountain big sagebrush, mixed mountain shrub, and aspen, and higher elevation summer ranges are predominately aspen and mixed conifer forest. Plant diversity and production is higher at mid to high elevation summer ranges. Nutrition on summer ranges is generally not a limiting factor for mule deer. Historically naturally occurring wildfire played a major role in the ecology of these habitats. Suppression of fire on summer ranges has resulted in older and more decadent mixed mountain shrub, aspen, and mixed conifer forests more susceptible to disease, insect infestations, and catastrophic wildfires. Drought has had a significant impact on mid-elevation serviceberry and aspen habitats. Many aspen clones at mid-elevations are dead or dying with varying degrees of regeneration. Drought-stressed serviceberry plants have been top-killed from a leaf blight. The effects of the blight are widespread; however, many of the shrubs affected appear to show signs of basal sprouting.

The optimal combination of cover types on summer ranges includes 40% of the area that is a mosaic of hiding, thermal, or fawning cover and 60% foraging area (Olson 1992). Dietary shifts occur over the course of the summer. As grasses dry and cure mid-summer, mule deer transition to forbs and shrubs. By mid to late summer, forbs and leaves can comprise up to two-thirds of the diet. As forbs senesce, deer replace forbs with shrubs in their diet.

Although riparian areas comprise a small portion of the landscape, they are of high importance for mule deer. The optimal combination of cover types occur in these small areas

and provide year-round forage for deer. Higher water tables within riparian zones support more diverse plant communities with extended green periods when surrounding uplands dry out, providing deer with access to nutritious grasses, forbs and shrubs.

Fall Transition

The path taken during fall transition along migratory routes often mirrors the path of spring migration. Fall transition occurs from higher elevation summer ranges to lower elevation winter ranges. As mule deer descend in elevation in fall, their diets shift and contain a higher percentage of browse and mast (acorns/berries) from mixed mountain shrub species. Depending on the distance between seasonal ranges and weather, the amount of time spent and intensity of use on transitional ranges can vary. During winters with lighter snow cover, mule deer may remain within transitional ranges longer, where forage quality and plant diversity is often higher than lower elevation winter habitats.

Energy requirements differ for bucks, does, and fawns during the fall. Bucks spend less time foraging this time of year during the rut, so quality of summer and fall transition forage resources are important for maintaining body condition considering the energy requirements during breeding. Increased activity levels result in faster depletion of fat reserves going into the winter. In contrast, doe body condition improves as fawns are weaned in the fall and the demands of lactation decrease. Body condition of does affects timing of ovulation, conception, and fecundity (Tollefson et al. 2010). Odds of winter fawn survival increases for fawns with access to high quality forage. Fawns on a higher nutritional plane have larger body mass, which translates into higher survival rates and subsequent recruitment into the population.

In addition to weather, human activity can also influence time spent in transitional ranges. Deer tend to spend less time in highly developed areas, increasing the rate of movement through or altering the use of habitats within these areas (Sawyer et al. 2013, Lendrum et al. 2013). Where disturbances occur and at what level can potentially have a significant impact on deer population dynamics. Therefore, knowing how deer use transitional ranges is important to making informed land-use decisions in order to avoid or minimize impacts to these critical transition ranges.

Winter Range

The quality of winter range habitat is extremely important to mule deer survival because these ranges are most limited in forage quality and quantity. Forage quality and abundance are at the lowest levels while energy demands are highest during winter months. Browse from the leader growth of shrubs comprise the bulk of the deer diet. Important winter browse species across winter ranges often include Wyoming big sagebrush, mountain big sagebrush, silver sagebrush, black sagebrush, antelope bitterbrush, serviceberry, rabbitbrush, true mountain mahogany, Gambel oak, snowberry, four-winged saltbush, shadscale saltbush, and winterfat. Dietary quantity and quality are highly variable, with significant declines in digestible nutrients during the winter. Regardless of habitat type, nutritional gains from consuming winter browse is often less than the energy expenditures resulting in depletion of fat reserves as winter progresses. Body protein is often catabolized in order to survive the winter resulting in significant losses in body weight. However, the rate of weight loss can be reduced by improving winter range forage conditions. Enhanced nutritional forage conditions can buffer the effects of the high energy demands needed to survive the winter.

Winter weather conditions influence mule deer distribution on winter ranges. Increased snow depths force deer to concentrate onto smaller landscapes with open southern and western aspects where snow depths are minimal and access to forage resources are greater, although forage is limited. Many winter ranges consist of open sagebrush, mixed mountain shrub, or pinyon-juniper woodlands. Often deer will seek out pinyon-juniper woodlands for thermal cover and lighter snow conditions, allowing for increased mobility and lower energy expenditure.

In addition, lower elevation winter ranges are more susceptible to drought than mesic, higher elevation summer ranges. Overutilization of drought-stressed winter ranges reduces plant vigor and diversity resulting in monocultures, which negatively influence selective foragers such as mule deer. In contrast, some habitat disturbances may be beneficial by reverting succession and increasing plant diversity and forage quality. Fire in pinyon-juniper and mature mountain shrub communities, beetle kill, and agricultural development can all improve habitat quality. However, large-scale fires on mule deer winter ranges can have an adverse effect by converting shrub-dominated landscapes to grasslands rendering them unusable by wintering deer. In effect, the loss of browse from the fires results in a significant increase in deer densities and browsing pressure on the often-small patches of brush that remain. The increased browsing pressure leads to increased stress on the remnant brush, resulting in decreased nutritive value, decreased vigor, less productivity, and lower palatability. Ultimately, these situations lead to winter ranges capable of supporting fewer deer until the browse component within these landscapes are re-established to levels usable by deer.

Drought/Winter Weather Impacts

Weather and climate conditions also affect mule deer populations. Severe weather can manifest in the form of severe winter conditions or extreme drought, and these conditions can have both direct and indirect impacts on mule deer populations.

Severe winter weather in the form of snow depth and/or prolonged extreme cold temperatures can affect mule deer survival rates directly. Deep and/or crusted snow can limit access to forage and cause malnutrition and starvation and malnutrition in mule deer. When snow conditions are severe and snow is deep, mule deer tend to concentrate in larger groups, leading to the depletion of available forage. When mule deer are exposed to extremely cold temperatures for long periods, they may remain in sheltered areas where forage is less abundant. Winter weather can also have indirect impacts on mule deer survival. Because deep snow and extreme cold tend to concentrate mule deer and reduce the amount of available forage, mule deer are more vulnerable to predation and physically in poorer condition.

The impacts of extreme drought in summer are less immediate. During periods of prolonged drought, the nutritional characteristics of forage are compromised and successional stages of the habitats change. These factors can lead to lower nutritional carrying capacity of the range. Figure 4, below illustrates the percent of the Upper Colorado Watershed that falls in the different drought index categories from the year 2000 to present. This watershed includes all of the Upper Colorado which covers the western slope of Colorado, southwest Wyoming, Utah, and small parts of New Mexico and Arizona. The graph is similar to graphs for higher level watersheds in Colorado.

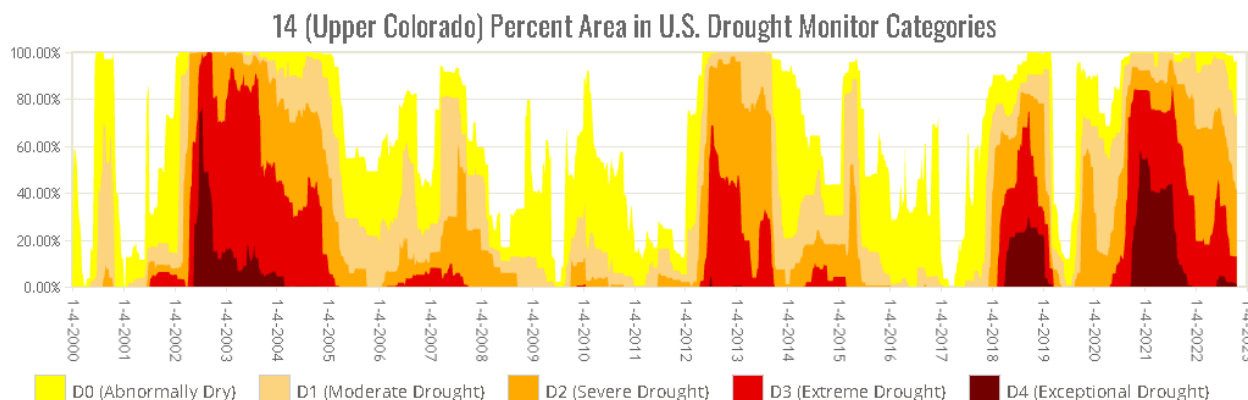


Figure 4. Times series drought monitoring graphing depicting the percentage of the watershed in different drought categories from the year 2000 to present. (www.droughtmonitor.unl.edu)

Human Impacts to Habitat Quality

Humans have both direct and indirect impacts to mule deer habitat. Energy exploration, solar and wind development, urban growth, recreation, highways, railroads, and fence lines all have direct impacts on habitat quality and functionality. These activities and structures fragment habitats and diminish habitat function by limiting access to foraging and resting areas. The quality of vegetative communities can also be degraded by land management practices. Fire suppression, livestock grazing, shrub eradication, and disturbances that promote invasion of cheatgrass and other noxious weeds all have impacts on habitat quality.

Habitat quality is a dynamic and complex issue affecting performance of mule deer herds in Colorado. Climatic changes and human disturbance have the greatest impacts on habitat quality. Drought cycles predispose plant communities to characteristic changes resulting in habitats that are less productive and functional for mule deer. Human growth and development not only affect habitat quantity but also render the remaining habitat less functional due the fragmentation that occurs from these disturbances.

Habitat Quantity

The amount of habitat available to mule deer in Colorado has changed significantly over the last century. However, the rate at which habitat loss has occurred within the last 50 years has accelerated considerably compared to the homesteading days of the late 1800’s - early 1900’s. Settlement of the West resulted in intensive livestock grazing through the 1930’s that actually increased the size, density, and vigor of shrub communities in Colorado and increased the amount of habitat available to mule deer. These increases in habitat contrast greatly with the losses of mule deer habitat within the last 50 years. Changes in climate and weather patterns and the direct and indirect losses of mule deer habitat due to the growth of Colorado’s human population have been driving factors in trends in mule deer populations.

Colorado’s population has had recent exponential growth to 5.7 million people. In the last 50 years, the amount of people per square mile has tripled from 17 people per square mile in 1960 to over 50 today. With increasing human population comes an increase in homes with a current estimate of 2.4 million housing units. Subdivisions, condominiums, ranchettes,

grocery stores, airports, golf courses, roads, power lines and all other infrastructure that comes hand in hand with homes contribute to a direct loss of mule deer habitat.

One of Colorado's main economic giants is recreation. Recreational activities such as rafting, skiing, camping, hunting, mountain biking, and off-road vehicle use all have indirect impacts to mule deer populations. For example, Colorado's ski industry consists of 23 resorts totaling 44,676 acres that has both direct and indirect impacts to mule deer summer ranges.

Mule deer habitat quantity has also been reduced from energy exploitation in Colorado. There are currently over 37,000 producing natural gas wells compared to 5,125 in 1989. There are also three surface coal mines in Colorado. Oil shale exploration and oil wells are also expected to increase in the future. These activities reduce the amount of available habitat through pads, roads, pipelines, and open mine pits.

Colorado has a network of roads that total 85,400 miles. Road construction directly impacts deer through removal of available habitat and population loss from road kills. Indirect impacts result from fragmentation, which alters deer migration patterns, daily movements and behavior. Roads are continually expanding into mule deer range from housing, energy development, and recreation.

Drought cycles over the past 20 plus years have also had an effect on usable mule deer habitat and mule deer production. Expansive wildfires on critical winter ranges have significantly reduced the amount of winter range available to mule deer. While fire can be beneficial and improve habitat quality for mule deer in most situations, it can be detrimental and result in significant losses of mule deer winter range. This is especially true when fire occurs in the presence of cheatgrass and in plant communities intolerant of fire. In these instances, the loss of winter range to fire significantly reduces the number of mule deer those ranges can support resulting in lower population levels.

The above impacts have resulted in both direct and indirect losses to the amount of habitat available to mule deer. The direct losses of mule deer habitat due to the footprint left by these activities are often amplified through the indirect losses that occur due to fragmentation of the available habitat that is left. The connectivity between the available habitat that is left is fractured, impacting the quality of habitat mule deer use through their life cycle from summer to winter ranges. Ultimately, these losses in available habitat limit mule deer populations.

Oil and Gas Development

Extraction of oil and gas has the potential to affect mule deer populations directly through habitat loss from pad, road, and pipeline development and associated spread of noxious weeds, or indirectly from the increased human presence at pads and use of roads. Oil and gas development activity in NW Colorado has remained at relatively low levels over the past decade compared to the high volume of activity experienced between 2006 and 2010. Recent market conditions and commodity price increases have resulted in slight upticks in the number of permits being submitted; however, active drilling rig counts have not increased significantly. The figure below (Figure 5) depicts the number of wells drilled annually in the Northwest Region from the year 2000 to present.

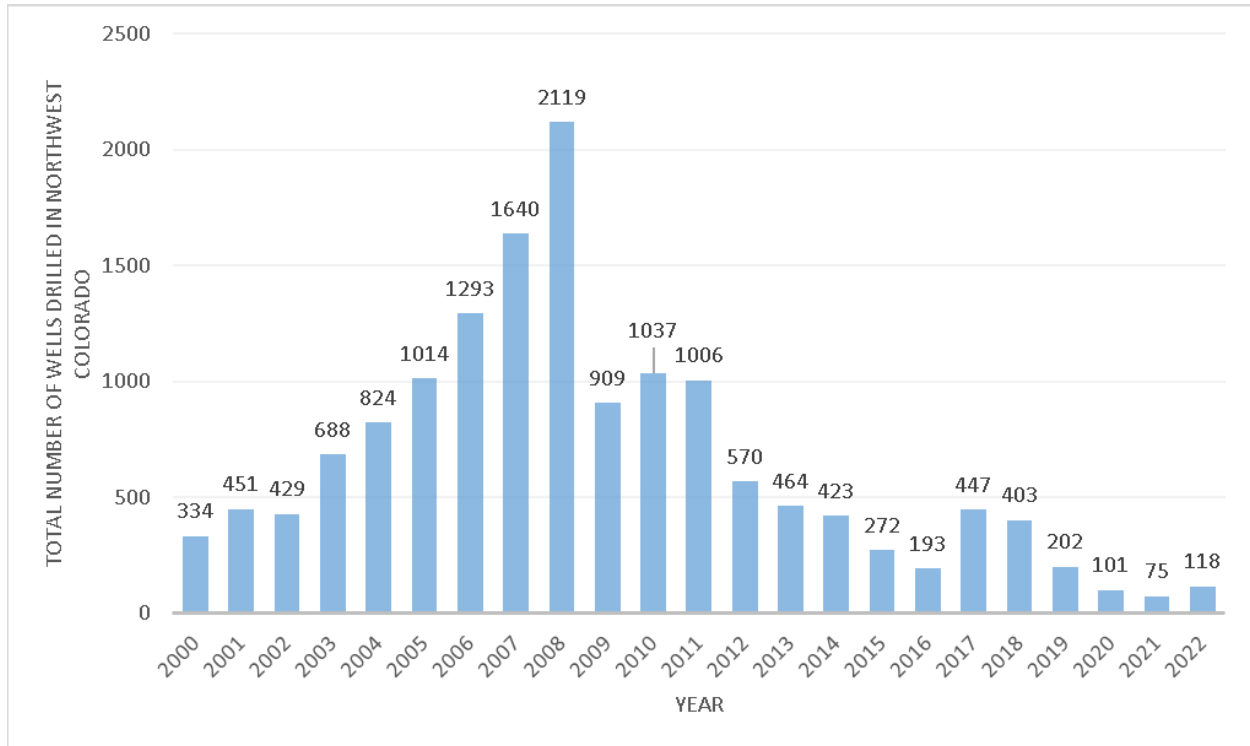


Figure 5. Wells drilled annual in northwest Colorado counties from 2000-September 2022.

Colorado’s recently enacted (January 2021) Senate Bill 19-181 (SB-181) oil and gas regulations contain new provisions and requirements for the protection of wildlife resources during oil and gas development. In particular, the new regulations contain measures to: reduce noise and light impacts, require compensatory mitigation to offset direct and indirect impacts to big game high priority habitats (HPH), limit the density of oil and gas development within big game seasonal ranges, and analyze alternative development locations to minimize adverse impacts. Figure 6, illustrates where active wells overlap with mule deer HPH layers. These new regulations result in significantly greater wildlife protections compared to the State’s previous House Bill 1298 oil and gas regulations, and expand CPW’s involvement and consultative role during the Colorado Oil and Gas Conservation Commission (COGCC) permitting process.

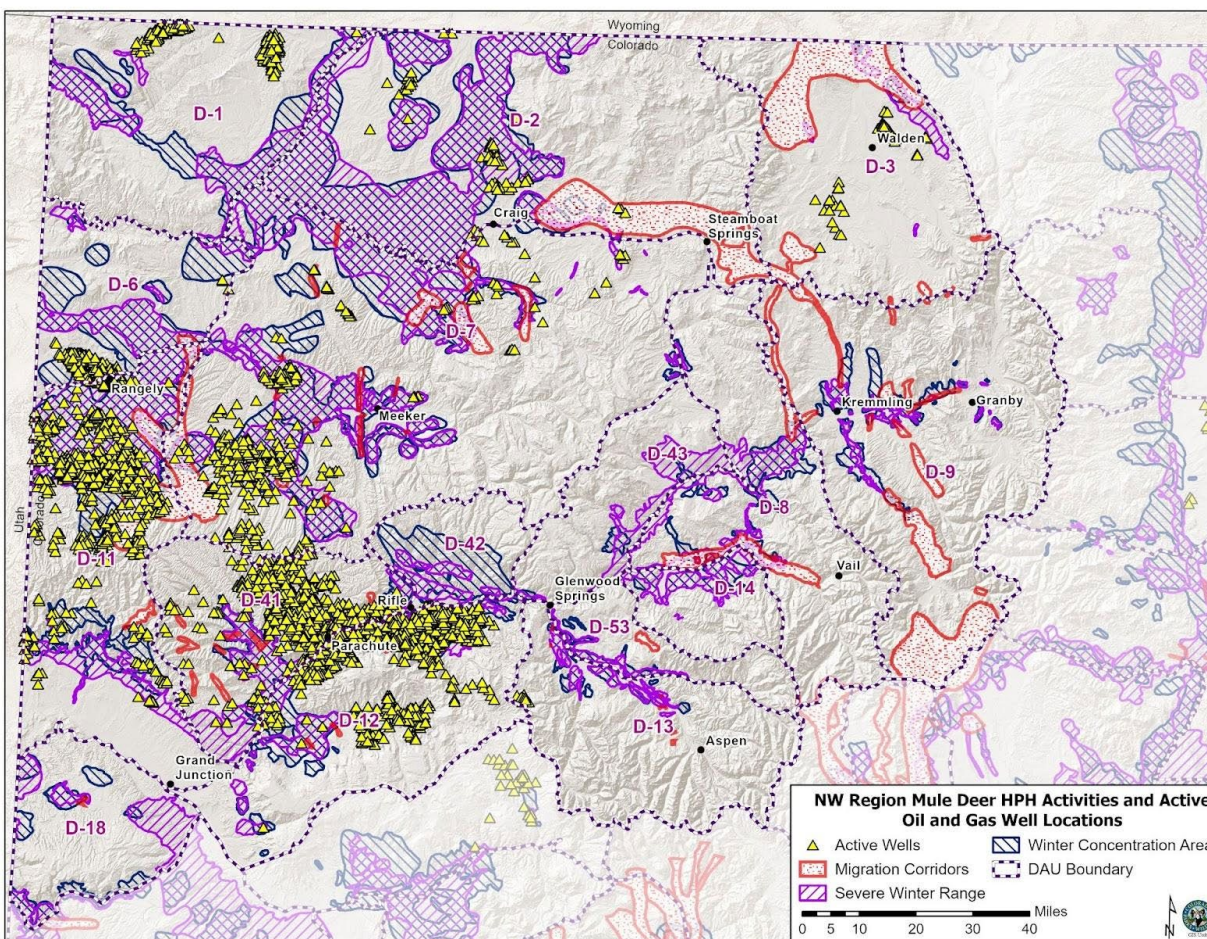


Figure 6. Map of deer DAUs in northwest Colorado overlaid with high priority habitat (HPH) layers and active oil and gas wells.

Renewable Energy

Proposed renewable energy projects have increased significantly in the past several years, with a focus on utility-scale photovoltaic (PV) solar projects in Western Colorado. CPW’s Northwest Region has consulted on approximately six proposed solar projects that are greater than 1,000 acres in size during calendar years 2021 and 2022. Of particular concern for big game species, the National Electric Code (NEC) requires that solar energy facilities be fenced for security purposes. This exclusionary fencing requirement results in a complete loss of habitat for big game, and oftentimes creates a significant barrier to daily and/or seasonal movement patterns.

When siting locations for utility-scale solar projects, developers typically seek areas close to existing electrical transmission lines and substations, flat topography, southern exposures, and limited forest canopy cover. Frequently, these landscape characteristics are also representative of high-quality winter range areas for big game in Western Colorado. Additionally, to avoid lengthy federal permitting processes, most of these proposed projects have been located on privately owned lands with 20-30 year lease agreements.

Urban/Residential Development

Over the past 50+ years, private lands in large portions of Northwest Colorado have transformed from undeveloped or rural/agricultural landscapes into increasingly suburban and even urban areas, dominated by residential and commercial developments and fragmented by roads, highways, and recreational trail networks. These private lands typically lie at lower elevations, coinciding with big game winter ranges. The human population in Northwest Colorado has grown consistently since the 1960s, with marked increases in the 1970s and 1990s-2000s (Figure 7). In the 1970s and 1980s, the growth of the ski industry in Aspen and Vail, and later in Steamboat Springs and Granby, brought an influx of visitors and new residents into these areas, facilitated by the construction of Interstate-70 starting in the late 1960s through the 1990s.

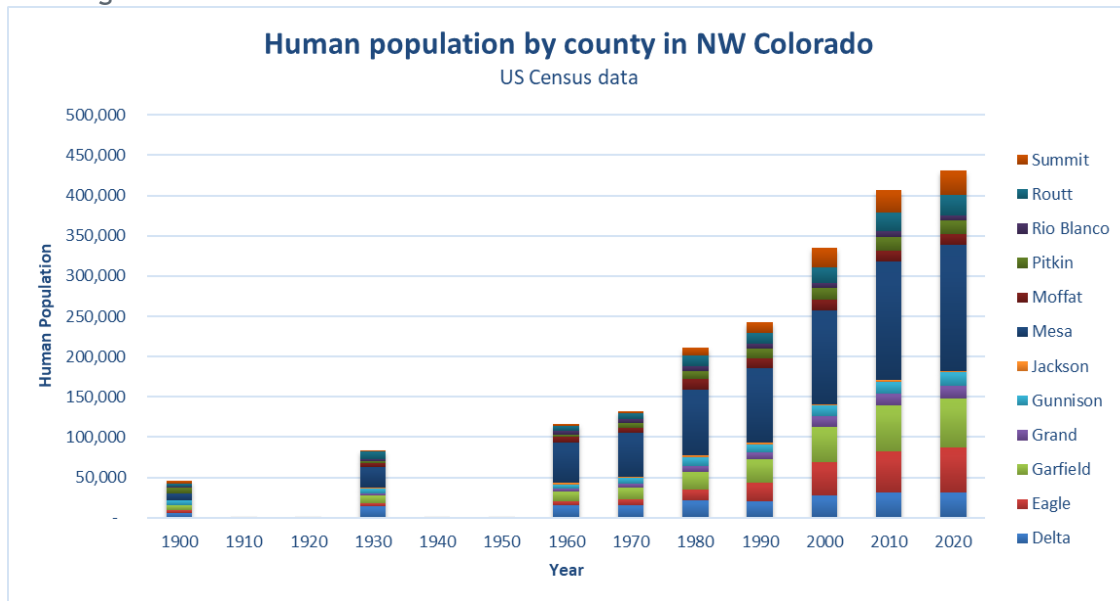
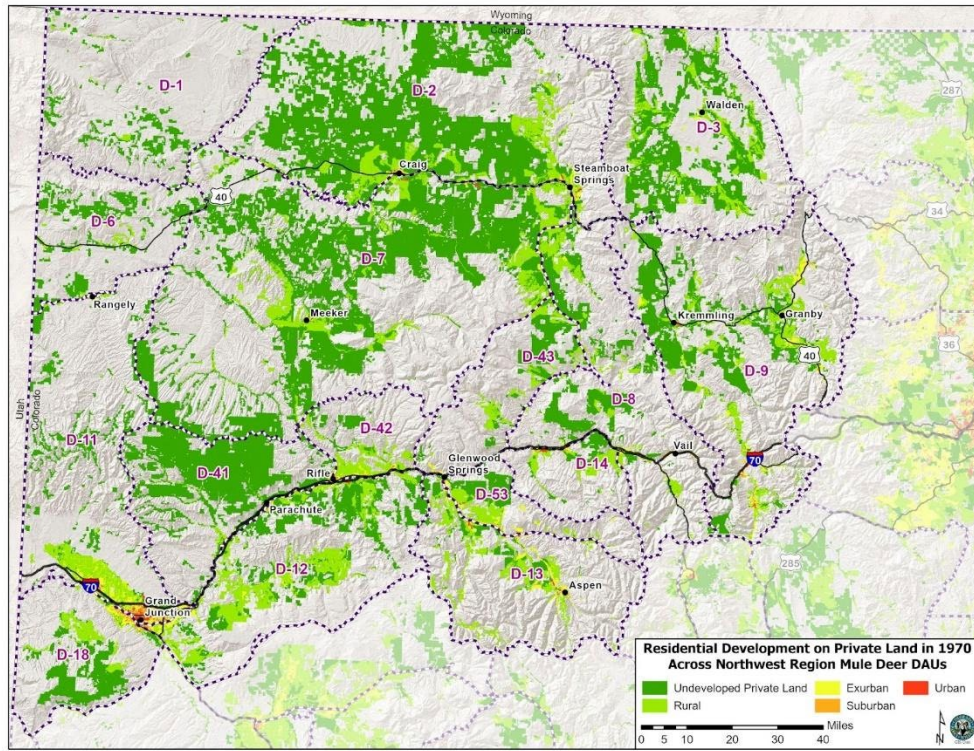
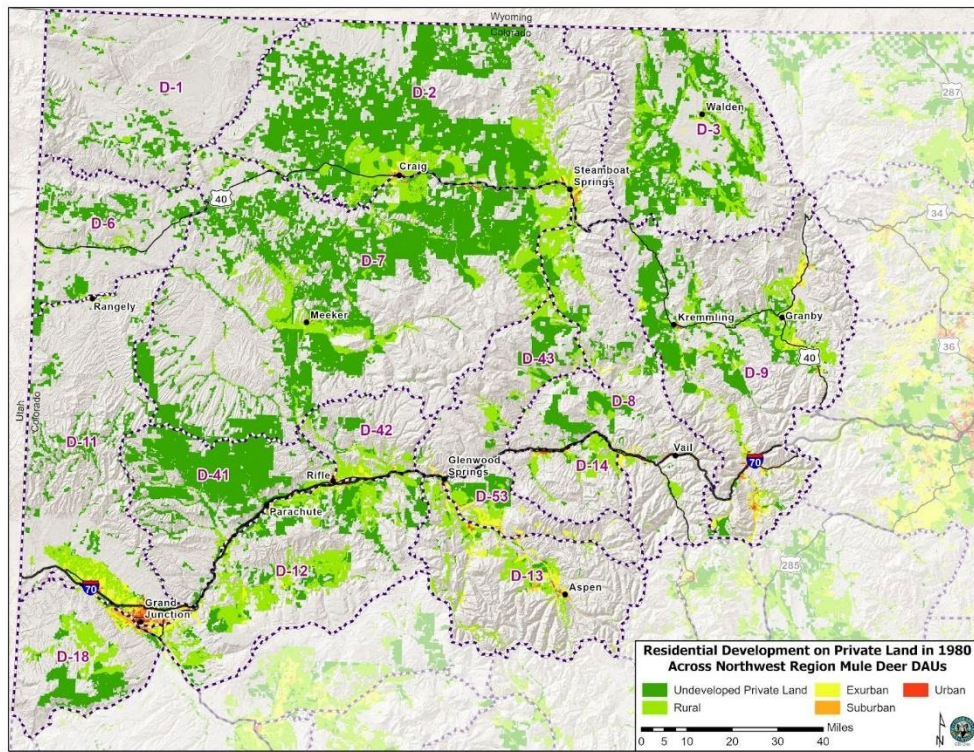


Figure 7. Human population from 1900-2020 based on US Census data in counties overlapping CPW’s Northwest Region.

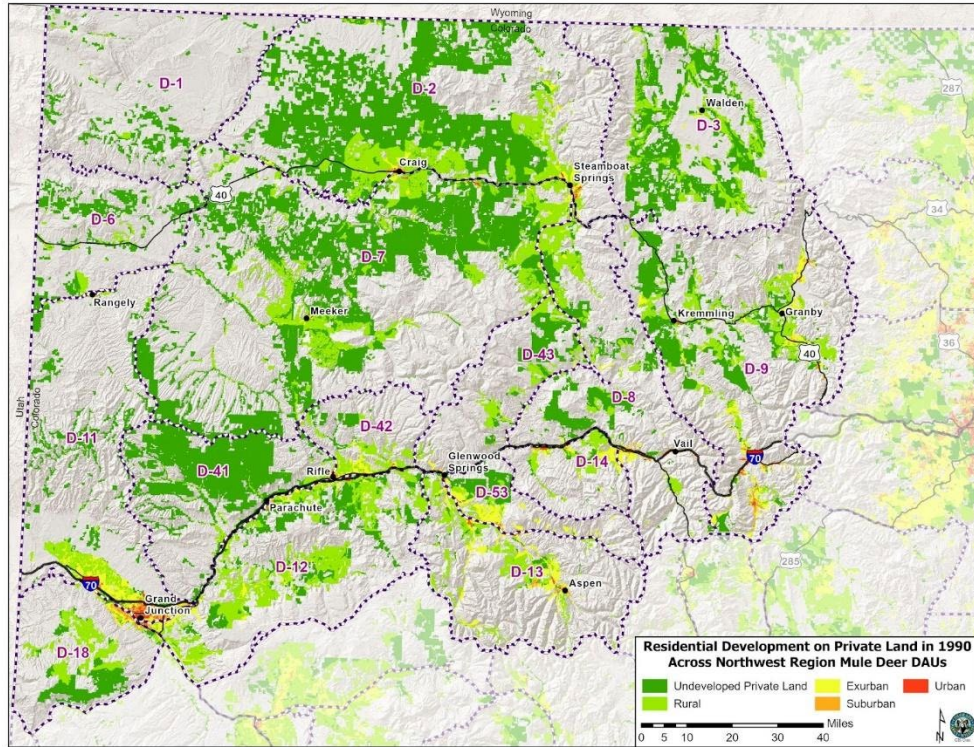
Construction and real estate development are now among the major industries in Northwest Colorado, especially along the Interstate-70 and State Highway 40 corridors. In 1970, 13,242 km² (74%) of private lands on mule deer overall range and 7,274 km² (77%) of mule deer winter range in Northwest Colorado were considered undeveloped (0 housing units/km²). By 2020, almost 30% of undeveloped private land was converted, leaving only 9,492 km² (53%) of mule deer overall range and 5,146 km² (54%) of mule deer winter range left as undeveloped (Figures 6a-f). Increasing residential housing development has been shown to correlate with declining mule deer recruitment rates (Johnson et al. 2017).



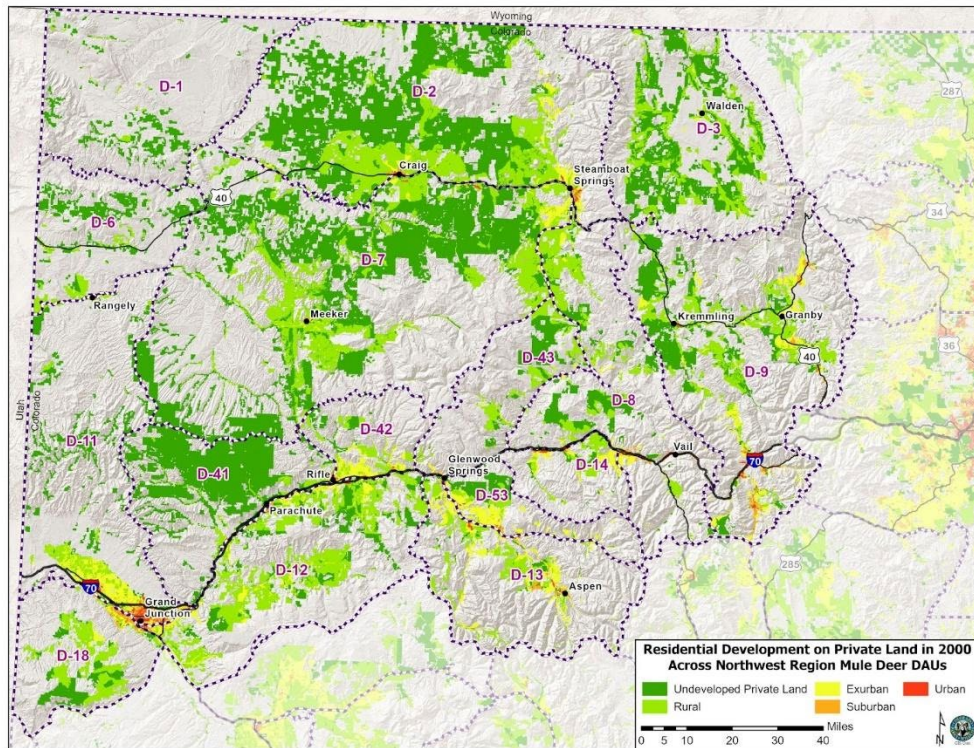
a.



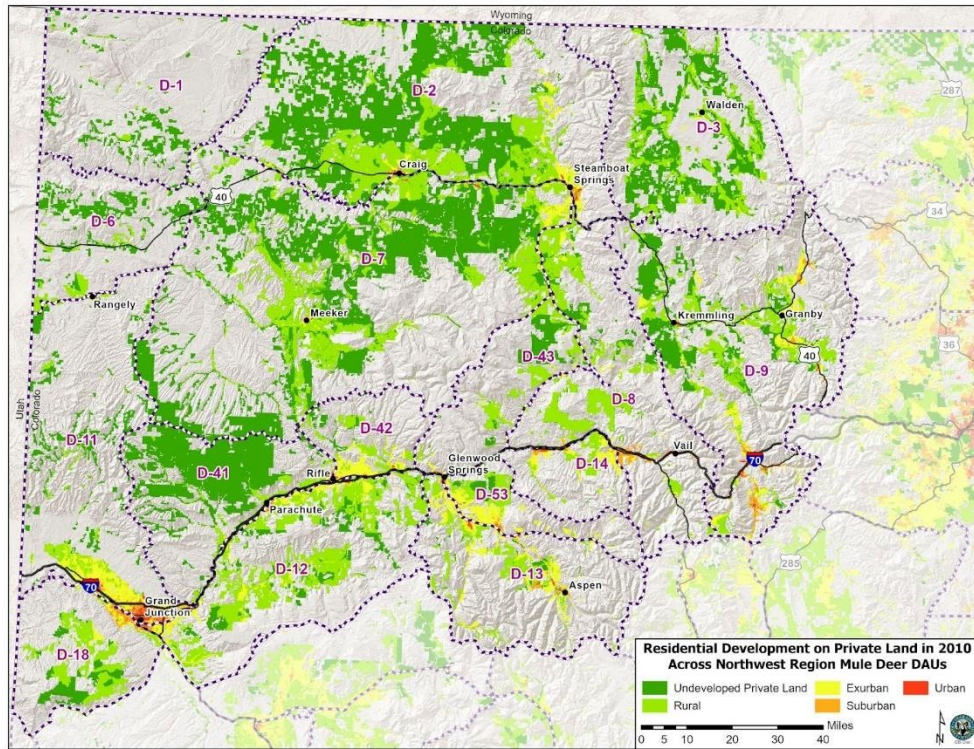
b.



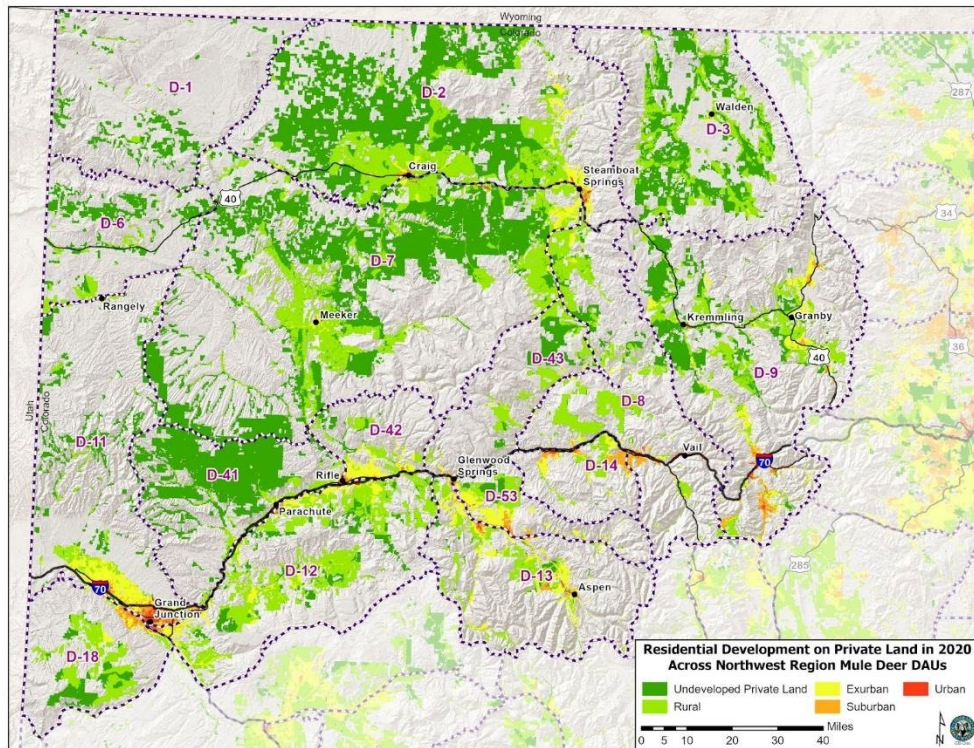
c.



d.



e.



f.

Figure 8(a-f). Maps of housing densities on private lands in Northwest Colorado from 1970-2020. Undeveloped = 0 housing units/km², Rural = <3 units/km², Exurban = 3-59 units/km², Suburban = 60-500 units/km², Urban = >500 units/km² based on Shushinky et al. 2014.



Figure 9. Housing densities on private lands in (a) mule deer overall range, and (b) mule deer winter range) in Northwest Colorado, 1970-2020. Undeveloped = 0 housing units/km², Rural = <3 units/km², Exurban = 3-59 units/km², Suburban = 60-500 units/km², Urban = >500 units/km² based on Shushinky et al. 2014.

Along with the growth of the human residential population has come higher vehicle traffic on roadways, leading to more roadkill of wildlife. Beyond the immediate footprint of habitat loss through land development, there are also larger-scale, indirect effects on the landscape: ever-increasing demand for outdoor recreational access has led to development of trail systems, campgrounds, and access roads, and therefore more human activity on both private lands and surrounding public lands.

Converting rural and agricultural lands that once functioned as wildlife habitat amounts to effectively a permanent loss of habitat. Real estate values have increased exorbitantly, so the financial incentive for ranch owners to subdivide and sell their properties has been immense. The cost to deer and other wildlife is the likely irreversible loss of habitat and therefore decreased carrying capacity across the landscape for many wildlife species.

Conservation of private lands should be a priority in order to protect and maintain connectivity of the remaining undeveloped lands for wildlife use. The Colorado Wildlife Habitat Program (“Habitat Stamp”) and Great Outdoors Colorado (GOCO), as well as federal programs and non-governmental organizations such as land trusts, provide funding and mechanisms to help private landowners set up conservation easements. The challenge, however, is that conservation easement efforts must compete with the extremely high real estate prices in the region.

Elk Competition

In many areas on the Western Slope of Colorado, and in other western mule deer herds, mule deer numbers have decreased as elk numbers have increased. Mule deer competition with elk has been proposed by a number of academics, biologists, and managers in several western states as one factor that may be contributing to a decline in deer numbers. Potential negative interactions with elk include competition for scarce supplies of high-quality forage and behavioral avoidance. However, the existence, nature, and scale of these effects remain theoretical. Predicted impacts are extrapolated from an understanding of mule deer life history and behavior to potential competition events with elk. The actual occurrence of competition resulting in reduced production or survival of mule deer is challenging to detect and measure, and little evidence of competition between elk and mule deer is documented in scientific studies. Further complicating detection of competition effects, there may be undetermined time lags between the occurrence of mule deer/elk competition and some effect on mule deer populations. If competition with elk occurs in western Colorado, it is most likely where key habitats are limited (i.e., on winter ranges, in fawning/calving habitats, in arid environments, etc.).

Elk were eliminated from many areas of Colorado by the early years of the 19th Century, but numbers had increased substantially by the 1920s and 1930s. Elk harvest on traditional mule deer winter ranges around Maybell, CO and Elk Springs, CO in western Moffat County was common during the homestead period of the 1920s, for instance, but elk were largely gone from the area by the end of the 1930s. Elk numbers in many areas of western Colorado remained relatively low during the peak years of mule deer populations in the 1950s and 1960s. Elk populations then increased steadily from the 1970s through 2000. During the winter of 1978-79, Colorado Division of Wildlife field personnel reported the first significant movement of elk in recent memory to the west of Colorado Highway 13, which runs from Rifle to Wyoming through Meeker and Craig. This westward movement of elk was repeated during the severe 1983-84 winter, when snow depths were extreme and therefore elk were artificially fed on many of these extended ranges. By the mid-1990s, this movement of

significant numbers of elk into winter ranges that previously had been exclusively occupied by mule deer had become an annual event. Intentional and aggressive decreases in the size of elk populations have occurred across western Colorado since 2000. However, most declining mule deer populations in western Colorado have not responded positively to these reductions in elk numbers.

The ability of ruminant wildlife to intake forage is driven largely by body size and the fixed rate at which forage is processed by microbes in the rumen to extract energy and nutrition. Smaller animals, including mule deer, are forced by these biological limitations to concentrate on forages of relatively higher quality in order to extract sufficient nutrition through a smaller digestive system. Larger ruminants, particularly elk, will also use these high-quality resources but have substantially greater ability to make use of low quality forages as well. When mule deer and elk occupy the same ranges, particularly when resources are limited as in the winter months, the potential increases for elk to negatively impact mule deer by consuming the high-quality forage required by deer, while supporting themselves on much more abundant low-quality forage.

Elk and mule deer often occur in relatively close proximity. However, they are rarely observed in mixed groups, suggesting that some level of behavioral separation occurs. Where resources are very limited, as on winter feed lines, elk have been observed to physically drive deer away from food. To the extent that competition with elk forces mule deer into less preferred habitats, it may contribute to reduced nutrition or higher predation risk, resulting in reduced production and/or reduced survival of mule deer.

If significant mule deer/elk competition occurs, management of elk to reduce competition with mule deer could be complicated, and perhaps precluded, by the interest in and value of elk as a big game species. Many sportsmen believe that current elk populations are too low. Elk are highly sought after in Colorado for hunting and wildlife watching opportunities and constitute a major economic driver for local communities on the Western Slope.

Efforts to manage potential mule deer/elk competition will require substantial and detailed local knowledge about the ecological interactions of the two species. Managing for healthy populations of both mule deer and elk in western Colorado will require, at a minimum; broad support of management and funding partners (i.e., BLM, USFS, NGOs, etc.); an understanding of current habitat conditions, including the relative value of current habitats to mule deer and elk; the relative distribution of key seasonal habitats; and the relative forage consumption by elk compared to forage removed by other wild and domestic grazing animals; as well as agreement on the desired relative population sizes of mule deer and elk.

Free-roaming Horses

The Bureau of Land Management manages over 82,000 free-roaming horses and burros on 42,300 acres across 10 Western states, including Colorado. The Wild Horse and Burro Program's goal is to manage healthy feral horses and burros on healthy public rangelands. Areas that are managed for free-roaming horses are designated as Horse Management Areas (HMAs). Areas with free-roaming horses and burros but that are not managed for them are designated as Horse Areas (HAs). The BLM determines the Appropriate Management Level (AML), or the number of feral horses the habitat can support with on a given HMA. Since HAs are not managed for feral horses and burros, and they are not intended to be present on these lands, AMLs are not designated for these areas.

The BLM in Colorado manages four wild horse herd management areas on 424,505 acres with an additional five Horse Areas where horses are not managed ranging 426,770 acres (USDI Bureau of Land Management 2022) (Figure 1). These areas cover critical deer habitat, specifically winter ranges. As of March 2022, combined populations in Colorado were estimated at 1,873 horses with the appropriate management level for all HMAs in the state at 827 animals.

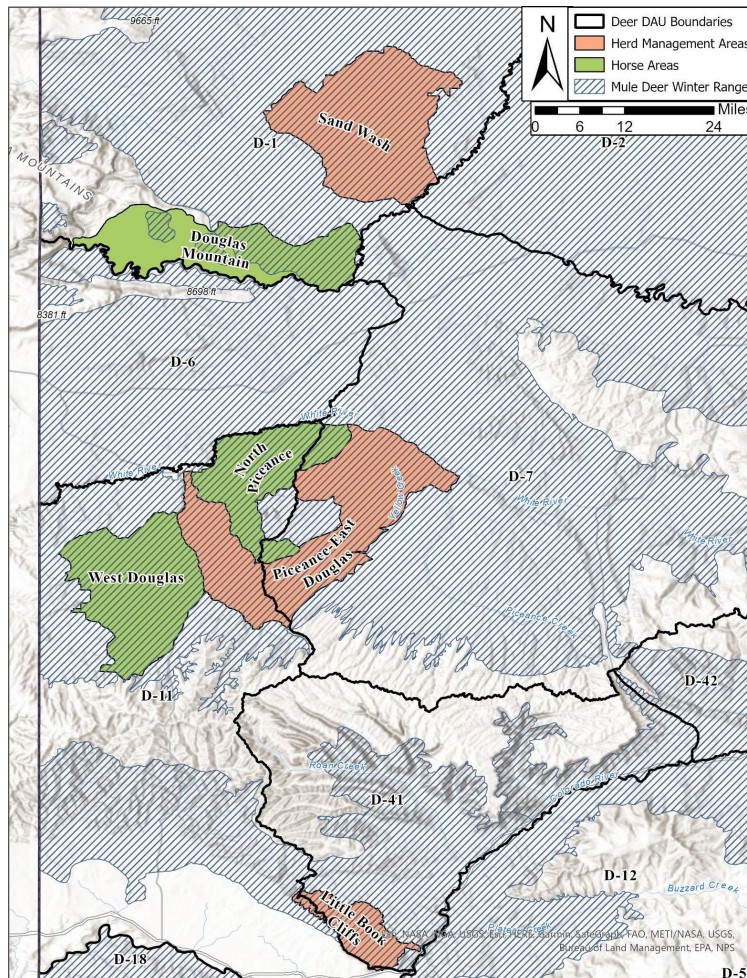


Figure 10. Herd Management Areas (HMAs) and Horse Areas (HAs) in Colorado overlapping deer DAUs and winter ranges.

As part of their management strategy, BLM gathers horses from HMAs that exceed appropriate management levels and allow adoption to the public (Table 4). Some HAs have also had gathers in recent years. The West Douglas Creek HA horses were gathered in 2021. The BLM gathered 451 horses there, when they expected the population to be about that number. Their goal was to remove horses from that HA. The HMAs have also seen some gathering projects in recent years (Table 4).

Table 4. Statistics on Herd Management Areas (HMAs) in Colorado as of March 2022 (BLM).
*Spring Creek Basin HMA is located in the Southwest Region.

Herd Management Area Name	Affected Deer DAUs	Total Acres	High Horse AML	2022 Estimated Population	% of AML	Year of Last Gather	Horses Removed
Little Book Cliffs Wild Horse Range	D11, D41	52,634	150	175	117%	2018	96
Piceance-East Douglas Creek	D7, D11	160,841	235	1,150	489%	2021	867
Sand Wash Basin	D1	156,502	362	291	Within AML	2021	684
Spring Creek Basin*	D24	54,528	80	73	Within AML	2019	166
Totals		424,505	827	1689			1813

Negative impacts from free-roaming horses to wildlife and wildlife habitat include spatial, water source, and forage competition, and habitat degradation (Hall et al. 2016, Boyd et al. 2017, Danvir 2018). The areas used by horses overlap with mule deer winter range, winter concentration areas, and severe winter range. These areas are critical to the sustainability and resilience of deer herds and the high levels of non-designated horse use contribute directly to habitat degradation. Free-roaming horses degrade sagebrush habitats and riparian areas and can impact the amount of forage available to mule deer and other grazing ungulates (Baur 2016).

Management of free-roaming horse populations is highly controversial. Proposed gathers to manage horse populations often end up in litigation. The inability to manage wild horse populations to herd objectives has had negative impacts on range conditions. This in turn creates challenges for land managers when trying to balance permitted livestock use within these allotments with competing free-roaming horse use resulting in further range degradation.

Recreation

Human recreation causes both direct loss of habitat from the development of infrastructure (roads, trails, parking areas, etc.), as well as indirect loss of habitat through the behavioral avoidance of these areas by wildlife. Human presence on the landscape in the form of recreation evokes a physiological stress response for mule deer that impacts habitat usage, activity times, competition, foraging, reproduction, and body condition. Wild animals minimize energy expenditure by reducing their spatial and temporal activity, but human disturbance disrupts this energy-saving behavior by causing extra movement to escape or find cover. Deer react to the presence and activity of humans either by fleeing or by being vigilant, both of which detract from the animal’s ability to feed and rest. These disturbances on the scale of individual encounters between an animal and a human recreationist may seem minor in isolation, but when translated to the lifetime of the animal or even to the scale of the whole deer population, the cumulative effects of year-round disturbance will lead to lower recruitment of fawns, higher mortality, and overall decline in population fitness over time. Disturbance from human activity can make what would otherwise be suitable habitat from a forage standpoint into poor quality habitat from a behavioral standpoint.

Avoidance of recreationalists effectively decreases the carrying capacity of an area, as mule deer and elk generally do not habituate to hiking or mountain biking. Distances from roads

and trails are an important habitat feature for wildlife, and large-scale patches of land that remain un-fragmented by routes in Colorado are becoming increasingly hard to find, even in protected areas such as Wilderness. When route densities increase to the point that the predicted behavioral avoidance zone overlaps or intersects with another route, habitat effectiveness is severely reduced or eliminated and can result in a barrier to seasonal migrations for ungulates. Figure 11, illustrates the densities of roads and trails across northwest Colorado. The cumulative effects of multiple routes with intersecting and overlapping avoidance buffers can impact a substantially larger area compared with the habitat loss from direct disturbance from the miles routes. Increased recreational activity associated with increased density of routes (roads and trails) leads to both immediate and long-term effects on individual animals and populations by displacing wildlife into less optimal habitats. The result is a decrease in available energy for winter survival, growth and reproduction, and ultimately reduced fitness of a population.

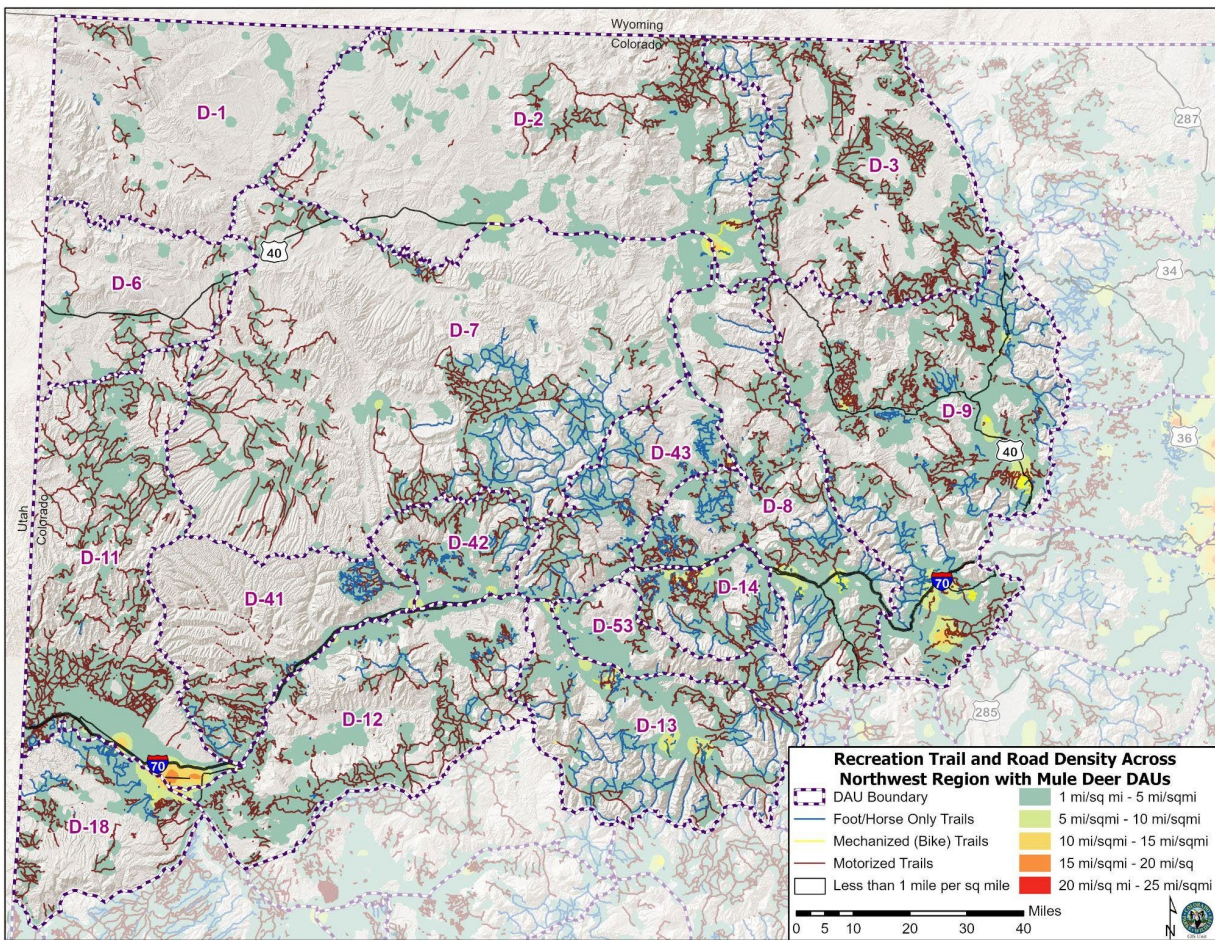


Figure 11. Recreation trail and road density across northwest Colorado.

Winter-range forage and habitat for mule deer is becoming increasingly limited in Colorado due to recreation, roads, and residential development. Mule deer are highly vulnerable to disturbance during the winter and early spring when they are struggling to maintain body condition and have limited energy reserves. Snow depths restrict animals to lower elevations where higher densities of roads and trails exist, and subsequently have greater human use. The combination of deep snow, cold temperatures and limited forage require animals to

expend higher amounts of energy for thermal regulation, daily movement and feeding. Recreation on winter ranges, including hiking, snowshoeing, snow/fat-biking, skiing and snowmobiling, shed antler gathering, can negatively impact ungulate behavior by causing them to flee and altering their feeding, resting and travel patterns. When a deer is disturbed, it forgoes foraging in favor of hiding until the disturbance has ended. Even low levels of disturbance from human recreation can negatively impact mule deer during winter months and decrease survival. While some animals show no apparent behavioral response, ungulates may still experience physiological stress and elevated heart rates, resulting in relatively high energy expenditures. CPW established a shed antler gathering season, an activity which CPW can regulate, prohibiting shed antler gathering on public lands from January 1st to May 1st annually.

The presence of dogs accompanying recreationists increases the zone of influence, flushing distances and temporal displacement for ungulates. Dogs are efficient at chasing deer, causing extreme energy expenditure and potential mortality, particularly for fawns. Deer concentrated on winter ranges are especially vulnerable to harassment and predation by dogs. Avoidance behavior can be critically impactful during the winter if deer spend time and energy evading dogs when they need to be foraging for food and expending as little energy as possible.

Predation

Mule deer are prey animals for the mid to large-sized predators of western North America. In Colorado, the primary predators of mule deer are mountain lions, coyotes, bobcats, and black bears. Following the passing of Proposition 114 and natural immigration, Colorado also will have wolves on the west slope. Predators may limit or regulate mule deer populations. All predators are opportunistic and will take advantage of individual prey that provide the easiest opportunity for a meal. Coyotes and bobcats tend to take young mule deer (fawns) or adults in poor condition, black bears prey primarily on young-of-the-year during spring but will take adults on occasion, and mountain lions will prey on all sex/age classes of mule deer. The influence of predators on mule deer populations is variable and based on several factors:

- The relationship of the deer population to the amount and quality of forage on seasonal ranges,
- The presence and location of hiding and stalking cover relative to feeding and resting areas,
- Abundance and distribution of alternate prey populations, and
- Number, abundance, and distribution of predator species that inhabit the mule deer range.

When mule deer populations are close to the forage capacity of the range, predation tends to have less influence on the population, and reductions in predator numbers have limited success in increasing the mule deer population. When mule deer numbers are relatively low and the forage capacity can sustain higher deer numbers, predator control can be more advantageous. Winter habitats with deep snow can limit mobility and increase vulnerability to predation. When alternate prey species occupy the same habitats as mule deer, predator populations have more prey from which to select. In those instances when mule deer decline, predators may switch to a more abundant species of prey, thereby reducing the effects of predation on remaining mule deer. Conversely, this ability to switch prey may result in stable and high predator numbers, which can in turn limit mule deer population growth when

conditions otherwise favor mule deer. In mule deer ranges with multiple predators, those predators may compete with one another, which may influence their abundance (e.g., increased coyote numbers may result in decreased bobcat numbers). In short, the relationship between predator and prey is complex, and can be challenging to address successfully.

Predation management is intended to affect change in predation to ultimately increase prey populations. Predation management is most effective when deer numbers are below the forage capacity of the range and predation is limiting population growth, control efforts sufficiently reduce the predator population, timing of predator removal is optimal (e.g., spring), and control efforts are spatially focused. Predation management appears ineffective when deer populations are limited by available forage and not predation, an insufficient number of predators are removed, and where large-scale, non-focused predation management is applied. Knowledge about predator/prey interactions is critical, yet challenging, for successful predation management.

Fencing

Highway fencing is becoming more of an issue to ungulates. While highway fencing can help with reducing vehicle collisions with deer and elk, the fencing can also inhibit mule deer migration corridors and access to important seasonal habitats. Under-passes and overpasses can help mule deer move over or under highways to access important seasonal habitats, while still minimizing vehicle collisions.

While supporting large and diverse wildlife populations, the region is also important agriculturally and supports numerous cattle and domestic sheep operations. As such, hundreds of miles of wire fence crisscross the landscape, allowing for a sustainable livestock industry which can effectively manage grazing, but also posing a hazard to wildlife. In the only published study on fence-related ungulate mortality, Harrington and Conover (2006, *Wildlife Society Bulletin*) conducted research in northwest Colorado and northeast Utah and documented one ungulate (elk, deer, or pronghorn) mortality for every 4 km (2.5 miles) of fence. Multiplied out across this vast landscape, potential fence-related ungulate mortality becomes staggering. Fences can also have sub-lethal effects on big game species by causing injury or hair loss during crossing efforts, separating calves/fawns from adults where crossings are difficult, inhibiting seasonal migration activities, and increasing the energetic costs of moving through the landscape. Several recent published studies (e.g. Jones et al. 2019 [*Ecosphere*]; Segar and Keane 2020 [*Conservation Science and Practice*]) have addressed and highlighted the magnitude of potential sub-lethal effects of wire fences on ungulates inhabiting rangelands in the American West. While fences provide necessary infrastructure to manage grazing effectively, which ultimately supports quality wildlife habitat, numerous miles of old abandoned and obsolete fences that no longer serve a management purpose currently exist in northwest Colorado.

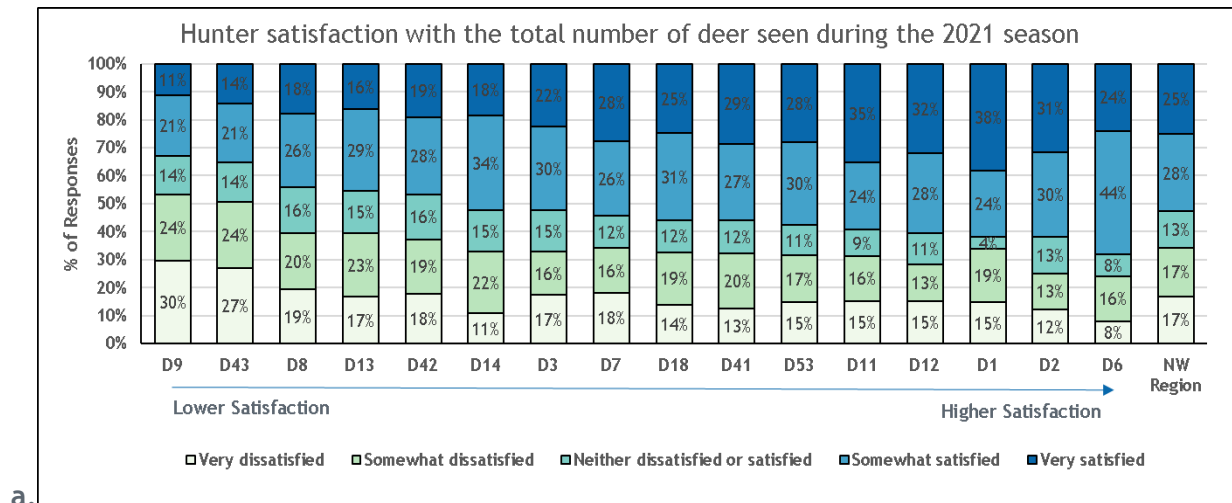
Deer Herd Management Plans for Northwest Colorado

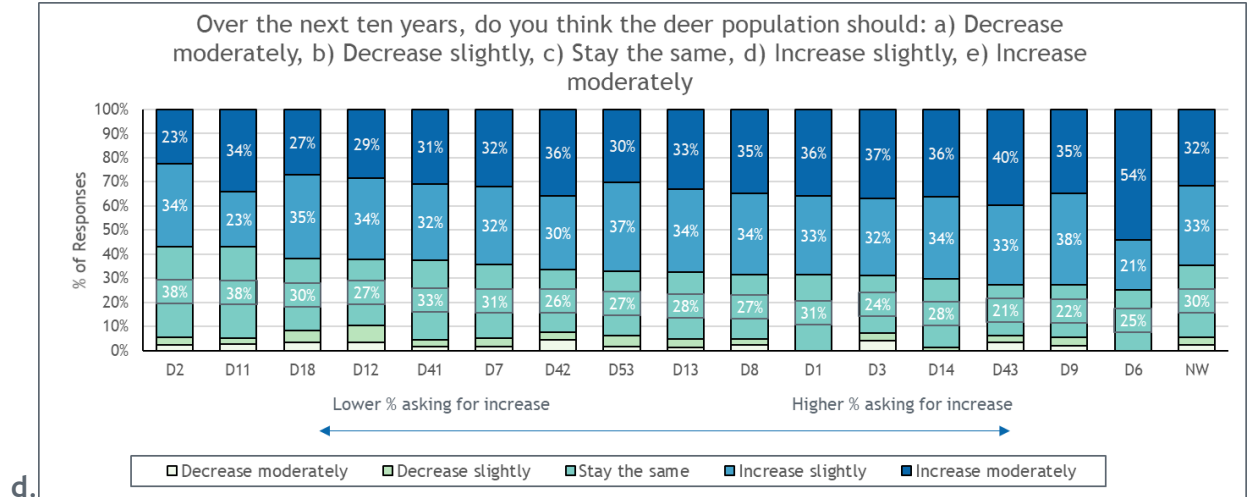
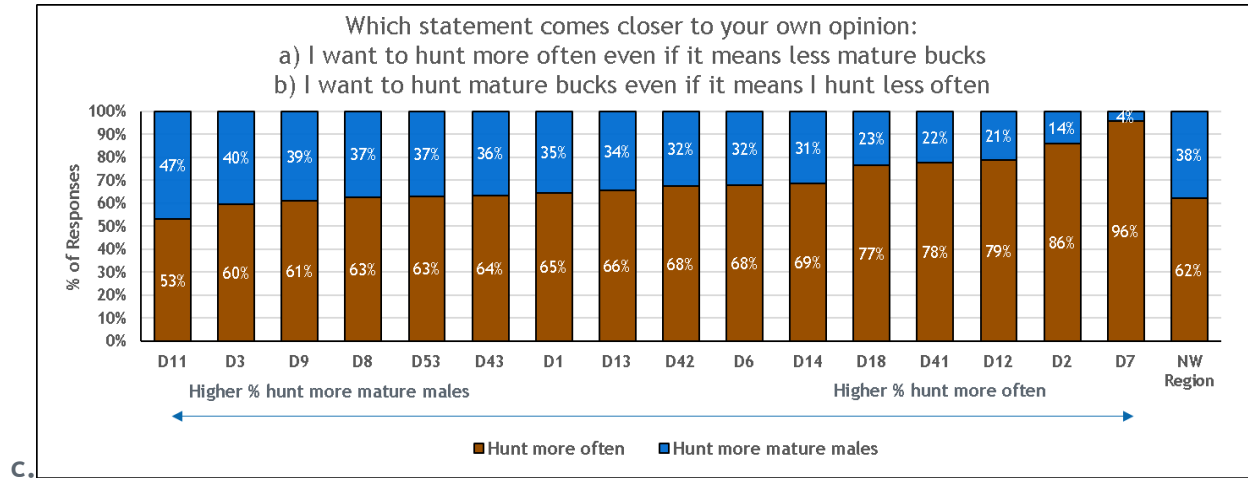
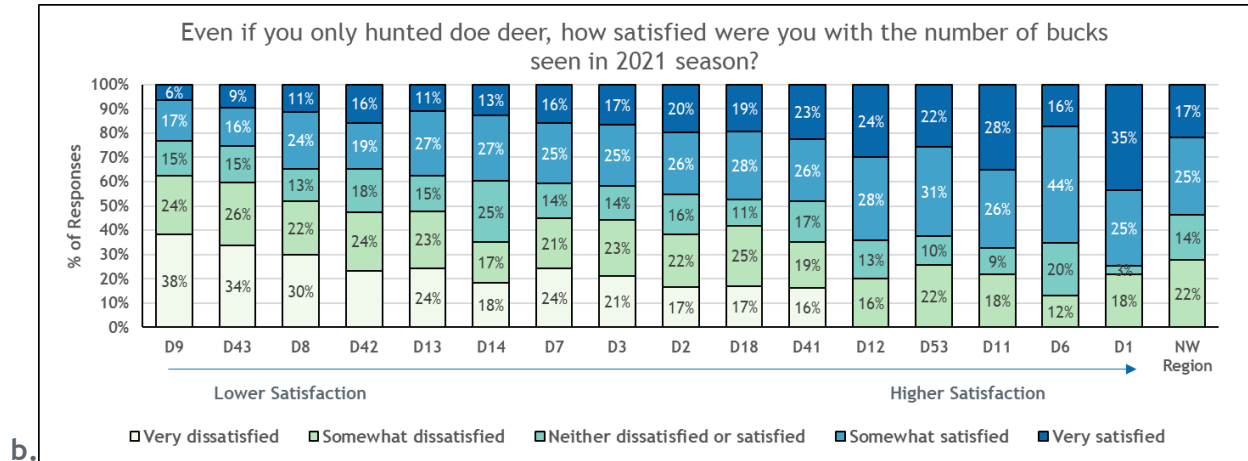
Public Input

There are 16 deer DAUs in northwest Colorado. The following section is comprised of the 16 individual deer HMPs with proposed objectives and justification. Seven of the sixteen deer herd management plans have been approved within the last 3 years and will be extending those objectives as status quo. The other nine HMPs have proposed population and sex ratio objectives. Public meetings have been held in Craig, Grand Junction, Glenwood, and Walden to collect input on the status of local deer populations, management concerns, and provide direction for future management.

In addition to the public meetings, CPW staff have reviewed new optional hunter harvest attitude survey data to capture input from hunters on their experience during the 2021 hunting season. Of the 29,124 deer license holders in northwest Colorado in 2021, 5,283 hunters opted in for the additional hunter harvest attitude survey. The seven graphs below depict the hunters' responses to seven questions relating to their hunting experience and observations in the 16 different DAUs in northwest Colorado. The DAUs in each graph are ranked from least satisfied to most satisfied.

The draft plan was posted for 30 days for the public to provide additional comments on the proposed objectives for each DUA from mid November to mid December 2022. The plan has been presented to county commissioners, Habitat Partnership Program (HPP) committees and federal agencies for additional input. All input is collected and provided in the following Appendices. The final draft plan will be presented to the Colorado Parks and Wildlife Commission this winter with a tentative plan to present the first time in February and for approval in March.





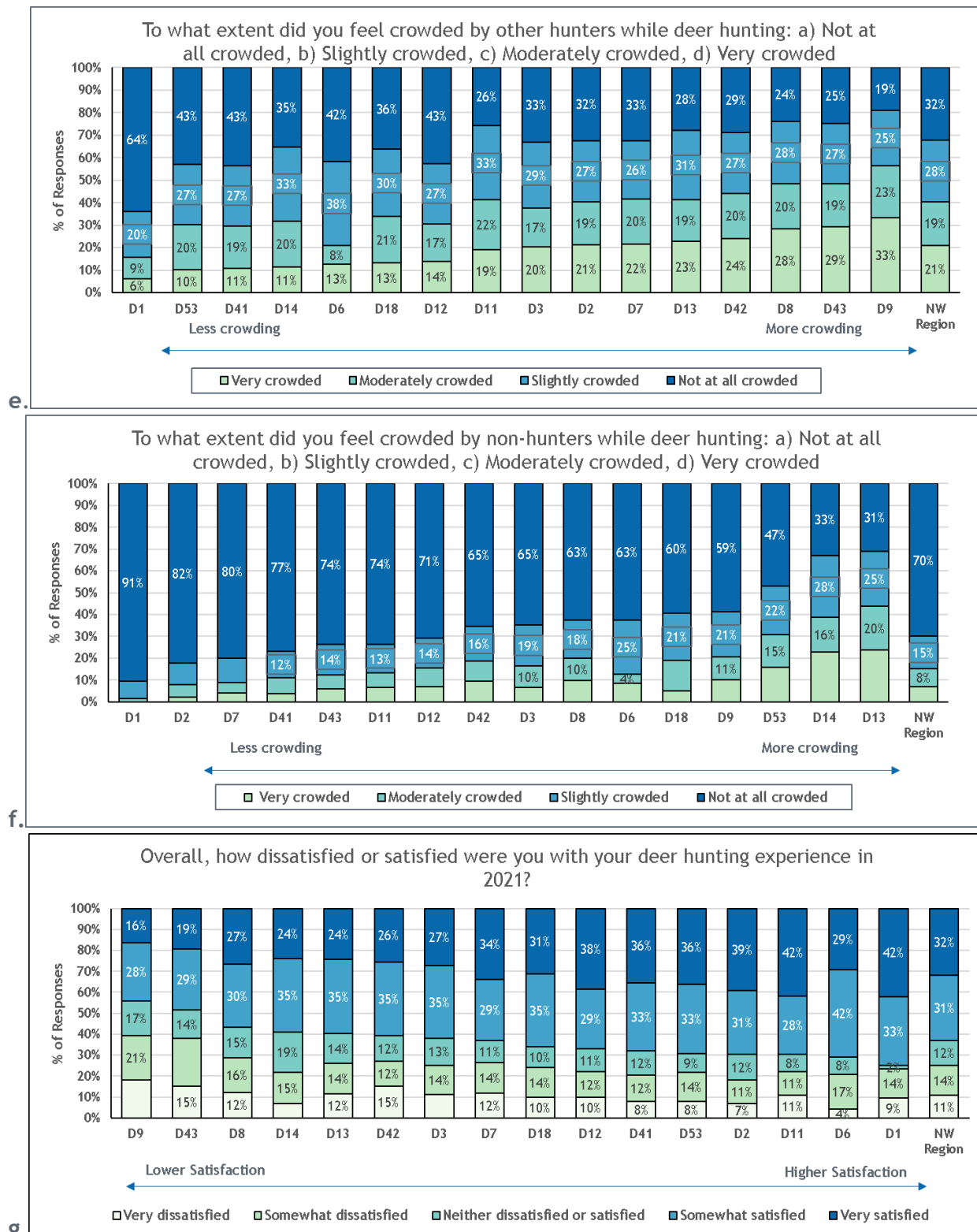
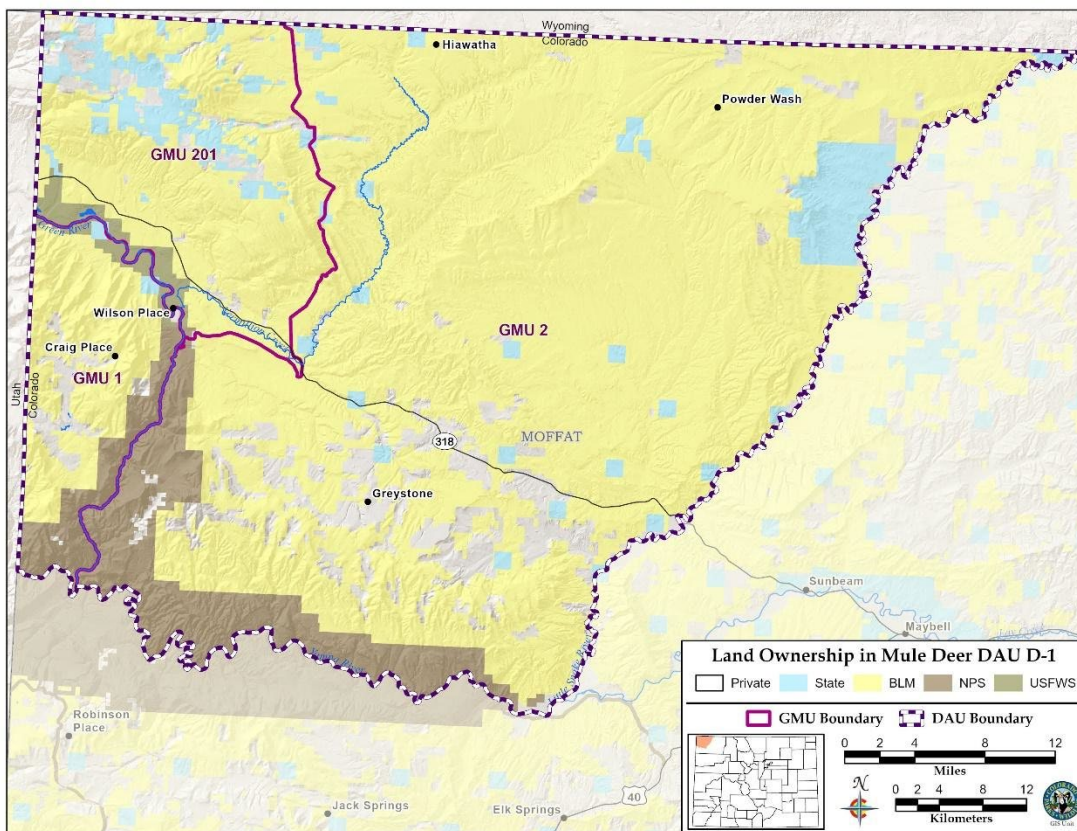


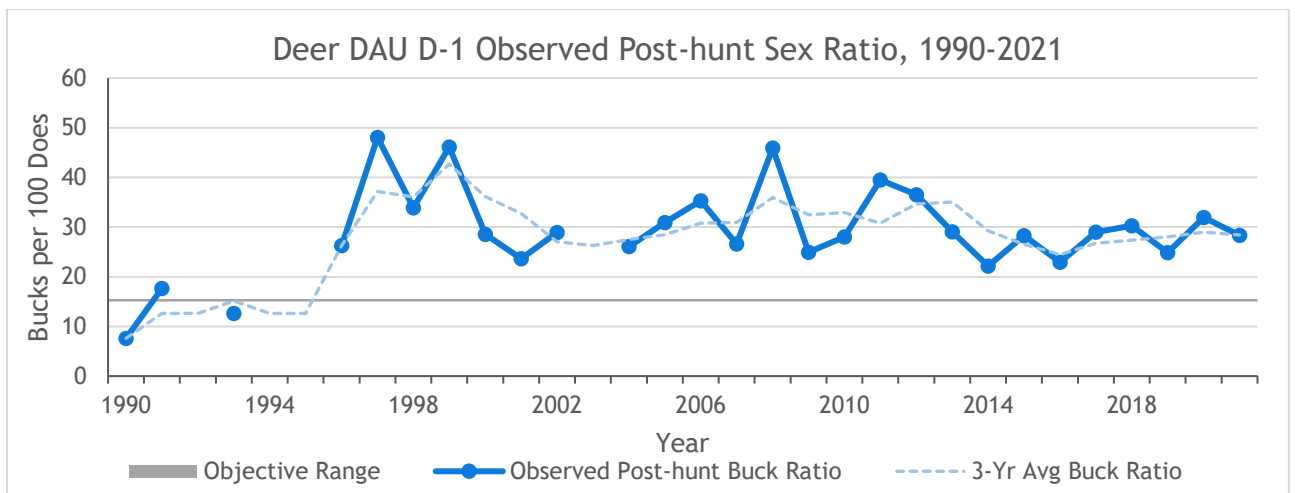
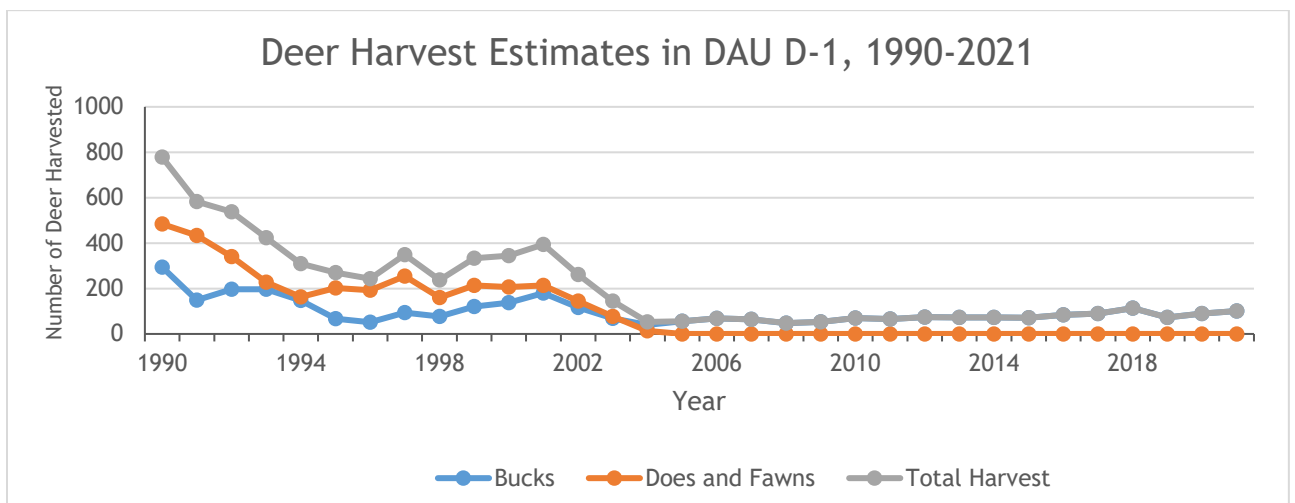
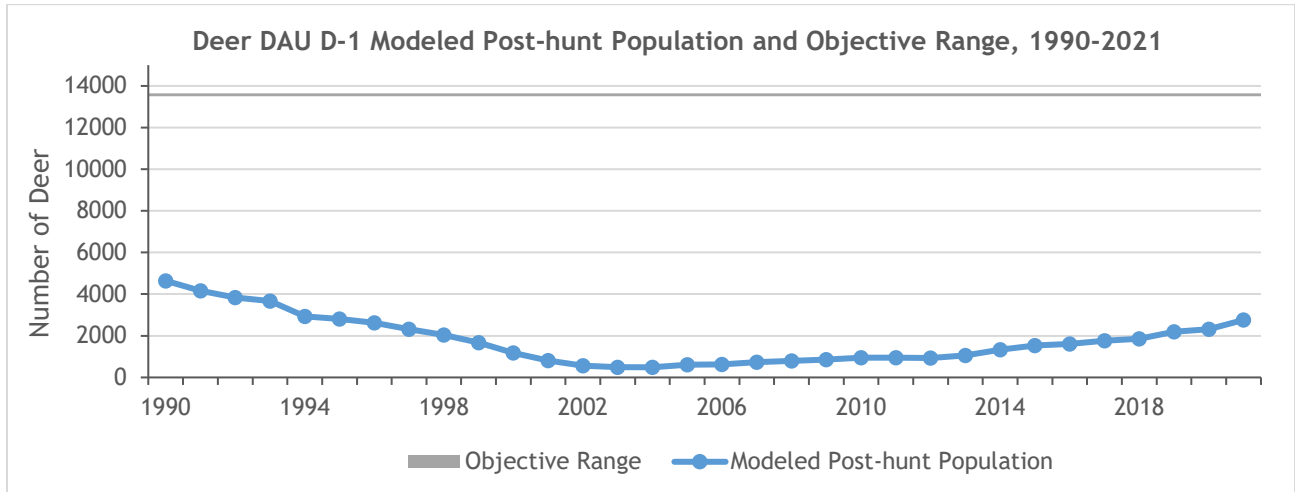
Figure 12 (a-g). Hunter harvest attitude survey questions and results for the 16 deer DAUs ranked from low DAU to high DAU (left to right) in relation to the specific question.

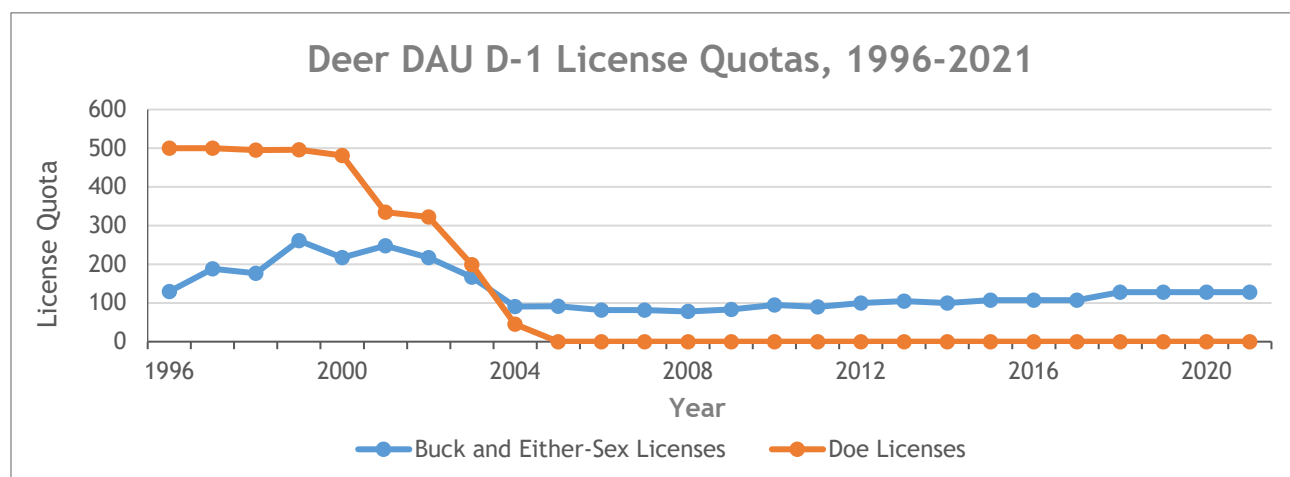
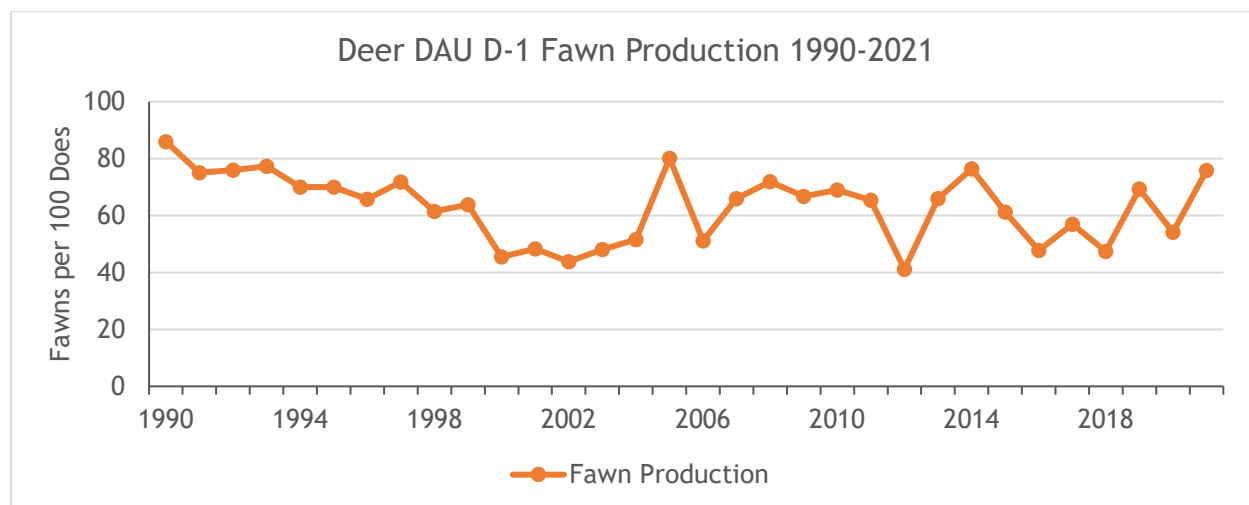
LITTLE SNAKE MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-1

Darby Finley, Wildlife Biologist, Meeker

Little Snake Mule Deer Herd (DAU D-1)	GMUs: 1, 2, 201
Post-hunt population:	
Current (no plan) Population Objective:	13,500 deer
Post-hunt 2021 Population Estimate:	2,419 deer
Proposed New Population Objective	1,500-3,500 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (no plan) Sex Ratio Objective:	15 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	28 bucks per 100 does
Proposed New Sex Ratio Objective:	15-25 bucks per 100 does







Background

The Little Snake Mule Deer DAU, D-1, is located in northwest Colorado and includes portions of Moffat county. The DAU includes Game Management Units (GMU): 1, 2, 201.

The Little Snake deer DAU covers 1563 square miles. Of this, 9% (208 mi²) is private property, 76% (1186 mi²) is Bureau of Land Management (BLM) land, 6% (90 mi²) is State Land Board land, 8% (126 mi²) includes Dinosaur National Monument administered by the National Park Service, and <1% is Colorado Parks and Wildlife property.

Resident mule deer within D-1 will migrate short distances from summer ranges at higher elevations on Cold Springs and Douglas Mountains to lower elevations surrounding these high mountain plateaus. Migratory deer from adjacent DAUs D-2, D-7 and Wyoming will move into the eastern portions of the DAU to winter along the Little Snake River corridor. A significant number of deer will also migrate into Brown’s Park to winter from Utah, especially in the Diamond Breaks in GMU 1 and along the lower stretches of Beaver Creek in GMU 201 along the UT-CO state line.

Significant Issues

The most significant issue concerning the D-1 herd is the sustained stagnant state of population growth this herd has experienced for the past two decades. Much of the herd unit has been within severe to extreme drought conditions since the late-90s. As a result, range conditions have become less productive and degraded due to the loss of browse from shrub mortality and the growing population of feral horses within the Sand Wash Basin. In addition, cheatgrass and other invasive annuals dominate much of the herbaceous understory within Browns Park. These conditions have reduced the nutritional carrying capacity across winter ranges throughout the DAU and made achieving historic population levels unachievable. Despite the population, appearing to be in a capacity driven slump, there has been minimal harvest applied to the herd and the population has remained stagnant. In fact, there has been no antlerless harvest since 2005 and antlered harvest has been minimal. The combination of poor range conditions, predation, and elk population levels are all playing a role in the ability for this deer population to grow and contributing to the lower sustainable deer population.

Management Objective Recommendations

CPW recommends a population objective range of 1,500-3500 deer. This recommendation is lower than the current objective of 13,000 set back in 1994. The recommended population objective range will allow for management more in line with habitat carrying capacities as a result of persistent drought. Licenses will be issued annually to manage to a target population size within the population objective range and CWD prevalence threshold of 5% or less.

CPW recommends a sex ratio objective to 15-25 bucks:100 does. The current sex ratio objective is 15 bucks:100 does. The current 3-year average buck ratio, 28 bucks:100 does. Currently, CWD prevalence is less than 5% in the DAU with a two-year average of 3.7% prevalence. It is important to note that the distribution of animals that tested positive were likely migratory deer that had moved into the eastern portion of D-1 from D-2, which has high CWD prevalence.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

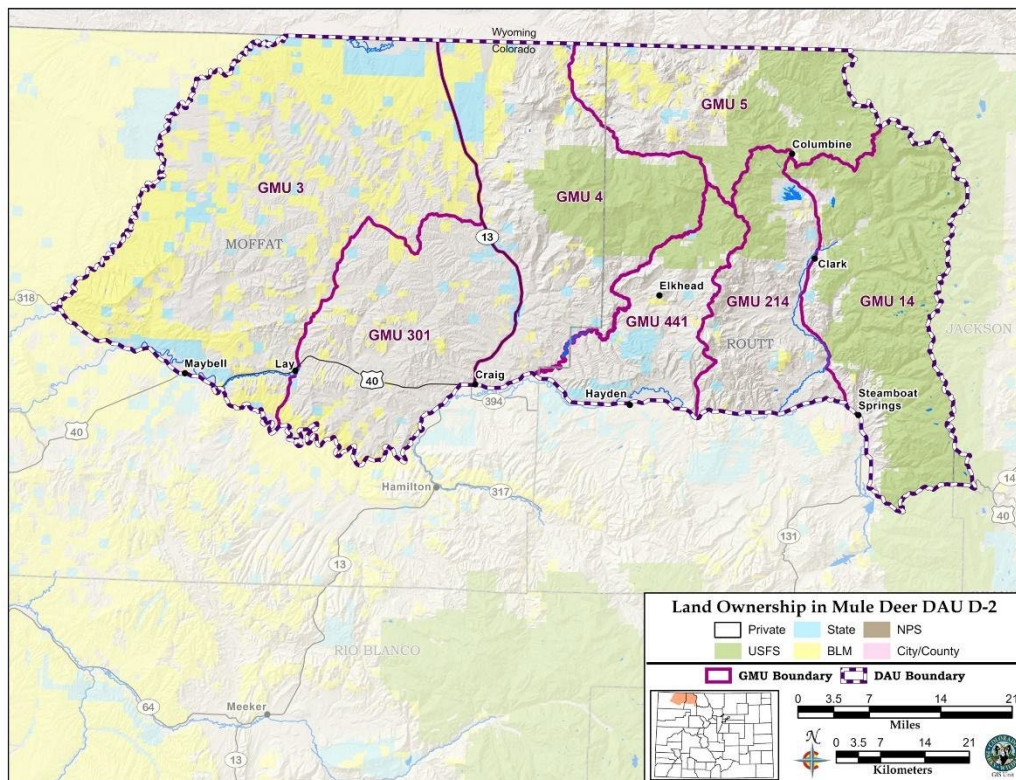
A population objective range of 1,500-3,500 will allow population levels to be managed in line with habitat carrying capacity. Management actions recommended to achieve the population objective are to apply habitat treatment strategies that will improve habitat conditions across winter ranges. Improving habitat conditions will be a challenge considering drought conditions so maintaining both mule deer and elk populations at nutritional carry capacities the winter range can support through harvest management may be the most effective tool to allow for reduced browsing pressure on drought stressed winter ranges.

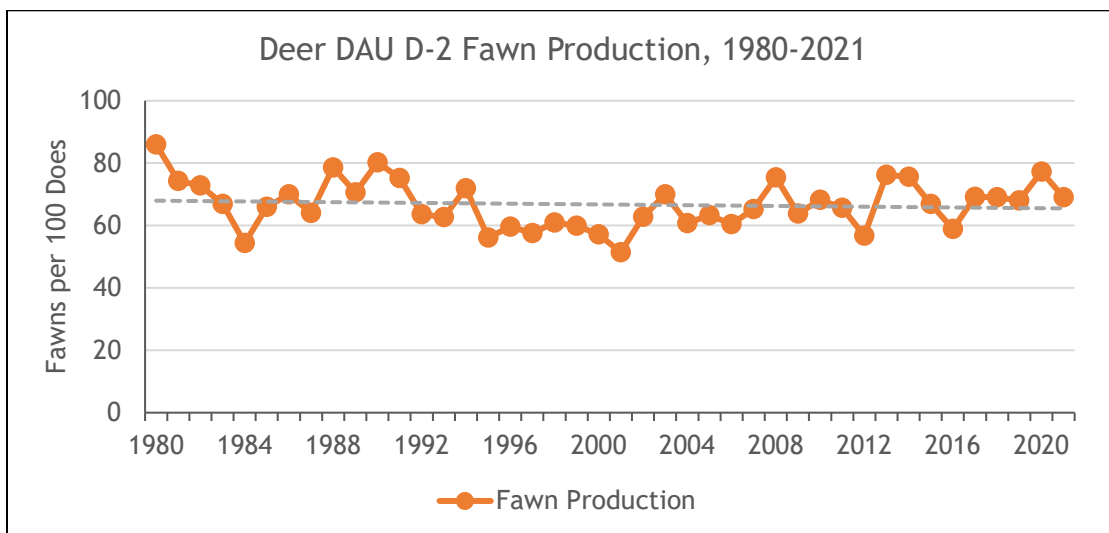
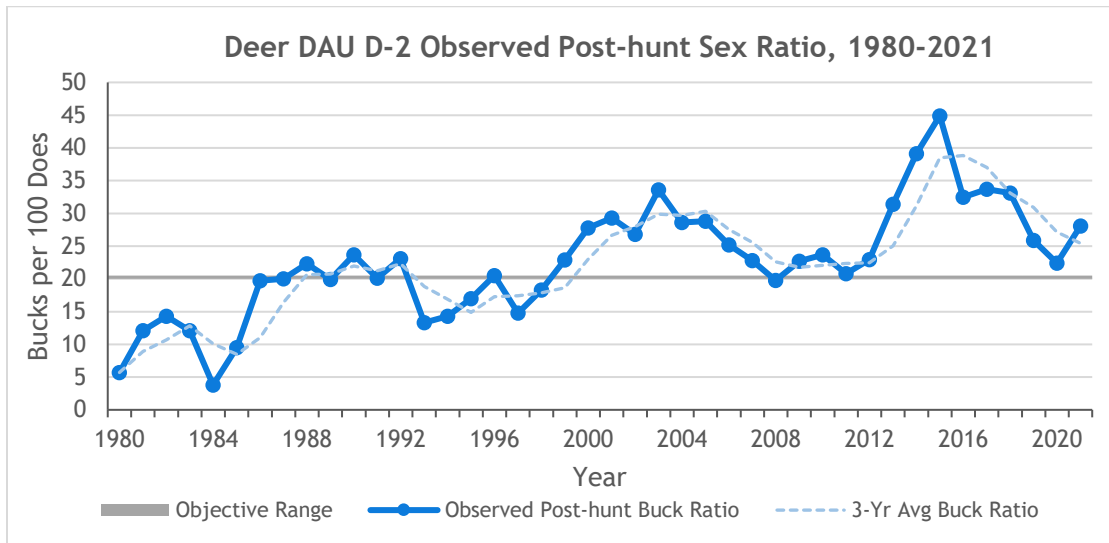
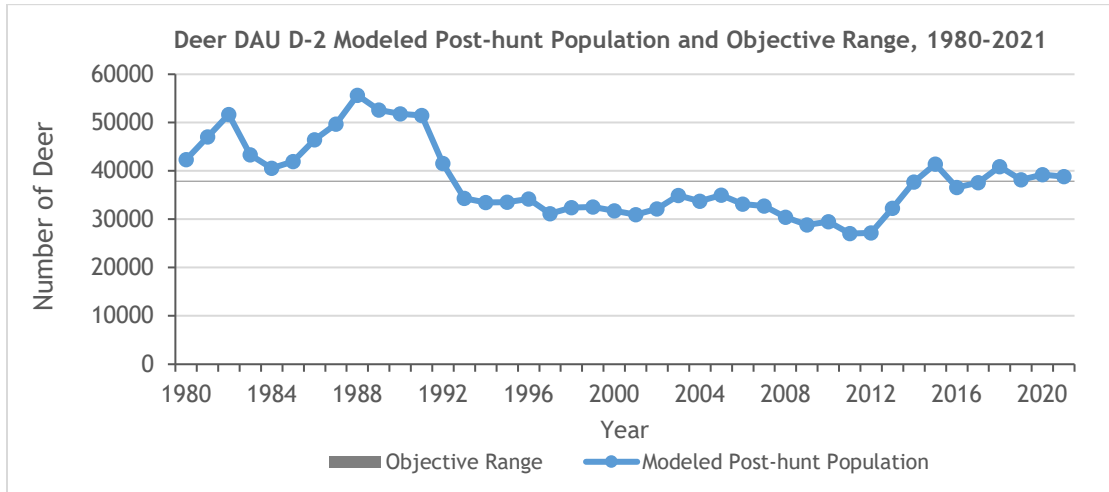
The recommended sex ratio objective will allow the ability to address management concerns regarding CWD prevalence rates if increased prevalence becomes a concern. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

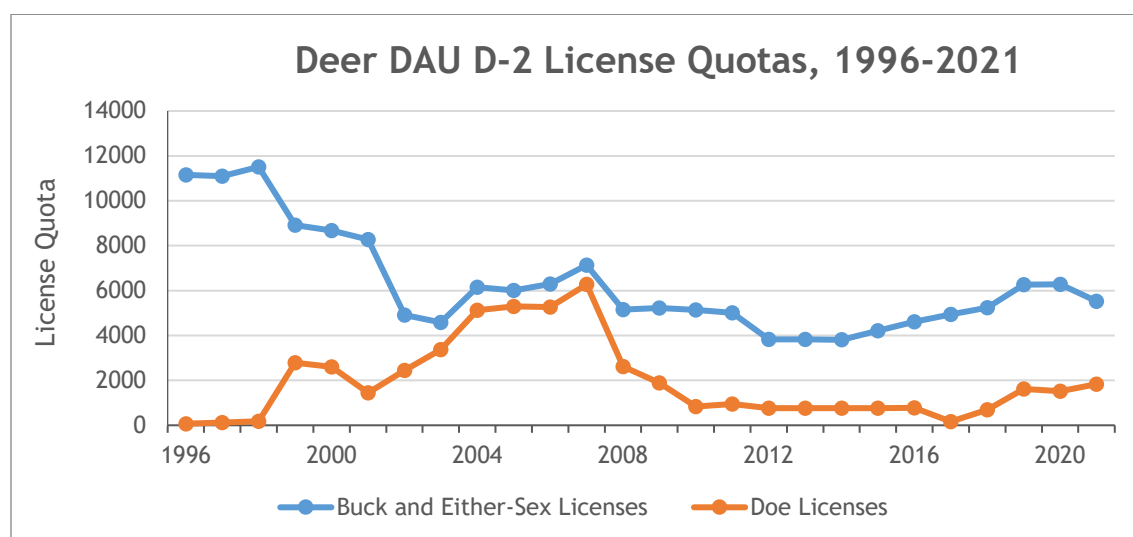
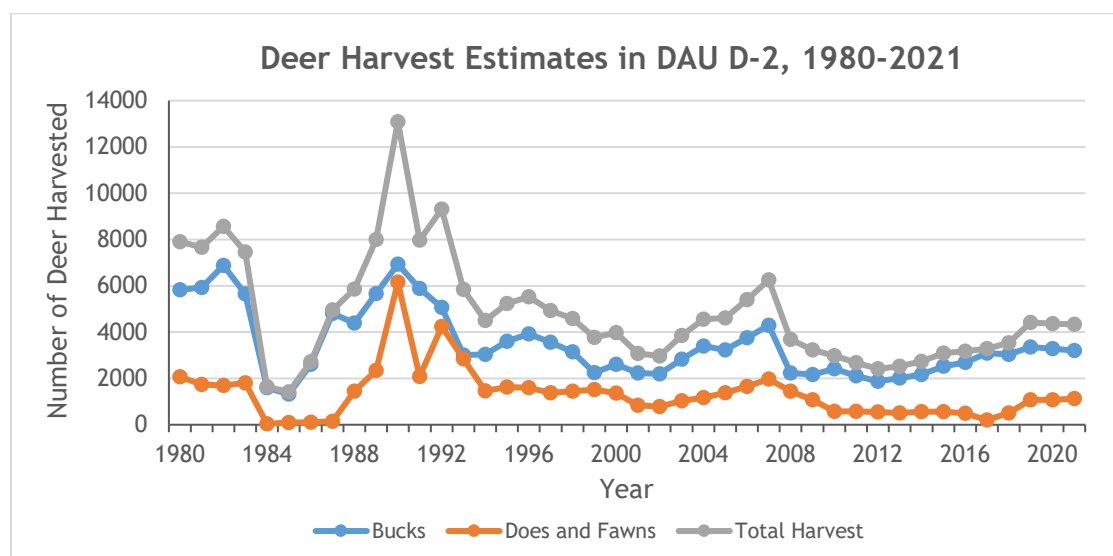
BEAR'S EARS MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-2

Darby Finley, Wildlife Biologist, Meeker

Bear's Ears Mule Deer Herd (DAU D-2)	GMUs: 3, 4, 5, 14, 214, 301, 441
Post-hunt population:	
Current (1994 plan) Population Objective:	37,800 deer
Post-hunt 2021 Population Estimate:	38,859 deer
Proposed New Population Objective	30,000-40,000 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (1994 plan) Sex Ratio Objective:	20 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	25 bucks per 100 does
Proposed New Sex Ratio Objective:	15-25 bucks per 100 does







Background

The Bear’s Ears Mule Deer DAU, D-2, is located in northwest Colorado and includes portions of Routt and Moffat counties. The DAU is comprised of 7 Game Management Units (GMUs): 3, 4, 5, 14, 214, 301, and 441. The towns of Craig, Steamboat Springs and Maybell are located on the southern periphery of the DAU. Ownership patterns vary across mule deer seasonal ranges within the DAU comprised of private, state and federal lands. Half of all mule deer winter range within the DAU is on private property, 40% is managed by BLM, and the remaining 10% is a mix of state and county owned lands. Summer range includes the entire DAU.

Mule deer within D-2 are migratory, moving from higher elevation summer ranges in eastern portions of the DAU to lower elevation winter ranges in the western portions of the DAU. Migratory distances vary greatly with some deer moving 60 to 70 miles between seasonal ranges while others move relatively short distances, 10 to 20 miles or are year-round resident herds.

The average decadal population size has declined from 48,000 in the 1980s, to 38,000 in the 1990s, to the mid-30,000s in the 2000s and 2010s. The population objective was lowered from 42,000 to 37,800 in 1994. Throughout the decades of a steady overall population decline, deer herd numbers stabilized for a short period from 1993-2000 before rebounding slightly from 2001-2006. This increase was due, in part, to an increased number of bucks recruited into populations after the limitation of deer licenses statewide in 1999. The increasing trend was short-lived. Coming out of the drought in the early 2000s, deer numbers were at the highest population level since the early 1990s entering the severe winter of 2007-2008. Population dynamics within the herd changed after this severe winter. Contributing factors to these changes within the herd were the combination of high deer numbers and drought stressed winter ranges leading into the severe winter. The poor range conditions could not support the high winter deer densities resulting in further range degradation. Ultimately, this has resulted in long-term reductions in the nutritional carrying capacities across winter ranges within the DAU. A population range objective will allow for management flexibility in response to changes in habitat conditions, CWD prevalence, and changes in population size due to severe winter events and drought.

Historically, various management strategies have been implemented to achieve sex ratio objectives in D-2 ranging from unlimited buck hunting with a minimum 5-inch antler regulation for yearling bucks, to 3-point antler restrictions, to limited season lengths, and finally, totally limited licensing. All management strategies have presented challenges in maintaining sex ratio objectives. The D-2 herd has been over the current sex ratio objective since 1999 when all deer licenses became limited. Excellent fawn recruitment from 2013 - 2015 boosted buck ratios to an all-time high in 2015 with observed post-hunt sex ratios of 45 bucks per 100 does. The current 3-year average buck ratio is 25 bucks per 100 does. Given the significant increase in CWD prevalence within D-2 over the past 20 years, consideration must be given to management strategies that will reduce buck ratios to within sex ratio objective ranges in an attempt to reduce CWD prevalence rates.

Since 2008, license allocations have been conservative with management actions aimed at maintaining the herd at the population objective. These management actions have included antlerless license reductions up to 98% and antlered license reductions up to 64%. The results of these license reductions reduced harvest rates to minimal levels. Despite these efforts, growth of the deer herd was fairly stagnate until 2013 when the population began to rebound. Since 2014, the population has been stable with some fluctuation occurring due to persistent drought and severe winters.

Significant Issues

There is a growing concern over increasing CWD prevalence in D-2. CWD was first discovered within the herd in early 2002. Surveillance efforts from mandatory testing in 2018 solidified concerns about increasing prevalence rates revealing an 18% CWD prevalence rate in the D-2 herd. The adjacent DAU D-7 has a similarly high rate of 15%, there is significant movement, and interaction of deer especially on winter ranges between the two DAUs. CWD prevalence rates of >5% can lead to rapid spread of the disease within a herd and will have population-level impacts through higher mortality of adult deer and a decline in the age structure of a population. This high CWD prevalence rate is contributing to lower than average adult survival and overall herd-level resilience within D-2.

Another issue of concern for the D-2 herd is the degradation and loss of critical winter range due to drought, wildfire, and overuse. There is a sentiment to maintain or grow the deer herd from current population levels even though the cyclical weather pattern of summer drought and above average winter snowfall has been consistent since 2007, resulting in reduced nutritional carrying capacities across winter ranges.

Biological carrying capacity is not static. Rather, carrying capacities fluctuate annually based on multiple factors and generally trend over time. Weather patterns, wildlife densities, wildfires, and grazing practices all influence year-round forage conditions, long-term range productivity, and the numbers of animals it can support. In addition, the direct and indirect impacts of fragmentation from energy development (oil and gas, solar, wind, etc.), trail development for recreation, and rural residential development reduces habitat function. Managing wildlife populations to be commensurate with nutritional carrying capacities through harvest management on annual basis is extremely difficult, especially in reaction to ever-changing range conditions influenced by such dynamic variables. Thus, managers prefer to manage wildlife populations with a sustained effort through time approach in which some level of harvest pressure is applied to the female segment of the herd.

The most recent potential land use change in D-2 is the conversion of large ranches to solar and wind developments. Two large transmission lines are currently being constructed through the western portion of D-2 with completion dates of 2023 and 2025. Along with those transmission lines is the prospect of wind and solar development as two large coal mines are scheduled to cease coal production by 2030 with the closure of the Craig power plant. The extent to which solar and wind development will occur is unknown but these developments have the potential to occupy large tracts of critical winter range and impact big game migration routes.

The cumulative effects of all of the aforementioned factors have played a role in the challenges to sustain historic or desired population levels in DAU D-2.

Management Objective Recommendations

CPW recommends a new population objective range of 30,000-40,000 deer. The current objective is a point estimate of 37,800 deer. The recommended population range will allow for management flexibility in response to changes in habitat conditions, CWD prevalence, and changes in population size due to severe winter events and drought. Licenses will be issued annually to manage to a target population size within the population objective range and CWD prevalence threshold of 5% or less.

CPW recommends a sex ratio objective to 15-25 bucks:100 does. The current 3-year average buck ratio, 25 bucks:100 does. Given the significant increase in CWD prevalence within D-2 over the past 17 years, consideration must be given to management strategies that will reduce buck ratios to within sex ratio objective ranges in an attempt to reduce CWD prevalence rates.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect

and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

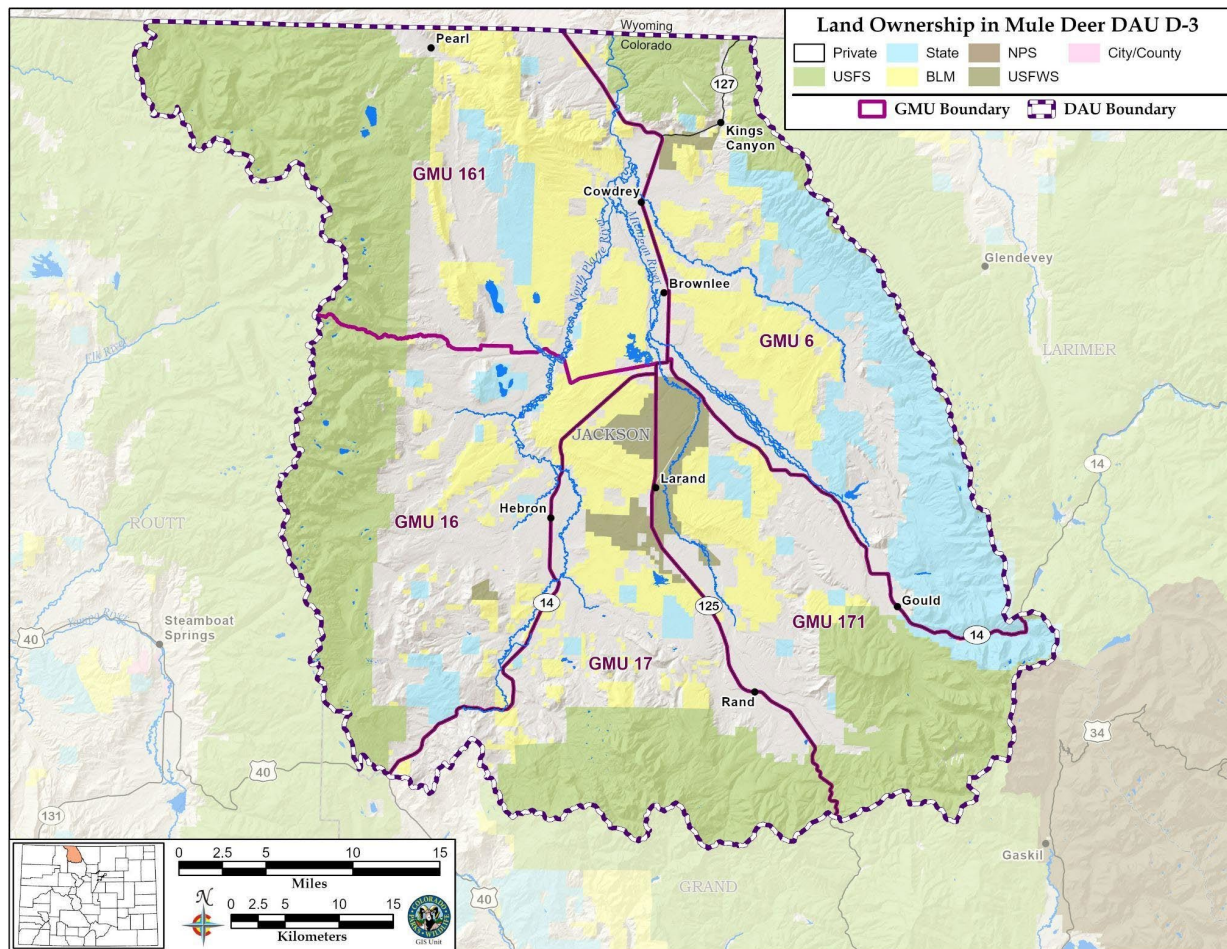
A population objective range of 30,000-40,000 would allow for increased flexibility in management options if desired CWD prevalence rate reductions were not being achieved. In addition, it would allow further population reductions to address density-dependence mortality factors. Management actions recommended to achieve the population objective and reduce CWD prevalence rates include: increased female and/or either sex hunting licenses, increased harvest in later season or in high CWD prevalence areas, increase private land only license availability, and increase harvest within targeted high-density mule deer winter ranges. The specific areas in which increased harvest on high-density mule deer winter ranges would be determined based on data from winter classification flights. Moderate incremental increases in license recommendations would be utilized to achieve desired objectives.

The recommended sex ratio objective would allow the ability to address management concerns regarding high CWD prevalence rates. Management actions implemented to achieve sex ratio objectives and reduce CWD prevalence rates would include: reduce male:female ratios, change age structure, and maximize ability to remove diseased animals at smallest scale possible. Management tactics to achieve sex ratio objectives and CWD prevalence rates will include disease management hunts and/or increasing and/or shifting male hunting licenses into later seasons and creation or modification of hunt code groupings for more targeted harvest. The lower end of the sex ratio would allow for management flexibility if CWD prevalence thresholds were not met despite a reduction in overall sex ratios. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

NORTH PARK DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-03

Eric VanNatta, Wildlife Biologist, Area 10 Steamboat Springs

North Park Deer Herd (DAU D-03) Approval Year for last HMP: 2002	GMUs: 6, 16, 17, 161, 171
Post-hunt population: Current (2002 plan) Population	5,400 - 6,400 deer
Objective: Post-hunt 2021 Population Estimate:	5,750 deer
Proposed New Population Objective	<u>4,400 - 6,400 deer</u>
Post-hunt Sex Ratio (Bucks:100 Does): Current (2002 plan) Sex Ratio	30-40 bucks per 100 does
Objective: 2021 3-year Average of Observed Sex Ratio:	47 bucks per 100 does
Proposed New Sex Ratio Objective:	<u>30-40 bucks per 100 does</u>



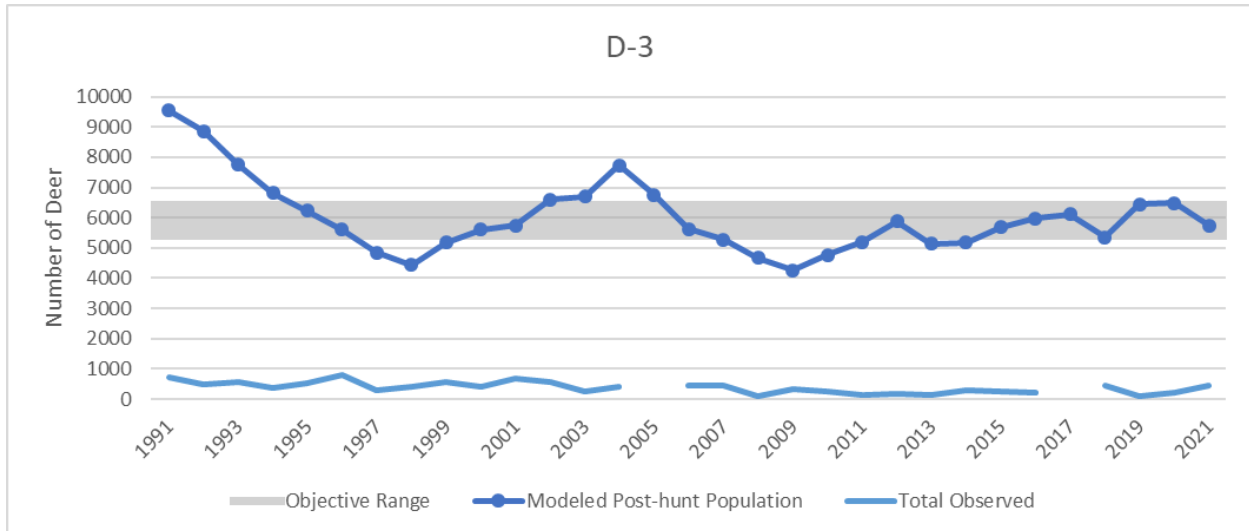


Figure D3-1. Deer DAU D-03 modeled post-hunt population size and objective range, years 1991-2021. Note the low annual sample size (observations), typically less than 500 animals seen during classification flights.

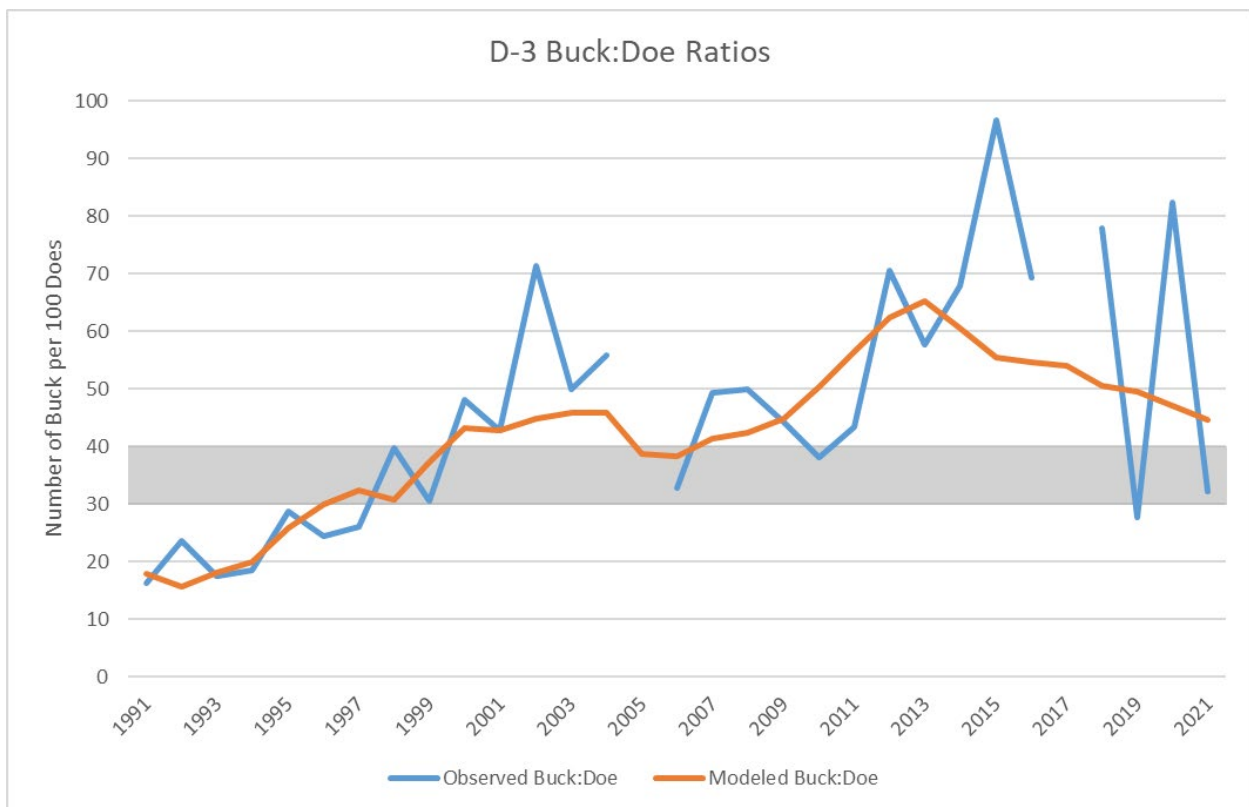


Figure D3-2. Deer DAU D-03 observed and modeled post-hunt sex ratio (bucks:100 does), years 1991-2021. 2002 HMP sex ratio objective range of 30-40 bucks:100 does.

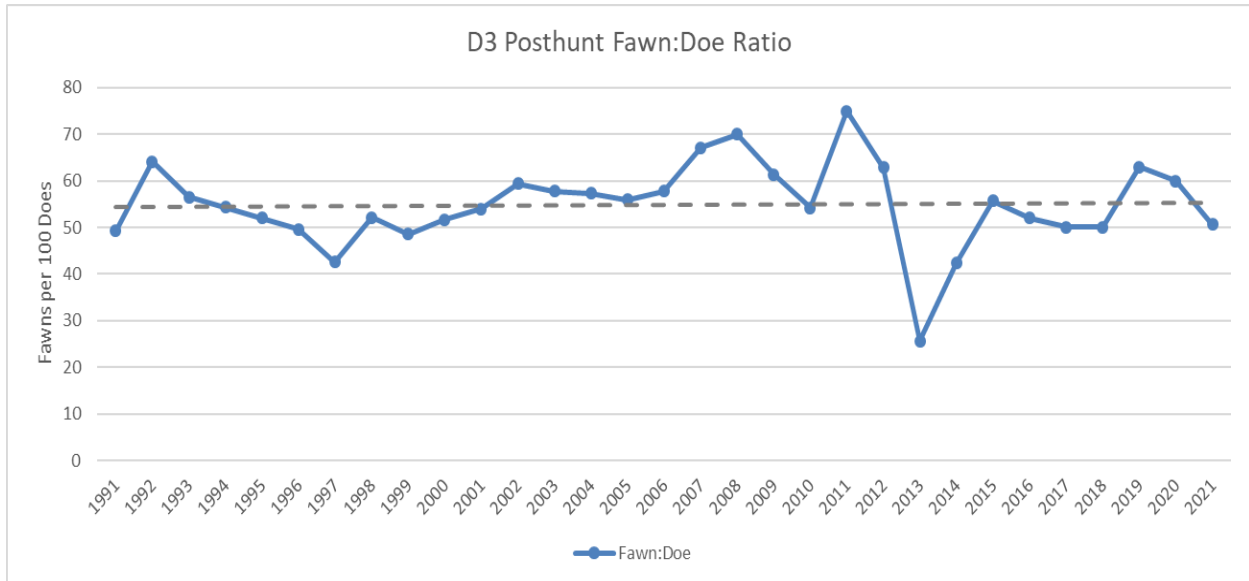


Figure D3-3. Deer DAU D-03 fawn production (observed post-hunt fawns:100 does ratio), years 1991-2021. Dashed line represents the average trend.

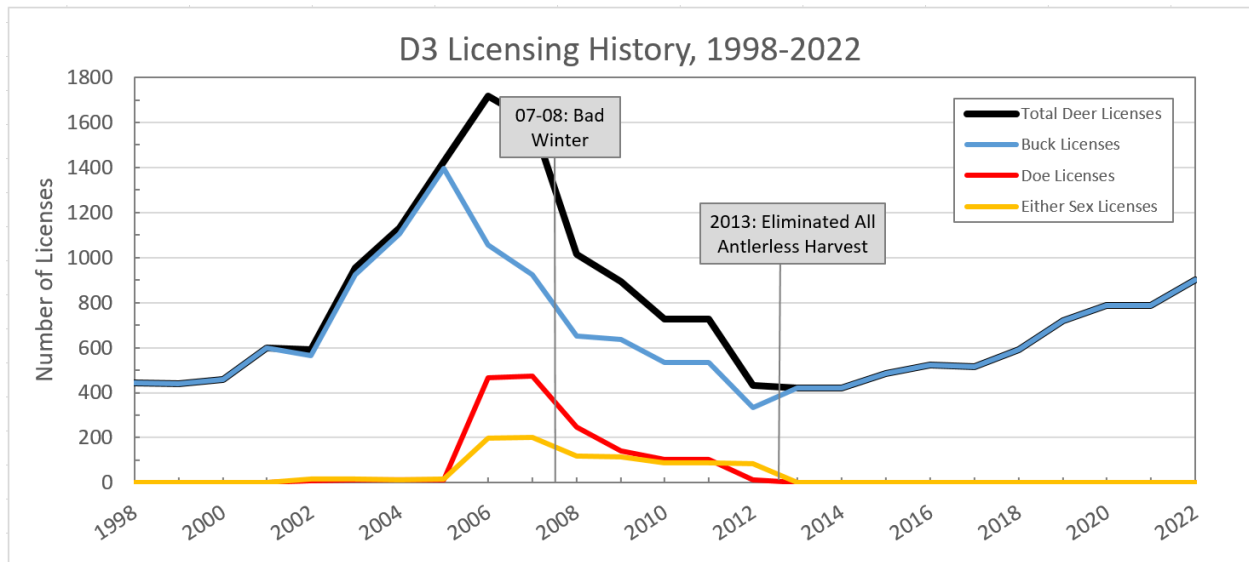


Figure D3-4. License quotas for D-03, years 1991-2021.

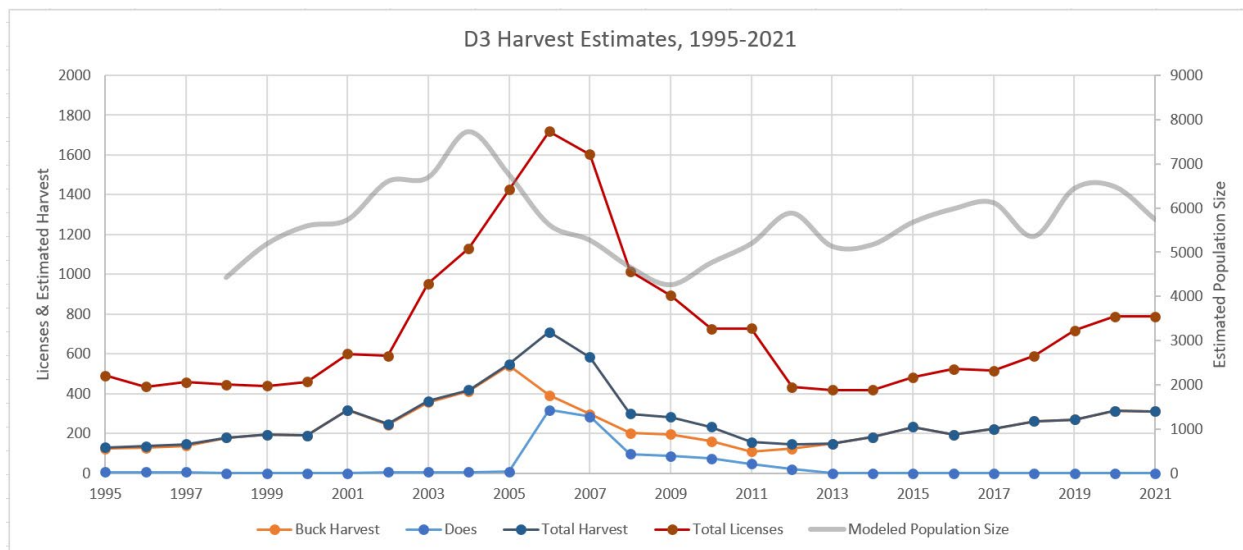


Figure D3-4. D3 harvest estimates, years 1995-2021.

Background Information

Mule deer Data Analysis Unit (DAU) D3 is located in North-Central Colorado and encompasses all of Jackson County, commonly called North Park. D3 consists of Game Management Units (GMUs) 6, 16, 17, 161, and 171, all of which converge on the primary population center in the DAU, Walden. North Park is an intermountain park on the east side of the Continental Divide containing the headwaters of the North Platte River, and ranges in elevation from approximately 7,800' - 13,000' above sea level. Major tributaries that make-up the North Platte drainage include Grizzly Creek, the Illinois River, the Michigan River, the Canadian River, and the North Fork of the North Platte River. North Park is bounded to the north by the Wyoming state line, to the east by the Medicine Bow and Never Summer Ranges, to the south by the Rabbit Ears Range, and to the west by the Park Range. D3 encompasses 1.036 million acres (1,618 square miles) and has a mosaic of land ownership including 35.9% private land, 31.9% USFS, 18.2% BLM, 12% State, and 1.7% ANWR. D3 also contains portions of the Mt. Zirkel, Platte River, Rawah, Neota, and Never Summer Wilderness Areas.

During summer months, mule deer can be found throughout the entire DAU. However, higher concentrations tend to exist at the interface between sagebrush communities and aspen-conifer forests between 8,000' - 10,000' elevation. Starting as early as October, most mule deer migrate north out of D3 towards winter range along the North Platte River in Wyoming (i.e. Beaver Hills, Bennett Peak, Baggot Rocks, etc.) near the communities of Encampment and Saratoga. Additionally, smaller cohorts of deer migrate south to Middle Park, southeast to Estes Park, or east down the Cache La Poudre River canyon towards Rustic and Stove Prairie. Due to the timing and extent of these migrations, modeled population estimates and buck:doe ratios for this herd should be interpreted with some level of caution. Input data for these models are collected during classification flights flown in December and January, and may not always accurately represent summer population demographics. As relics of a very different winter range distribution during the mid-late 1900's, a small number of deer (likely <500) may also winter in North Park near the sand dunes in GMU 6, or on Independence Mountain in GMU 161. However, data collected from GPS collars suggest many of these deer eventually travel north during late winter months (following severe storm events) and occupy winter range in Wyoming.

D3's post-hunt modeled population estimate for 2021 is 5,750 deer (Figure D3-1), and has remained relatively static over the past decade. Prior to the current (2002) D3 management plan, which managed for a population objective range of 5,400-6,400 animals, the population size of D3 may have historically been in excess of 10,000 animals. The post-hunt modeled sex ratio estimate for 2021 was 44.7 bucks per 100 does (Figure D3-2). This estimate is below the highest modeled estimate of 65 bucks in 2013, yet is still above the current management objective range of 30-40 bucks. Observed buck ratios from classification flights have been recorded as high as 96 bucks in 2015 and 82 bucks in 2020, however these observations likely reflect a mismatch between true summer population demographics and what is observed during winter surveys. Given that bucks tend to migrate after does and fawns, it is likely that observed buck ratios above 50 reflect years where the majority of does and fawns have already migrated. This nuance highlights the importance of evaluating multi-year trends in classification data, rather than scrutinizing a single year's observation. Fawn:doe ratios have remained quite stable in D3 since the early 1990's. Most recently, 51 fawns per 100 does were observed post-hunt in 2021, which is just below a 30-year average of approximately 55 fawns (Figure D3-3).

All five GMUs in D3 have historically been managed for high quality, late-season buck hunting opportunities during the mule deer rut. As such, 3rd and 4th rifle season buck tags have low quotas and usually require multiple preference points to acquire. For example, in 2021, the 3rd rifle season buck tag for GMU 6 required 5 preference points, and the 4th rifle season buck tag (valid DAU-wide) required 8 preference points. Opportunity is slightly higher for archery, muzzleloader, and 2nd rifle seasons which required 1, 1, and 3 preference points during the same year, respectively. As interest in hunting deer in D3 appears to gradually increase each year, the amount of preference points required for each hunt code is also expected to increase. In 2021, a total of 789 buck deer tags were available (Figure D3-4), including 4 allocated to the Ranching for Wildlife Program (Silver Spur Outfitters). Since 2002, total tag allocation has ranged widely, between 400 - 1,700 licenses. D3 has not offered any doe licenses since 2013 in an effort to increase the number of resident wintering deer and the overall population size, a decision that has generally been supported by the public. Total harvest was 294 bucks in 2021, and has ranged from approximately 175 - 700 animals since 2002, though harvest has not been above 300 animals in over a decade (Figure D3-5). Although D3 has not historically managed for white-tailed deer (hereafter 'whitetails'), a small, isolated population of whitetails have existed in D3 for many years. During winter months, whitetails congregate on private land near, or within, the town of Walden. These deer are not targeted during classification flights, however, anywhere between 5-30 animals are spotted each year with little variation in distribution. By most anecdotal accounts, this subpopulation has remained stable or is increasing slightly. Whitetail bucks are legal to harvest with any valid buck tag in the DAU although very few, if any, have even been taken by hunters. Beginning in 2023, D3 will offer a list B, private land, late-season antlerless whitetail-only hunt, with a small harvest quota and preference given towards youth. This tag is designed to be used as a management tool to reduce whitetail densities near the town of Walden when needed for reducing the risk of vehicle collisions, damage to landscaping and agriculture, and disease transmission (i.e. CWD).

Significant Issues

Resident Deer & Winter Range

The total number of deer residing in D3 has decreased substantially over the past 50-75 years, particularly the number of resident wintering deer in North Park. Don Gore, a retired North Park district wildlife manager, reported up to 10,000 deer wintering in North Park during ground counts in the late 1950's and early 1960's. During this same time period, hunters were allowed to purchase as many as three licenses in an effort to reduce the deer population. A record harvest occurred in 1956, which included an 88 day rifle season. In this single year, 5,357 deer hunters harvested 3,515 deer in North Park. In GMU 6 alone, hunters harvested 2,114 deer. Today fewer than 500 deer are classified in winter classification counts, and fewer than 300 deer are harvested annually.

Reasons for this winter resident population decline are likely attributed to several factors. The severe winters of 1983-84, 1992-93, 1995-96, 2007-08, and 2010-11 killed many fawns and adult deer. After each harsh winter, the population failed to recover to previous numbers. Over-hunting of resident deer, in particular, up through the early 1970's likely contributed to a long term decline in deer wintering in North Park. Perhaps a substantial amount of harvest on non-migratory deer during October and November eliminated those individuals with learned behavior for this wintering strategy. Migratory deer during this time may have been less vulnerable to harvest, and thus became the dominant cohort within this population. In addition to severe winters and potential over-harvest, elk and pronghorn populations increased during this time period, and moose were introduced to North Park. A net increase in interspecific ungulate competition may have influenced mule deer wintering behavior. Today, substantial winter range remains in North Park, though it is underutilized by mule deer.

Migratory Deer Management

The apparent shift in mule deer wintering behavior in D3 also presents challenges associated with interstate deer management. Location data from multiple collaring studies since 2000 (Appendix II) have demonstrated that the bulk of mule deer leave North Park in early October for the North Platte Valley of Wyoming, or Middle Park Colorado for winter. North Park deer are clearly a southern extension of the North Platte deer herd in Wyoming. This behavior reduces deer vulnerability to harvest in Colorado, but increases vulnerability to harvest in Wyoming under Wyoming Game and Fish Department's current season structure. Current management in Colorado is geared toward stabilizing and reversing the decline in deer numbers and will require collaborating on strategies with Wyoming Game & Fish.

Chronic Wasting Disease

Similar to other deer herds in Colorado, CWD is another major management issue for the D3 herd. Prior to 2020, there has not been any mandatory CWD testing for deer or elk in North Park. The total number of harvested deer and elk submitted for testing each year during this time has never exceeded 40 animals. Given these small sample sizes, and the likelihood of bias towards testing visually sick animals, results from these tests are not useful for population level monitoring and management. However, D3 was selected for mandatory testing (i.e. all rifle harvested bucks) during the 2020 and 2021 hunting seasons. Results from 2020 yielded a DAU CWD prevalence rate of 5.9% (n=135), and results from 2021 yielded a prevalence rate of 11.4% (n=185). Taken together, the overall CWD prevalence rate for the D3

herd was 9.1% (n=320). These results are comparable with prevalence rates from mule deer harvested from the North Platte Valley of Wyoming from 2019-2021 (6.9%; personal comm. with Teal Cufaude, WGFD Biologist), which further highlights the connectivity between these areas, and underscores the value in cooperation between Wyoming Game & Fish and CPW. CWD prevalence rates >5% can lead to rapid spread of the disease within a herd and will have population-level impacts through higher mortality of adult deer and a decline in the age structure of a population. It remains unclear if a prevalence rate of 9.1% is a recent phenomenon, or if CWD has existed in this population at this level for some time. D3 is scheduled for mandatory CWD testing again in 2023 and 2028. Results from these tests will be highly informative in describing whether prevalence rates are increasing, stable, or decreasing, and at some level will likely influence license allocation.

Increased Predation Pressure

In addition to human harvest and winter kill, predation from black bears, mountain lions, and coyotes is a notable source of deer mortality in D3. In rare cases, bobcats and golden eagles may also take small or injured deer.

Since the early 2000's, multiple gray wolf sightings have been confirmed in North Park. Most recently, two wolves arrived in North Park from Wyoming and successfully reared a litter in 2021, thus establishing Colorado's first wolf pack since approximately 1945. Regardless of human tolerance and future outlook for this wolf pack, the probability of wolves existing in North Park for years to come appears high as there seems to be a natural corridor into North Park used by wolves dispersing from Wyoming.

Currently, CPW biologists and wildlife managers do not feel that wolves will add a significant amount of additive mortality to D3. Though wolves are expected to prey on mule deer, most research conducted in the Rocky Mountains indicates that wolves will target elk over mule deer if both are available. While it will be important to monitor impacts of all predation sources, CPW has prioritized resident wintering deer, potential complications with interstate management, and CWD prevalence as the most important issues for D3.

Management Objective Recommendations

Given the history, current status, and significant issues impacting deer in D3, CPW recommends a new population objective range of 4,400-6,400 deer. This objective drops the lower end of the current objective of 5,400-6,400 deer. Lowering the bottom end of this range provides more flexibility in managing a herd with high CWD rates. The population might decline on its own due to CWD-related mortalities and/or we might need to intentionally reduce deer densities for several years to drive the CWD rate below 5%. Assuming that the CWD rate can be reduced through harvest management, the population could also grow back to the upper end of the population objective range.

Although CWD is a concern for the future of this deer herd, and lowering buck ratios can be an effective tool for reducing CWD prevalence, CPW recommends the sex ratio objective range remain status quo at 30-40 bucks per 100 does. Nuances associated with the timing of classification surveys and population models complicate the interpretation of modeling results. It is likely that current buck:doe ratio estimates are biased high as buck observations are often inflated during classification surveys. As such, rather than dropping the objective range for this metric, we intend to bring observed buck:doe ratios down into the established range or the bottom of the objective range (CWD Plan), rather than allow it to remain above (has been above objective since 2007). By employing this effort, the population's buck:doe ratio will be lowered, hopefully providing some reduction in CWD prevalence. If future CWD

prevalence rates fall below 5%, CPW may manage for the upper end of this objective range to maintain high quality buck hunting opportunities.

Stakeholder Outreach and Input

These proposed objectives were presented at a public meeting held in Walden on August 9th, 2021. Only 2 members of the public attended, and one survey response form was completed and returned. This participant's response favored CPW's HMP recommendations. Additional outreach was completed in July 2017 for the then draft version of this plan. Area 10 biologist Jeff Yost held two public meetings, one on July 14th, 2017 in Walden and another on July 17th, 2017 in Fort Collins. At that time, proposed management alternatives were a population objective of 5,400-6,400 deer, and a sex ratio of 30-40 bucks per 100 does. Overall, 4 members of the public attended the meeting in Walden, and 2 attended in Fort Collins. In addition, CPW solicited input from USFS - Parks District, BLM - Kremmling, State Land Board, Colorado Bowhunters Association, NE and NW Colorado State Representatives, North Park HPP Committee, Colorado Muzzleloaders Association, and the Jackson County Planner. From this outreach effort, the North Park HPP Committee responded with approval for the proposed herd objectives.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

Fewer deer wintering in D3 is likely the result of a combination of factors including habitat quality/quantity, competition from other ungulates, and the result of over shooting local deer. In addition, severe winters may compound each of these factors by increasing nutritional stress and lowering survival rates. The elimination of antlerless harvest has been in effect for 10 years, however this has not appeared to have increased the number of deer on the landscape. Therefore, CPW managers may decide to bring back a small level of antlerless harvest to increase hunting opportunity as public interest and herd health allows. Habitat studies to investigate forage utilization and possible competition among herbivores may provide some clarification on the interactions among the four ungulate species that utilize North Park's winter range. Other opportunities to study the effects of the fire on both habitat succession and deer utilization are currently available in GMUs 161 and 6, as recent wildfires have occurred there. Other habitat improvement techniques such as fertilization, rejuvenating bitterbrush, or mechanical disturbance of forage could be implemented.

CPW will continue to work collaboratively with federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity, studying movement corridors, and adhering to seasonal recreation closures on winter range areas.

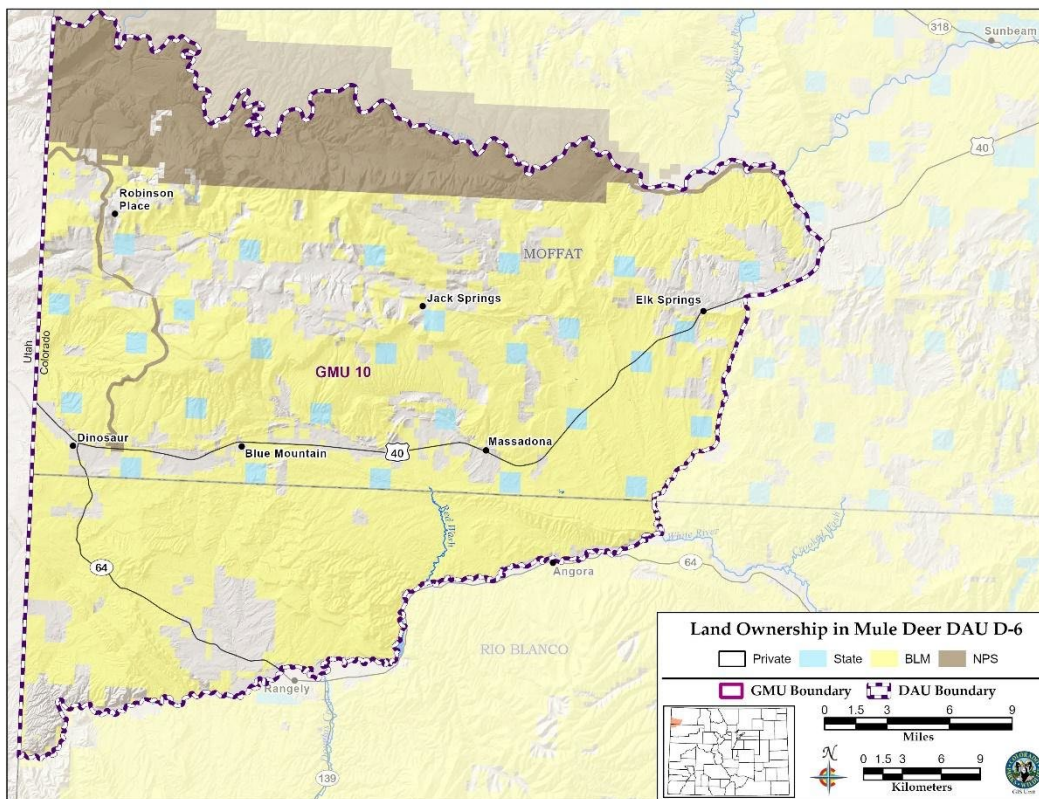
To achieve the updated population objective and to maintain the current sex ratio objective, CPW will continue to set licenses annually to both provide hunting opportunities and manage for low CWD rates. CWD prevalence will continue to be monitored through periodic mandatory testing and voluntary sample submissions.

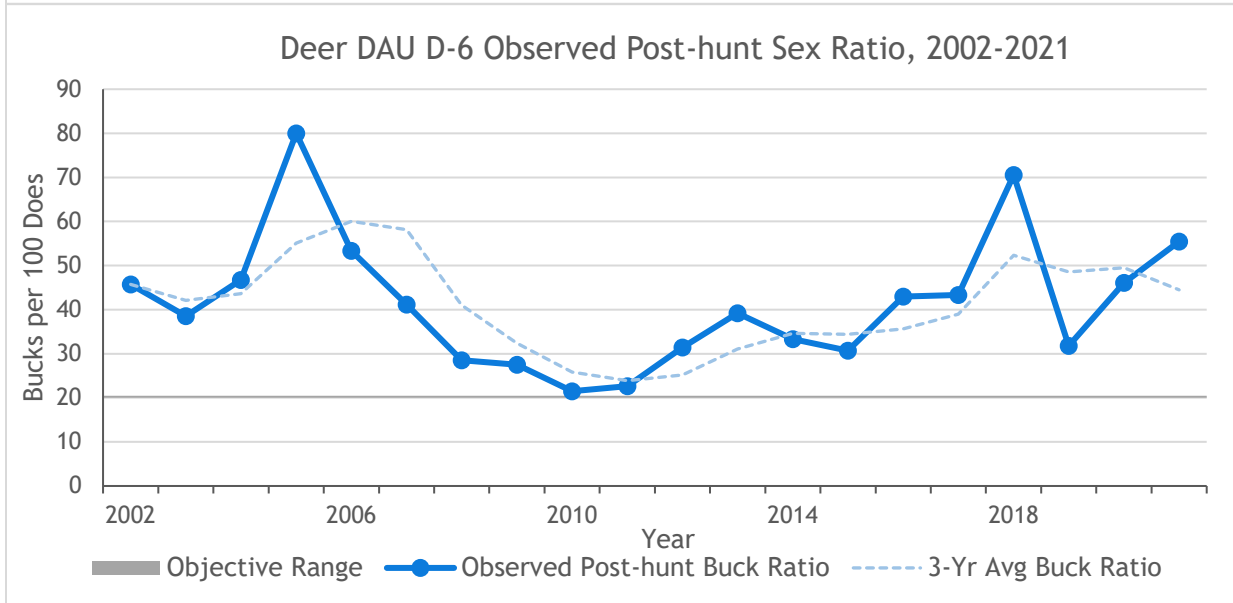
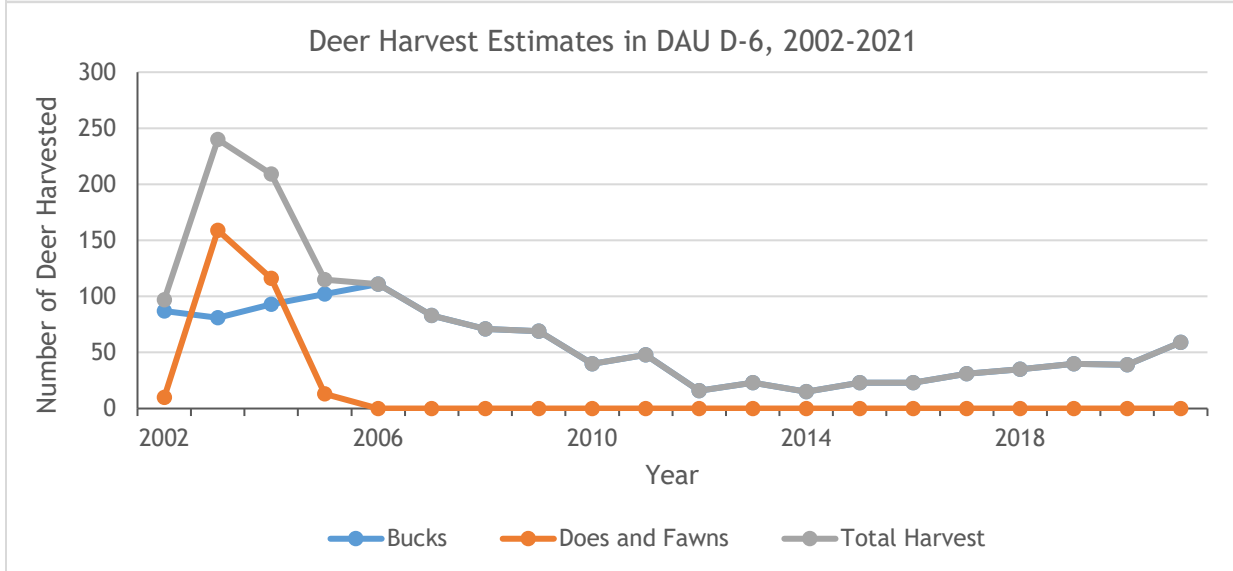
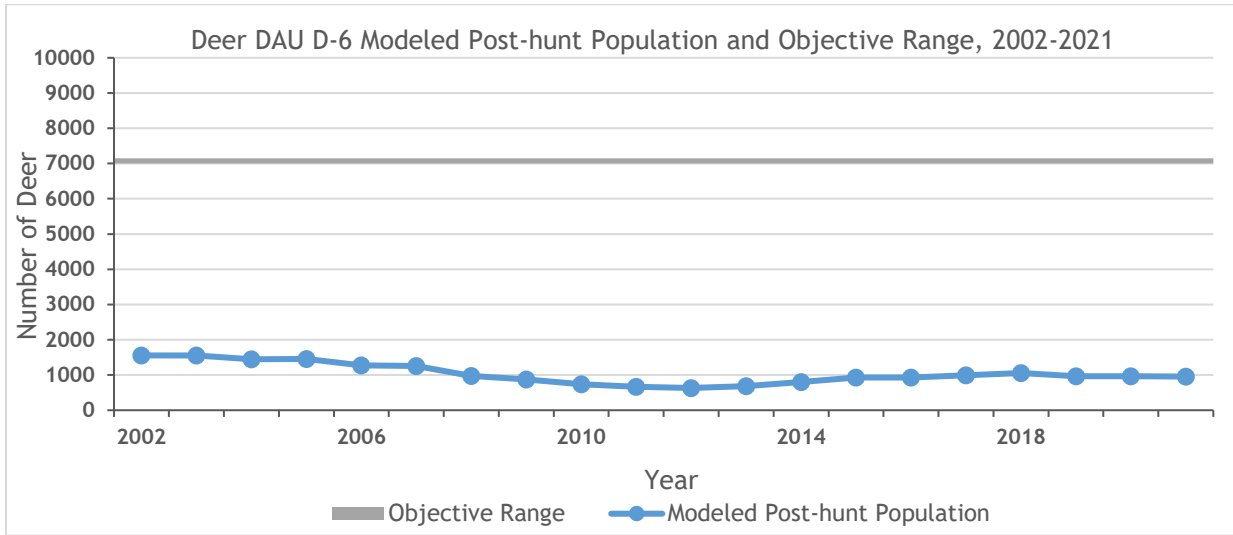
RANGELY MULE DEER HERD MANAGEMENT PLAN

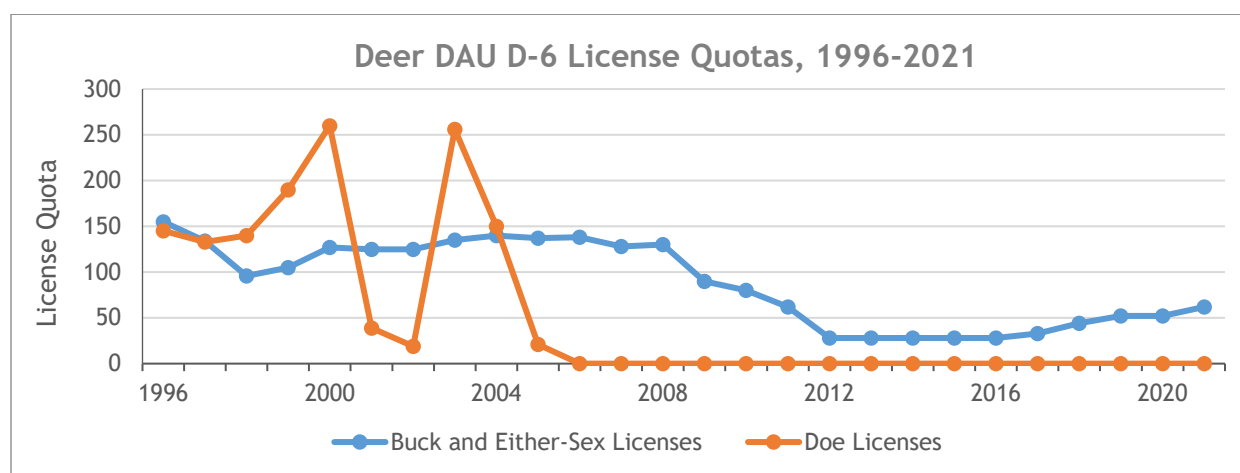
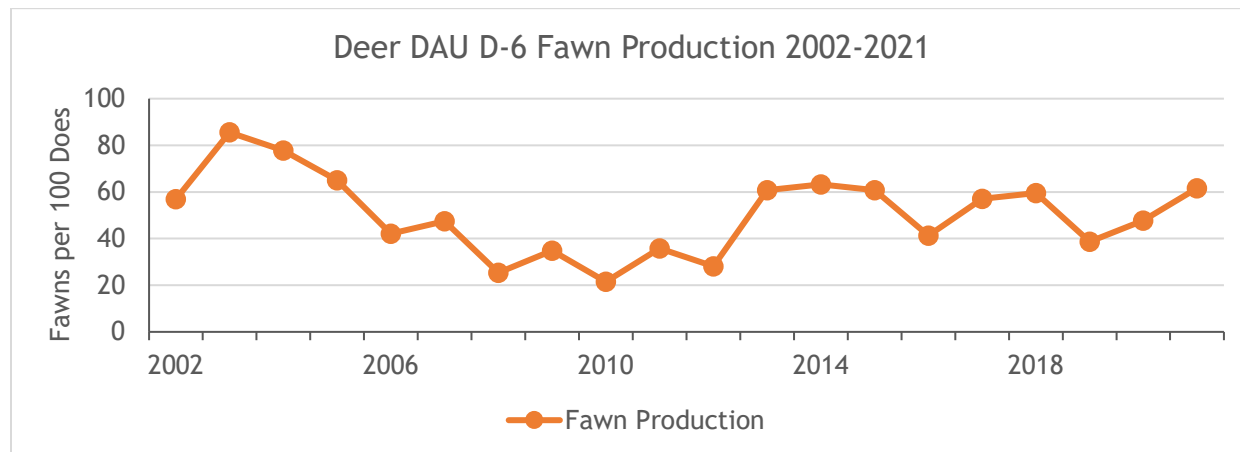
DATA ANALYSIS UNIT D-6

Darby Finley, Wildlife Biologist, Meeker

Rangely Mule Deer Herd (DAU D-6)	GMUs: 10
Post-hunt population:	
Current (no plan) Population Objective:	7,000 deer
Post-hunt 2021 Population Estimate:	957 deer
Proposed New Population Objective	1,500-3,500 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (no plan) Sex Ratio Objective:	20 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	44 bucks per 100 does
Proposed New Sex Ratio Objective:	25-35 bucks per 100 does







Background

The Rangely Mule Deer DAU, D-6, is located in northwest Colorado and includes portions of Moffat and Rio Blanco counties. The DAU includes a single Game Management Unit (GMU): 10. The towns of Rangely and Dinosaur are located on the periphery of the DAU.

The Rangely deer DAU covers 832 square miles. Of this, 21% (178 mi²) is private property, 62% (513 mi²) is Bureau of Land Management (BLM) land, 3% (27 mi²) is State Land Board land, and 14% (114 mi²) of the DAU includes Dinosaur National Monument administered by the National Park Service. Ownership patterns vary across mule deer seasonal ranges within the DAU comprised of private, state and federal lands.

Resident mule deer within D-6 will migrate short distances from summer ranges at higher elevations on Blue Mountain to lower elevations surrounding the high mountain plateau. Migratory deer from adjacent DAUs D-2 and D-7 will also move into the eastern portions of the DAU to winter.

Significant Issues

The most significant issue concerning the D-6 herd is the sustained stagnant state of population this herd has experienced for the past two decades. Much of the herd unit has

been within severe to extreme drought conditions since the late-90s. As a result, range conditions have become less productive and degraded due to the loss of browse from shrub mortality and the conversion of herbaceous understories to a monoculture of cheat grass and other invasive annuals. These conditions have reduced the nutritional carrying capacity across winter ranges throughout the DAU and made achieving historic population levels unachievable. Despite the population, appearing to be in a capacity driven slump, there has been minimal harvest applied to the herd and the population has remained stagnant. In fact, there has been no antlerless harvest since 2007 and antlered harvest has been minimal. The combination of poor range conditions, predation, and elk population levels are all playing a role in the ability for this deer population to grow and contributing to the lower sustainable deer population.

Management Objective Recommendations

CPW recommends a population objective range of 1,500-3500 deer. This recommendation is lower than the current objective of 7,000 approved in 2021. The recommended population objective range will allow for management more in line with habitat carrying capacities as a result of persistent drought. Licenses will be issued annually to manage to a target population size within the population objective range and CWD prevalence threshold of 5% or less.

CPW recommends a sex ratio objective to 25-35 bucks:100 does. The current sex ratio objective is 20 bucks:100 does. The current 3-year average buck ratio, 44 bucks:100 does. Currently, CWD prevalence is low within the DAU at 1.3% prevalence based on mandatory testing results from 2017.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

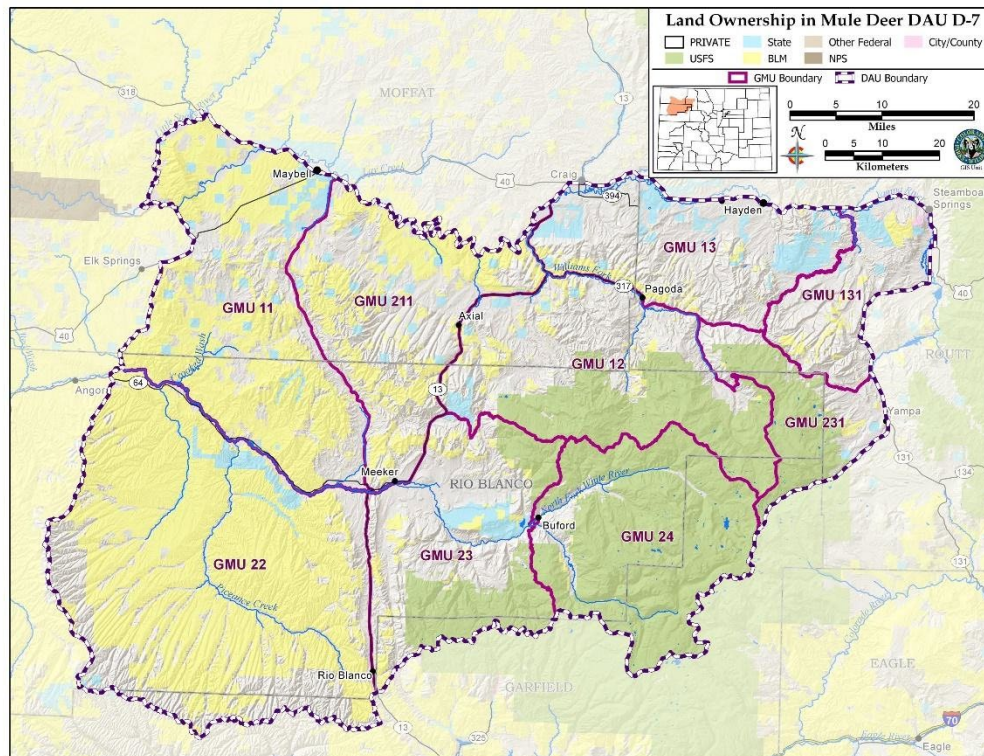
A population objective range of 1,500-3,500 will allow population levels to be managed in line with habitat carrying capacity. Management actions recommended to achieve the population objective are to apply habitat treatment strategies that will improve habitat conditions across winter ranges. Improving habitat conditions will be a challenge considering drought conditions so maintaining both mule deer and elk populations at nutritional carry capacities the winter range can support through harvest management may be the most effective tool to allow for reduced browsing pressure on drought stressed winter ranges.

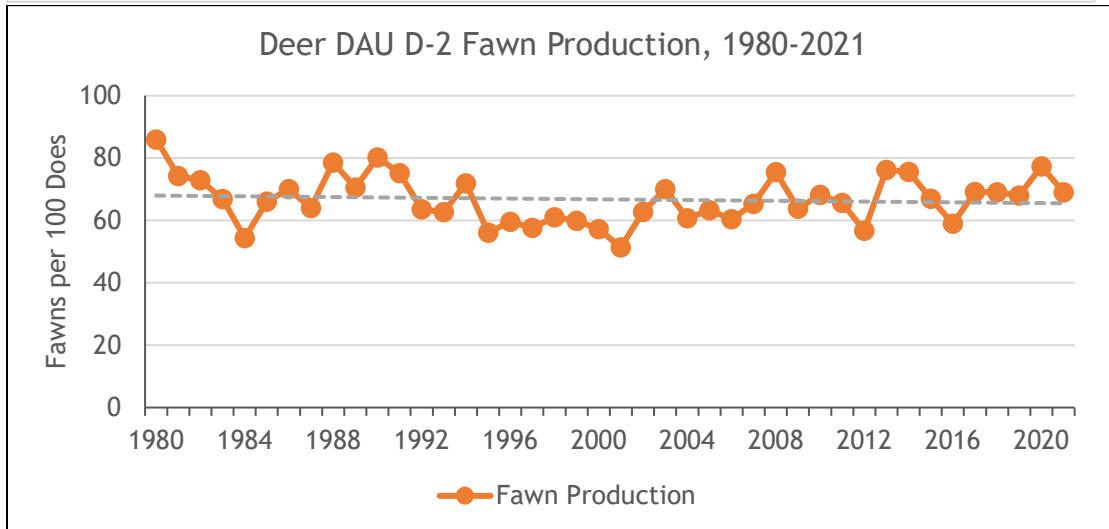
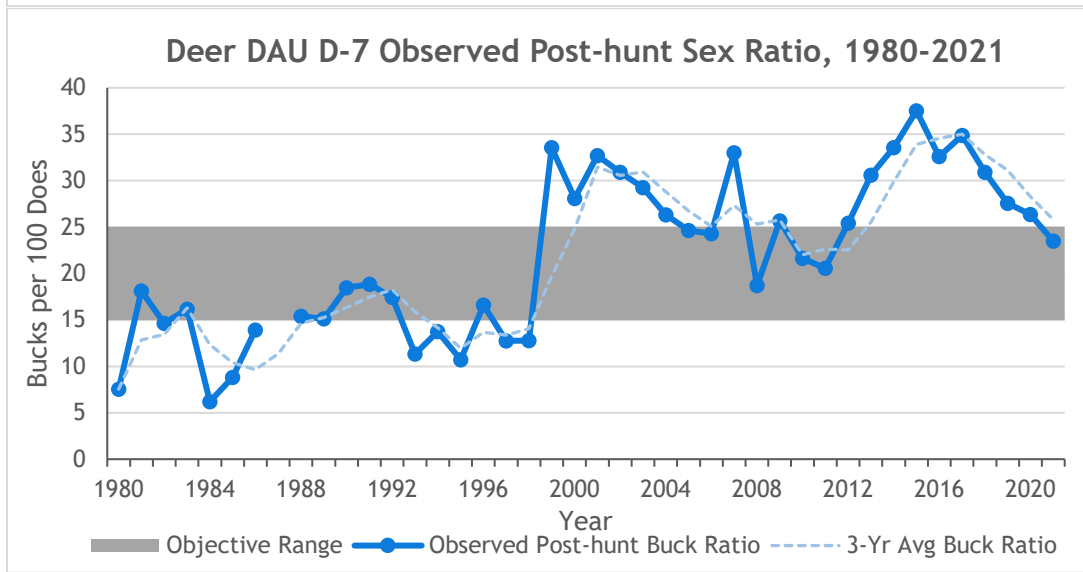
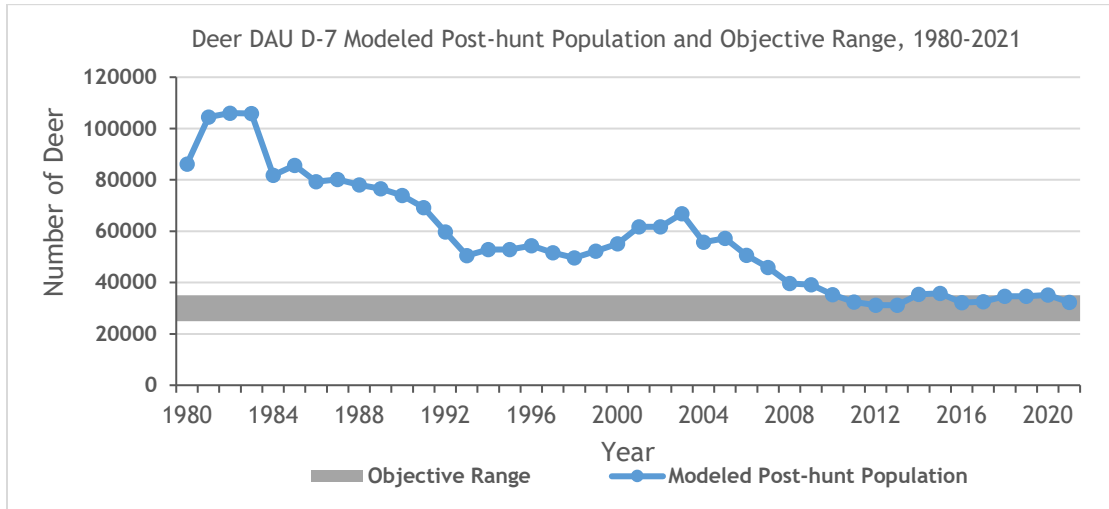
The recommended sex ratio objective will allow the ability to address management concerns regarding CWD prevalence rates if increased prevalence becomes a concern. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

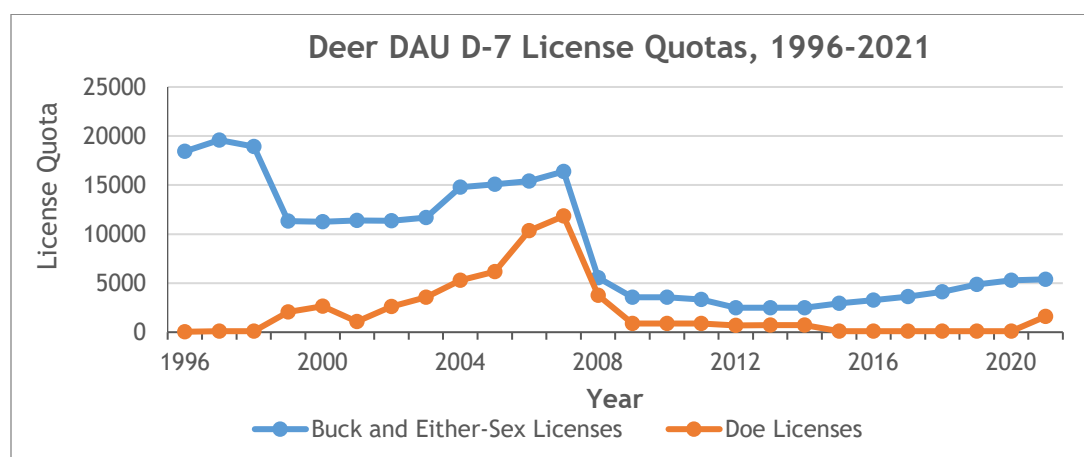
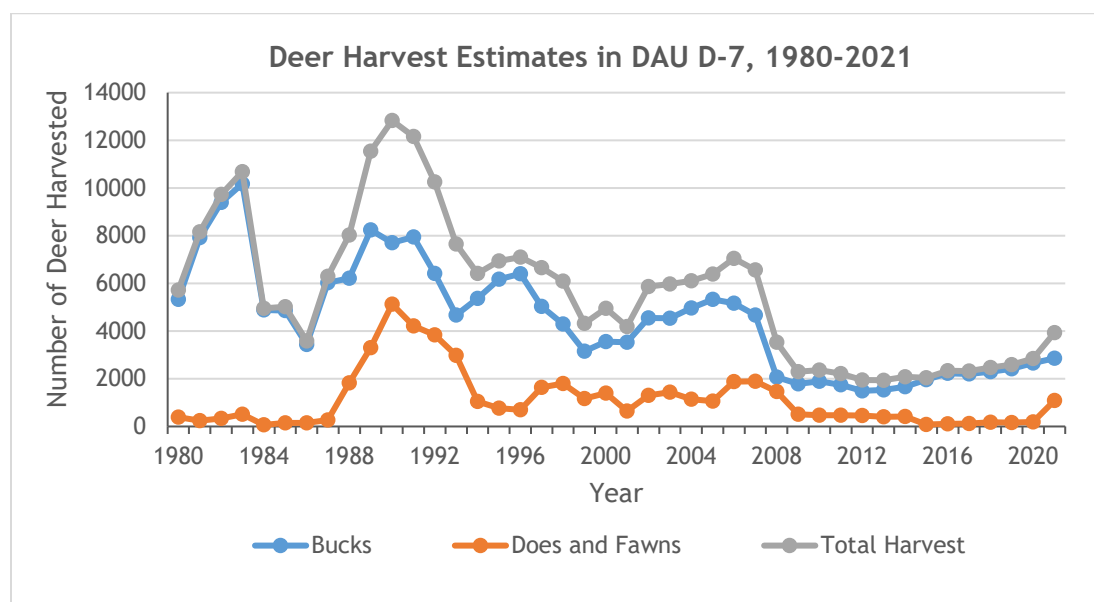
WHITE RIVER MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-7

Darby Finley, Wildlife Biologist, Meeker

White River Mule Deer Herd (DAU D-7)	GMUs: 11, 12, 13, 22, 23, 24, 131, 211, 231
Post-hunt population:	
Current (2020 plan) Population Objective:	25,000-35,000 deer
Post-hunt 2021 Population Estimate:	32,279 deer
Extension Population Objective	<u>No change, 25,000-35,000 deer</u>
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2020 plan) Sex Ratio Objective:	18-25 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	26 bucks per 100 does
Extension Sex Ratio Objective:	<u>No change, 15-25 bucks per 100 does</u>







Background

The White River Mule Deer DAU, D-7, is located in northwest Colorado and includes portions of Routt, Moffat, Rio Blanco, and Garfield counties. The DAU is comprised of 9 Game Management Units (GMUs): 11, 211, 12, 13, 22, 23, 24, 131 & 231. The towns of Craig, Steamboat Springs, Yampa, and Oak Creek are located on the periphery of the DAU and Meeker is centrally located within the DAU.

The White River deer DAU covers 4,120 square miles. Of this, 42% (1,714 mi²) is private property, 33% (1352 mi²) is Bureau of Land Management (BLM) land, 21% (856 mi²) is administered by the United States Forest Service (USFS), 3% (116 mi²) is State Land Board land, and less than 2% (78 mi²) is Colorado Parks and Wildlife (CPW) land (Figure 5 & 6). Ownership patterns vary across mule deer seasonal ranges within the DAU comprised of private, state and federal lands. Half of all mule deer winter range is managed by BLM and the other half is primarily private property with minimal state owned lands. Summer range is primarily comprised of private property and Forest Service lands.

Mule deer within D-7 are migratory, moving from higher elevation summer ranges in eastern portions of the DAU to lower elevation winter ranges in the western portions of the DAU. Migratory distances vary greatly with some deer moving 60 to 70 miles between seasonal ranges while others move relatively short distances, 10 to 20 miles or are year-round resident herds.

Significant Issues

Characteristic of deer populations throughout Colorado and elsewhere in the West, population trends within the D-7 herd are cyclical (Gill et al. 2001). These cyclical trends are most affected by severe winters and drought. Historically, the White River deer herd was very robust, likely exceeding 100,000 deer in the early-1960s. More favorable habitat (early seral stage vegetation) and widespread poisoning to control predators during this time likely created a situation in which deer populations were unnaturally high. The most recent population peak occurred in the early-1980s with modeled estimates consistently predicting the population at over 100,000 deer. Since the early-80s, population estimates have shown a steadily declining trend. The declining trends in the modeled estimates are consistent with on the ground observations. Going into the severe winter of 1983-84 the D-7 deer herd was at an all-time high and has not rebounded to those population levels since. The average population size has declined from 92,000 in the 1980s, to 61,000 in the 1990s, to 53,000 in the 2000s, and to 34,000 in the 2010s. In turn, population objectives for the D-7 herd have also been set lower. The population objective prior to 1990 was 85,000 deer and in 1994, the objective was lowered to 67,500. Throughout the decades of a steady overall population decline, deer herd numbers stabilized for a short period from 1993-2000 before rebounding slightly from 2001-2006. This increase was due, in part, to an increased number of bucks recruited into populations after the limitation of deer licenses statewide in 1999. The increasing trend was short-lived. Coming out of the drought in the early 2000s, deer numbers were at the highest population level since the early 1990s entering the severe winter of 2007-2008. Population dynamics within the herd changed after the severe winter of 2007-2008. Contributing factors to the changes within the D-7 herd were the combination of high deer numbers and drought stressed winter ranges leading into the severe winter. The poor range conditions could not support the high deer densities resulting in further range degradation. Ultimately, this has resulted in long-term reductions in the nutritional carrying capacities across winter ranges within the DAU. Over-winter survival rates from radio collared fawns prior to 2007 averaged 72.2%. Post 2007, over-winter fawn survival has averaged 59.7%. Furthermore, annual adult doe survival pre and post 2007 went from an average of 85.6% to 79.8%, respectively. Cause specific mortality rates from malnutrition doubled for both does and fawns after the 2007-2008 winter. It appears, based on evidence from radio-collared deer, the cumulative effects weather (drought and severe winters), habitat conditions, and disease (specifically, CWD) all appear to be contributing to the declining population trend in the D-7 herd. In recent years (likely since 2010s) chronic wasting disease has contributed in partially additive way to lowered doe survival. This is likely affecting population performance and preventing rebounds in the population even when habitat conditions temporarily improve (i.e. reducing herd resilience). In the last decade, the herd has not exceeded 40,000 animals.

Biological carrying capacity is not static. In reality, carrying capacities fluctuate annually and trend over time. The declines observed within the D-7 mule deer herd are evidence the carrying capacity is, and has been, on a downward trend. Sustaining historic or desired population levels can be difficult or impossible due to habitat constraints. The cumulative

effects of all human related activities lower habitat capability and ultimately reduce the size of big game populations the habitat can sustain. In addition, drought plays a significant role in habitat capability by affecting winter and year-round forage condition. The direct and indirect impacts of fragmentation from energy development (oil and gas, solar, etc.), trail development for recreation, and rural residential development reduces habitat function. Drought in combination with overuse by livestock, wild horses, and wildlife effects habitat quality. Fire suppression has increased canopy cover reducing winter range quality and in other areas, wildfire has resulted in significant losses of browse on critical winter range and increased competition from invasive annual grasses. Compounding the impacts of wildfire has been increased elk competition on winter ranges.

CWD was first discovered within the D-7 herd in early 2002. A cluster of CWD cases was unexpectedly detected in mule deer entrapped in a captive elk facility in GMU 12 near Pagoda in the Williams Fork drainage. The initial management approach after discovering CWD was an attempt to eradicate the disease. Focused culling efforts were initiated to try to control CWD from spreading. However, testing results from hunter-harvested animals during the 2002 hunting season revealed the disease was more widespread within the DAU than initially thought. While CWD was present in D-7, prevalence rates in the herd were low, ~1%. Throughout the early 2000s, heightened hunter awareness about CWD, free testing, liberal license allocations, and relatively high harvest rates resulted in high hunter submission rates for CWD testing. Surveillance efforts indicated prevalence rates remained low within the D-7 herd from 2002-2007. With CWD prevalence rates remaining relatively low, hunters and managers became apathetic. In turn, hunter interest in having animals tested for CWD waned and hunter-harvested submission rates declined. From 2009-2016 hunter-harvested submissions remained low while prevalence rates showed an increasing trend. The increasing trend in CWD prevalence was cause for concern among wildlife managers and in 2017, mandatory testing was required for all deer harvested in D-7. The 2017 sampling effort solidified concerns about increasing prevalence rates revealing a 15.3% CWD prevalence rate in the D-7 herd, a 10-fold increase in 15 years. At this observed level of prevalence, CWD appears likely to be contributing to recent declines in adult deer abundance and herd-level resilience in those portions of the D-7 herd outside of the Piceance Basin.

Management Objective Recommendations

CPW recommends extending the population objective range of 25,000-35,000 deer. This recommendation is status quo from the current objective range approved in 2020. The recommended population range will allow for management flexibility in response to changes in habitat conditions, CWD prevalence, and changes in population size due to severe winter events and drought. Licenses will be issued annually to manage to a target population size within the population objective range and CWD prevalence threshold of 5% or less.

CPW recommends extending the sex ratio objective to 15-25 bucks:100 does. The current sex ratio objective is 18-25 bucks:100 does. The current 3-year average buck ratio, 26 bucks:100 does. Given the significant increase in CWD prevalence within D-7 over the past 19 years, consideration must be given to management strategies that will reduce buck ratios to within sex ratio objective ranges in an attempt to reduce CWD prevalence rates.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

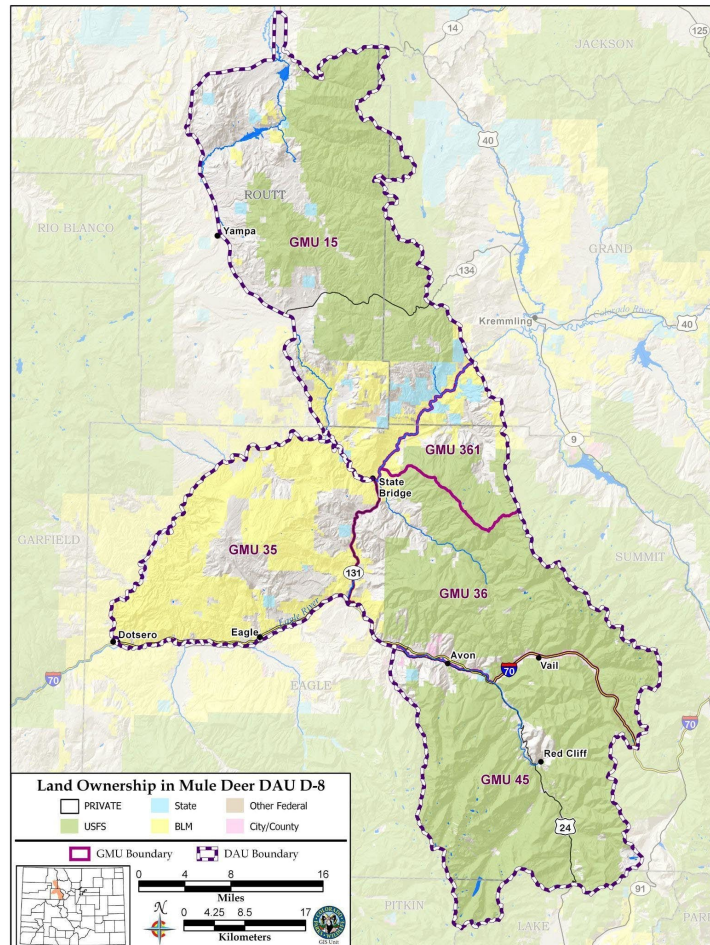
A population objective range of 25,000-35,000 will allow for increased flexibility in management options if desired CWD prevalence rate reductions were not being achieved. In addition, it would allow further population reductions to address density-dependence mortality factors. Management actions recommended to achieve the population objective and reduce CWD prevalence rates include: increased female and/or either sex hunting licenses, increased harvest in later season or in high CWD prevalence areas, increase private land only license availability, and increase harvest within targeted high-density mule deer winter ranges. The specific areas in which increased harvest on high-density mule deer winter ranges would be determined based on data from winter classification flights. Moderate incremental increases in license recommendations would be utilized to achieve desired objectives.

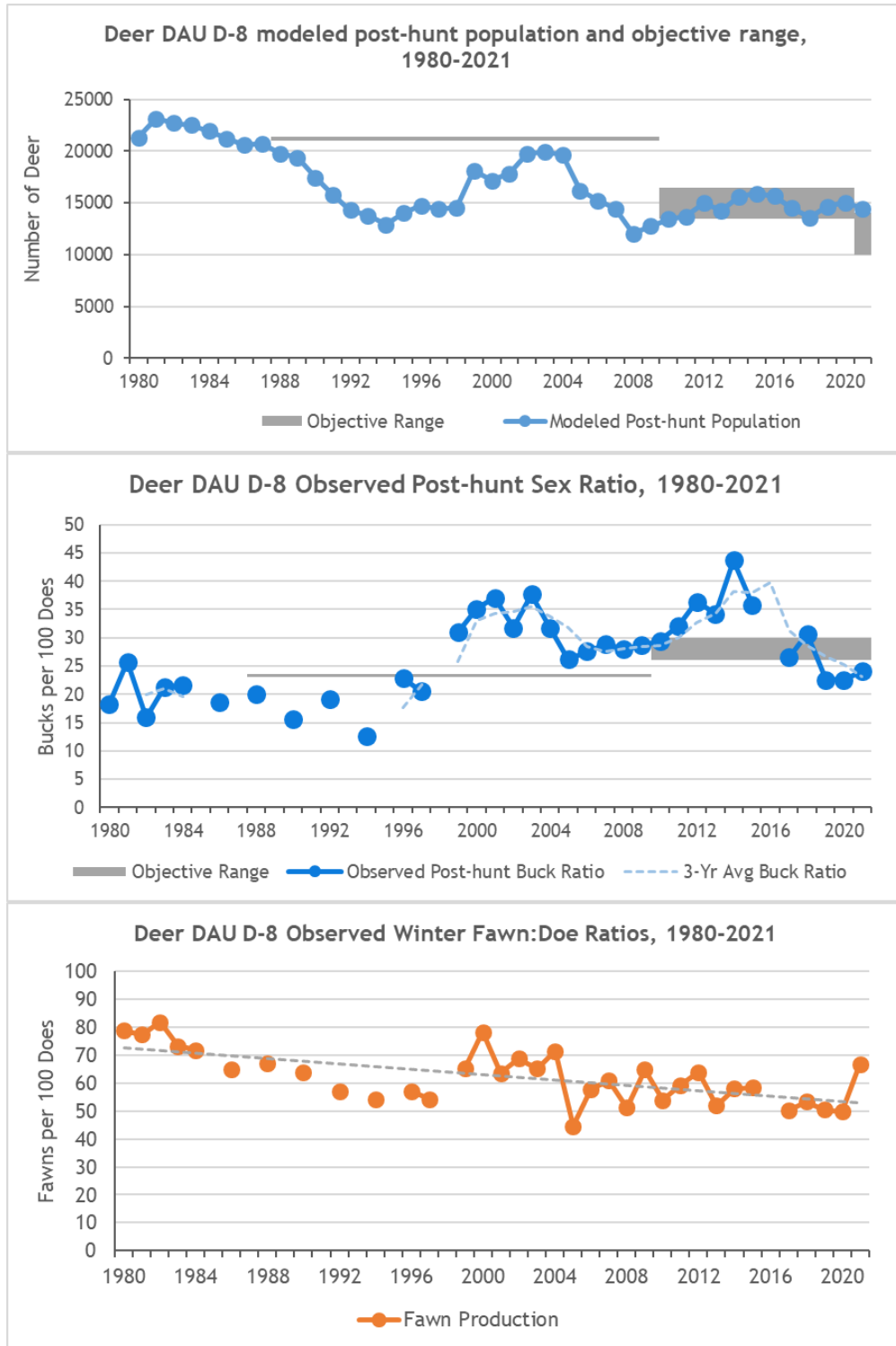
The recommended sex ratio objective would allow the ability to address management concerns regarding high CWD prevalence rates. Management actions implemented to achieve sex ratio objectives and reduce CWD prevalence rates would include: reduce male:female ratios, change age structure, and maximize ability to remove diseased animals at smallest scale possible. Management tactics to achieve sex ratio objectives and CWD prevalence rates will include disease management hunts and/or increasing and/or shifting male hunting licenses into later seasons and creation or modification of hunt code groupings for more targeted harvest. The lower end of the sex ratio would allow for management flexibility if CWD prevalence thresholds were not met despite a reduction in overall sex ratios. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

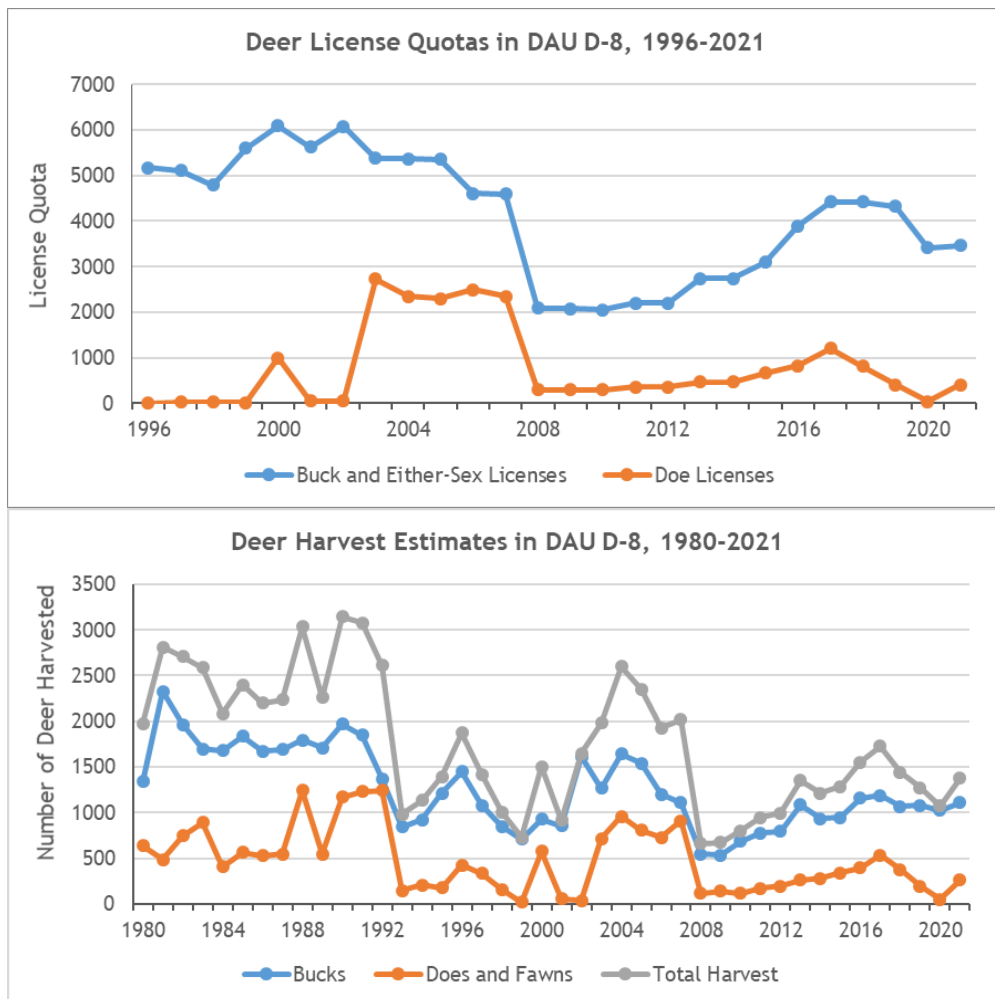
STATE BRIDGE MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-8

Julie Mao, Wildlife Biologist, Glenwood Springs

State Bridge Deer Herd (DAU D-8) Approval Year for last HMP: 2020	GMUs: 15, 35, 36, 45, and 361
<u>Post-hunt population:</u> Current (2020 plan) Population Objective:	10,000-14,000 deer
Post-hunt 2021 Population Estimate:	14,463 deer
Extension Population Objective	<u>No change: 10,000-14,000</u>
<u>Post-hunt Sex Ratio (Bucks:100 Does):</u> Current (2020 plan) Sex Ratio Objective:	26-30 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	23 bucks per 100 does
Extension Sex Ratio Objective:	<u>No change: 26-30 bucks per 100 does</u>







Background

The State Bridge DAU (D-8) is located in northwest Colorado and consists of GMUs 15, 35, 36, 45, and 361. D-8 contains parts of the Eagle, Colorado, and Yampa River watersheds. Counties included in the DAU are Routt, Grand, Eagle, and Pitkin. The towns of Vail, Minturn, Avon, Edwards, Eagle, and Gypsum lie along Interstate-70, which cuts through the central-southern portion of the DAU. D-8 covers a land area of 3,765 sq. km (1,453 sq. miles), approximately 80% of which is public lands.

In the [2020 D-8 herd management plan](#), CPW lowered and widened D-8’s population objective range to 10,000-14,000 deer. This objective range takes into account the changes in land use, especially the increase in recreation activity and resulting decline in habitat quantity and quality, that have occurred over the previous decade. D-8’s most recent population estimate in 2021 is 14,463 deer, which is within the current objective range.

The herd’s sex ratio objective was maintained in the 2020 DAU plan at a range of 26-30 bucks:100 does. This is the same objective that was set earlier in the 2009 plan and has been a good balance between providing adequate hunter opportunity, buck quality, and

maintaining chronic wasting disease (CWD) prevalence in the herd below 5%. The current 3-year (2019-2021) average is 23.1 bucks:100 does, slightly below the objective range. In 2020 and 2021, buck and either-sex licenses were reduced from the earlier higher quotas from 2017-2019 to bring the sex ratio back up into objective range.

Significant Issues

D-8 is one of the larger deer herds in the state, but as with many herds in western Colorado, the cumulative impacts of decades of human population growth and the direct and indirect impacts of human activities have continued to diminish both the quality and quantity of habitat and its carrying capacity for deer. Land development, fragmentation by roads and trails, increased human activity on public lands, and suppression of large-scale wildfires have long-term and perhaps even irreversible effects on the landscape. The proliferation of all forms of outdoor recreation on public lands has continued since the 2009 herd management plan. Continued conversion of habitat on private lands into residential housing developments is expected over the next decade or so, especially in the units near Interstate-70, leading to further loss of mule deer winter and summer range habitat. Vehicle traffic also continues to increase as the region's human population grows, and wildlife-vehicle collisions continue to be a concern. CWD prevalence rate in harvested bucks was 4% as of the most recent mandatory check year (2018) for this DAU.

Management Objective Recommendations

CPW recommends maintaining the objective range of 10,000-14,000 deer that was established in the recent (2020) D-8 herd management plan. This objective range manages for a population level slightly below habitat carrying capacity and gives CPW sufficient latitude in maintaining license quotas at a more consistent level, which in turn gives D-8 hunters more predictability from year to year when applying for licenses.

CPW recommends maintaining the current sex ratio objective of 26-30 bucks:100 does that was originally set in the 2009 D-8 Plan and carried forward in the 2020 D-8 Plan. This range is a moderate sex ratio at which the herd is still managed primarily for ample buck hunting opportunity. The maturity of available bucks would be about the same as it currently is. Buck license quotas would likely remain similar to the recent few years' quotas to keep the observed sex ratio within the objective. We expect that by managing for this moderate sex ratio, chronic wasting disease (CWD) prevalence rate in bucks in D-8 will remain below 5%. However if the CWD prevalence rate reaches 5% or higher, then other measures including a revision of the sex ratio objective downward may be needed to suppress CWD in the herd.

Stakeholder Outreach and Input

For the 2020 Plan, CPW conducted public outreach in a variety of approaches, including:

- an online survey sent to 1,000 randomly selected D-8 hunters,
- presentations to the various boards of county commissioners,
- presentations to the Routt County Recreation Roundtable and Eagle County Community Wildlife Roundtable,
- presentations to 3 Habitat Partnership Program (HPP) Committees: Middle Park, Lower Colorado River, and Upper Yampa River
- a general public meeting
- outreach to local BLM and USFS staff

There was a wide variety of viewpoints represented among the comments we received (see Appendices B-F in the [2020 D-8 plan](#)). The majority of opinions supported CPW staff recommendations on the preferred alternatives for the herd management objectives.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

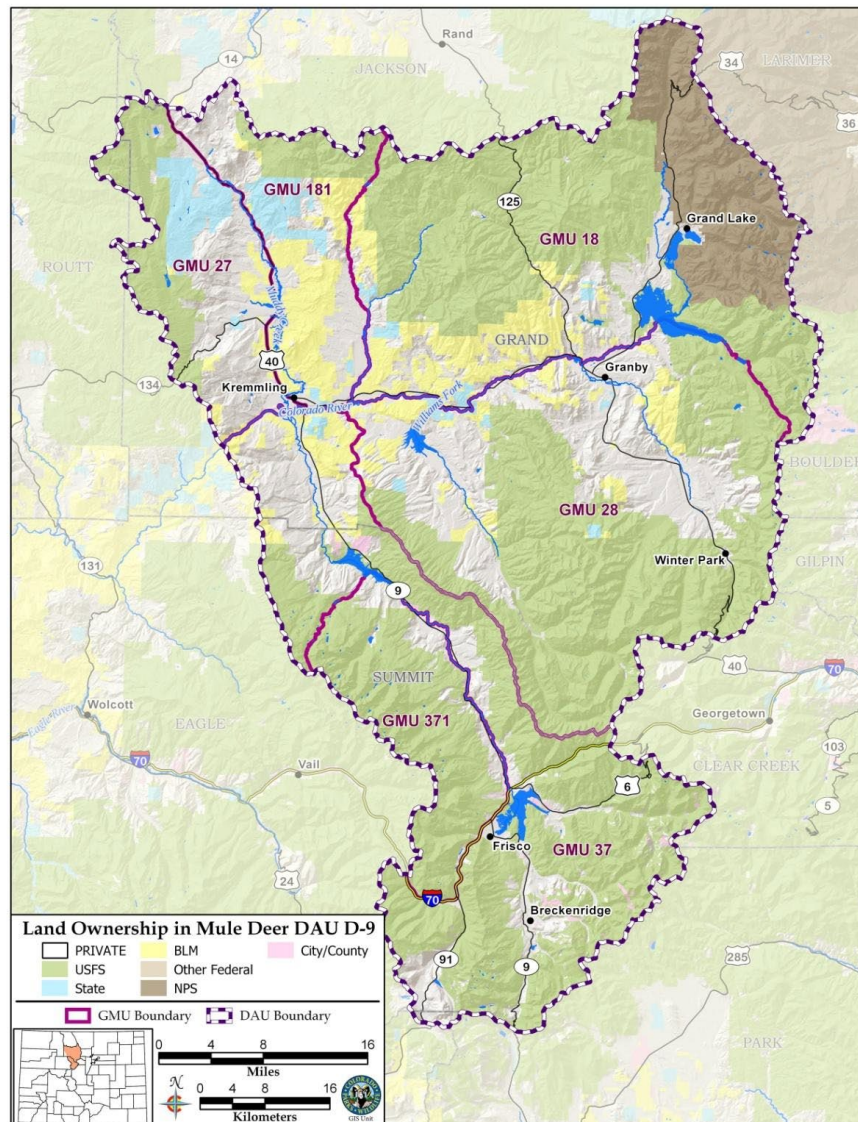
CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

To achieve the updated population objective and to maintain the current sex ratio objective, CPW will continue to set licenses annually to provide sufficient buck and doe hunting opportunity for the public and to use hunting as a management tool to keep deer densities and buck ratios at moderate levels to discourage the spread and prevalence of chronic wasting disease. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

MIDDLE PARK MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-9

Elissa Slezak, Wildlife Biologist, Hot Sulphur Springs

Middle Park Deer Herd (DAU D-9)	GMUs: 18, 27, 28, 37, 181, 371
Approval Year for last HMP: 2020	
Post-hunt population:	
Current (2020 plan) Population Objective:	10,500-14,000 deer
Post-hunt 2021 Population Estimate:	13,994 deer
Extension Preferred Alternative:	No change, 10,500-14,000 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2011 plan) Sex Ratio Objective:	30-35 bucks per 100 does
Post-hunt 2021 Sex Ratio:	observed: 28; modeled: 35
Extension Preferred Alternative:	No change, 30-35 bucks per 100 does



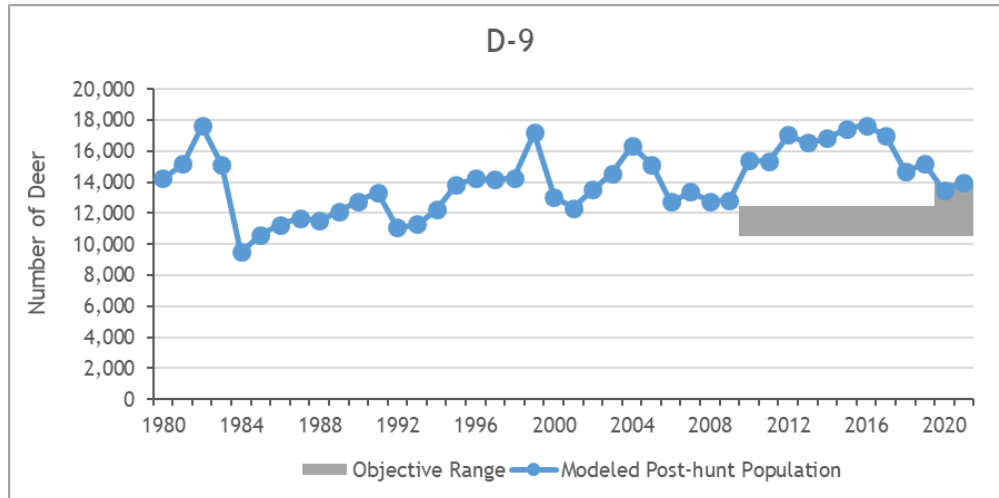


Figure D9-1. Mule deer DAU D-9 modeled post-hunt population and objective range, years 1980-2021.

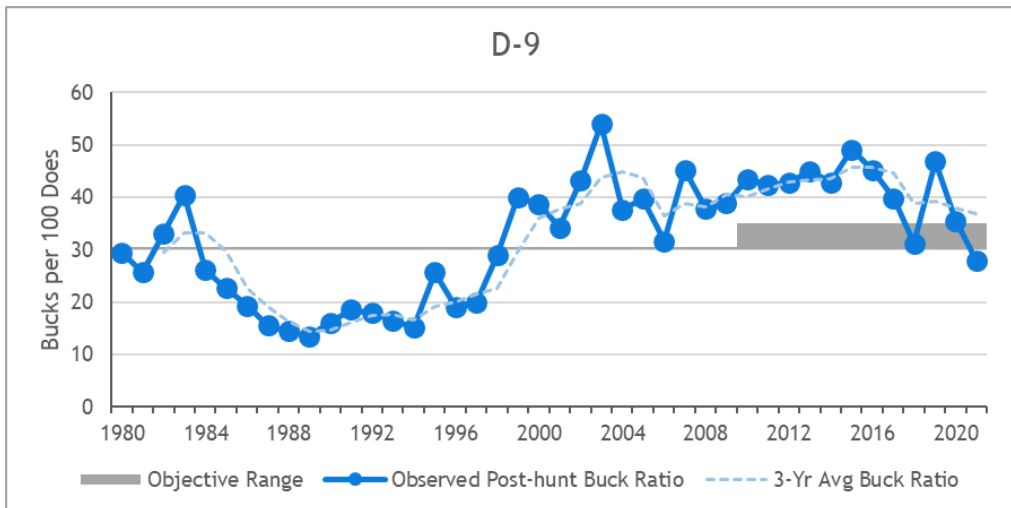


Figure D9-2. Mule deer DAU D-9 observed post-hunt sex ratio (bucks:100 does), years 1980-2021.

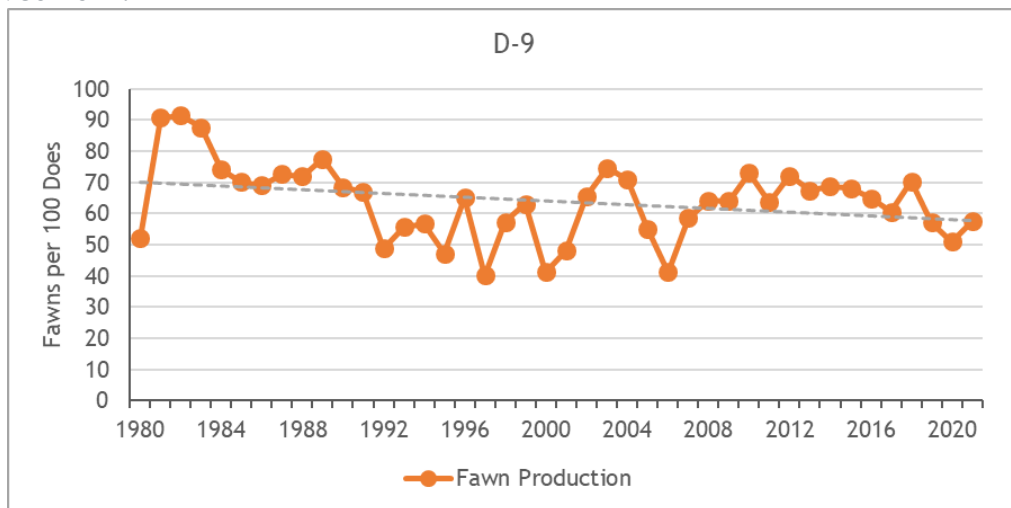


Figure D9-3. Mule deer DAU D-9 fawn production (pre-hunt fawns:100 does), 1980-2021.

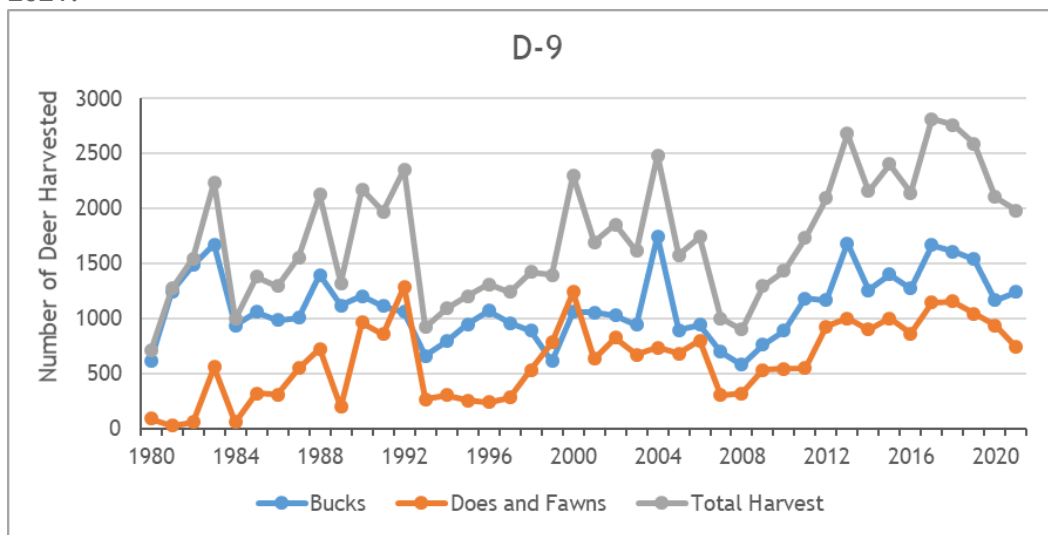


Figure D9-4. Mule deer harvest estimates in D-9, years 1980-2021.

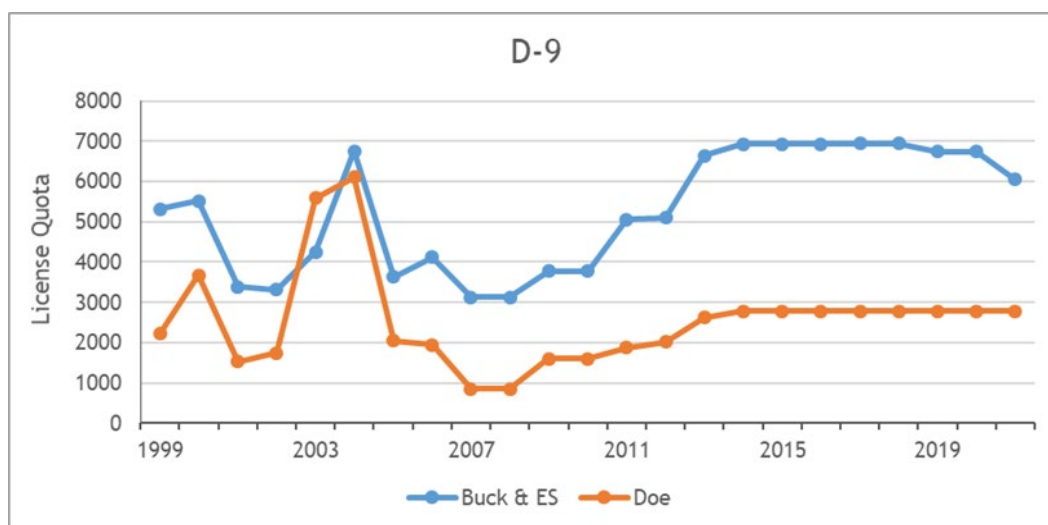


Figure D9-5. License numbers in D-9, years 1980-2021.

Description

D-9 is approximately 2,387 square miles, and land ownership is 25% Private, 9% BLM, 56% USFS, 6% NPS, 3% State Land Board, and <1% CPW. D-9 is bounded on the east and south by the Continental Divide, on the north by Hwy 40 and the Continental Divide, and on the west by the Gore Range Divide and Eagle River-Tenmile Creek Divide. D-9 includes all of Summit County, most of Grand County, and a small portion of Routt and Jackson Counties. Major towns include Kremmling, Hot Sulphur Springs, Granby, Fraser, Grand Lake, Silverthorne, Frisco, Dillon and Breckenridge. Major highways that traverse the DAU include U.S. Highway 40 from Berthoud Pass to Rabbit Ears Pass; Interstate 70 from the Eisenhower Tunnel to Vail Pass; Highway 9 from Kremmling to Hoosier Pass; and Highway 91 from I-70 to Fremont Pass. D-9 is bordered on the northeast by Rocky Mountain National Park. Middle Park is a large basin surrounded on all sides and intersected by high mountain ranges. The Gore Range, Tenmile

Range and Continental Divide all have peaks exceeding 13,000 feet in elevation. The valley floor at Kremmling is 7,300 feet in elevation. Major drainages in Middle Park include the headwaters of the upper Colorado River, the Fraser River, the Williams Fork River, Troublesome Creek, Muddy Creek, and the Blue River.

Climate

The Middle Park climate is generally dry and cold, with a majority of annual precipitation falling as snow. Drought conditions have persisted in recent decades, and Middle Park has experienced significant wildfires in recent years. Extreme temperature inversions occur during winter months, with average nighttime low temperatures between -20° to -30°F, and recorded winter temperatures as low as -64° F. The growing season is extremely short and variable. Summer daytime temperatures at lower elevations can reach into the 90° F range; however, valleys become significantly cooler than uplands during the night as colder air settles.

Precipitation ranges from only 11 inches of moisture per year in Kremmling to 20 inches per year in Grand Lake, Fraser and Summit County. A majority of the annual precipitation falls as snow between October to late April. Winter snow accumulations of 30" are typical at 9,000 to 10,000 feet in elevation. At higher elevations, more than 20 feet of snow can fall over the course of winter. Mule deer move to lower elevations as snow accumulates, seeking south facing slopes or wind-blown ridges where the snow dissipates more quickly.

Vegetation

Vegetation in Middle Park can be categorized into five broad types:

1. Cropland
2. Wetland/riparian
3. Rangeland - Sagebrush Steppe, Mountain Shrub and Grassland
4. Forestland - Pinyon-juniper, Lodgepole Pine, Aspen and Spruce-fir
5. Alpine Tundra

Seasonal Ranges

During the summer months, deer are distributed throughout the entire DAU. In the winter, deer migrate from productive summer range habitat as snow accumulates at higher elevations, shifting to limited and lower quality winter range at lower elevations. While there are some relatively large contiguous blocks of suitable winter habitat, some of these areas are in poor condition due to ongoing drought, senescence and succession of plant communities.

Deer winter range comprises 19% of the DAU's total area, with a majority occurring on BLM and private lands. Deer utilize winter ranges from about mid-December to mid-May. Major wintering areas for deer include the southern end of GMU 18, GMU 27, and GMU 181; and the northern end of GMU 37 and GMU 28. There are 139 mi² (88,814 acres) of winter concentration areas. DAU D-9 contains 38 mi² (23,070 acres) of severe winter range. During severe winters (e.g., 1983-84, 1992-1993, 2007-2008), the D-9 population has dropped due to low winter survival, particularly among fawns. Lower survival during severe winters is attributed to sustained cold temperatures and snow loads, and limited severe winter range sustaining a high density of deer.

History

CPW has conducted aerial sex and age composition surveys in D-9 since the late 1960's. Middle Park is also one of five Intensive Mule Deer Monitoring Areas in Colorado (see Appendix A).

Population

From 1989-2009, the population objective for D-9 was 10,500 animals. The deer population was relatively high in D-9 during the early 1980's through the early 1990's. In 2009, the population objective was expanded to a range of 10,500-12,500 deer. Since that time, the herd slightly declined, rebounded, and stabilized above the objective range, which was expanded again in 2020 to 10,500-14,000 deer. The current model estimates the deer population at 13,994 animals, at the high end of the current population objective range (Figure 1). Although trends of many mule deer populations have been declining throughout Colorado and the Western U.S., the D-9 DAU has remained productive.

Sex Ratios

The sex ratio has averaged 32 bucks:100 does over the last 40 years (1982-2021). The historic sex ratio objective was 30 bucks per 100 does; D-9 was below objective until 1998 when deer licenses became totally limited. Sex ratios have generally increased and have remained above objective since; objectives were expanded in 2009 to a range of 30-35 bucks:100 does. Post-hunt modeled sex ratio estimates in 2021 were 35 bucks:100 does (Figure 2), with a 3-yr average of 37 bucks:100 does.

Age Ratios (Production)

Fawn production in D-9 has ranged between a low of 40 fawns:100 does and a high of 90 fawns:100 does, averaging 68 fawns:100 does over the past 40 years (1980-2021). Post-hunt modeled fawn:doe ratio estimates in 2021 were 62.4 fawns:100 does (Figure 3), with a 3-yr average of 60.5 fawns:100 does.

Harvest

Deer harvest in D-9 has fluctuated over time, primarily because of license allocation. The 40-year averages for antlered and antlerless deer harvest are approximately 1,100 and 600, respectively (Figure 4). The three-year average for antlered and antlerless deer harvest is 1,600 and 1,100, respectively.

Significant Management Issues

1. *Limited winter range*
2. *Decline in habitat quality due to drought, fire suppression and climax plant communities*
3. *Loss of habitat due to human development*

- a. From 1970 to 2010, there was a 61% increase in developed areas within the D-9 DAU (Sushinsky et al. 2014).
4. *Habitat fragmentation and disturbance from recreation and human activities*
5. *Highways/Roadkills*
 - a. Roadkill accounts for an average of 2% mortality in Middle Park radio-collared deer for does, fawns, and bucks.
6. *Chronic Wasting Disease*
 - a. CWD was first confirmed in D-9 in 2001.
 - b. 2002 and 2003 prevalence rate ~1%.
 - c. 2018 prevalence rate in mule deer bucks: 3.2% (95% CI 2.3-4.5%, n=1,047).
7. *Competition with Elk*
8. *Predation*
 - a. From 1998-2021, an average of 4.7% of mortalities were caused by coyotes, 2.2% by mountain lions, 0.2% by black bears, and 0.1% by bobcats. 1.0% of mortalities were undetermined predation (see Appendix E).
9. *Livestock Competition*
 - a. BLM currently has 79 active allotments in the DAU and 6 inactive allotments, providing 107,157 AUMs from late June through September.
10. *Human Habituation*

Other Management Considerations

- Middle Park Mule Deer Survival Study (see Appendix A)

Strategies for Addressing Management Issues and Achieving Objectives

D-9 is managed through totally limited licenses for both antlered and antlerless harvest for all manners of take. Archery, muzzleloader, and 2nd, 3rd, and 4th season rifle licenses are available for the D-9 DAU. The 2nd and 3rd season either-sex license quotas may be adjusted to ensure a quality buck hunt for the 4th rifle season. Private land licenses provide hunting opportunities on private lands and help to disperse deer. The current management strategy has been very effective at providing a healthy (low CWD prevalence) and productive herd that offers excellent hunting opportunity. Continuing with a similar management strategy into the future will continue to provide a desired outcome for the majority of the hunting community and managers alike.

Tools to address habitat quality issues include ongoing habitat treatments on both public and private lands (including fertilization, brush beating, Spike, Dixie Harrow, thinning, seeding, burning, and pinyon-juniper thinning), and seasonal closures to protect winter range and transitional ranges during critical times of the year for mule deer.

Stakeholder Outreach and Input

In March 2020, hunters were randomly selected to complete a survey from the 2018 hunting season, and 237 respondents answered the survey. Overall, a majority of respondents were satisfied with their hunting experience, and top concerns among respondents were loss of deer habitat, disturbance, decline in habitat quality, and CWD. Complete survey results and stakeholder letters are available in the 2020 D-9 Herd Management Plan.

In 2021, hunters were randomly selected to complete the 2021 Deer Hunter Attitude Survey after the completion of their hunting seasons, and 899-1,027 respondents answered the opt-in questions for D-9. Approximately 50% of hunters were dissatisfied with the total number of deer and number of bucks seen in 2021. Slightly more than half would prefer to hunt bigger bucks less often, though a majority of resident respondents would prefer to hunt more often with less opportunity for mature bucks. Nearly 75% of respondents wished to see an increase in deer population over the next 10 years. Approximately 80% of respondents felt slightly to very crowded during their hunt, and about half the respondents were satisfied with their hunt overall, while the other half were dissatisfied.

D9 APPENDICES

APPENDIX D9-A: Middle Park Mule Deer Survival Study

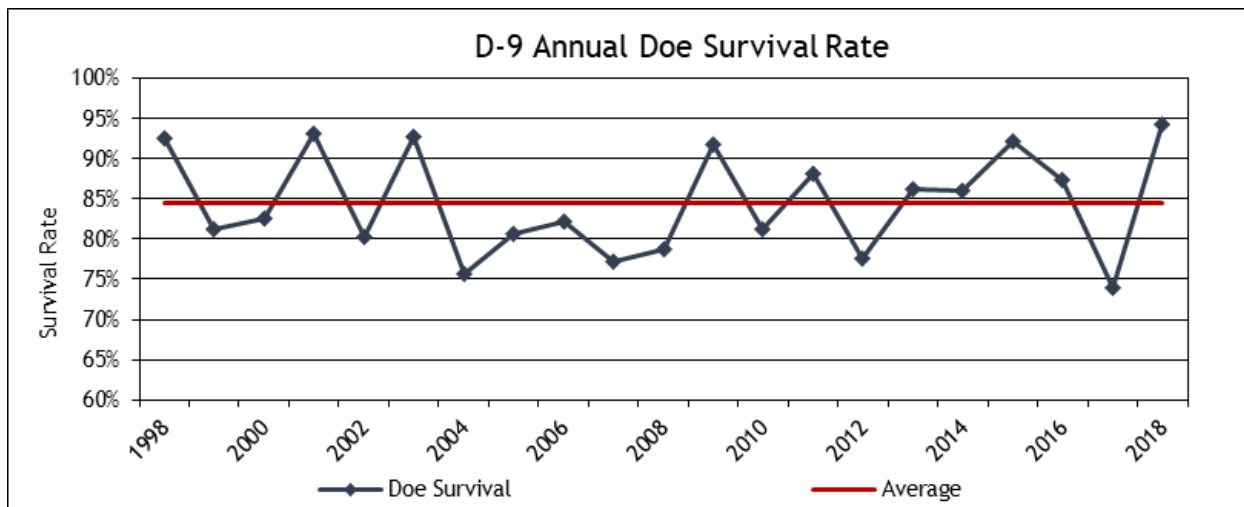
Intensive herd survival monitoring has been conducted in D-9 since 1998, which began with radio-collaring does and fawns. In 2010, bucks were added to this ongoing study. A sample of 60 fawns, 90 bucks and 90 does are maintained each year. Bucks and does are monitored from mid-December to mid-December of the following year, and 6-month old fawns are collared in mid-December and are monitored until mid-June when they are recruited into the adult population and the collars are designed to drop off. Historically, VHF collars were deployed for this study; these are being replaced over the next several years by GPS collars and currently there is a mix of both collar types on deer in D-9. Both GPS and VHF collars are equipped with mortality sensors that detect when movement ceases to occur. All collared animals are monitored throughout the year to assess survival rates and determine causes of mortality. Between 1998-2021, 5,606 mule deer have been monitored for survival.

Objectives of this ongoing survival monitoring study are:

1. To determine survival rates for both the juvenile and adult segments of the D-9 herd.
2. To identify cause-specific mortality factors within the D-9 herd.
3. To identify seasonal habitats and movement patterns of D-9 deer.

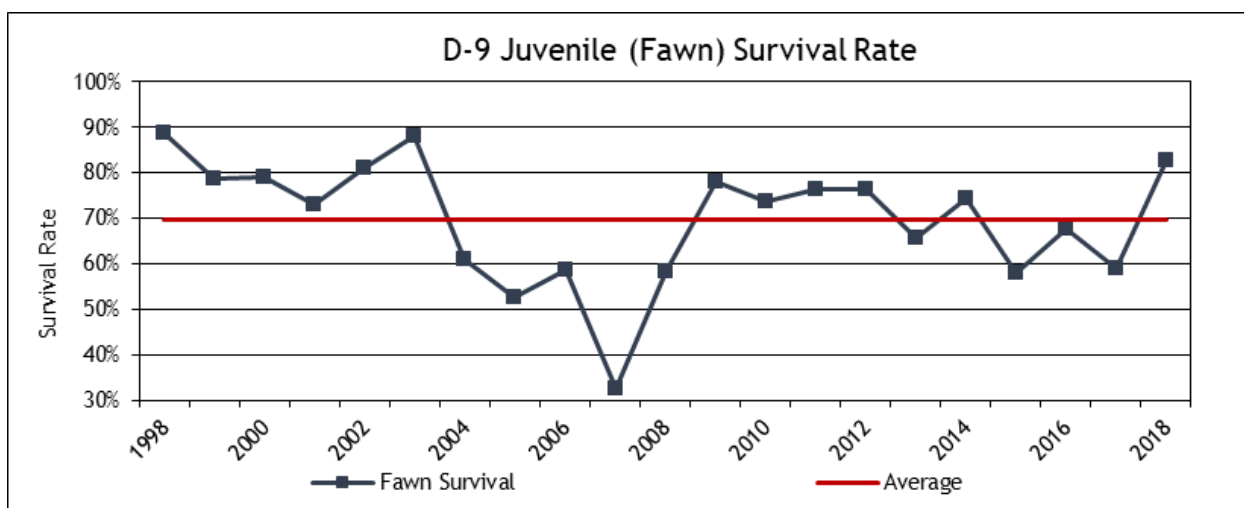
Doe Survival

From 1998-2021, estimated doe survival has fluctuated between a low of 74% survival (2017) to a high of 94% survival (2018). The 20-year average doe survival in the D-9 herd is 85%.



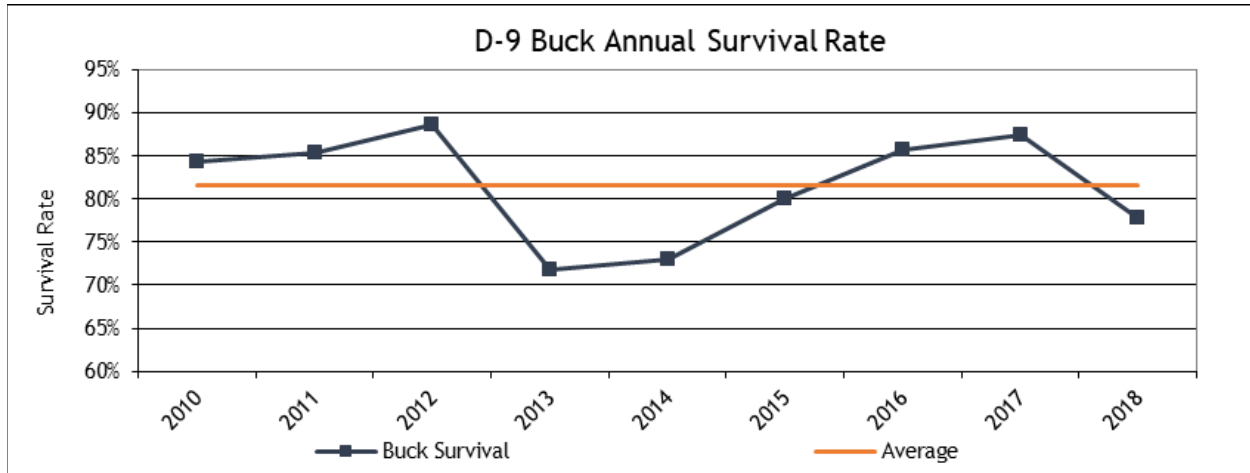
Juvenile (Fawn) Survival

Juvenile survival varies considerably with the severity of the winter, along with other factors. The lowest fawn survival measured was 33% (2007), while the highest was 88% (2003). The 20-year average fawn survival is 70%.



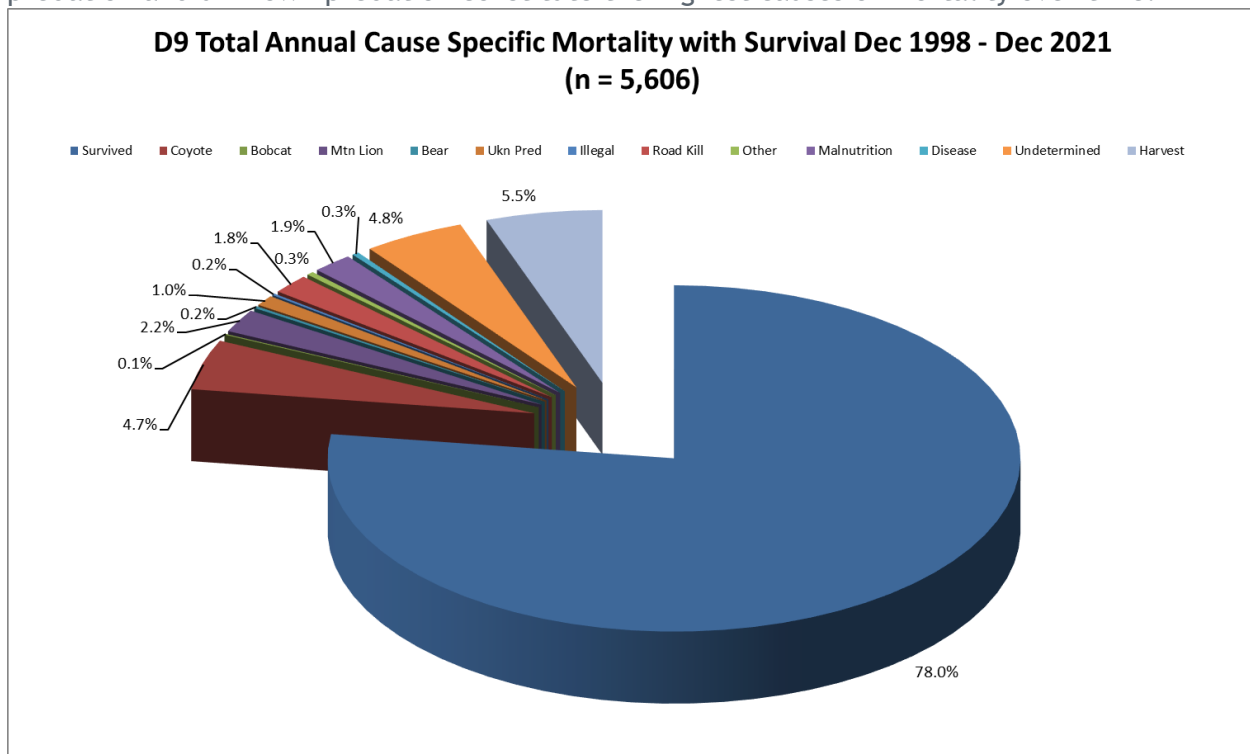
Buck Survival

From 2010-2021, the estimate has fluctuated between a low of 72% survival (2013) to a high of 89% survival (2012). The average buck survival during this time in the D-9 herd is 82%.



Total D-9 Cause Specific Mortality

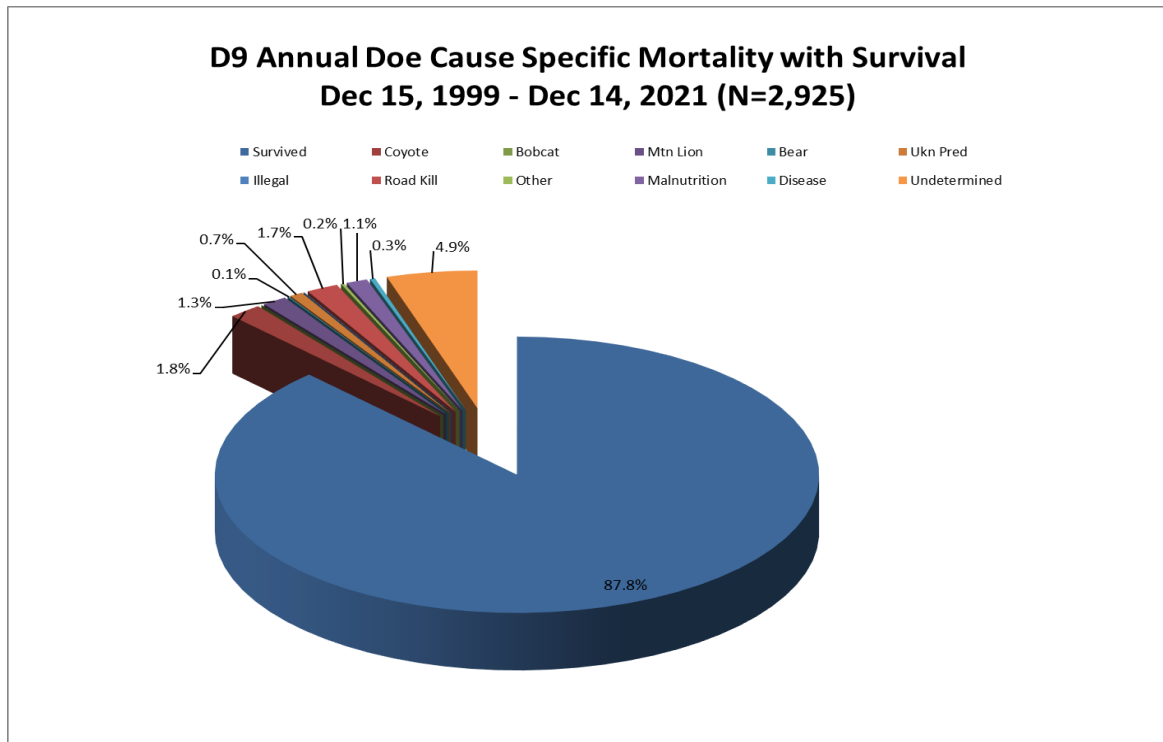
Overall survival of D-9 mule deer from 1998-2021 is 78%. Other than hunter harvest, coyote predation and unknown predation constitute the highest causes of mortality over time.



Adult Doe Cause-Specific Mortality

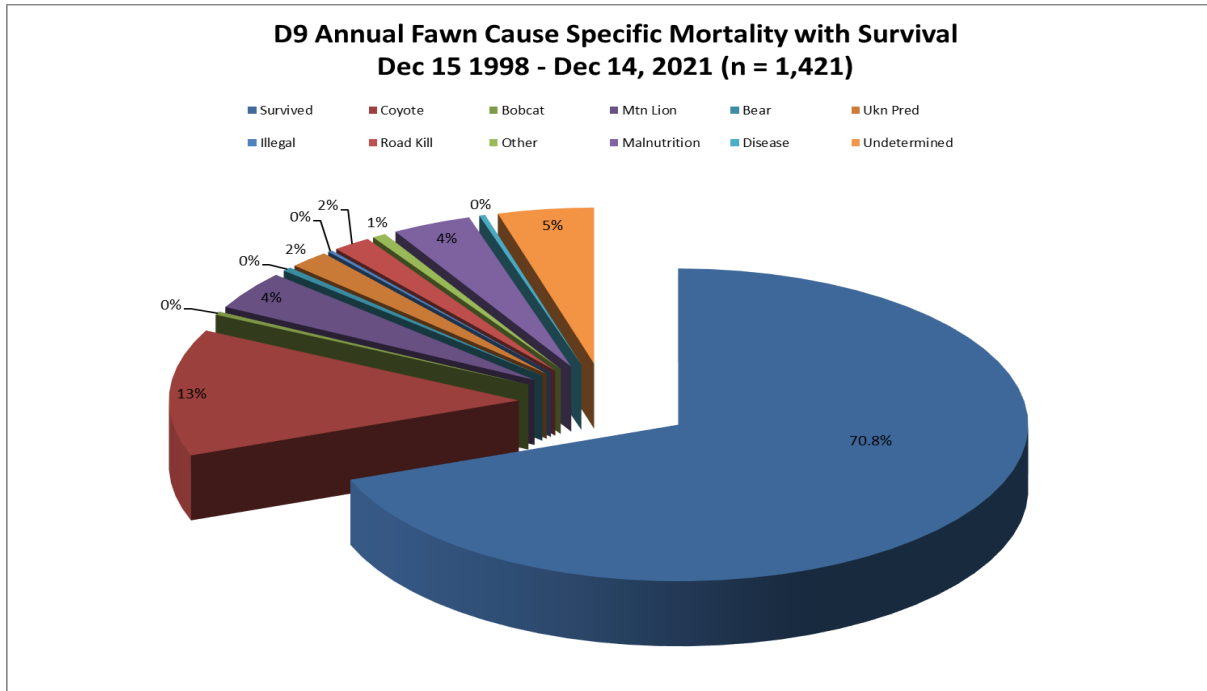
Mortality factors can be identified through timely investigation of mortalities. Two adult does collared during the first year of the study in 1998 were alive and had functioning collars until 2007. The oldest recorded age of a doe was 14+ years, from one of the two aforementioned deer. Hunting harvest is not included in the cause-specific mortality because it can be influenced by license number fluctuations set every year. "Undetermined" accounts for the largest percent of adult mortalities. This is due to the fact that some of the collared does in

the study die in the summer and decompose more quickly than during the winter. The transition from VHF to GPS collars will allow for more timely inspection of mortalities and will improve future estimation of causes. The two leading causes of known mortality for adult doe deer in Middle Park are road kills and coyotes. It is important to note that throughout the study, 88% of all collared deer have survived until the radio collar has stopped working.



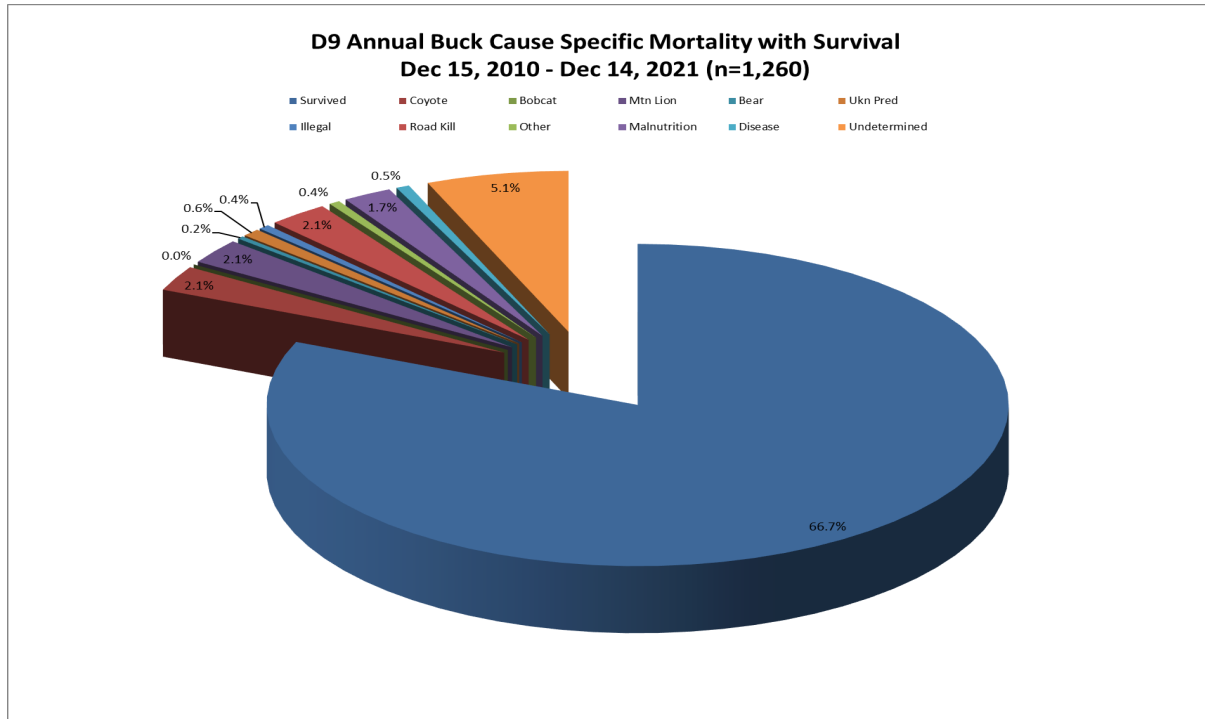
Juvenile Cause-Specific Mortality

Juvenile (fawn) survival is measured from December 15th-June 14th. 6-month old fawns are fitted with radio collars designed to drop-off in June, so as not to interfere with growth. The figure below shows the percentage breakdown of juvenile mortality factors in D-9. Coyote predation accounts for 12% of all measured juvenile mortality in Middle Park. Over time, 72% of the collared D-9 fawns survive until the radio-collar drops off.



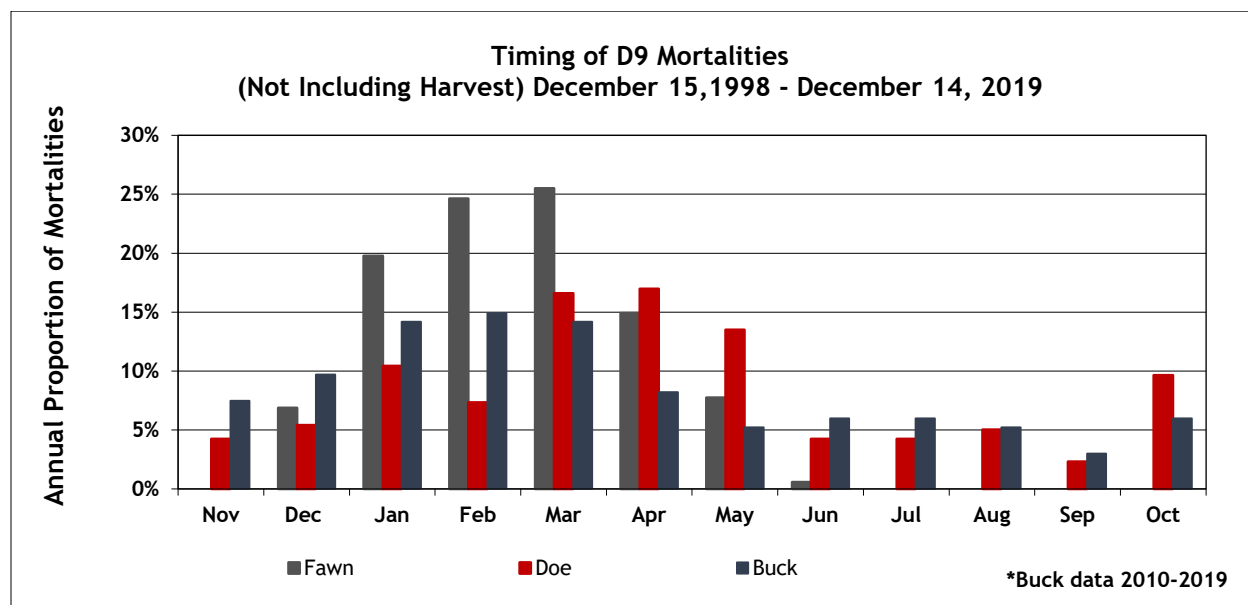
Adult Buck Cause-Specific Mortality

“Undetermined” accounts for the largest percent of buck mortalities. Similar to does, this is due to the fact that some collared bucks die during the summer and decompose before biologists are able to determine a cause. The transition from VHF to GPS collars will allow for more timely inspection of mortalities and will improve future estimation of causes. The three leading causes of known mortality for adult buck deer in Middle Park are road kills, lions and coyotes.



Timing of Mortalities

Along with survival estimates and cause-specific mortality, the survival study has allowed for collection of other pertinent data such as the timing of adult and juvenile mortalities(excluding hunter harvest). Doe deer tend to die more frequently during the late winter months (March-May). Fawn mortality occurs more often in the early winter months (January-March) perhaps due to inexperience with surviving Middle Park winters. It is important to note that once a fawn reaches 1 year of age (June 15 for survival study purposes), it is then classified as an adult until the fawn collar drops off. This explains why there is no juvenile mortality data for the Middle Park Study from June 15 through December 15. Similar to fawns, bucks tend to die at a higher rate during the early winter months (Jan-March); this occurs because during the rut (just before the onset of winter) bucks reduce foraging, invest crucial resources (i.e., body fat), and may become injured while battling, increasing their susceptibility to mortality.



APPENDIX D9-B: D-9 Hunting Licenses and Harvest Statistics

Middle Park Hunting Season History

Hunting seasons and license allocation in Middle Park has evolved since the 1960’s, based on herd productivity and hunting pressure, to the current split deer/elk combined seasons. Prior to 1971, a hunter could harvest two or more deer per year. From 1971 to 2002, hunters were limited to harvesting one deer annually. Since 2003, doe licenses have been List B, meaning hunters may have a doe license in addition to a buck or either sex deer license. In 1986, the Wildlife Commission approved either-sex archery deer licenses, limited muzzleloader deer licenses, and three combined unlimited buck and limited doe seasons as the general statewide season structure. The three combined rifle seasons were 5, 12 and 9 days in length, and were designed to more broadly distribute hunting pressure. While elk herds have generally been stable or increasing since 1986, deer herds have generally been on the decline. Several variations of the three combined rifle seasons have been used by biologists to help improve the deer herds.

In 1986, deer antler point restrictions (APR) were approved statewide, limiting harvest of bucks to those with three points or more on one antler. While APR worked well for elk by allowing yearling spike bulls to grow into branch-antlered bulls at 2 2/1 years of age, bucks did not respond well to this strategy as antler points were not correlated to age in the same way. A majority of yearling bucks grow two-point antlers but some grow 3-4 points per antler; consequently young bucks with high genetic potential were harvested before they could breed, and older bucks that did not grow more than 2 points continued to reproduce. Additionally, hunters mistakenly shot numbers of deer without the legal number of points and many of these deer were abandoned. After the 1991 hunting season, deer APR were abandoned over much of the state.

In 1992, out of a growing concern of declining mule deer populations, much of the state’s deer hunting was restricted to a three-day buck hunt. This structure was very unpopular with

hunters and was abandoned after 1994. In 1995, buck hunting was extended to the first five days of each of the three combined seasons. Buck licenses remained unlimited or over-the-counter until 1998.

Hunting licenses in D-9 became totally limited in 1998 (over-the-counter licenses were no longer issued). In 1999, all deer licenses in the state west of Interstate 25 were changed to totally limited for archery, muzzleloader, and regular rifle seasons. This was done mainly to improve the quantity and quality of the antlered deer hunts. Also, from 1999 - 2001, none of the leftover licenses from the computer drawing process were sold as leftover licenses.

In 2015, CPW began a new 5-year season structure that included:

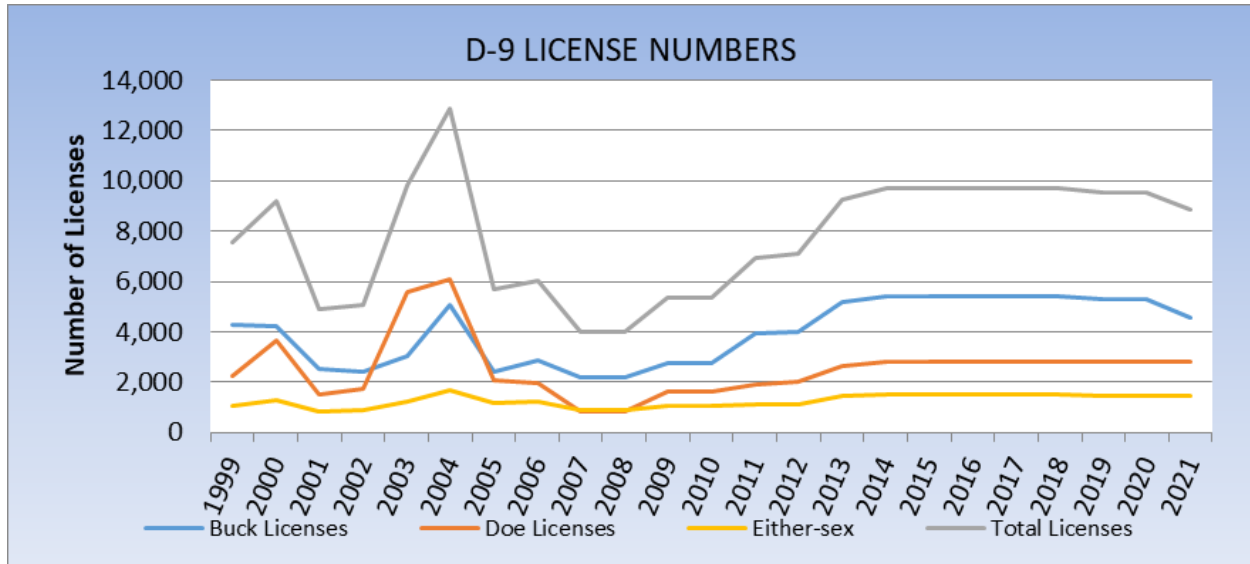
- 1) Limited buck or either-sex archery season
- 2) Limited muzzleloader season for bucks and does
- 3) Limited rifle seasons combined with elk second and third seasons for bucks and does
- 4) Highly limited fourth season for bucks combined with elk fourth season

Criteria for antlerless and 4th season buck seasons:

- 1) Each DAU that offers limited antlerless (doe) deer licenses must be within the population objective range.
- 2) Each DAU that offers a limited 4th season buck deer hunt must average more than 25 bucks:100 does over the previous three years, and be within the long-term sex ratio objective range.

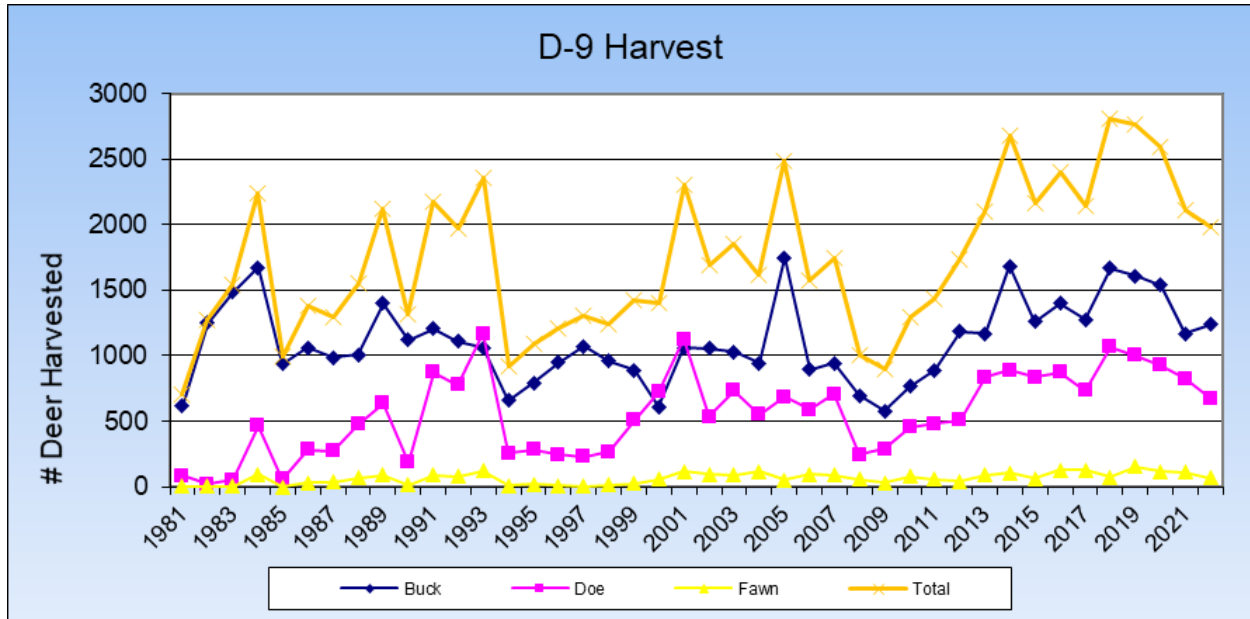
Licenses allocation

Since 1998 when all D-9 licenses became limited (i.e., no over-the-counter), the total number of licenses issued in D-9 has ranged from a low of 3,975 in 2007-2008 to a high of 12,866 in 2004. In 2004, the high number of licenses offered was an effort to reduce the population and bring buck/doe ratios closer to HMP management objectives. CWD was first discovered in D-9 in 2001, shortly before Miller and Conner (2005) determined that prevalence among bucks is twice that of does, and mature bucks have twice the prevalence of young bucks in Colorado. These factors lead CPW staff to intensify efforts to manage to HMP objectives. In 2007-2008, licenses were lowered to 3,975 because of a severe winter that resulted in high mortality. Between 2009 and 2013, licenses were steadily increased as the population rebounded from the winter of 2007-2008, and have remained fairly consistent with an average of 9,629 licenses. In 2021 and 2022, buck licenses were decreased slightly as the population fell within the high end of the objective range.



Harvest

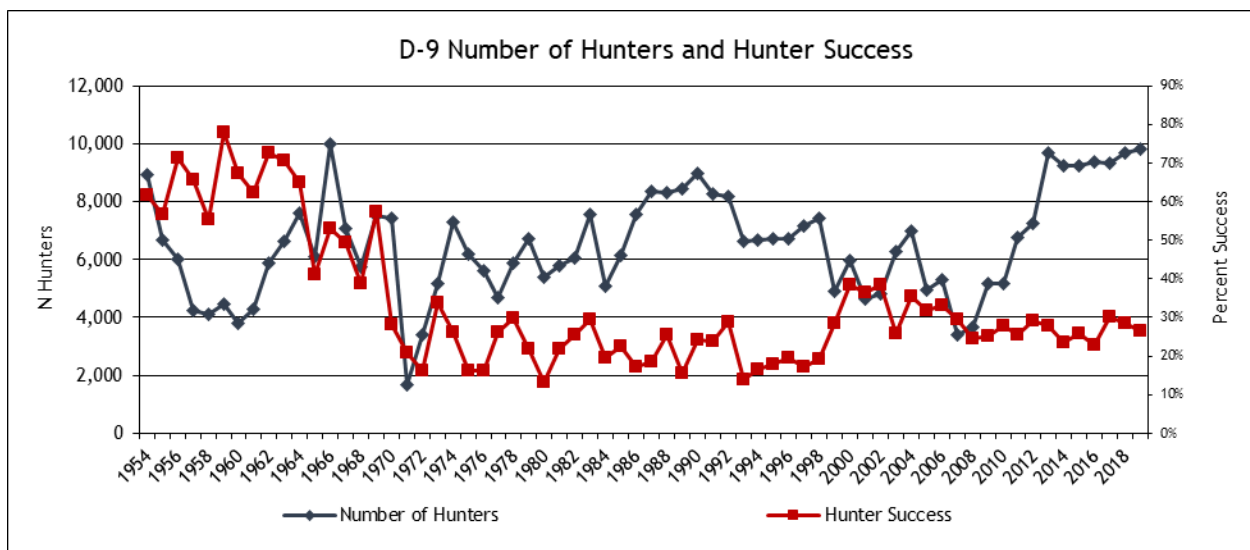
The total deer harvest (bucks, does, and fawns) is a factor that contributes to estimation of population performance over time. Between 1953 and 2021, deer harvest in Middle Park has averaged approximately 1,700 deer per year, or 1,100 antlered (bucks) and 600 antlerless (does and fawns). During the 1950's and 1960's the total harvest in D-9 averaged 3,700 deer. From the 1970's until 2008, average harvest dropped to less than 1,500 total deer per year, less than 40% of the harvest in the 1950's and 1960's. Harvest since 2011 (last ten years) has averaged 1,400 for bucks and 970 for antlerless, 2,370 total deer. This positive trend of increased harvest over the last ten years can be attributed to a productive herd, an increase in licenses issued, hunting season structure, and good hunting conditions some years (i.e., early snow that pushed deer to lower elevations making them more susceptible to hunters). Harvest data from 1953-2021 is summarized below.



Hunter Numbers and Success Rates

Total hunting pressure has remained relatively stable in Middle Park since 1954. Between 1954 and 2019, the number of hunters averaged around 6,500. The lowest number was 1,686 in 1971 when the state was restricted to statewide buck-only hunting. The highest number of hunters occurred in 1966 with 9,987 hunters. Over the last ten years, the number of hunters averaged 8,551.

Since the 1950's and early 1960's, percent success has dropped with declines in deer numbers and harvest. The highest percent success was 78% in 1959 and the lowest was 13% in 1980. During the period 1954-2019 overall success averaged 33%. Hunter success averaged around 27% from 2010-2019.



Demand and Preference Points Required

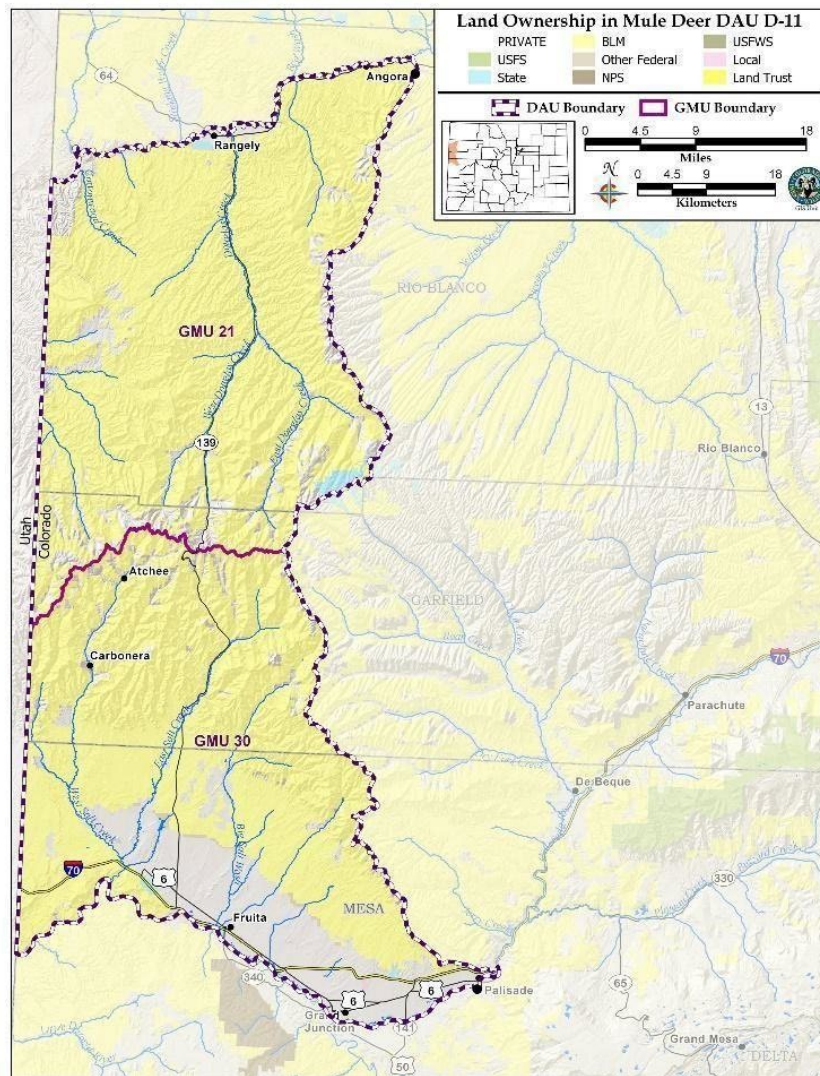
D-9 is managed to provide hunting opportunity and provides ample limited licenses to draw. In 2021, the 018 and 027 hunt code 4th season buck licenses required 2 preference points (both sold out with 1st choice applicants). Muzzleloader and 3rd season buck licenses sold out as 2nd choice, and 2nd season sold out as 3rd choice for both hunt 018 and 027 hunt codes. All antlerless licenses and either sex private land rifle licenses were sold as leftovers.

BOOKCLIFFS HERD MANAGEMENT PLAN

DATA ANALYSIS UNIT D-11

Genevieve Fuller, Wildlife Biologist, Grand Junction

Bookcliffs Deer Herd (DAU D-11)	GMUs: 21 and 30
Approval Year for last HMP: 2021	
Post-hunt population:	
Current (2021 plan) Population Objective:	5,000 - 8,000 deer
Post-hunt 2021 Population Estimate:	8,662 deer
Extension Preferred Alternative:	No change, 5,000 - 8,000 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2021 plan) Sex Ratio Objective:	27-32 bucks per 100 does
Post-hunt 2021 Sex Ratio:	observed: 32; modeled: 33
Extension Preferred Alternative:	No change, 27-32 bucks per 100 does



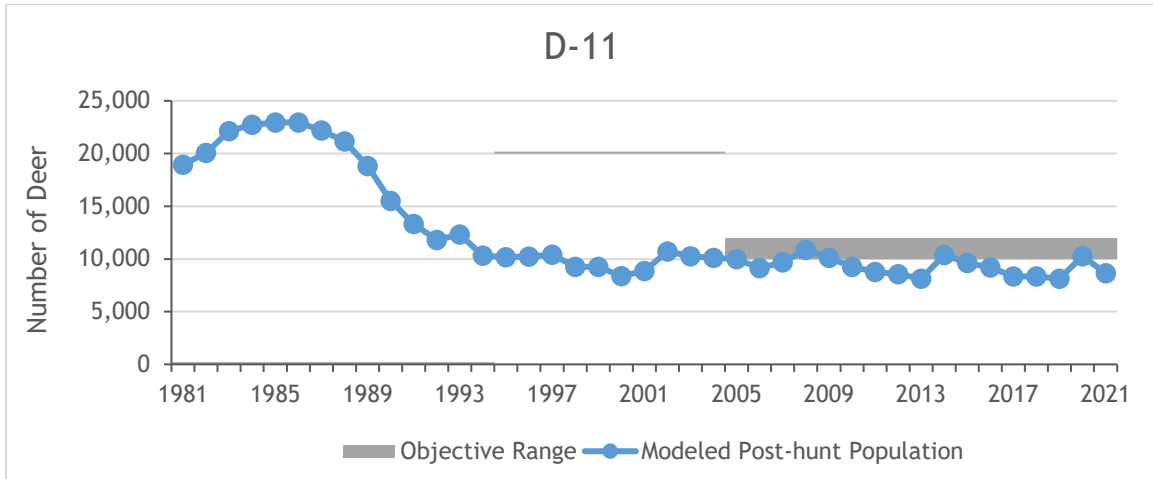


Figure D11-1. Deer DAU D-11 modeled post-hunt population and objective range, years 1981-2021.

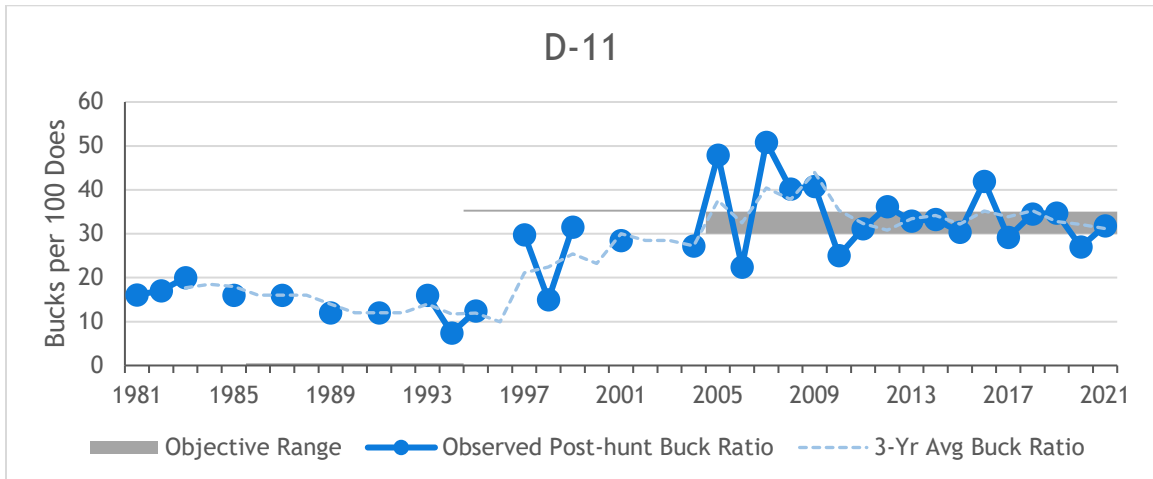


Figure D11-2. Deer DAU D-11 observed and modeled post-hunt sex ratio (bucks:100 does), years 1981-2021.

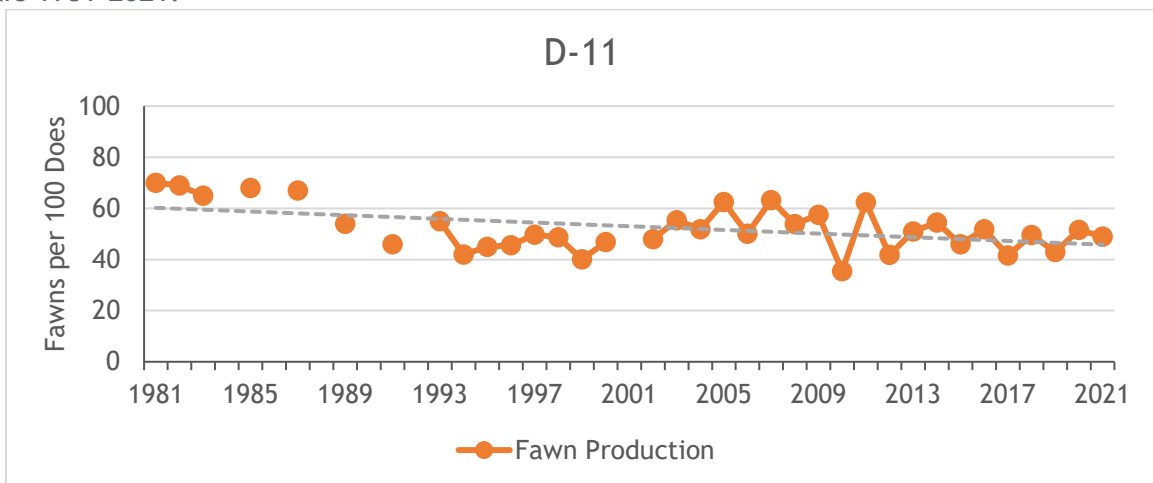


Figure D11-3. Deer DAU D-11 fawn production (observed post-hunt fawns:100 does ratio, years 1981-2021)

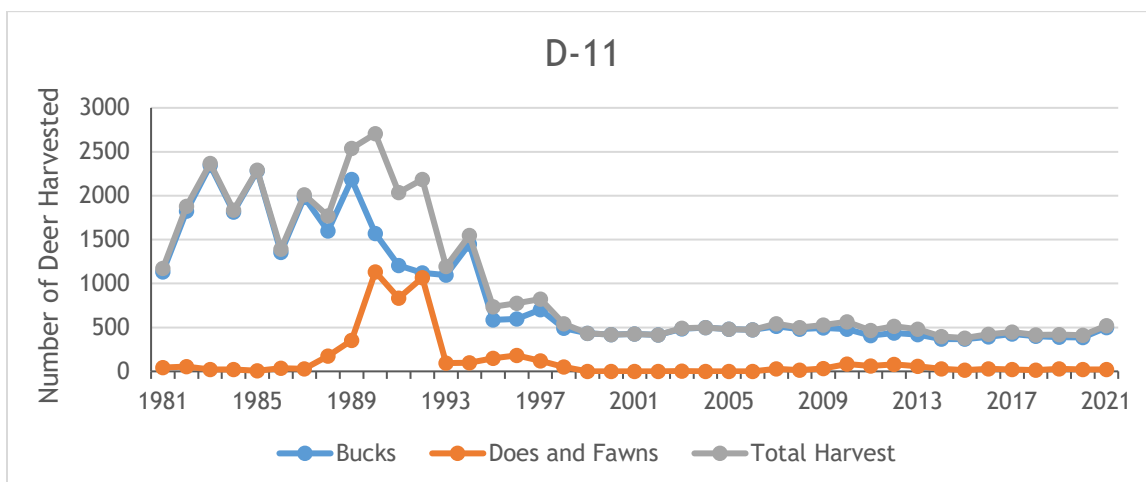


Figure D11-4. Deer harvest estimates in D-11, years 1981-2021.

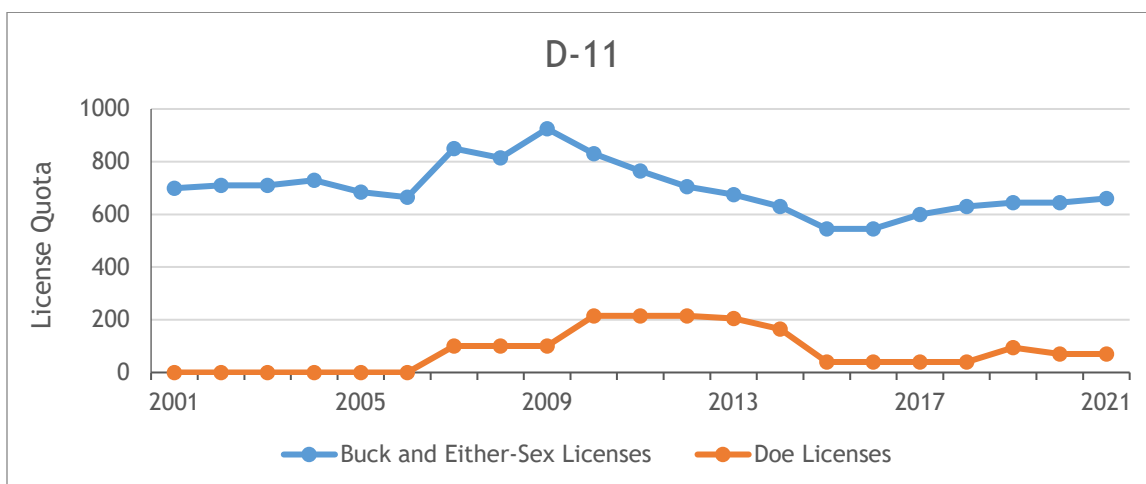


Figure D11-5. Deer License Quotas in D-11, years 2001-2021.

Background Information

The Bookcliffs deer herd (DAU D-11) is located in west central Colorado and includes portions of Mesa, Garfield, and Rio Blanco Counties. The D-11 DAU (Data Analysis Unit) consists of Game Management Units (GMUs) 21 and 30. The Bureau of Land Management (BLM) manages approximately 80% of D-11 and privately owned lands comprise the remaining 19%. The entire DAU encompasses approximately 4,555 km². Human population centers occur on the periphery of the DAU in the cities and towns of Grand Junction, Fruita, and Rangely.

D-11 lies atop significant deposits of natural gas and oil shale that is open to mineral extraction. Livestock grazing is an important land use on public and private lands, while hay and row crops are grown on private lands at lower elevations. Elevations range from approximately 4,600 ft. where the Colorado River meets the Utah state line to over 8,800 ft. along the boundary between the two GMUs. Topography includes flat, low elevation desert and agricultural areas, steep foothills, and narrow ridges often bisected by nearly vertical canyon walls.

Mule deer generally occupy the entire DAU, migrating from low-elevation winter ranges to high-elevation summer ranges in response to available forage and snow conditions. Migration also occurs across the state boundary into Utah. Small resident herds live year-round in the Grand Valley, relying on agricultural and low-density residential developments for forage.

Since 2004, the D-11 herd has plateaued at around 7,000-10,000 deer (Figure 1). Fawn:doe ratios have been declining steadily since 1981, from 70 fawns:100 does in 1981 to 49 fawns:100 does in 2021 (Figure 3). This decline mirrors fawn: doe ratio declines across much of western Colorado. Buck:doe ratios in D-11 have been increasing slowly and are generally within or near the current sex ratio objective range of 30-35 bucks:100 does (Figure 2). This unit has been managed for older age-class and quality buck harvest since 1995.

Significant Issues

Significant issues facing this deer herd include declining fawn:doe ratios, population stagnation, recreation, energy development, disease, and degraded habitats due to feral horses, long-term drought, over-utilization, and wildfire.

The deer population in D-11 has been stagnant at historically low levels for nearly two decades. Fawn:doe ratios are declining and buck:doe ratios are high. The current prevalence of Chronic Wasting Disease (CWD) in D-11 is estimated at 3%, which is below the management intervention threshold of 5%. However, two deer DAUs adjacent to D-11, D-07 and D-41 have a CWD prevalence above 5%.

Much of D-11 lies atop significant deposits of natural gas and oil shale open to mineral extraction. Energy development is concentrated on the state line and Texas Mountain areas. Although inherent fluctuations in commodity prices as well as political considerations affect the demand for oil & gas and resulting development intensity, oil and gas wells and the associated infrastructure have increased dramatically across D-11 since 1970. Over 22% of winter range in D-11 is within 700 m of a well pad, and nearly 80% is within 2,700 m. These calculations do not account for the impact of associated infrastructure such as major roads, they solely account for oil & gas wells.

Within D-11, an estimated 365 feral horses roamed across the 517 km² West Douglas Herd Area prior to the 2021 roundup. Currently, the BLM estimates there are 50-60 horses in the area, which is not managed as a Herd Management Area by the BLM. These areas are critical to the sustainability and resilience of the D-11 herd and the high levels of non-designated horse use contribute directly to habitat degradation. The habitat encompassed by the DAU is fragmented and degraded throughout much of the herd's important ranges. Although the condition of the landscape varies across the DAU, much of the habitat in D-11 is degraded due to drought, overgrazing by livestock, energy development, feral horses and conversion from native to invasive plants. Long-term drought and the impacts to the forage and wildlife in D-11 are severe, cumulative, and long-lasting.

Pine Gulch Fire

The Pine Gulch Fire, the third largest wildfire in state history, was sparked by lightning on July 31, 2020. The fire burned more than 567 km² before it was fully contained in late September. Most of the fire burned in D-41 but more than 194 km² in GMU 30 were also

burned (Figure 6). Approximately 145 km² of winter range and 90 km² of summer range in D-11 were impacted. It is likely that the impacts from the Pine Gulch Fire will decrease survival of wintering deer in GMU 30 for the next 20 years.

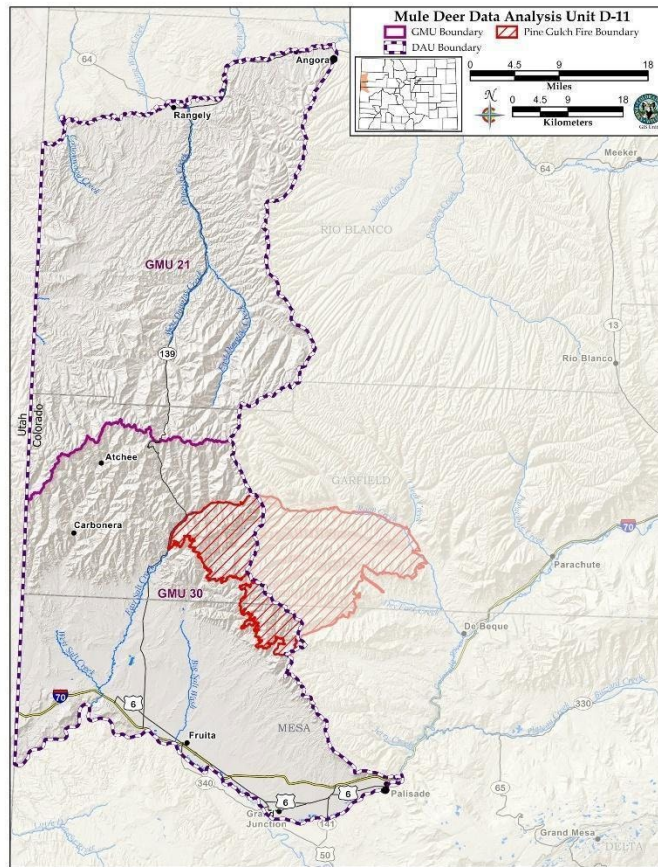


Figure D11-6. Pine Gulch burn location and extent in Data Analysis Unit D-11 in west-central Colorado.

In late 2020, BLM, CPW and private landowners collaborated to identify approximately 20,000 acres of the burned area for re-seeding with native vegetation. Approximately 1,500 acres were identified as high-priority wildlife habitat and received a higher proportion of forb and shrub seeds to have the greatest benefit to deer and elk.

Stakeholder Outreach and Input

An initial public survey was conducted in the summer of 2020 that contacted over 2,000 hunters and other stakeholders. It yielded responses from 481 individuals. A 30-day public comment period was advertised on the CPW website. CPW also sent a draft to the Bureau of Land Management and presented it to the Mesa, Garfield, and Rio Blanco County Commissioners, and the White River Habitat Partnership Program Committee. The feedback from this outreach effort were incorporated into the plan and objective alternatives.

Management Alternatives

The preferred alternatives of 5,000 to 8,000 deer and 27 - 32 bucks:100 does were approved by the commission in May of 2022. We are not seeking to update herd management for D-11 at this time.

2021 CPW Commission Approved Objectives:

Post-hunt Population

5,000-8,000 deer

The D-11 herd, while remaining mostly stable over the last two decades, hovering between 8,000 - 9,000 animals, has shown a slow decline suggesting it has become stagnant. The slightly wider objective range for this alternative would allow for more flexibility in dealing with issues that could change significantly during the 10 years that this herd management plan will be in effect. During times of drought when habitat conditions are poor, the population could be drawn down to levels lower than it currently is by harvesting more bucks, which simultaneously addresses potential disease issues. In the event that drought wanes, competition with feral horses is reduced, and habitat conditions improve, the herd could be allowed to increase back to current or slightly higher levels. Recovery of the Pine Gulch Fire area has potential to see improvements in habitat production for deer over the next 5 - 10 years if given the opportunity to recover.

Post-hunt buck ratio

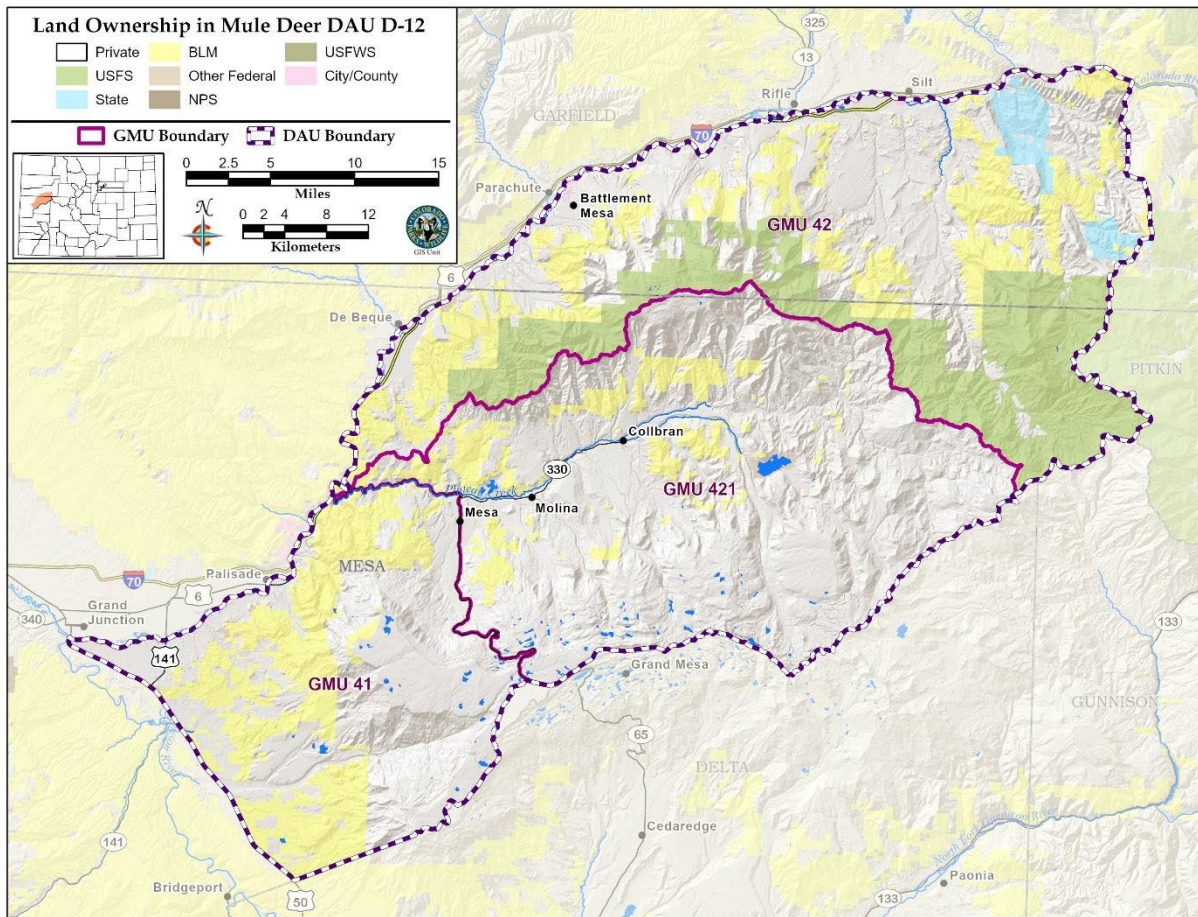
27-32 bucks:100 does

Since 1995, when all deer licenses in D-11 were limited, buck:doe ratios have doubled, while the total population size and winter fawn:doe ratios have decreased approximately 20%. Although high buck: doe ratios are not the singular cause of the diminished and stagnant population size, it may be contributing to the poor herd performance. In addition, low hunting pressure associated with management strategies favoring higher buck:doe ratios are linked with higher prevalence of chronic wasting disease (Miller et al. 2020). Proactive management of chronic wasting disease includes long-term decreases in deer densities and buck:doe ratios. This buck: doe ratio allows CPW to decrease the number of bucks slightly in an effort to reduce the spread of CWD between D-11 and adjacent deer units. Allowing for a small increase in buck harvest may also address pressures from poor range conditions, resulting in improved herd performance.

GRAND MESA NORTH HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-12

Genevieve Fuller, Wildlife Biologist, Grand Junction

Grand Mesa North Deer Herd (DAU D-12)	GMUs: 41, 42, and 421
Approval Year for last HMP: 2010	
Post-hunt population:	
Current (2010 plan) Population Objective:	17,000 - 23,000 deer
Post-hunt 2021 Population Estimate:	16,550 deer
Preferred Alternative:	17,000 - 23,000 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2010 plan) Sex Ratio Objective:	25-30 bucks per 100 does
Post-hunt 2021 Sex Ratio:	observed: 25; modeled: 24
Preferred Alternative:	25-30 bucks per 100 does



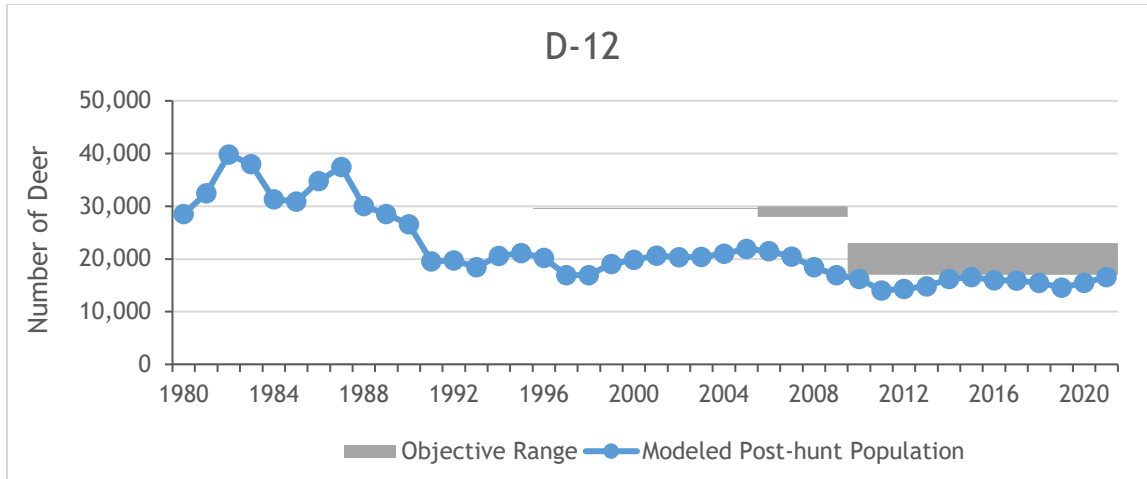


Figure D12-1. Deer DAU D-12 modeled post-hunt population and objective range, years 1980-2021.

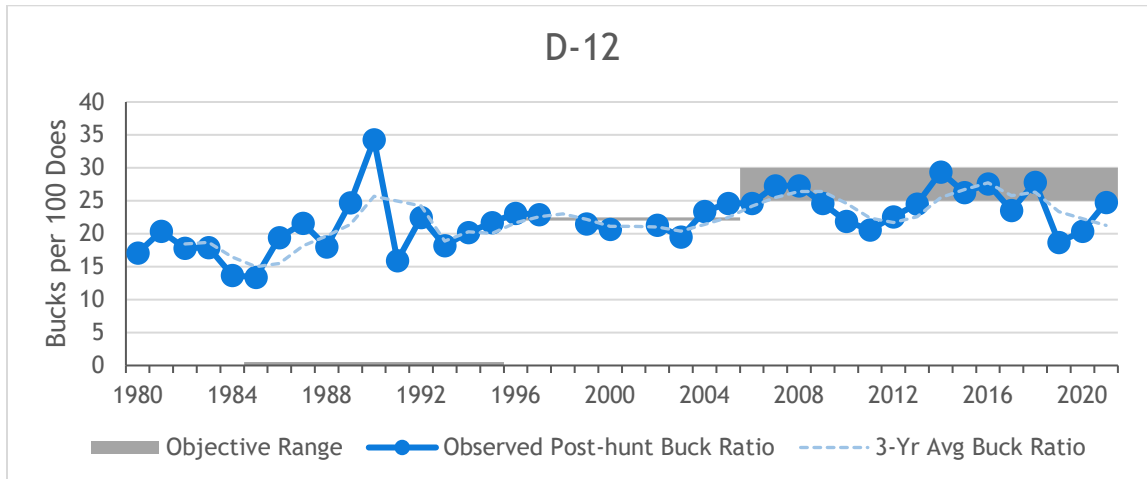


Figure D12-2. Deer DAU D-12 observed and modeled post-hunt sex ratio (bucks:100 does), years 1980-2021.

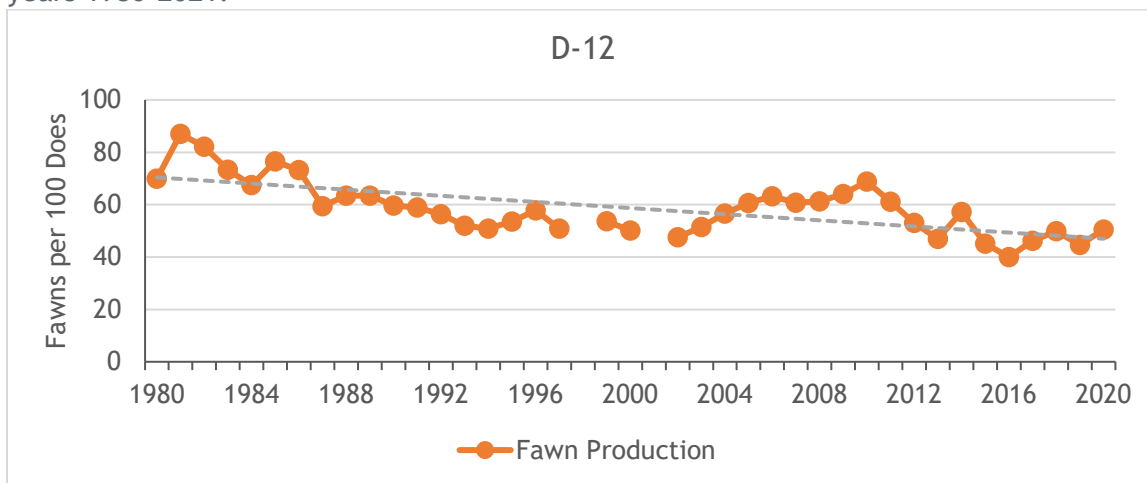


Figure D12-3. Deer DAU D-12 fawn production (observed post-hunt fawns:100 does ratio, years 1980-2021)

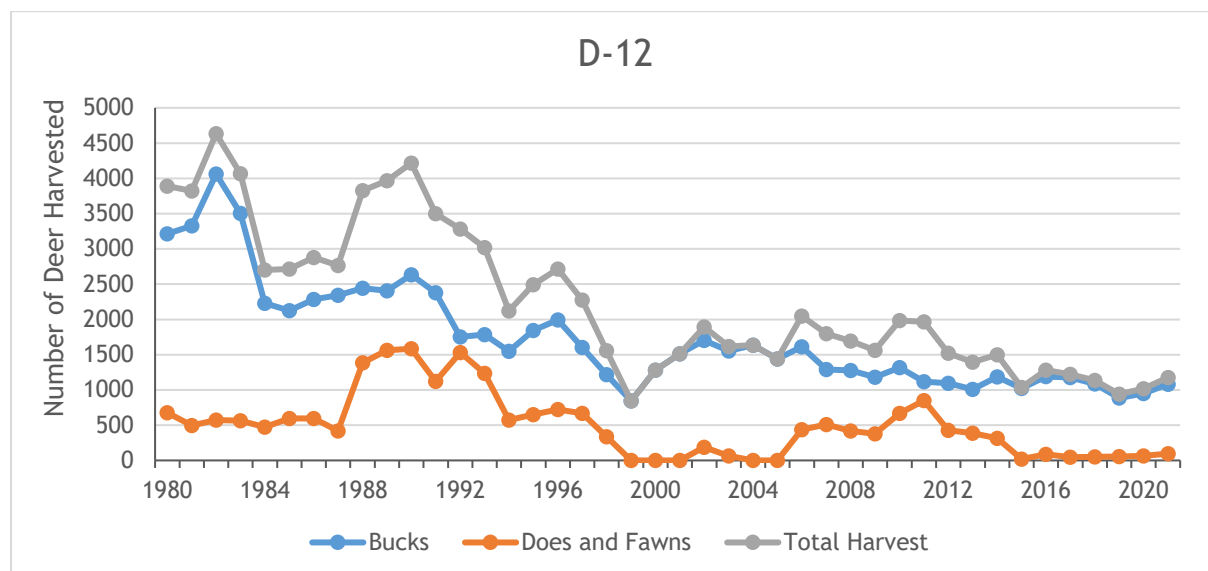


Figure D12-4. Deer harvest estimates in D-12, years 1980-2021.

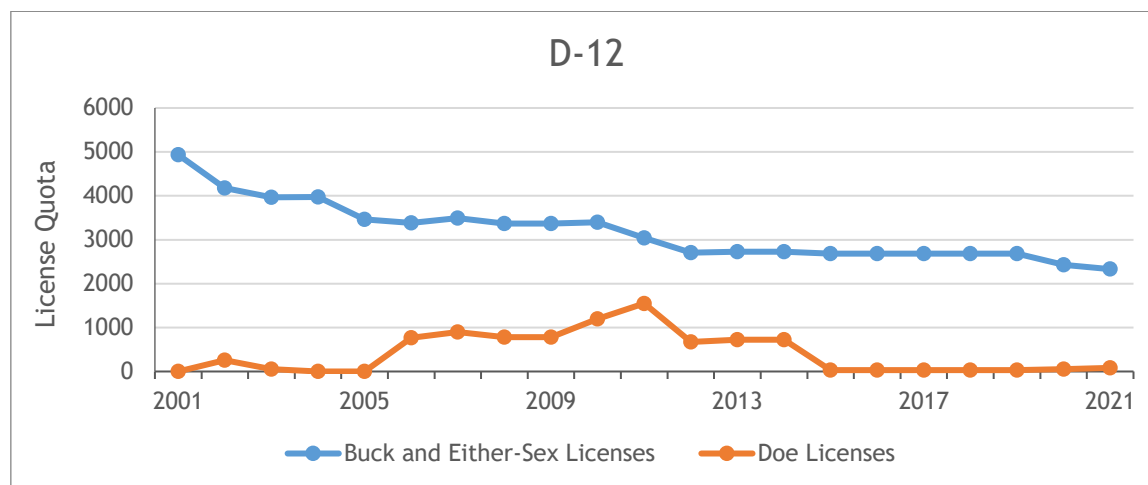


Figure D12-5. Deer License Quotas in D-12, years 2001-2021.

Background Information

The North Grand Mesa D-12 DAU is located in west-central Colorado and includes the north side of the Grand Mesa, directly east of Grand Junction. Approximately 60% of the lands within this DAU are public property. About 38% is managed by the United States Forest Service (FS) and about 21% by the Bureau of Land Management (BLM). Privately owned lands make up 39% of the total. Less than 1% is managed by the State of Colorado.

The main topographic feature of this DAU is the Grand Mesa, which is a high, flat-topped mountain, formed by volcanic basalt activity. Elevations vary from about 11,000 feet on Grand Mesa in the south-central portion of the DAU, to the floodplain of the Colorado River at approximately 4,600 feet near Grand Junction. The Colorado River forms the northern boundary of the DAU. Interstate 70 parallels the Colorado River, forming a significant barrier which restricts deer movements in and out of the DAU throughout the northern portion of the

unit. Along the western boundary and west portions of the southern boundary the desert-like open terrain acts as another natural barrier that inhibits deer movements in and out of the DAU. Deer are forced by deep snows to migrate to lower terrain surrounding the Grand Mesa during the winter.

In the early 2000s, deer numbers increased slightly in D-12, but began to fall in the late 2000s, early 2010s. The population has stagnated just beneath the 2010 population objective of 17,000 - 23,000 deer for the last 10 years. Updated models in use since 2021 estimate approximately 16,550 deer (Figure 1). Fawn production in the DAU has been in decline, much like many other Western deer herds. 2021 estimates put fawn:doe ratios at 58.8 fawns per 100 does (Figure 3). Early records in the 1980's show that total buck: doe ratios were around 17 bucks: 100 does. These ratios have been in large part due to limited male licenses implemented in 1995. This DAU has been managed for hunter opportunity not high quality buck hunting. Post-hunt classifications in 2021 observed 24.7 bucks: 100 does (Figure 2).

Significant Issues

The primary issues involve habitat quality and quantity, particularly on winter ranges, energy development, and increases in housing and recreational development.

In D12, the elk population has increased steadily until just recently. There is some concern that the elk herd has negatively impacted the deer herd through direct competition for spatial and forage resources. Predation by the high density of bears and persistent drought could also be factors in low fawn: doe ratios and population decline.

In many areas in DAU D-12, the range and browse conditions, specifically in winter ranges, are of significant concern. Although browse conditions are generally good, degraded areas are more common on transitional and winter ranges. Generally, the habitat quality and quantity decline has been caused by fire suppression, persistent drought, invasive weeds, and development.

The DAU has had substantial development in areas that were once part of deer winter range, particularly along the I-70 corridor. Ranches have been subdivided and natural habitat quality is significantly reduced by fragmentation. This includes direct loss of habitat and the effective loss of surrounding habitat due to increased human activity. All this new development has combined to reduce the amount of useable winter range. The Rifle, Silt, New Castle, Collbran and Mesa areas have all, in the last decade, seen a rapid development of housing in areas that once were deer winter ranges. Additionally, recreational development in the form of hiking, mountain biking and off-road vehicle trails has increased in the last few years. The usage of these trails has also increased dramatically. Energy development has been an issue in D-12 over the last few decades. Recently, more solar developments have been proposed in winter ranges for deer in the area.

Stakeholder Outreach and Input

In the fall of 2022, these objectives has been presented to the Grand Mesa HPP Committee, Garfield County Commission and Mesa County Commission.

Management Objectives

Considering the current trends, feedback from the public and issues facing this deer herd, CPW has developed preferred objectives for this DAU.

Post-hunt Population

17,000 - 23,000 (Status quo)

For most of the life of the 2010 plan, the population has remained just below objective. Between 1997 and 2010, the average population estimate has held at about 19,000 deer. This is well within the population objectives set in 2010 of 17,000 - 23,000. There is potential within possible habitat improvements and management actions to increase the population within the objective range. The current population estimation of 16,550 is only 450 deer shy of the lower end of the objective range. CPW recommends maintaining a population objective of 17,000 to 23,000 deer.

Post-hunt buck ratio

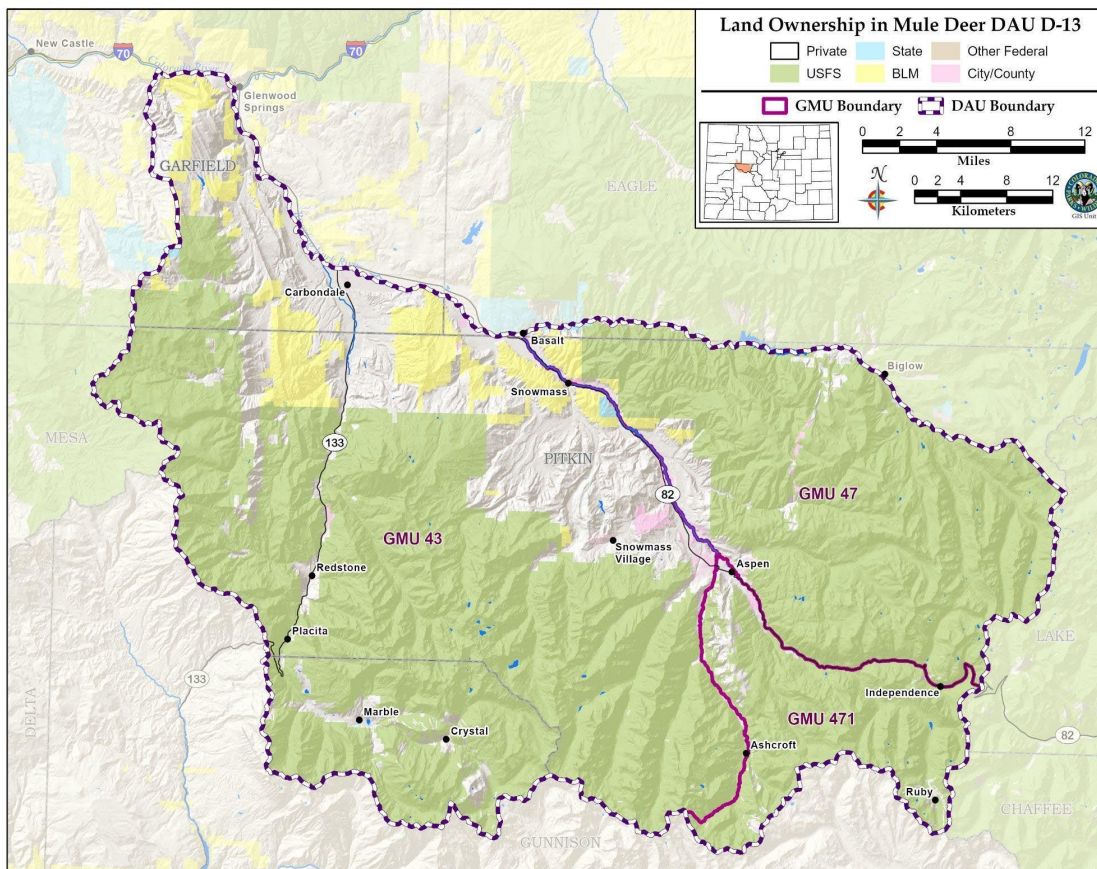
25 - 30 bucks: 100 does (Status quo)

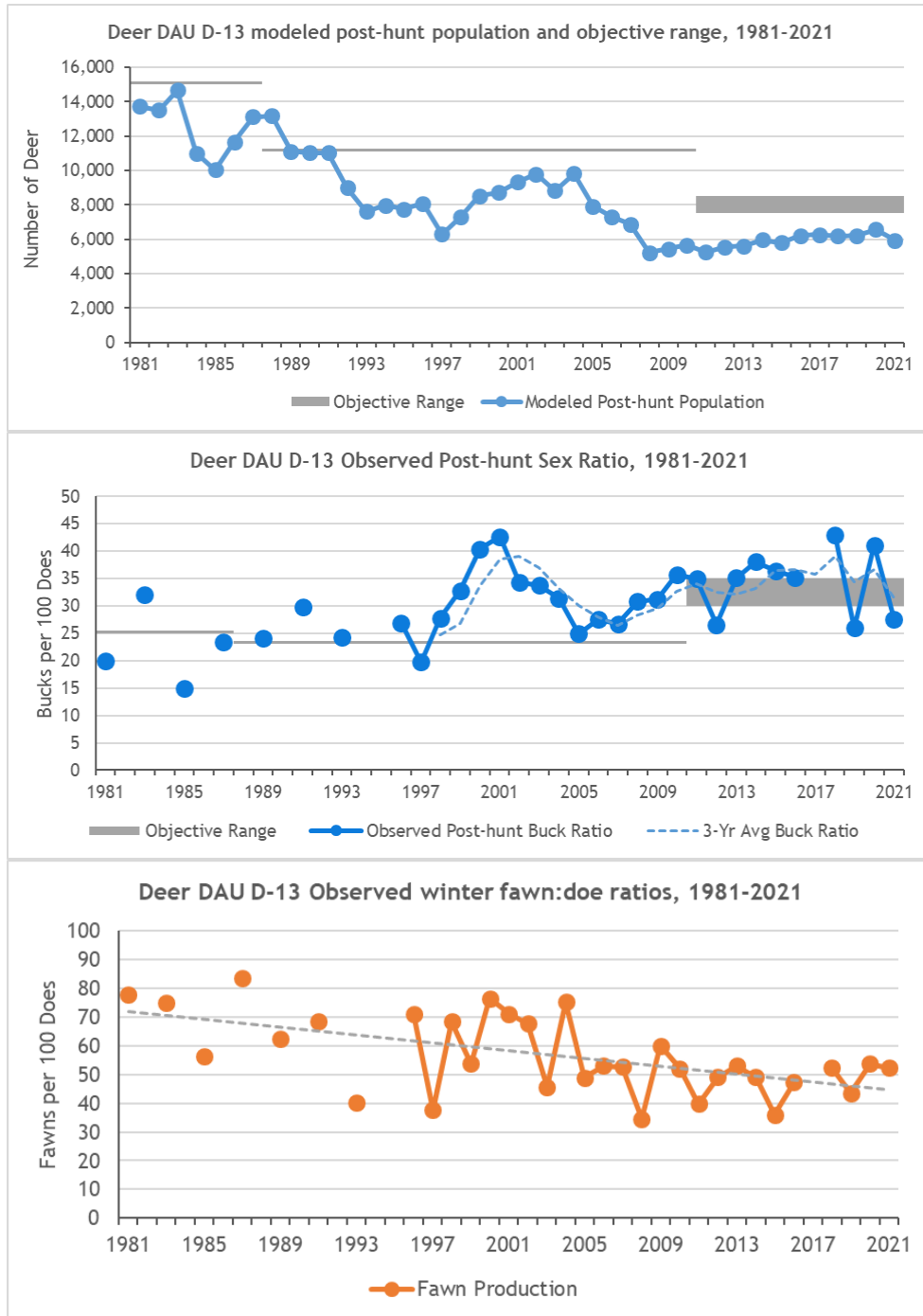
The sex ratio for this DAU has fluctuated in and out of objective for the life of the previous (2010) HMP. The 2021 sex ratio is only slightly outside of objective at 24.7 bucks: 100 does. The current objective range at 25 - 30 bucks per 100 does is a reasonable metric to continue the management of this herd at. This DAU is managed for buck hunting opportunities not mature bucks hunting. CPW recommends status quo for sex ratio objectives.

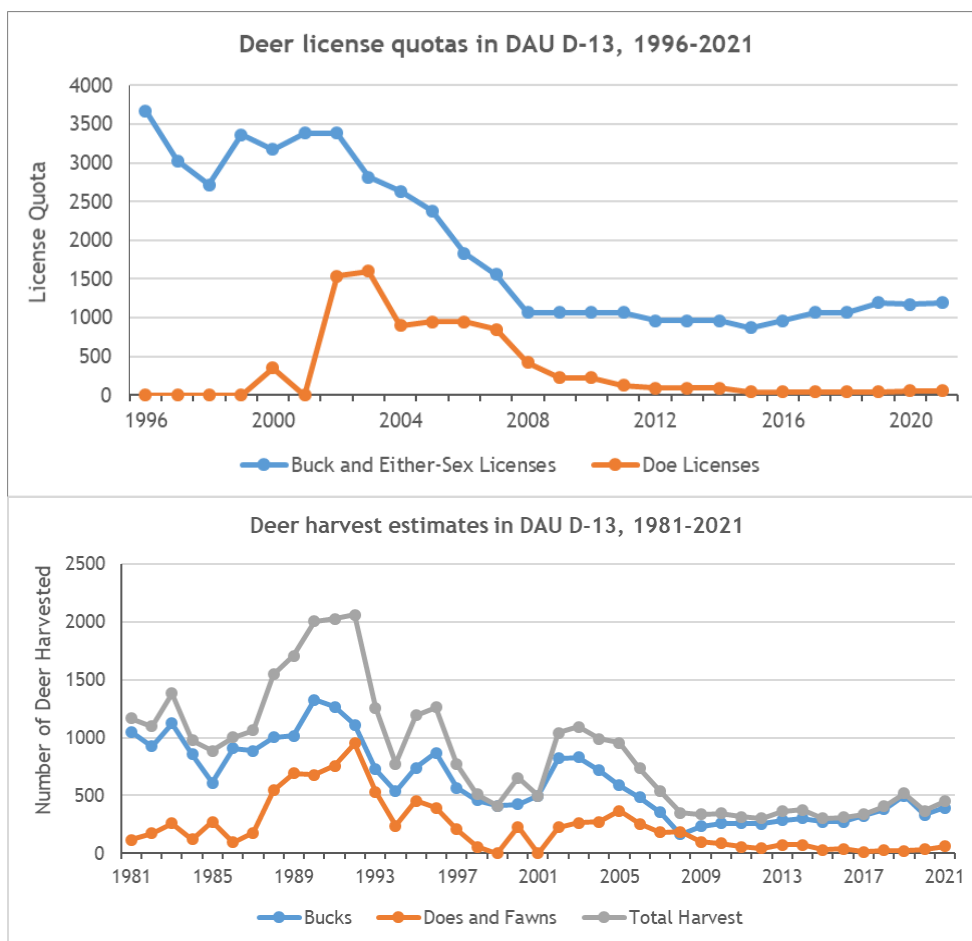
MAROON BELLS MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-13

Julie Mao, Wildlife Biologist, Glenwood Springs

Maroon Bells Deer Herd (DAU D-13)	GMUs: 43, 47, 471
Approval Year for last HMP: 2011	
Post-hunt population:	
Current (2011 plan) Population Objective:	7,500-8,500 deer
Post-hunt 2021 Population Estimate:	5,931 deer
Proposed New Population Objective	7,000-9,000 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2011 plan) Sex Ratio Objective:	30-35 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	32 bucks per 100 does
Proposed New Sex Ratio Objective:	27-32 bucks per 100 does







Background

The Maroon Bells deer herd DAU D-13 is located in northwest Colorado and consists of GMUs 43, 47, and 471. This DAU encompasses the Crystal River watershed and most of the Roaring Fork River watershed, and lies in Pitkin, Gunnison, Eagle, and Garfield Counties. Major towns include Glenwood Springs, Carbondale, Basalt, Aspen, and Snowmass Village. Public lands make up 80% of D-13’s land area. Nearly half of these public lands at higher elevations are wilderness areas, including all of the Hunter-Frying Pan Wilderness, most of the Maroon Bells-Snowmass Wilderness, and parts of the Collegiate Peaks and Raggeds Wilderness Areas. In the 2011 herd management plan, CPW lowered D-13’s population objective to account for the changing landscape and set an objective range of 7,500-8,500 deer. Over the past 10 years of managing for this population objective, the population has been slowly creeping upward in size, but has still remained below the objective range. License quotas have remained generally consistent, with buck and either-sex license quotas increasing modestly over the past 5 years and doe licenses remaining minimal. D-13’s most recent population estimate in 2021 was 5,931 deer, which is below the current objective range.

The herd’s sex ratio objective was set in the 2011 DAU plan at a range of 30-35 bucks:100 does. The sex ratio increased over time until the 3-year average exceeded the objective range by 2015. In response, we slightly raised buck and either-sex license quotas

incrementally from 2016-2019. The observed sex ratios over the past several years has been highly variable, but the 3-year average has declined to be within objective. The current 3-year (2019-2021) average is 32 bucks:100 does.

Significant Issues

Winter fawn:doe ratios, which represent a measurement of recruitment of young into the population and provide an index of the herd's productivity, have declined in D-13 by about 50% compared to 3-4 decades ago. Low fawn:doe ratios and the inability of the deer population to grow, despite relatively limited hunting pressure, are likely the result of the transformation of the landscape as the local human population has grown. The major limiting factors for the D-13 herd are (1) disturbance due to ever-increasing numbers of outdoor recreationists on the landscape, as well as (2) the loss of habitat quantity due to land development over the previous 40+ years, and (3) the loss of habitat quality due to long-term fire suppression leading to plant senescence and habitat succession.

Recreation activity in the Roaring Fork Valley has continued to boom over the past decade and is the major economic driver of the local economy. Human population growth rate in this area has slowed in the past 10 years compared to the preceding 3 decades, but tourism and recreation remain the primary attractions for human activity. The public lands that are not developed with buildings are still carved up by roads and trails, creating a fragmented landscape and thus reducing the quality of habitat for wildlife. Although some areas of public lands are closed seasonally for big game winter range protection and for elk calving (which also benefits any does fawning in the same areas), the vast majority of historic winter range has now been developed into housing and commercial use. Furthermore, seasonal closures typically only limit motorized and mechanized activity and still allow recreationists on foot and often do not limit dog walkers. Seasonal closures are often violated and are difficult to enforce by land management agencies' existing staffing, and even small numbers of violators can have a disproportionate effect in disturbing wildlife.

The land development that has occurred to date is effectively irreversible loss of habitat, especially because of the exorbitant monetary value of land and housing in the Roaring Fork Valley. Higher human densities also make prescribed burns increasingly difficult to conduct near these developments, added to the effects of climate change and 2 decades of drought conditions. One potential land development project, natural gas drilling in the Thompson-Divide area of GMU 43 in D-13 and GMU 42 in D-12 which became a concern 10+ years ago when the last plan was written, has not occurred to date. Due to litigation and local community opposition to drilling, some of the mining leases have been canceled, while others remain in place and could be developed in the future.

Ultimately, the ability of this deer herd to persist in sufficient numbers and even to grow will depend on whether or not people are willing to self-regulate our activities on the landscape to provide some remaining habitat and areas of solitude for deer and other wildlife.

Management Objective Recommendations

CPW recommends a new population objective range of 7,000-9,000 deer. This objective widens the current 2011 Plan objective of 7,500-8,500 deer, but retains the midpoint of the objective range at 8,000 deer. The current objective range is relatively narrow compared to the more recent objectives for neighboring deer herds. D-13's population trajectory over the

previous 10 years has been slowly increasing, so with continued management and protection of the remaining habitat, it is possible for the D-13 herd to reach the objective over the next 10 years. If more significant conservation actions (e.g., conservation easements, protection of migration routes, compliance with/enforcement of seasonal closures) can be achieved, then it could be possible for this deer herd to grow more quickly and reach objective sooner than 10 years.

CPW recommends lowering the sex ratio objective of 27-32 bucks:100 does. The current sex ratio from the 2011 Plan of 30-35 bucks:100 does is somewhat high. Although chronic wasting disease (CWD) is not a concern in D-13 at present, CWD is prevalent in nearby deer herds to the north and southwest. Reducing the sex ratio objective to a more moderate range would limit the ability of CWD to spread into D-13, while still allowing for ample buck hunting opportunity.

License quotas for buck, either-sex, and doe tags would likely remain similar to recent years. Buck and either-sex licenses would allow for moderate harvest opportunity, while doe licenses would remain highly limited until the population reaches at least the lower end of the proposed population objective range.

Stakeholder Outreach and Input

These proposed objectives have been presented at a general public meeting held in Glenwood Springs, as well as to the Lower Colorado River Habitat Partnership Program, Eagle County, and Garfield County commissioners.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

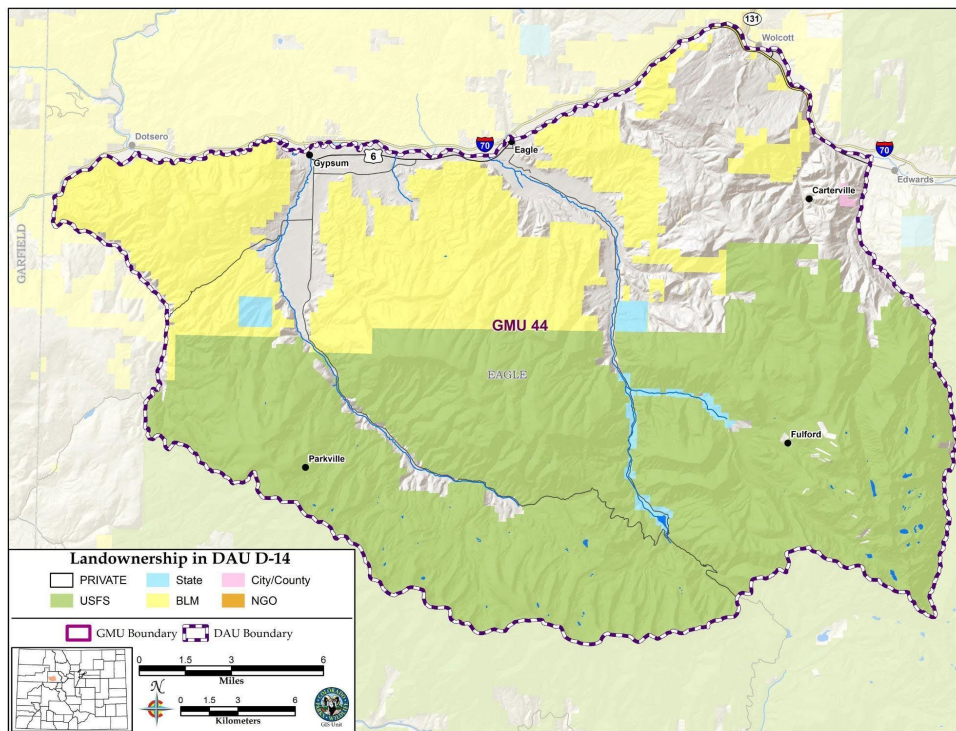
To achieve the updated population objective and to maintain the current sex ratio objective, CPW will continue to set licenses annually to provide sufficient buck hunting opportunity and very limited doe hunting opportunity. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

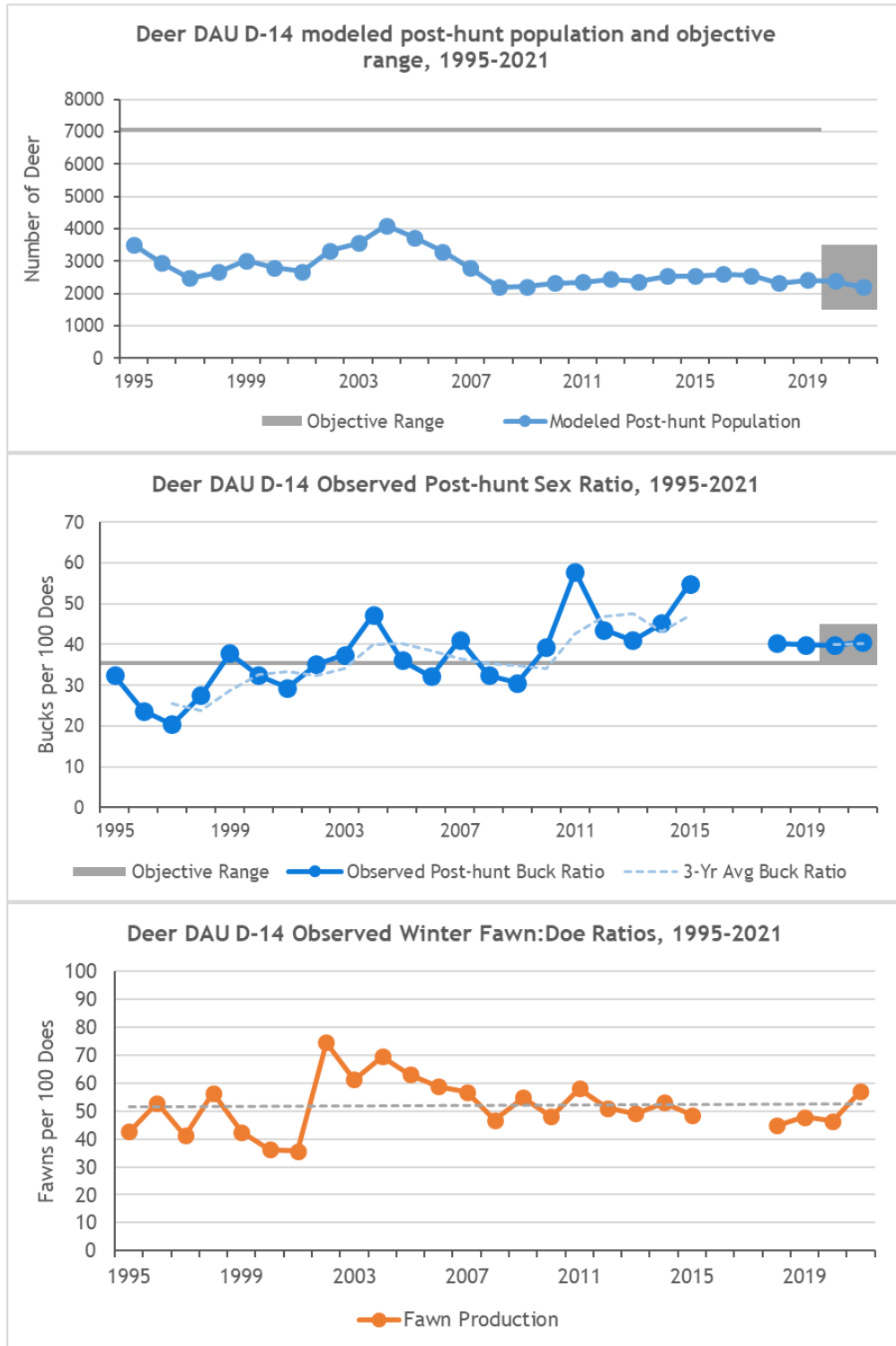
BRUSH CREEK MULE DEER HERD MANAGEMENT PLAN

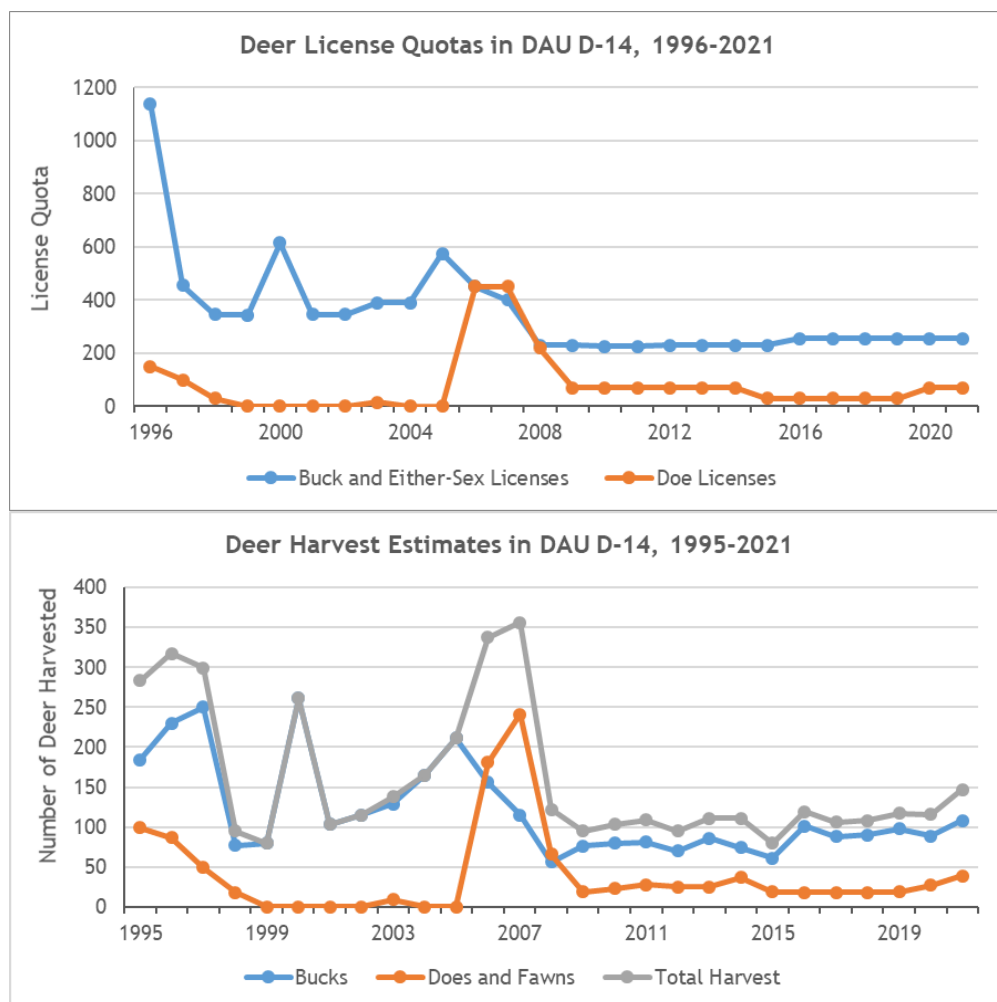
DATA ANALYSIS UNIT D-14

Julie Mao, Wildlife Biologist, Glenwood Springs

Brush Creek Deer Herd (DAU D-14)	GMU: 44
Approval Year for last HMP: 2020	
Post-hunt population:	
Current (2020 plan) Population Objective:	1,500-3,500 deer
Post-hunt 2021 Population Estimate:	2,190 deer
Extension Population Objective	No change: 1,500-3,500 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2020 plan) Sex Ratio Objective:	35-45 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	40 bucks per 100 does
Extension Sex Ratio Objective:	No change: 35-45 bucks per 100 does







Background

The Brush Creek mule deer Data Analysis Unit (DAU) D-14 is located in Eagle County in northwest Colorado and consists of Game Management Unit (GMU) 44. D-14 covers an area of 976 km² (377 mi²), over 3/4 of which is public land. It is bounded on the north by the Colorado and Eagle Rivers; on the east by East Lake Creek; on the south by Red Table Mountain ridgeline; and on the west by Red Table Mountain Road, Cottonwood Pass Road, and Cottonwood Creek. Major towns within D-14 include Gypsum and Eagle. The town of Edwards is just outside of, but immediately adjacent to, the northeast part of the DAU. Interstate-70 follows the north edge of the unit. D-14 contains parts of the Colorado River, Eagle River, Lake Creek, and Cottonwood Creek and all of Gypsum Creek, Brush Creek, and Squaw Creek drainages.

This DAU has been managed to provide the highest quality buck hunting experience, defined as accessibility to public land with very low hunting pressure and a higher opportunity to harvest a mature animal. Drawing a 3rd or 4th season buck license in this unit is often perceived as a “once-in-a-lifetime” hunt opportunity.

In the recently updated [2020 D-14 herd management plan](#), the population objective range was lowered to 1,500-3,500 deer, which is a more realistic objective and is where the population estimate has been sitting for the past decade and half. The most recent (2021) post-hunt population estimate is 2,190 deer.

The 2020 D-14 plan also set a new sex ratio objective range of 35-45 bucks:100 does, managing for a moderately high sex ratio. The average of the most recent 3-year (2019-2021) average of observed sex ratios is 40 bucks per 100 does, mid-way within the current objective range.

Significant Issues

The major issues for this deer herd involve the cumulative effects of decades of human population growth and impacts of human activities on deer habitat in the Eagle River Valley. The result has been a loss of habitat quantity and quality and less solitude from human disturbance. The unit's carrying capacity for mule deer has declined compared to conditions in past decades when the previous objectives were set over 2 decades ago. Significant issues include habitat loss and fragmentation from land development, declining habitat condition, and impacts of human recreation on deer. Other management concerns include competing herd management objectives (managing for a given population size while maintaining a relatively high sex ratio), as well as the potential for chronic wasting disease (CWD). CWD has not yet been detected in this herd, but sampling has been based on a very low sample size of harvested deer because of intentionally limited harvest opportunity in this unit. However, a relatively high sex ratio sets this herd up for a high likelihood of acquiring and spreading CWD in the future.

Management Objective Recommendations

CPW recommends maintaining the population objective range of 1,500-3,500 deer and the sex ratio objective range 35-45 bucks:100 does, set in the recent 2020 herd management plan. This population objective is believed to be reasonably achievable under current habitat and land use conditions. The sex ratio objective will continue to provide high quality buck hunting in the unit, but not be too high to pose problems with the health of the herd and its ability to recover from weather events or be resilient against disease outbreaks and other stressors. CWD should continue to be tested for in this herd, given that the sex ratio objective is moderately high.

Stakeholder Outreach and Input

In 2017 and 2018, CPW conducted public outreach to D-14 license holders and applicants, held a general public meeting, solicited public comments through online questionnaires, presented to the Eagle Board of County Commissioners and the Lower Colorado Habitat Partnership Program, and requested comments from BLM and USFS. Most D-14 hunters and license applicants ranked "obtaining a trophy buck" and "spending time in nature" as the most important reasons to hunt deer in this unit. For more details on public comments, see Appendices B-D of the [2020 D-14 herd management plan](#).

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

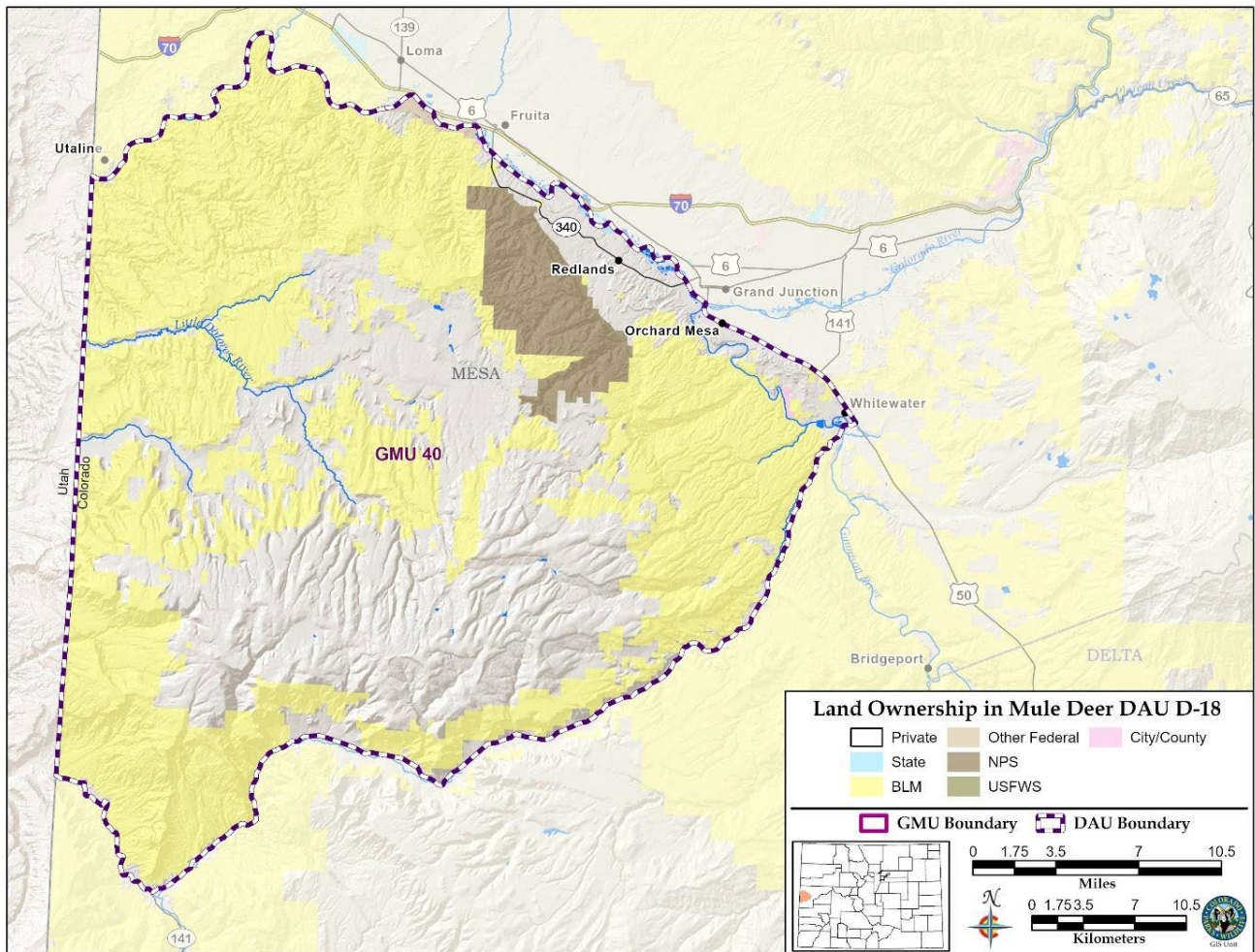
CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

To achieve the population and sex ratio objectives over the next 10 years, CPW will continue to set licenses annually, keeping in mind such issues as Chronic Wasting Disease and achieving a balance between maintaining high quality bucks and providing some additional opportunity for hunters to draw buck licenses in the high-demand seasons.

GLADE PARK HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-18

Genevieve Fuller, Wildlife Biologist, Grand Junction

Glade Park Deer Herd (DAU D-18)	GMU: 40
Approval Year for last HMP: 2010	
Post-hunt population:	
Current (2010 plan) Population Objective:	6,500 - 8,500 deer
Post-hunt 2021 Population Estimate:	3,904 deer
Preferred Alternative:	4,300 - 6,500 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2010 plan) Sex Ratio Objective:	30-35 bucks per 100 does
Post-hunt 2021 Sex Ratio:	observed: 26; modeled: 35
Preferred Alternative:	30-40 bucks per 100 does



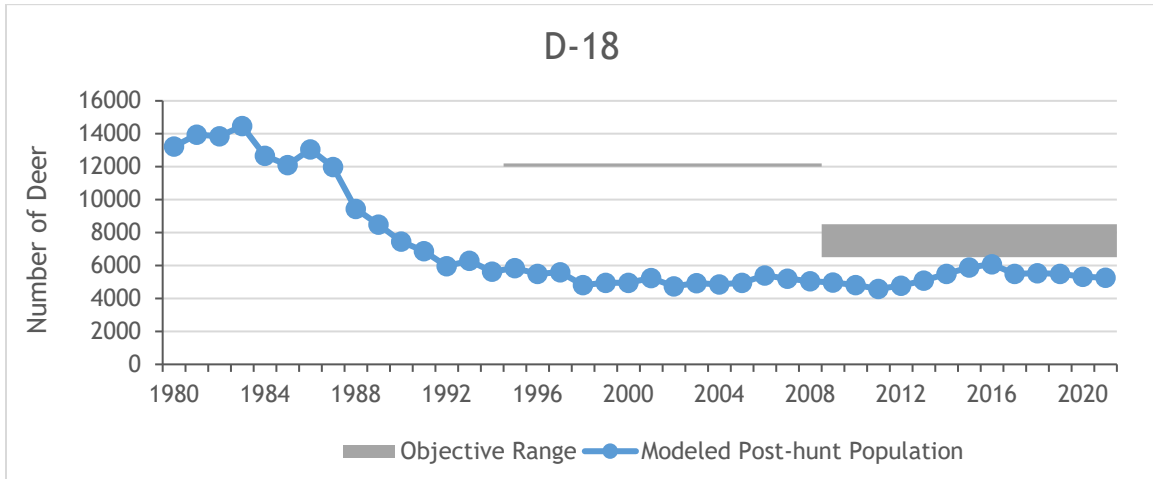


Figure D18-1. Deer DAU D-18 modeled post-hunt population and objective range, years 1980-2021.

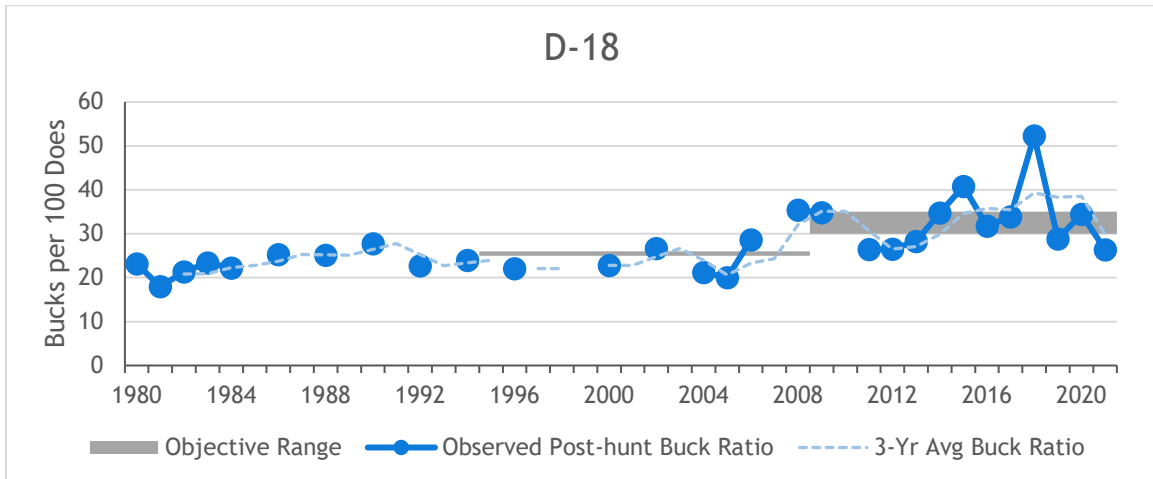


Figure D18-2. Deer DAU D-18 observed and modeled post-hunt sex ratio (bucks:100 does), years 1980-2021.

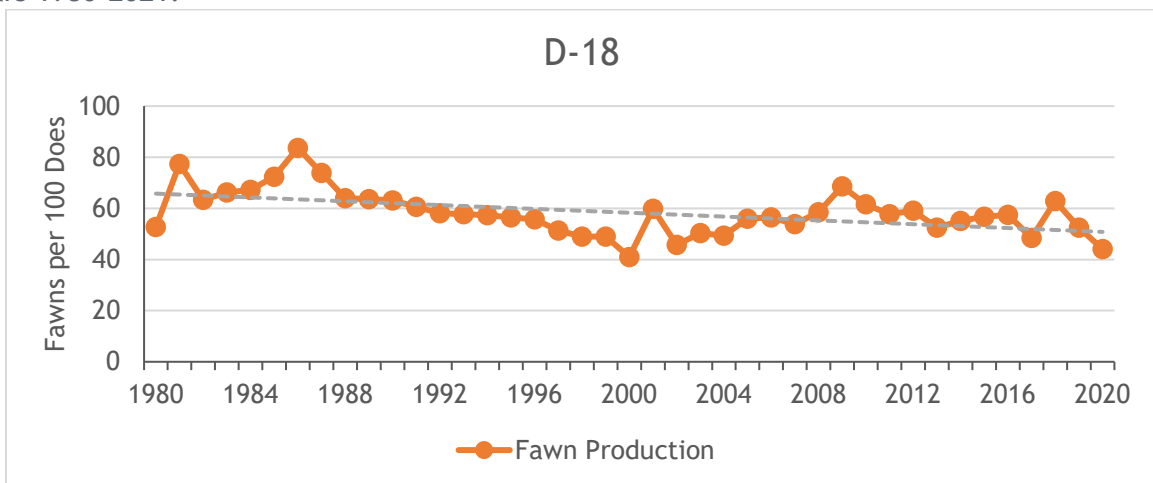


Figure D18-3. Deer DAU D-18 fawn production (observed post-hunt fawns: 100 does ratio, years 1980-2021)

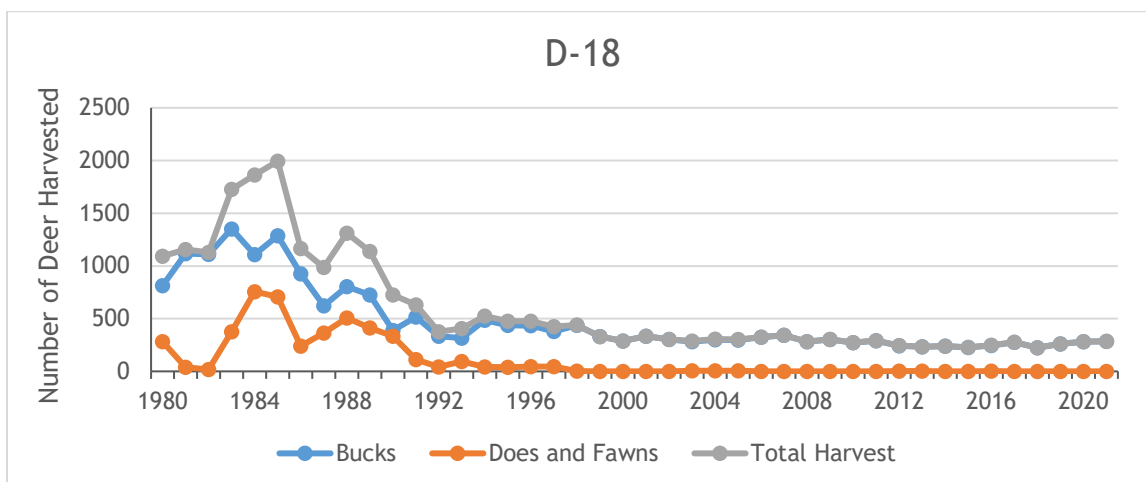


Figure D18-4. Deer harvest estimates in D-18, years 1980-2021.

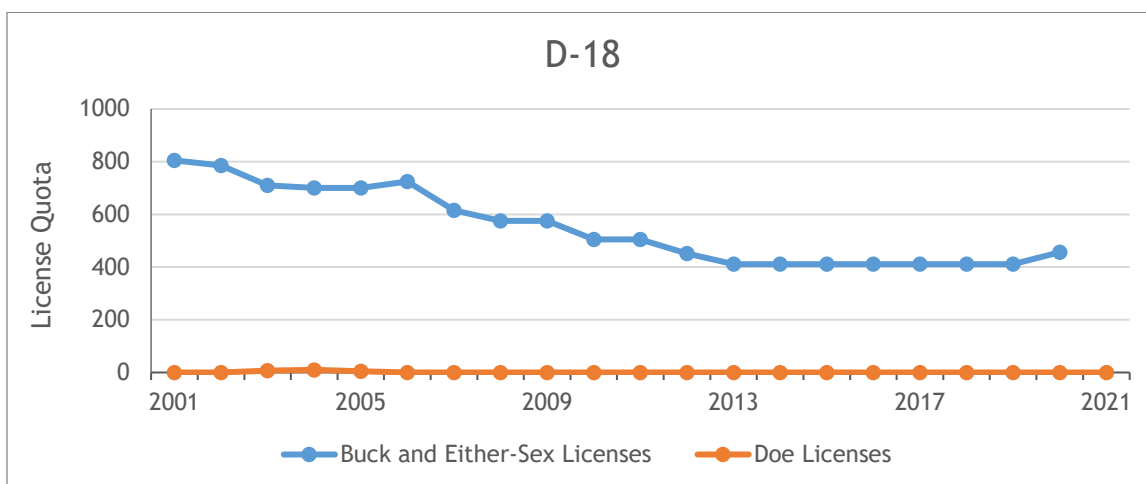


Figure D18-5. Deer License Quotas in D-18, years 2001-2021.

Background Information

The Glade Park D-18 DAU is located in west-central Colorado and includes Glade Park and Pinon Mesa, southwest of Grand Junction, Colorado. This DAU can be broadly divided into two units: Glade Park, in the northern portion and Pinon Mesa rising south and west of Glade Park. The DAU is called both Pinon Mesa and Glade Park and the two are often used interchangeably. The Glade Park D-18 DAU is 744 square miles in size and contains a mixture of public and private lands. Of the overall area, 2% is managed by the United States Forest Service (USFS) and about 56% by the Bureau of Land Management (BLM). The National Park Service owns 4%. Privately owned lands make up 38% of the total.

The topography varies greatly in the DAU. The highest elevations in the DAU are at its center and from there elevation decreases in all directions. The highest point is approximately 9,700 feet at the south-center of the DAU. The lowest point is where the Colorado River meets the UT state line at approximately 4,600 feet. Interstate 70 parallels the Colorado River, forming a significant barrier which restricts deer movements throughout the northern portion of the DAU. Additionally, nearly vertical sandstone canyons on the north end of the unit prohibit

much deer movement to the north. Some of the lower elevations include suburban areas part of Grand Junction where there are scattered residential deer groups.

The deer population was relatively high in D-18 during the early 1980's through the early 1990's. Since that time, the herd declined dramatically, and then stabilized in the last 20 years. The early decline of this herd mirrored the falling numbers in most mule deer populations throughout Colorado and the Western U.S. Current models estimate a population of 3,900 deer.

Early records in the 1980's show that total buck: doe ratios were around 22 bucks: 100 does. These ratios have generally increased to recent levels over 26 bucks: 100 does, in large part due to totally limited male licenses implemented in 1995 and continued through the present. The average buck:doe ratio in the DAU for the last 10 years is 33.8 bucks: 100 does. Post-hunt classifications in 2021 observed 26.4 bucks: 100 does. Fawn production in the DAU have seen a gradual decline, but generally have remained between 40 and 70 fawns: 100 does. Since 2001, production has averaged 54 fawns: 100 does.

Significant Issues

The primary issues involved the low population size, competition with elk, long-term drought, and residential development, particularly on winter range. Habitat quality and quantity have been in decline in part due to an increasingly impactful long-term drought. There is some concern that the drought conditions may be a part of an aridification process occurring in the area. Many landowners have become more interested in habitat projects that benefit elk and deer and fewer cattle have been grazed in the area in the past few years. Additionally, drought tolerant invasive weeds are increasing in frequency. There is also some concern that the elk herd has negatively impacted the deer herd through direct competition for spatial and forage resources.

The DAU has had substantial development in areas that were once part of deer winter range, particularly in the areas surrounding Glade Park. The Unaweep Canyon is also seeing increased development. Ranches have been subdivided and natural habitat quality is significantly reduced by fragmentation. This includes direct loss of habitat and effective loss of surrounding habitat due to increased human activity.

Stakeholder Outreach and Input

In the summer of 2022, the proposed objectives were presented at a public meeting in Grand Junction to 14 stakeholders. They were asked to submit written feedback. Many expressed their concerns about degraded quality and quantity of habitat, long-term drought, and development. Their full responses are included in Appendix

In the fall of 2022, these objectives were presented to the Grand Mesa HPP Committee and the Mesa County Commission.

Management Objectives

Considering the current trends, feedback from the public and issues facing this deer herd, CPW has developed preferred objectives for this DAU.

CPW Preferred Objectives:**Post-hunt Population****4,300 - 6,500 deer (Slight Decrease, 25 year average)**

The estimated deer population has been consistently under objective for over 20 years. There has been no doe harvest in over a decade and this population has still not increased. There is no ability for harvest management to have an effect on population growth in this unit.

Limitations on this population are likely due to low quality and quantity of habitat, long-term drought/aridification and competition with livestock and elk. Fawn:doe ratios have been in decline for the last 10 years. CPW would like to increase the deer population, but the current objectives are unattainable given the current conditions. This new objective range centers around the 25 year average, but leaves room for population increases that may come from land management changes in the area.

Post-hunt buck ratio

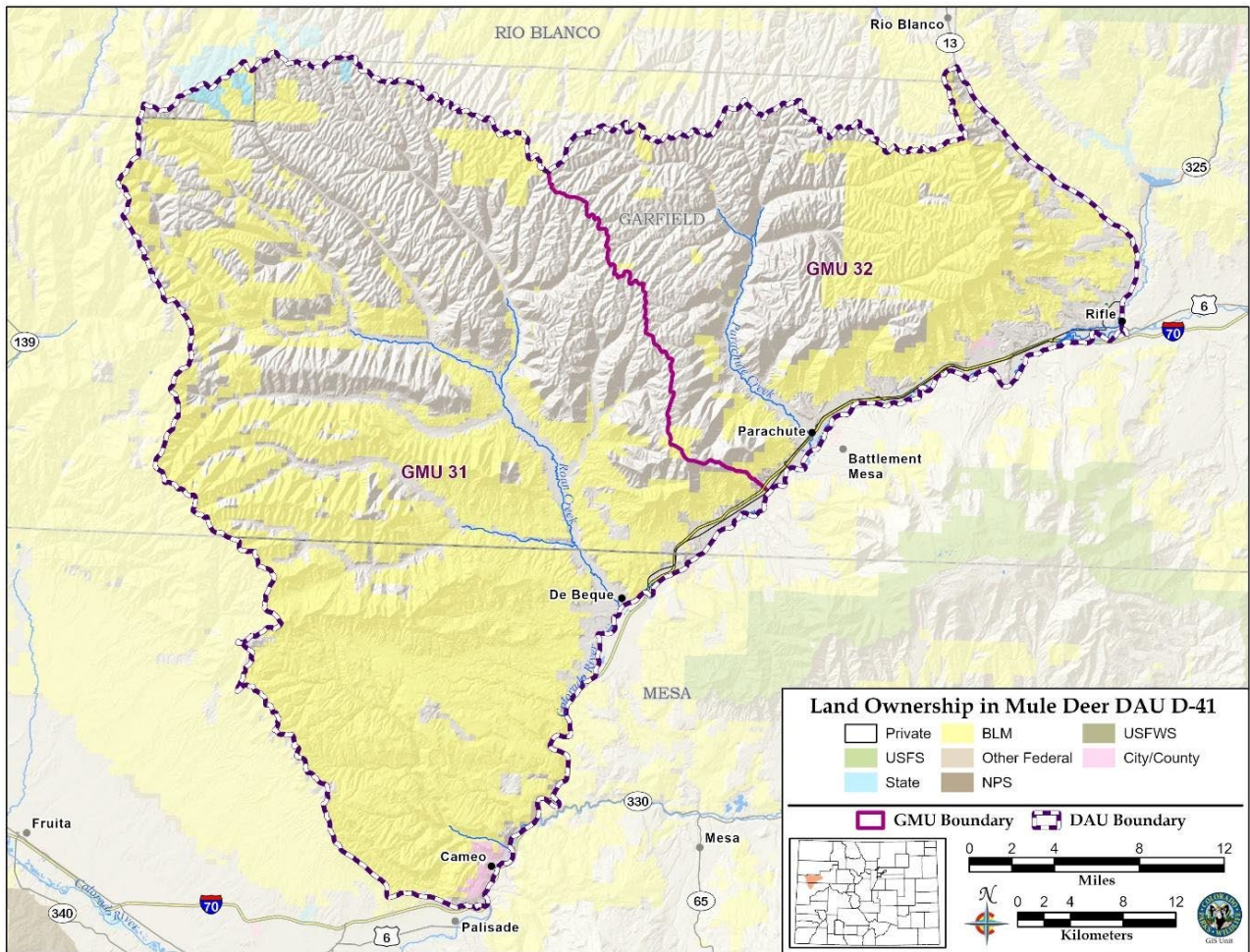
30 - 40 bucks: 100 does (Broader range)

D-18 has not been documented as a quality or mature buck hunt, but in the last 10 or so years, it has been managed as one. Public feedback has also indicated that a majority of hunters would like to see it continued to be managed for mature buck hunting opportunities. The observed sex ratio has fluctuated quite a bit during the previous 10 years. 2020 landed on the high end of objective, while 2021 just below. Expanding this buck:doe ratio range to 30 - 40 bucks:100 does would allow more flexible management, where the seemingly large swings in sex ratio from year to year can continue without precedent for big management actions. This also allows for continued management towards more mature bucks.

LOGAN MOUNTAIN HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-41

Genevieve Fuller, Wildlife Biologist, Grand Junction

Logan Mountain Deer Herd (DAU D-41)	GMUs: 31 and 32
Approval Year for last HMP: 2012	
Post-hunt population:	
Current (2012 plan) Population Objective:	6,500 - 8,500 deer
Post-hunt 2021 Population Estimate:	4,478 deer
Preferred Alternative:	Status quo, 6,500 - 8,500 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2012 plan) Sex Ratio Objective:	25-30 bucks per 100 does
Post-hunt 2021 Sex Ratio:	observed: 23; modeled: 24
Preferred Alternative:	Status quo, 25-30 bucks per 100 does



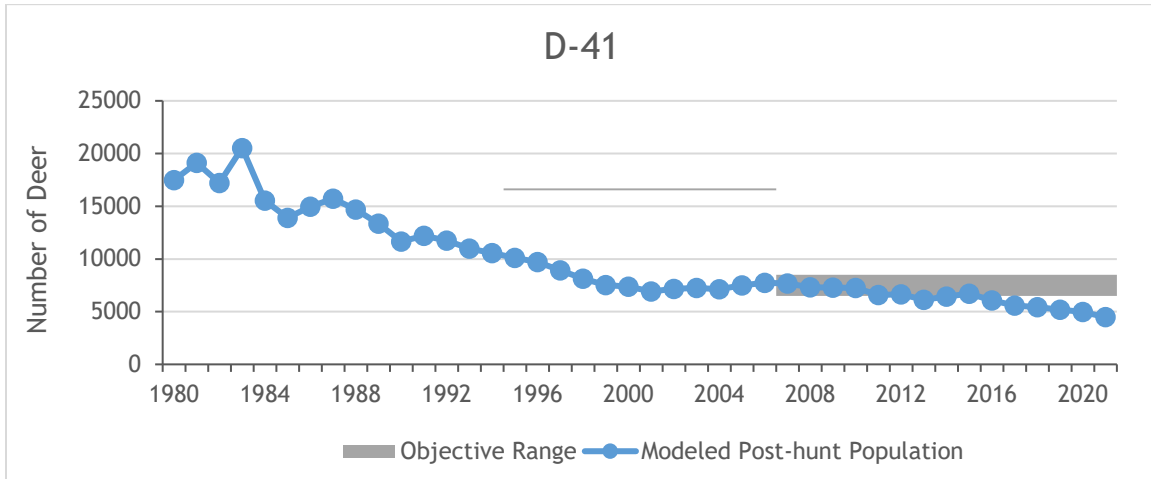


Figure D41-1. Deer DAU D-41 modeled post-hunt population and objective range, years 1980-2021.

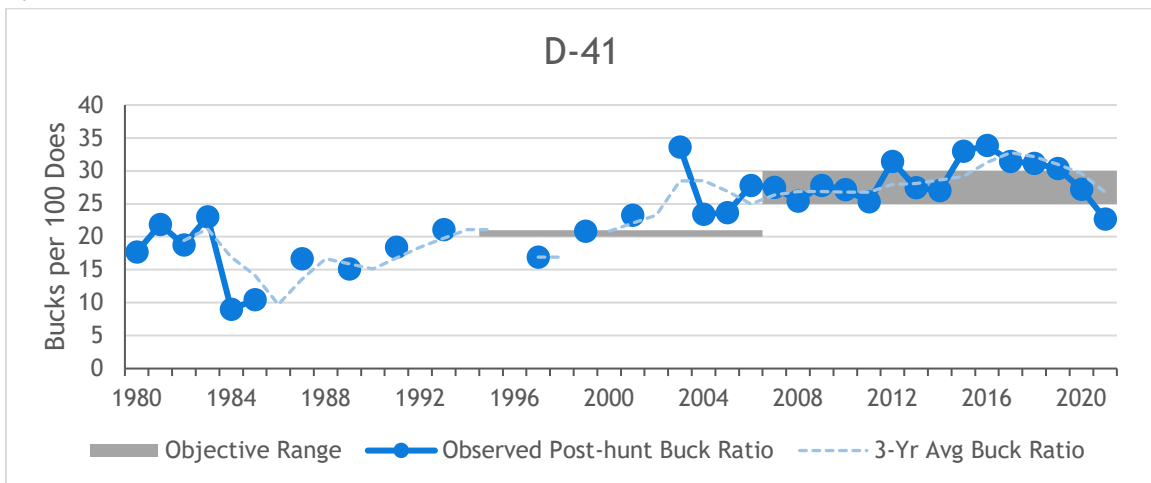


Figure D41-2. Deer DAU D-41 observed and modeled post-hunt sex ratio (bucks:100 does), years 1980-2021.

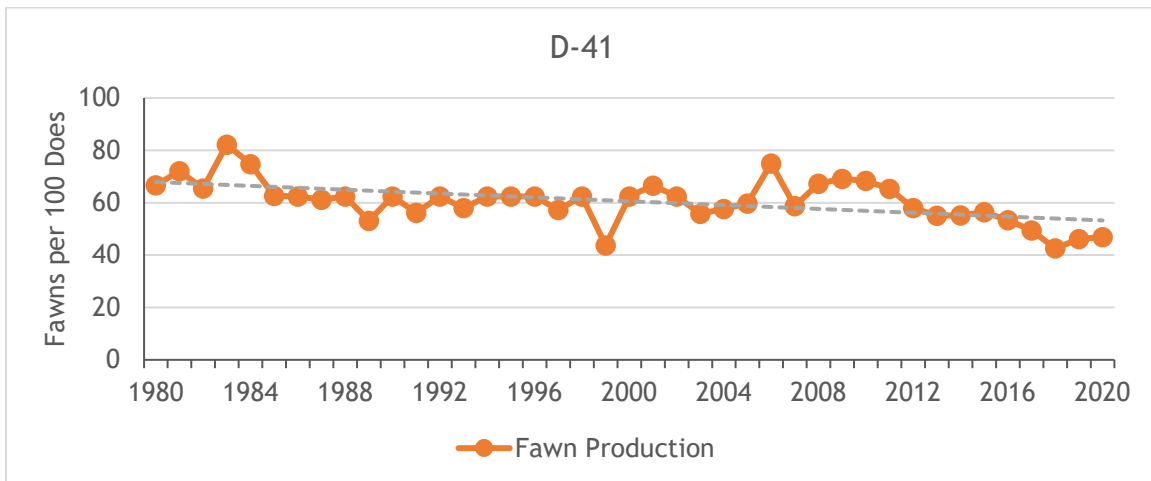


Figure D41-3. Deer DAU D-41 fawn production (observed post-hunt fawns:100 does ratio, years 1980-2021)

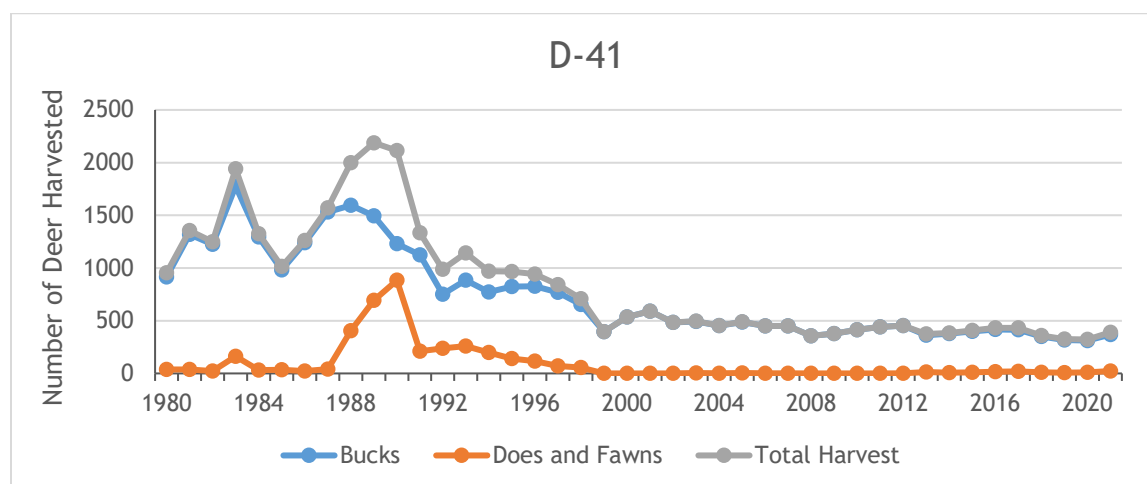


Figure D41-4. Deer harvest estimates in D-41, years 1980-2021.

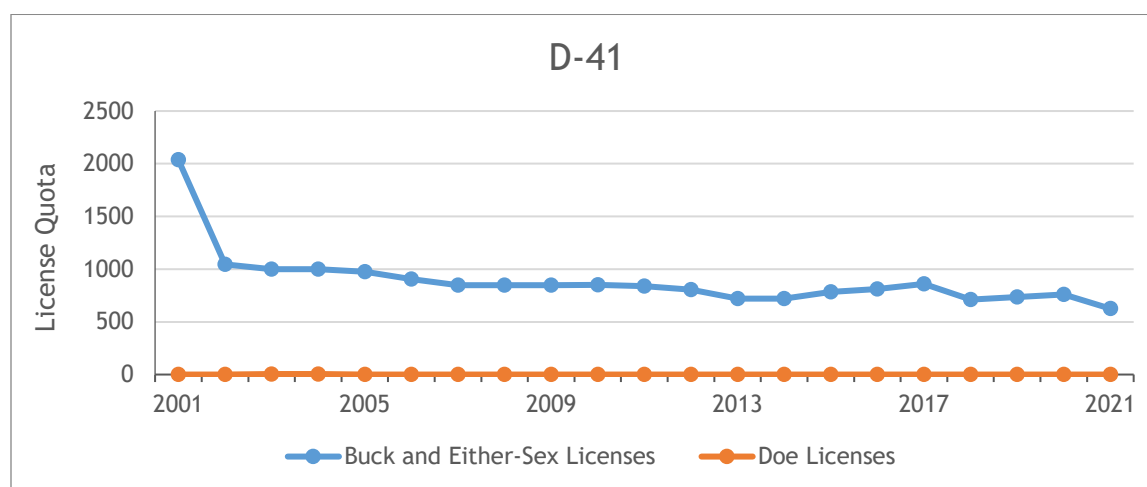


Figure D41-5. Deer License Quotas in D-41, years 2001-2021.

Background Information

Mule deer Data Analysis Unit (DAU) D-41, Logan Mountain, is located in west-central Colorado and includes Game Management Units (GMUs) 31 & 32. The primary geographic features in this DAU include the high elevation, gently sloping Roan Plateau that is bisected by deep drainages that compose Roan and Parachute Creeks. The DAU is approximately 1,004 square miles and is nearly evenly divided between public (Bureau of Land Management) and private ownership. Much of this DAU is used for livestock grazing and oil and gas extraction. The high elevation Roan Plateau is generally cool and receives significantly more moisture than the rest of the DAU. These areas are generally associated with summer and fawning ranges. The lower elevations, particularly near the towns of Debeque and Palisade, are much warmer and drier and provide a greater proportion of winter range. The 2021 post-hunt population estimate is 4,478, which is below the low of approximately 6,000 in the late 1990's (Figure 1). Fawn production in this DAU has varied over the years with

a slight decline and has seen a slight uptick in the last three years. 2021 estimates put fawn:doe ratios at 58.8 fawns per 100 does (Figure 3).

Since antlered licenses were limited in 1999, buck: doe ratios have improved dramatically and have remained 22.7 bucks: 100 does were observed during 2021 post-hunt classification surveys (Figure 2). In the last decade, sex ratios have been largely within or above the objective range of 25 - 30 bucks per 100 does.

Significant Issues

There are several significant issues associated with the mule deer herd in the Logan Mountain area. The most significant issue is the long-term decline and stagnation of the herd. Despite virtually no antlerless harvest in over 25 years, the population has not rebounded from the decline of the 1990's.

Habitat quality and quantity decline resulting from the loss of winter range, feral horse impacts, long-term drought and pinon-juniper encroachment also affects this deer herd. Additionally, landscape-scale energy development is a significant concern. This area has seen a large degree of oil and gas development in the last decade. There are significant natural gas reserves underneath DAU D-41. It is estimated that there are approximately 8.9 trillion cubic feet (TCF) of natural gas underneath in the eastern portion of GMU 32 alone. Of these reserves, approximately 4.2 TCF are under the top of the Roan Plateau (deer summer range) and another 4.7 TCF are under the lands below the rim, including cliffs (deer winter range). Much of the private land D-41 is owned or leased for oil and gas extraction. Due to the large amount of public land with no hunter access, there are challenges for access to harvest opportunities in D-41.

Pine Gulch Fire

The Pine Gulch Fire, the third largest wildfire in state history, was sparked by lightning on July 31, 2020. The fire burned more than 567 km² before it was fully contained in late September. Most of the fire burned in D-41 (Figure D41-6).

Approximately 152 km² of winter range and 309 km² of summer range in D-41 were impacted. It is possible that the impacts from the Pine Gulch Fire will decrease survival of wintering deer in GMU 31 for the next 20 years.

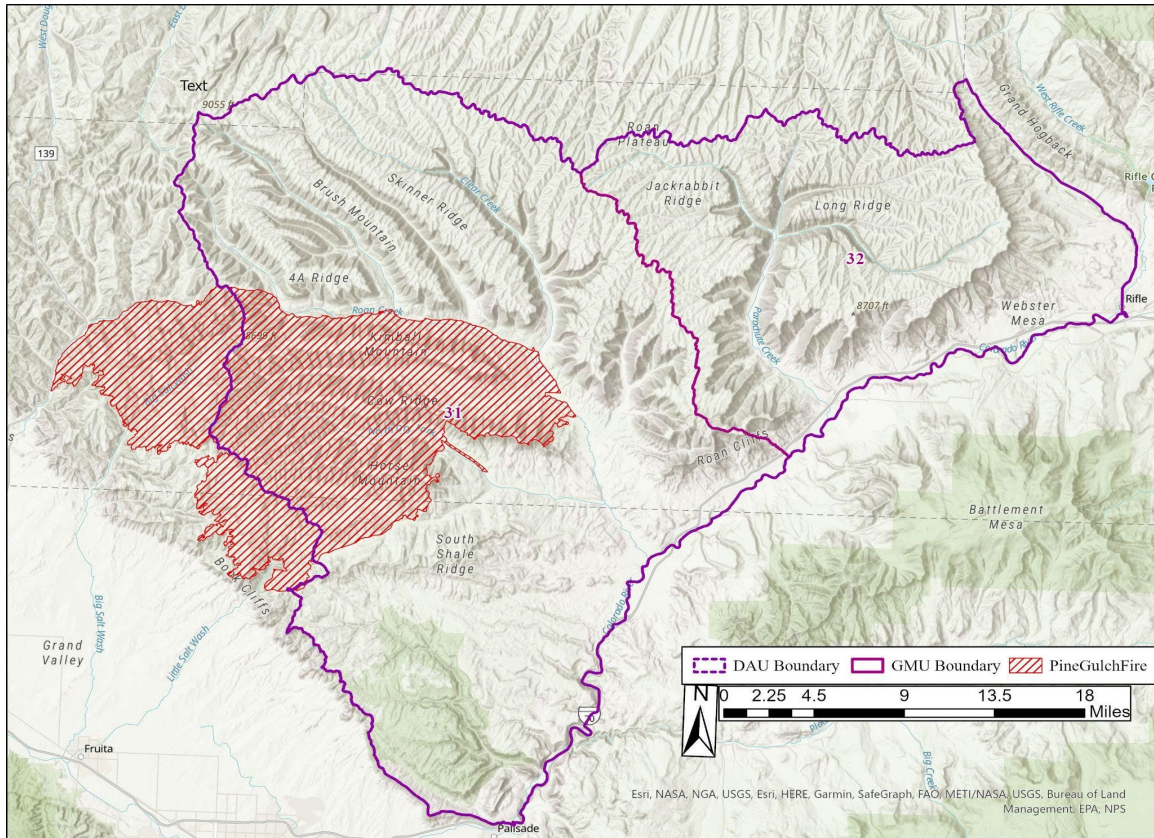


Figure D41-6. Pine Gulch burn location and extent in Data Analysis Unit D-41 in west-central Colorado.

In late 2020, BLM, CPW and private landowners collaborated to identify approximately 20,000 acres of the burned area for re-seeding with native vegetation. Approximately 1,500 acres were identified as high-priority wildlife habitat and received a higher proportion of forb and shrub seeds to have the greatest benefit to deer and elk.

Stakeholder Outreach and Input

In the summer of 2022, the proposed objectives were presented in Grand Junction to 14 stakeholders. They were asked to submit written feedback. Those who responded expressed their concerns about degraded quality and quantity of winter range, long-term drought, predation and development of migration corridors. Their full responses are included in Appendix

In the fall of 2022, these objectives were presented to the Grand Mesa HPP Committee, Garfield County Commission and Mesa County Commission.

Management Alternatives

Considering the current trends, feedback from the public and issues facing this deer herd, CPW has developed preferred objectives for this DAU.

Post-hunt Population

6,500 - 8,500 (Status quo)

For half of the previous plan's life, this population was within objective range. Only in the last 6 years has this population declined below objective. Likely, the combination of drought and increasing elk numbers have created more challenging habitat conditions and competition in winter ranges for deer. Fawn:doe ratios have been in decline, mirroring the population decline. The elk population in this area has increased in size and private lands that bar public hunting access have created refuges for elk that have likely impacted lower harvest success rates for elk. While there are fewer tools available to us with regards to direct management of deer that may result in an increase of this population to the current objective range, the management of habitat, changes in livestock management practices and changes in elk management in the area may provide a boost to deer populations. For the time being, CPW staff recommend maintaining the status quo for population objectives in this DAU.

Post-hunt buck ratio

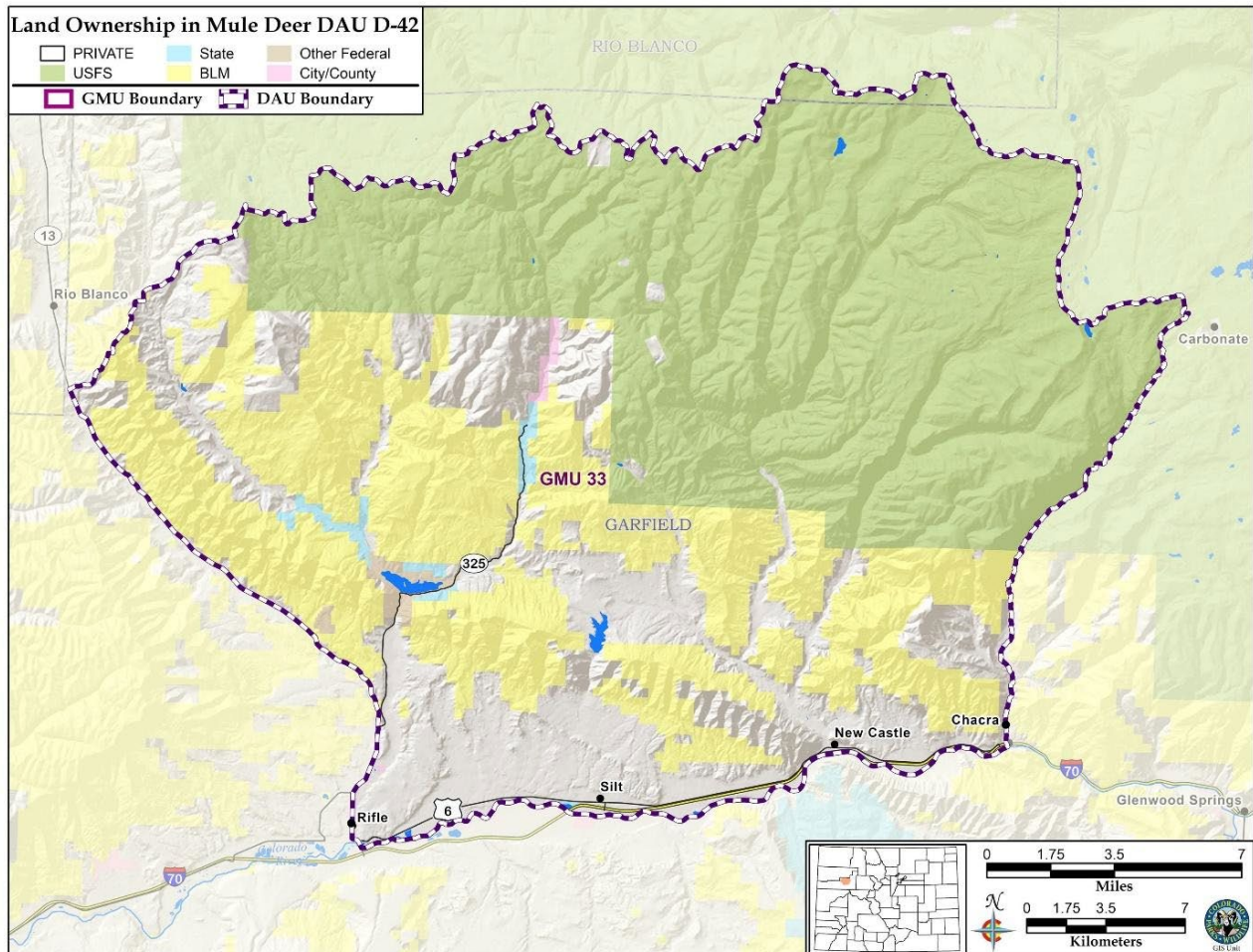
25 - 30 bucks: 100 does (Status quo)

This unit is managed as an opportunity unit with some mature buck hunting options. The buck:doe ratios over the last 10 years have remained within or above the current objective range, barring this previous year. With an increase of CWD prevalence in this unit and a proposed 4th rifle season that provides mature buck hunting opportunities, CPW staff feels that the previous plan's sex ratio objective range is an appropriate range going forward. This is further supported by the hunter attitude survey.

RIFLE CREEK HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-42

Genevieve Fuller, Wildlife Biologist, Grand Junction

Rifle Creek Deer Herd (DAU D-42)	GMU: 33
Approval Year for last HMP: 2022	
Post-hunt population:	
Current (2022 plan) Population Objective:	6,200 - 8,500 deer
Post-hunt 2021 Population Estimate:	6,400 deer
Extension Population Objective:	No change, 6,200 - 8,500 deer
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2022 plan) Sex Ratio Objective:	25-32 bucks per 100 does
Post-hunt 2021 Sex Ratio:	observed: 24; modeled: 24
Extension Sex Ratio Objective:	No change, 25-32 bucks per 100 does



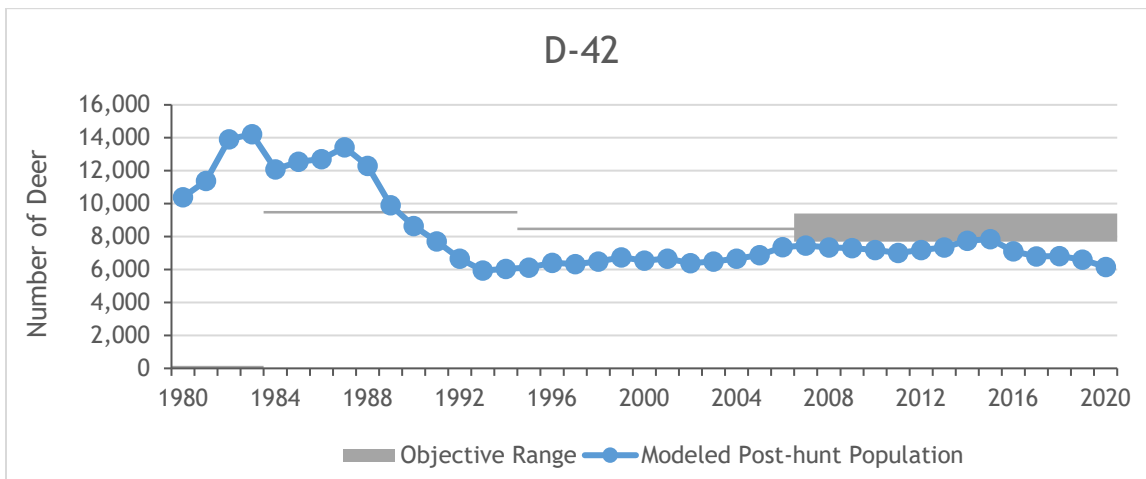


Figure D42-1. Deer DAU D-42 modeled post-hunt population and objective range, years 1980-2021.

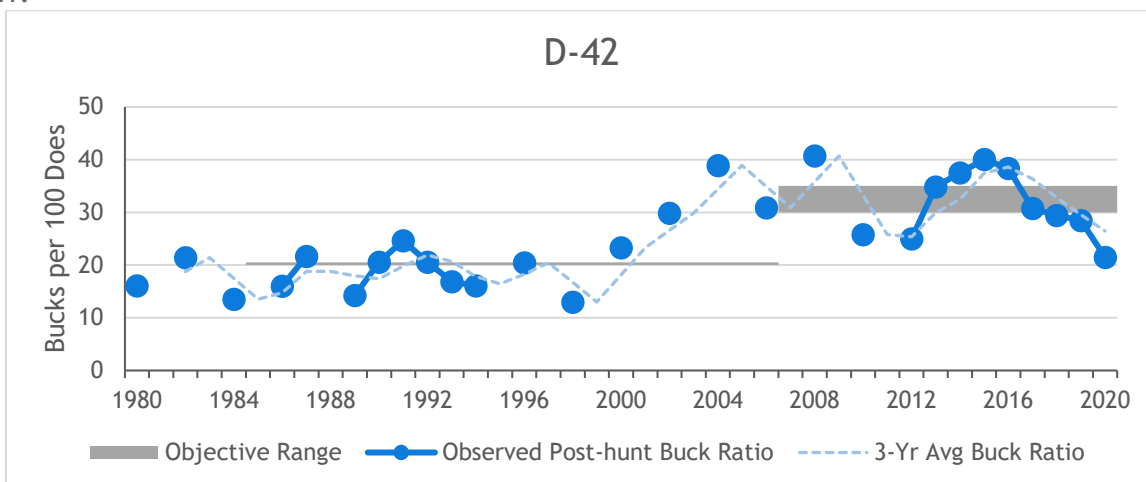


Figure D42-2. Deer DAU D-42 observed and modeled post-hunt sex ratio (bucks:100 does), years 1980-2021.

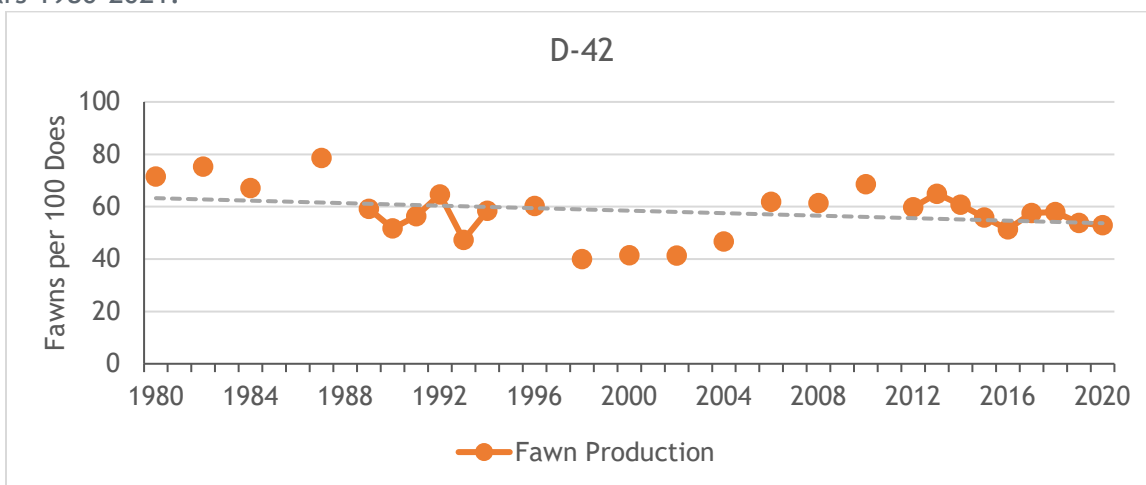


Figure D42-3. Deer DAU D-42 fawn production (observed post-hunt fawns:100 does, years 1980-2021)

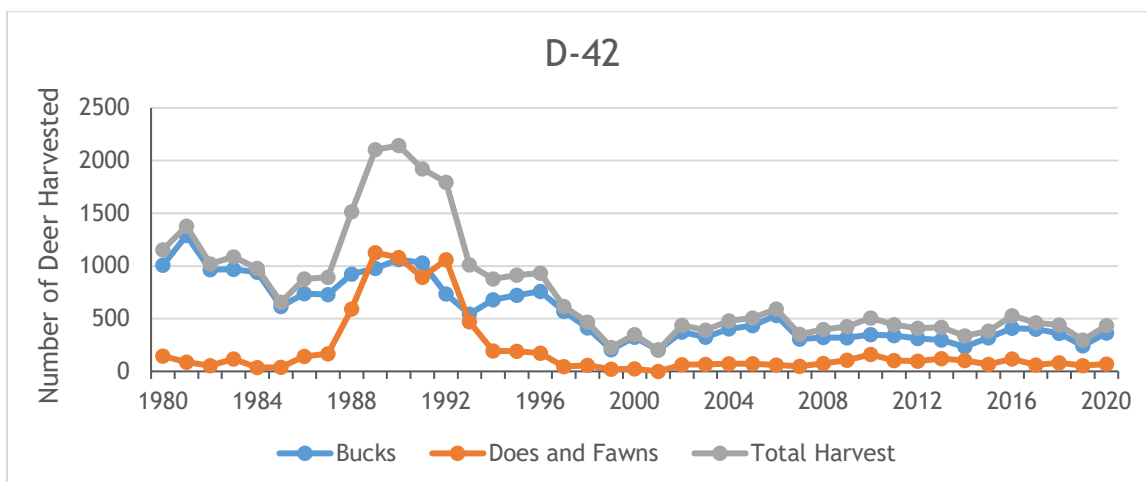


Figure D42-4. Deer harvest estimates in D-42, years 1980-2021.

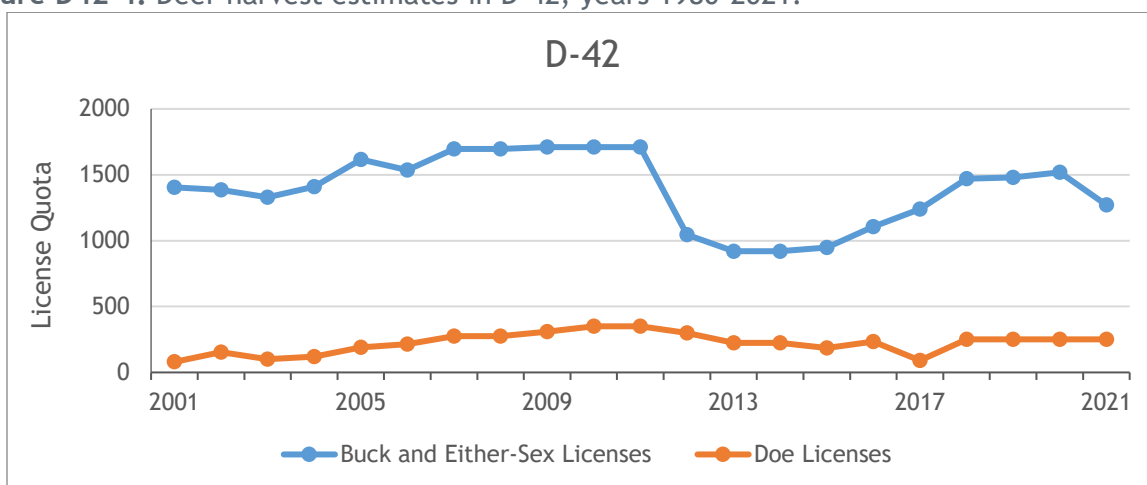


Figure D42-5. Deer License Quotas in D-42, years 2001-2021.

Background Information

The Rifle Creek deer DAU is located in west central Colorado and falls almost entirely within Garfield County except for a very small area within Rio Blanco County. D-42 consists entirely of Game Management Unit (GMU) 33. Approximately 74% of D-42 is public; 29% is managed by the Bureau of Land Management (BLM), and 45% is managed by the US Forest Service. State and federal agencies each own around 1% of D-42. Approximately 25% of the DAU is privately owned. Livestock grazing is an important land use on public and private lands, while hay and alfalfa are grown on private lands at lower elevations.

Mule deer occupy the entire DAU, migrating from low-elevation winter ranges to high-elevation summer ranges in response to available forage and snow conditions. Small resident herds live year-round at low elevations south of the hogback, relying on agricultural and low-density residential developments for forage.

The deer population in D-42 has been stagnant for nearly two decades (Figure 1). Buck: doe ratios in D-42 increased slowly between 1981 and 2015, and were generally within or near the sex ratio objective range of 30 - 35 bucks: 100 does until the last two years (Figure 2). This unit has been managed for older age-class and quality buck harvest since 1999.

Significant Issues

Significant issues facing this deer herd include, disease, degraded habitats due to drought and over-utilization, recreational disturbance, residential development, long-term low fawn:doe ratios, and population stagnation.

Increases in residential development and recreational activities in the area leaves few areas free from human disturbance. Much of the winter range on private lands in D-42 has been converted from agriculture to increasingly dense residential developments. Since only 29% of the DAU is privately owned, the actual footprint of the residential development is relatively small. However, much of that area is in traditionally important winter range and the loss is both direct and cumulative. The entirety of D-42 receives some form of recreation pressure at some point during the year. The area is attracting more and more users to the hiking, mountain biking and camping opportunities in D-42, causing higher degrees of disturbance to wildlife.

Drought plays a role in the amount quality habitat and water available to mule deer in D-42. While this area has regularly seen periods of drought, in recent years, the area has seen more severe drought conditions. The habitat is fragmented and degraded throughout much of the herd's important ranges.

Mandatory testing in 2017 estimated the chronic wasting disease (CWD) prevalence at 10% in adult male deer, which is above the threshold to trigger management actions to reduce the prevalence. Stakeholders are concerned about the long-term effects of the disease on this herd.

Stakeholder Outreach and Input

From August 6 to September 5, 2021 over 2,000 resident and non-resident hunters from the last three years in D-41 and landowners in this area were invited through email to provide perspectives on hunting, disease and management of the Rifle Creek deer herd through an online public survey. The survey was also announced and posted on the CPW website for anyone to participate in. 316 individuals responded to the survey.

In consideration of public interests and staff knowledge of the mule deer herd and management issues, a preferred alternative was identified and a draft plan was posted for public comment for 30 days. In addition, the plan was submitted to local BLM and USFS offices, as well as being presented to Garfield County Commissioners and local Habitat Partnership Program (HPP) committee.

The comments received addressed a number of concerns about the management of D-42, the management of deer in Colorado and other issues facing deer across the state. There was some support for the preferred alternatives as well as some concern about reducing the objectives for this herd and other deer herds across the state. These stakeholders would like to see status quo maintained. The issues that were mentioned in these comments as concerns include migration corridor loss to development, reintroduction of wolves to the state, other predation impacts, current habitat conditions, chronic wasting disease, and increasing human disturbance.

Management Alternatives

The preferred alternatives of 6,200 to 8,200 deer and 25- 32 bucks:100 does (in bold below) were approved by the commission in May of 2022. We are not seeking to update herd management for D-42 in this year's plan, just to extend the plan objectives.

2021 CPW Commission Approved Objectives:

Post-hunt Population

6,200 - 8,200 deer

The population for the D-42 herd has been largely stable since 2006 at an average population estimate of 7,194 deer. With the current amount of usable deer habitat throughout the DAU, the high prevalence of chronic wasting disease, and the pressures of recreation and other land uses, this alternative population objective range is more indicative of the amount of deer the land can currently sustain. This objective range was not a reduction of the deer population, but rather a management of the population at the level it has been stable at for the last 20 or so years. The current population estimate is at the lower end of this range.

Post-hunt buck ratio

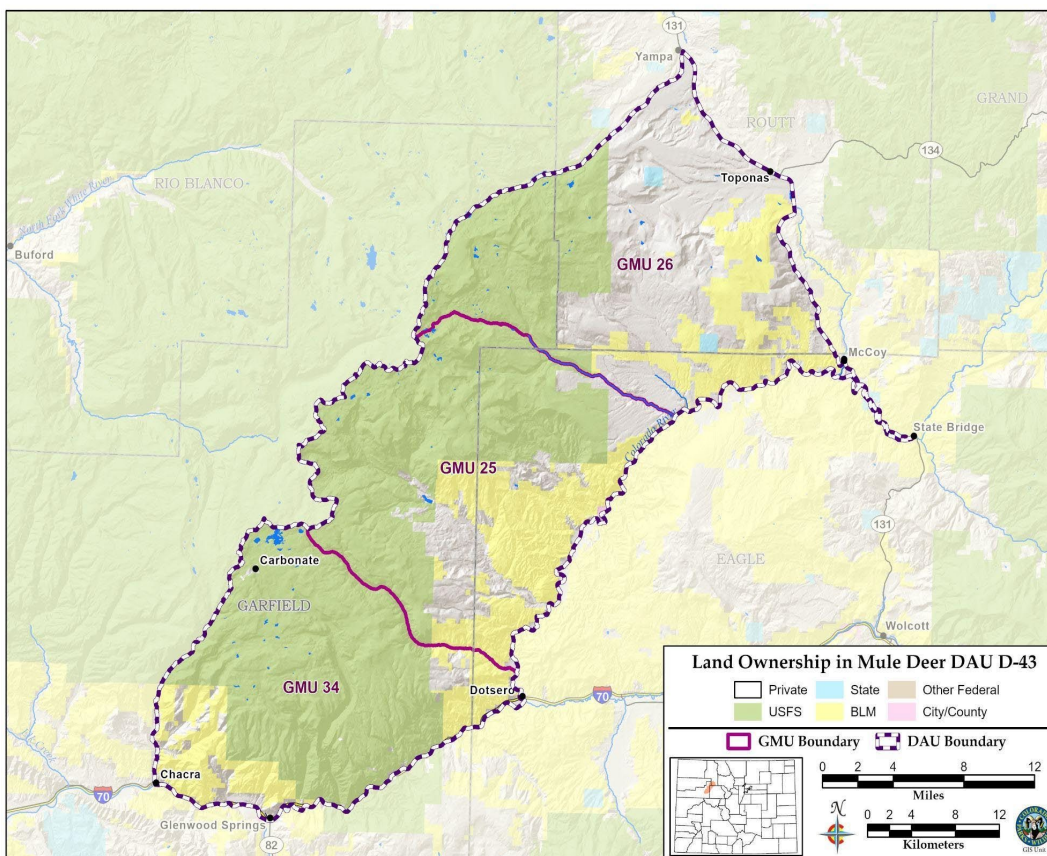
25 - 32 bucks: 100 does

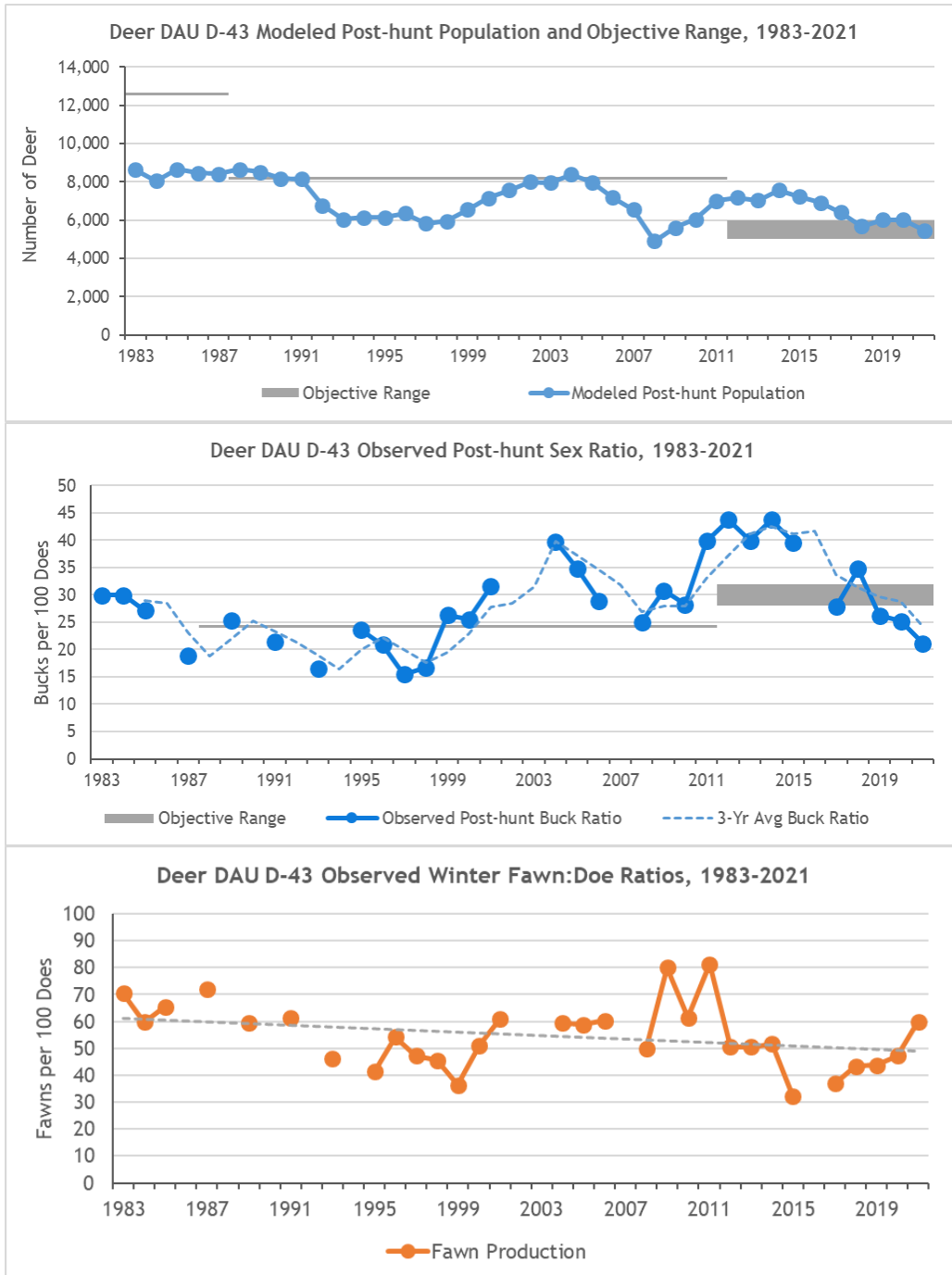
As of 2021, the post-hunt observed 3-year average sex ratio was 24.5 bucks per 100 does. Most stakeholders would like to see CPW strike a balance between reducing CWD prevalence and maintaining mature buck harvest in this DAU. The sex ratio objective range of 25 - 32 bucks: 100 does attempts widens the sex ratio for CPW to make adjustments as prevalence of the disease fluctuates over time. This objective range gives CPW the flexibility to manage at the lower end of the range when CWD prevalence is high and manage at the higher end of the range when CWD prevalence is low.

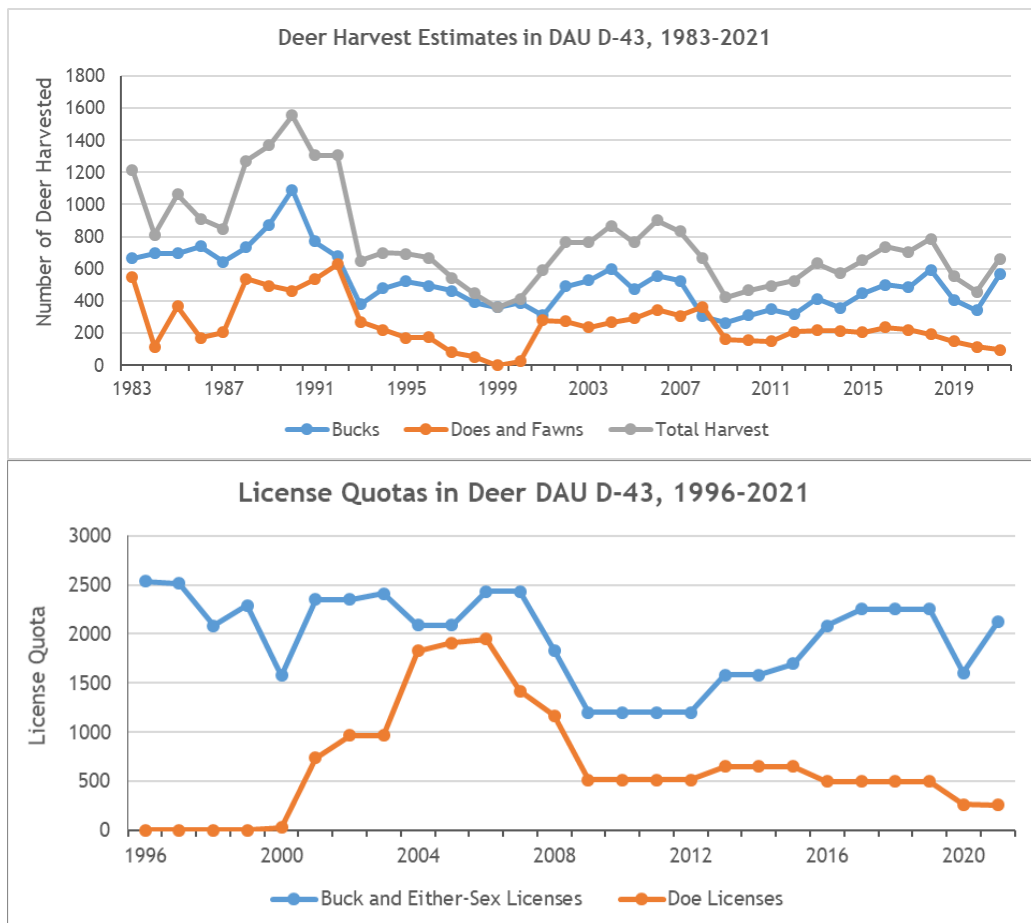
SWEETWATER CREEK MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-43

Julie Mao, Wildlife Biologist, Glenwood Springs

Sweetwater Creek Deer Herd (DAU D-43)		GMUs: 25, 26, 34
Post-hunt population:		
Current (2011 plan) Population Objective:	5,000-6,000 deer	
Post-hunt 2021 Population Estimate:	5,464 deer	
Proposed New Population Objective	4,000-6,000 deer	
Post-hunt Sex Ratio (Bucks:100 Does):		
Current (2011 plan) Sex Ratio Objective:	28-32 bucks per 100 does	
Most Recent 3-year Average of Observed Sex Ratio:	24 bucks per 100 does	
Proposed New Sex Ratio Objective:	18-25 bucks per 100 does	







Background

The Sweetwater Creek mule deer DAU D-43 in northwest Colorado consists of Game Management Units (GMUs) 25, 26, and 34, and is located in Garfield, Eagle, and Routt counties. The DAU extends from the southeast portion of the Flat Tops Wilderness Area to the Colorado River. Glenwood Springs is the major town in the DAU. Some of the smaller towns within and adjacent to the DAU include Dotsero, Burns, McCoy, and Toponas. Public lands comprise 74% of the lands in the DAU.

In the 2011 herd management plan, CPW lowered D-43’s population objective to account for the changing landscape and set an objective range of 5,000-6,000 deer. Over the past 10 years of managing for this population objective, the population has varied both above and within the objective range. In the past 4-5 years, the population has declined within objective and some years the population estimate has come close to even dropping below objective. D-43’s most recent population estimate in 2021 was 5,464 deer, which is within the current objective range. However, considering longer term trends, the current objective range is too narrow to capture both the natural fluctuations in population size as well as the negative population effects of chronic wasting disease (CWD).

The herd’s sex ratio objective was set in the 2011 DAU plan at a range of 28-32 bucks:100 does. Due to conservative buck harvest for several years following the severe winter of 2008,

the sex ratio climbed quickly to 40-45 bucks per 100 does from the period 2011-2015. As buck and either-sex license quotas were ratcheted upward since 2013, the sex ratio has dropped within and then below the objective range. The current 3-year (2019-2021) average is 24 bucks:100 does. Because of high CWD prevalence (discussed further below) in the DAU, since 2021 we have intentionally managed below the current sex ratio objective.

Buck and either-sex license quotas were increased incrementally from 2013-2107 and held steady through 2019. As the sex ratio and hunter success rates declined in 2019, buck and either-sex license quotas were cut in 2020. However, with the discovery in the 2020 mandatory CWD testing for the unit that the CWD prevalence rate in bucks was very high at 14%, we raised buck and either-sex license quotas back up to the 2017-2019 levels in order to manage the sex ratio downward to reduce the CWD rate. D-43 will be a mandatory CWD test unit again in 2022. Doe license quotas were maintained at a fairly stable level throughout most of the past 10 years with some minor adjustments to maintain the population within objective range.

Significant Issues

Chronic wasting disease is currently the major management issue for the D-43 herd. Although CWD was known to occur in the unit, it was not until the mandatory CWD testing in 2020 that the current high prevalence rate of 14% was discovered. The adjacent DAU D-7 had a similarly high rate of 15% and there is likely movement and interaction of deer between the two DAUs in the Flattop Mountains. CWD prevalence rates of >5% can lead to rapid spread of the disease within a herd and will have population-level impacts through higher mortality of adult deer and a decline in the age structure of a population. The high CWD rate may in part explain why the population declined since 2015 despite little change in doe license quotas and even reductions in doe licenses and harvest in recent years.

The primary land use change in the DAU is the acquisition of Sweetwater Lake by Eagle Valley Land Trust from a private landowner and its establishment in 2022 as a State Park managed jointly by USFS and CPW. On the one hand, the conversion of the property from private to public land may have averted the development of the parcel into a private commercial/residential resort. However, on the other hand, recreation activity on the lake and on surrounding USFS lands is expected to increase significantly with its status and publicity as a State Park. CPW, USFS, and the public need to be cognizant of the potential detrimental effects of increased recreation on habitat quality and loss of areas of solitude for wildlife. Often as recreation activity increases and people feel crowded by fellow recreationists, there is a “shifting baseline syndrome” of creating more trails and more access to accommodate growing demand for recreation opportunities. However, this would come at a long-term and likely irreversible cost to mule deer and other wildlife, as has happened elsewhere in Colorado.

Another potential land use change in D-43 is conversion and subdivision of the large ranches in GMU 26 and other smaller private parcels in GMU 25. Many of these ranches today are still operating livestock ranches that incidentally function as wildlife habitat, especially winter range for deer, elk, and other species. Continued economic viability for these ranches will be an important way to maintain these properties as habitat, rather than developing them into housing subdivisions and other non-habitat uses. If game damage occurs due to deer or elk occupying ranch lands and consuming excessive forage on private lands, CPW has mechanisms

through the Game Damage Program to compensate landowners and incentivize them to maintain their lands as habitat for both wildlife and livestock.

Finally, as elsewhere in Colorado and throughout the Western US, long-term fire suppression has led to over-mature shrubs and habitat succession such as pinon-juniper encroachment into sagebrush communities. Hotter summers, two decades of drought, and increased vehicle traffic and human activity are conditions that set up a situation ready for wildfires, such as the Grizzly Creek Fire of 2020 in GMU 34. Overall, wildfires are more of a benefit in the long run than a short-term hazard to wildlife and their habitat, but after decades of accumulation of dry fuel loads, wildfires today can burn hotter and more catastrophically for people and our infrastructure. Prescribed burns and mechanical treatments can however benefit wildlife habitat in a more planned and controlled way.

Management Objective Recommendations

CPW recommends a new population objective range of 4,000-6,000 deer. This objective widens the lower end of the current 2011 Plan objective of 5,000-6,000 deer. The current objective range is relatively narrow compared to the more recent objectives for neighboring deer herds. Lowering the bottom end of the objective range provides more flexibility in managing a herd with high CWD rates. The population might decline on its own due to CWD-related mortalities and/or we might need to intentionally reduce deer population density for several years to drive the CWD rate below 5%. Assuming that the CWD rate can be reduced through harvest management, the population could also remain or grow back to the mid/upper end of the population objective range.

CPW recommends lowering the sex ratio objective to 18-25 bucks:100 does primarily to manage CWD rates downward. This proposed objective range is the same as neighboring deer DAU D-7's. CWD in deer is twice as prevalent in bucks than does, and is also higher in prevalence in older versus younger bucks. Reducing the sex ratio by harvesting more bucks will help to reduce the CWD rate. Harvesting older bucks, who tend to be more vulnerable to harvest in the later rifle seasons during the rut, will also help with CWD management. Geographic hotspots of CWD, if identified, should also be targeted for increased buck harvest. Based on the initial 2020 mandatory CWD testing, all of the positive samples came from GMUs 25 and 26; however, lack of detection in GMU 34 could have been due to a small sample size. Because buck and either-sex license quotas were increased already in 2021, back up to the previous 2017-2019 levels, and the current 3-year average sex ratio has declined to 24 bucks per 100 does, there will likely be no need for any further increases in licenses. Doe licenses likewise will likely remain similar. Depending on the results from the 2022 mandatory CWD testing, we will adjust licenses accordingly to adapt to CWD management needs within the context of the new objectives.

Stakeholder Outreach and Input

These proposed objectives have been presented at a general public meeting held in Glenwood Springs, as well as to the Lower Colorado River Habitat Partnership Program, Eagle County, and Garfield County commissioners.

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

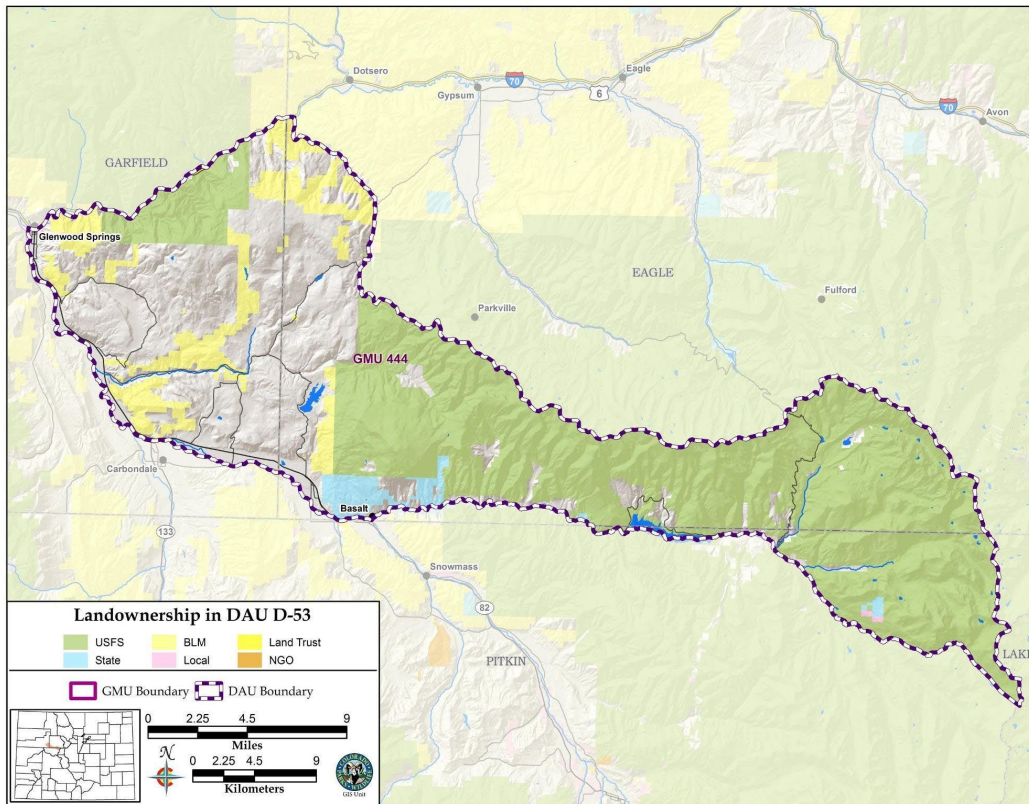
CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

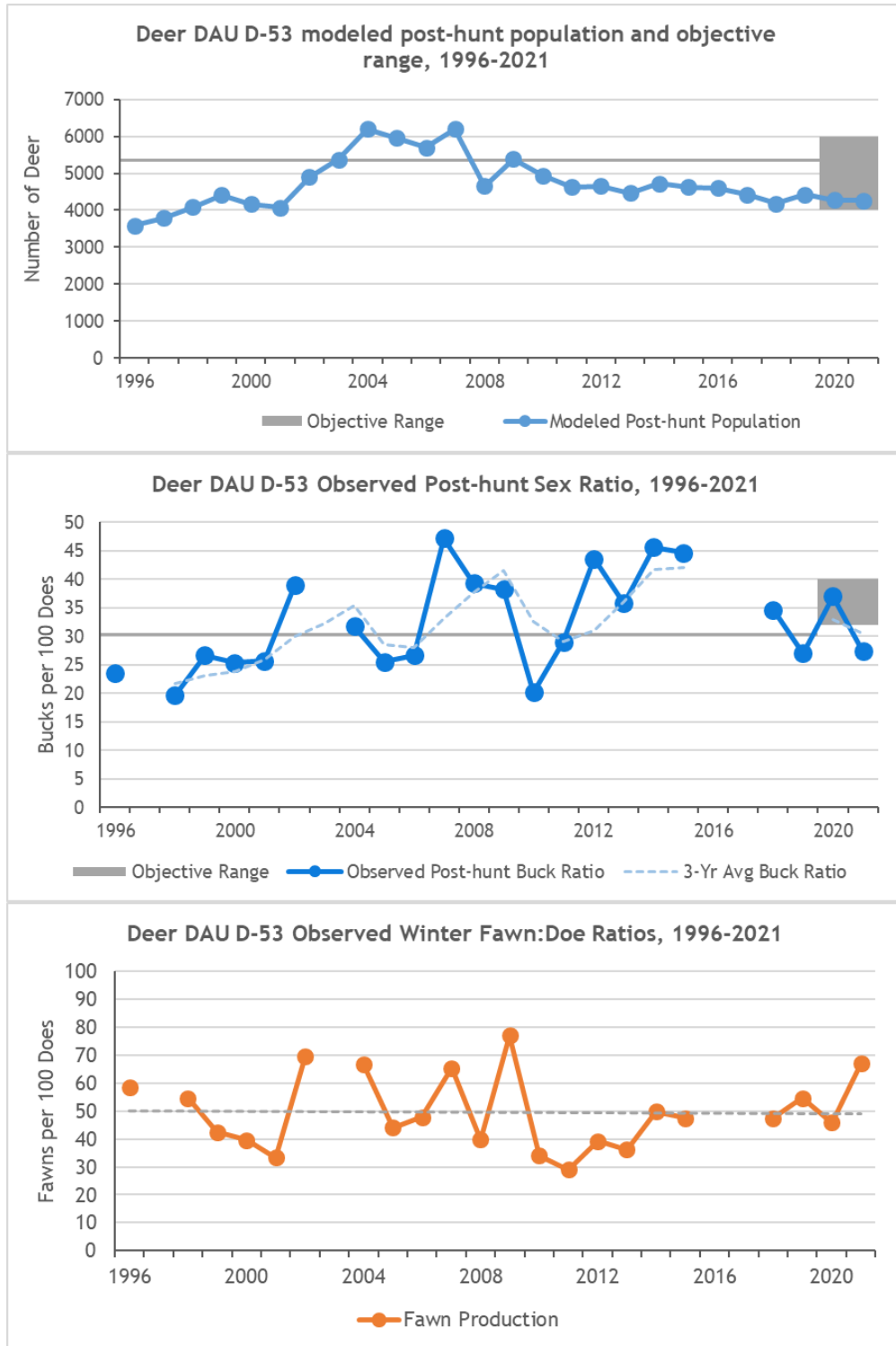
To achieve the updated population objective and to maintain the current sex ratio objective, CPW will continue to set licenses annually to both provide hunting opportunities and to manage for low CWD rates. CWD prevalence will continue to be monitored through periodic mandatory testing and through voluntary sample submissions.

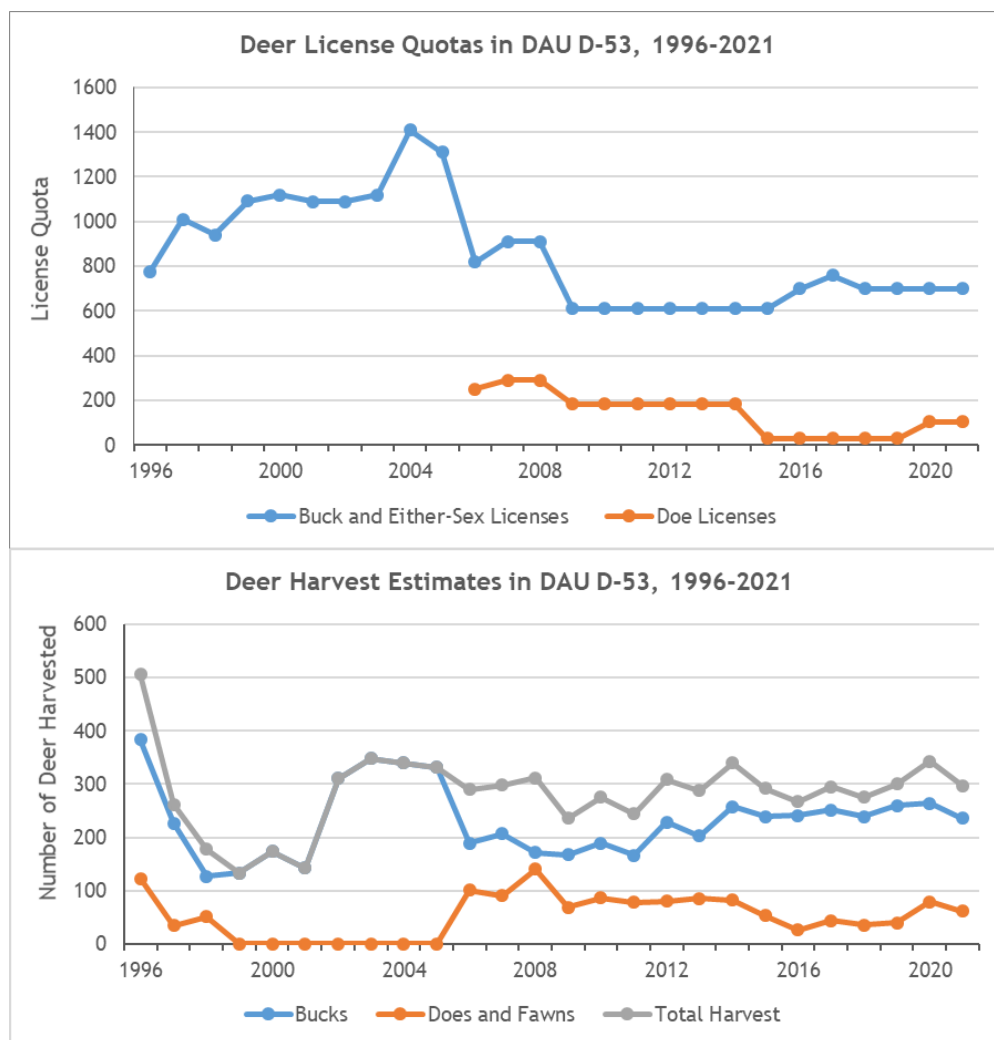
BASALT MULE DEER HERD MANAGEMENT PLAN DATA ANALYSIS UNIT D-53

Julie Mao, Wildlife Biologist, Glenwood Springs

Basalt Deer Herd (DAU D-53)	GMU: 444
Approval Year for last HMP: 2020	
Post-hunt population:	
Current (2020 plan) Population Objective:	4,000-6,000 deer
Post-hunt 2021 Population Estimate:	4,262 deer
Extension Population Objective	<u>No change, 4,000-6,000 deer</u>
Post-hunt Sex Ratio (Bucks:100 Does):	
Current (2020 plan) Sex Ratio Objective:	32-40 bucks per 100 does
Most Recent 3-year Average of Observed Sex Ratio:	31 bucks per 100 does
Extension Sex Ratio Objective:	<u>No change, 32-40 bucks per 100 does</u>







Background

The Basalt mule deer Data Analysis Unit (DAU) D-53 is located in Pitkin, Eagle, and Garfield Counties within northwest Colorado and consists of Game Management Unit (GMU) 444. The unit covers 960 km² (371 mi²), 65% of which are public lands. D-53 is bounded roughly in the area between the Fryingpan River, Roaring Fork River, Colorado River, the top of Red Table Mountain, and the ridgeline of the Sawatch Range. Major towns within and adjacent to the unit include Basalt, El Jebel, Carbondale, Glenwood Springs, as well as the smaller communities of Meredith and Thomasville.

The objectives for this herd were revised recently in the [2020 D-53 herd management plan](#), which set an updated population objective range of 4,000-6,000 deer and a sex ratio objective of 32-40 bucks:100 does. The 2021 post-hunt population estimate was 4,262 deer, within the population objective range. The most recent 3-year (2019-2021) average is 31 bucks per 100 does, just slightly below the sex ratio objective range.

Significant Issues

The major issues for this deer herd involve the cumulative effects of decades of human population growth and impacts of human activities on deer habitat in the Roaring Fork Valley. The result has been a loss of habitat quantity and quality and less solitude from human disturbance. The unit's carrying capacity for mule deer has declined compared to conditions in past decades when the previous objectives were set over 2 decades ago. Significant issues include habitat loss and fragmentation from land development, declining habitat condition, and impacts of human recreation on deer. CWD prevalence in this herd is not well characterized due to low sample size. One CWD-positive deer has been detected, a buck that was culled and tested due to observable symptoms. So far, no CWD-positive deer have been detected among the mandatory checks of harvested deer.

Management Objective Recommendations

CPW recommends maintaining the recently updated objectives for D-53 that were set in the [2020 herd management plan](#). The population objective of 4,000-6,000 deer provides the most flexibility in population management relative to the herd's current status. Within this objective range, the herd could either remain stable or be allowed to increase if habitat conditions, land use changes and/or weather conditions are favorable for population growth. The sex ratio objective range of 32-40 bucks:100 does balances the hunting public's desire for quality bucks while still maintaining enough buck licenses to provide hunting opportunities every year or few years. Because of limited public lands in the western one-third of the unit, managing lower than this sex ratio objective range would likely increase hunter crowding and private land trespass issues to undesirable levels. With minimal documented CWD in this unit so far, a slightly higher sex ratio can be sustained; but if the CWD prevalence rate reaches 5% or higher, then a revision of the sex ratio objective may be needed to adjust the sex ratio downward.

Stakeholder Outreach and Input

In 2017 and 2018, CPW conducted public outreach to D-53 license holders and applicants, held a general public meeting, solicited public comments through online questionnaires, presented to the Eagle, Garfield, and Pitkin Boards of County Commissioners and the Lower Colorado Habitat Partnership Program, and requested comments from BLM and USFS. Most hunters ranked "spending time in nature" and "spending time with family/friends" as the most important reasons to hunt deer in D-53, while "contributing to wildlife management of deer" and "obtaining a trophy buck" were not as important for most D-53 hunters. For more details on public comments, see Appendices B-D of the [2020 D-53 herd management plan](#).

Strategies to Address Issues and Management Concerns and to Achieve Herd Management Objectives

CPW will continue to work collaboratively with our partners in the federal land management agencies, private landowners, county governments, local municipalities and NGOs to protect and enhance the remaining mule deer habitat. Important habitat conservation methods include habitat treatments, conservation easements or land acquisitions, maintaining landscape connectivity and movement corridors, and adhering to seasonal recreation closures on winter range areas.

To achieve the objectives of a population size of 4,000-6,000 deer and a sex ratio of 32-40 bucks per 100 does over the next 10 years, CPW will continue to set licenses annually, keeping in mind such issues as providing sufficient hunting opportunity for both buck and doe harvest, and sustaining a stable, if not growing, deer herd.

Literature Cited

- Baur, Lauren, M. D. Smith, K. A. Schoenecker, P. Meiman, 2016. Effects of Feral Horse Herds of Plant Communities Across a Precipitation Gradient. Colorado State University.
- Boyd, C. S., K. W. Davies, and G. H. Collins. 2017. Impacts of Feral Horse Use on Herbaceous Riparian Vegetation Within a Sagebrush-Steppe Ecosystem. *Rangeland Ecology and Management* 70:411-417.
- Colorado Parks and Wildlife. 2018. Chronic wasting disease response plan. Denver, Colorado, USA.
- Conner, M. M., M. E. Wood, A. Hubbs, J. Binfet, A. Holland, L. R. Meduna, A. Roug, J. P. Runge, T. D. Nordeen, M. J. Pybus, and M. W. Miller. 2021. The relationship between harvest management and chronic wasting disease prevalence trends in western mule deer herds. *Journal of Wildlife Diseases* 57:831-843
- Danvir, R. E. 2018. Multiple-use management of western U.S. rangelands: Wild horses, wildlife, and livestock. *Human-Wildlife Interactions* 12:5-17.
- Hall, L. K., R. T. Larsen, C. C. Westover, R. N. Knight, and B. R. McMillan. 2016. Influence of exotic horses on the use of water by communities of native wildlife in a semi-arid environment. *Journal of Arid Environments* 127:100-105.
- Johnson, H. E., J. R. Sushinsky, A. Holland, E. J. Bergman, T. Balzer, J. Garner, and S. E. Reed. 2017. Increases in residential and energy development are associated with reductions in recruitment for a large ungulate. *Global Change Biology* 23:578-59.
- Lendrum, P.E., Anderson, C.R., Monteith, K.L., Jenks, J. A., Bowyer, R. T. 2013. Migrating Mule Deer: Effects of Anthropogenically Altered Landscapes. *PLOS ONE*. 8(5) pp. 1-10.
- Miller, M. W., J. P. Runge, A. A. Holland, and M. D. Eckert. 2020. Hunting pressure modulates prion infection risk in mule deer herds. *Journal of Wildlife Diseases* 56:781-790.
- Olson, R. 1992. Mule deer habitat requirements and management In Wyoming. Department of Renewable Resources, College of Agriculture, University of Wyoming, Laramie, USA.
- Sawyer, H., Kauffman, M. J., Middleton, A. D., Morrison, T. A., Nielson, R. M., and Wyckoff, T. B. 2012. A framework for understanding semi-permeable barrier effects on migratory ungulates. *Journal of Applied Ecology*. pp. 1-11
- Tollefson, T. N., L.A. Shipley, W. L. Myers, and N. Dasgupta. 2011. Forage quality's influence on mule deer fawns. *The Journal of Wildlife Management*, 75:919-928.

APPENDIX A: 30 Day Comment Period General Responses

(DAU specific comments are provided in the individual DAU comment Appendices)

General Comments

Sending a public comment regarding the 2023 revised deer plans for NW Colorado.

I do not support lowering population objectives in those units. Buck numbers and age class are already down. The deer got hammered this year during third season , with the cold and snow. I support keeping the population objectives as is. There is plenty of opportunity out there, let's have some places where we can see more mature deer.

Hunted Colorado since 1999.

Brad, as a non-resident hunter since 1998, we have had alot of memorable hunts in colorado. Many things things have changed no doubt. But as we (our group) has taken our kids and younger members. They all want better quality animals deer and elk. They are more into quality as that is how the young generation is being exposed to hunting. The younger hunters express concern over quality and they refuse to hunt unless its a quality animal hunt.

As we take our own stock animals and pass on alot of elk and deer waiting for a nicer animal we are pretty serious hunters.

If our opinion matters, please manage the elk for more quality bulls and eliminate the late season deer hunts as they are in place now.

The elk and deer herds in NW Colorado deserve a fair management plan. Your plan must begin with an accurate and reliable post-2021 population estimate—That is a problem. Your population estimate is based on fiction, not on reality. Where do you get your numbers? I think this number has been carried though the years in a mysterious, undocumented, and false assumption since the 1990'S. How can you magically design a plan based on a fictious population? There are several other problems with your assumptions on predation, range quality, impacts, and disease. The “before” and “after” data for these impacts are nonexistent. You can't measure the effects of drought on quality unless you know the pre-drought quality.

The data you use for these management plans is flawed. The deer and elk population in Western Colorado is considerably less that it was even 5 years ago. Your data does not reflect that. For the past 35 years I have spent almost every deer and elk season guiding hunters in NW and SW Colorado, hiking and observing deer and elk. **THERE ARE LESS ANIMALS NOW THAN EVER!**

Your management plan is needed, but it must begin with verifiable and reliable population numbers and a data set representing reality.

In my own opinion and as a concerned Hunter I would suggest opening up late seasons and extending seasons, the other option I suggest is capture some of the overpopulated deer areas and transfer them to lower populated areas east of I-25 and other regions

It has been extremely difficult for Colorado residents to pull big game licenses with priority in our own state. I believe that any Colorado resident that desires, has preference points, or puts in to help reduce these herds should be given first chance to help in this goal.

As a family of hunters, the priority order is unfairly granted to out of staters. This is a perfect opportunity for our Colorado funded organization to give back to it's people. Colorado hunters first....please!

Thank you to you and your team for the work in managing our deer herds. Quite the document and research. A Lot of the problems the deer are having I agree with your assessment, especially loss of habitat/winter range, due to development and growth. Although I read the entire document, I especially agree with D-12, D-18 analysis and plans.

Thanks again for your hard work.

Below you will find my comments with regard to the Herd Managment Plan public input. I appreciate the opportunity to share my thoughts.

General Comments

My main concern is the loss in quality deer hunting in the future. Based on my numerous days in the field, I feel as though the population objectives, with the projection of wolves being introduced in the near future, are a little low and that the tag allocations should anticipate the decrease in deer population with the wolf introduction.

Thank you for considering my input.

APPENDIX D1: Stakeholder Input

APPENDIX D1-A: HPP Letter



December 14, 2022

Darby Finley
Colorado Parks and Wildlife
73485 Highway 64
Meeker, CO 81641

RE: Northwest Colorado Habitat Partnership Program Comments - HMP D-1, D-6, D-7

Dear Mr. Finley:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsperson, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the Northwest Colorado HPP (NWCOHPP) Committee has reviewed the D-1, D-6, and D-7 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The NWCOHPP Committee supports the draft alternatives for the population objective and the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsperson desires and landowner concerns. While there are concerns about the current population and a desire to increase local herd sizes, we believe the preferred alternative is appropriate given the increasing trend in CWD prevalence, concerns over adequate winter range, and the other identified factors.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat across the committee area. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The Northwest Colorado HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Gary Visintainer, Chair
Northwest Colorado HPP Committee

APPENDIX D2: Stakeholder Input

Appendix D2-A: Comment from 30 day comment period:

I have spent many days in the D-2 region of the state hunting and scouting for game over the last 4 years. From my experience, the deer herds in units 4/441/214 have really taken a big hit the last few years. It is much harder to find quality hunting experiences for deer since the aggressive tag allocations. In 2022, I did see the populations start to recover since the decrease and was much more enjoyable of an experience than previous years. In my opinion, the previous tag allocations were a little too high for what the majority of the herd could handle long-term. I understand the objective of the allocation was for reduction in CWD. I commend the effort to reduce CWD through hunting, but from my experience in the D-2 region, I do not believe those efforts are a sustainable method. I believe the 25,000 lower bound on the objective is too low and should be 30,000.

APPENDIX D2-B: HPP Comment letter



December 14, 2022

Darby Finley
Colorado Parks and Wildlife
73485 Highway 64
Meeker, CO 81641

RE: Northwest Colorado Habitat Partnership Program Comments - HMP D-2

Dear Mr. Finley:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsperson, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the Northwest Colorado HPP (NWCOPHP) Committee has reviewed the D-2 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The NWCOPHP Committee would like to extend the draft alternative for the population objective. The Committee would prefer the population objective to be extended from 25,000-35,000 to 30,000-40,000 deer. We believe this more adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsperson desires and landowner concerns. Additionally, the Committee is in support of the proposed sex ratio range.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat in D-2. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The Northwest Colorado HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Gary Visintainer, Chair
Northwest Colorado HPP Committee

APPENDIX D3: Stakeholder Input

APPENDIX D3-A: HPP letter



January 25, 2023

Eric VanNatta
Colorado Parks and Wildlife
925 Weiss Drive
Steamboat Springs, CO 80477

RE: North Park Habitat Partnership Program Comments - HMP D-3

Dear Mr. VanNatta:

One of the initial reasons for creating the Habitat Partnership Program (HPP) was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of the North Park HPP (NPHPP) Committee consists of three livestock growers, a sportsperson, USFS, BLM, USFWS, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in achieving big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the NPHPP Committee has reviewed the D-3 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The NPHPP Committee supports the draft alternatives to expand the current population objective and maintain the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsperson desires and landowner concerns. While there are concerns about the current population and a desire to increase the local herd size, we believe the proposed alternative is appropriate given the CWD prevalence, concerns over winter range, and the other identified factors. We ask CPW to apply adaptive management practices and update the plan as needed to sustain deer populations.

As stated above, HPP is directed by statute to assist CPW to achieve game management objectives. The Committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat in D-3. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The North Park HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Todd Peterson

Todd Peterson, Chair
North Park HPP Committee

APPENDIX D6: Stakeholder Input

APPENDIX D6-A: HPP letter



December 14, 2022

Darby Finley
Colorado Parks and Wildlife
73485 Highway 64
Meeker, CO 81641

RE: Northwest Colorado Habitat Partnership Program Comments - HMP D-1, D-6, D-7

Dear Mr. Finley:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsman, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the Northwest Colorado HPP (NWCOHPP) Committee has reviewed the D-1, D-6, and D-7 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The NWCOHPP Committee supports the draft alternatives for the population objective and the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsman desires and landowner concerns. While there are concerns about the current population and a desire to increase local herd sizes, we believe the preferred alternative is appropriate given the increasing trend in CWD prevalence, concerns over adequate winter range, and the other identified factors.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat across the committee area. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The Northwest Colorado HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Gary Visintainer, Chair
Northwest Colorado HPP Committee

APPENDIX D7: Stakeholder Input

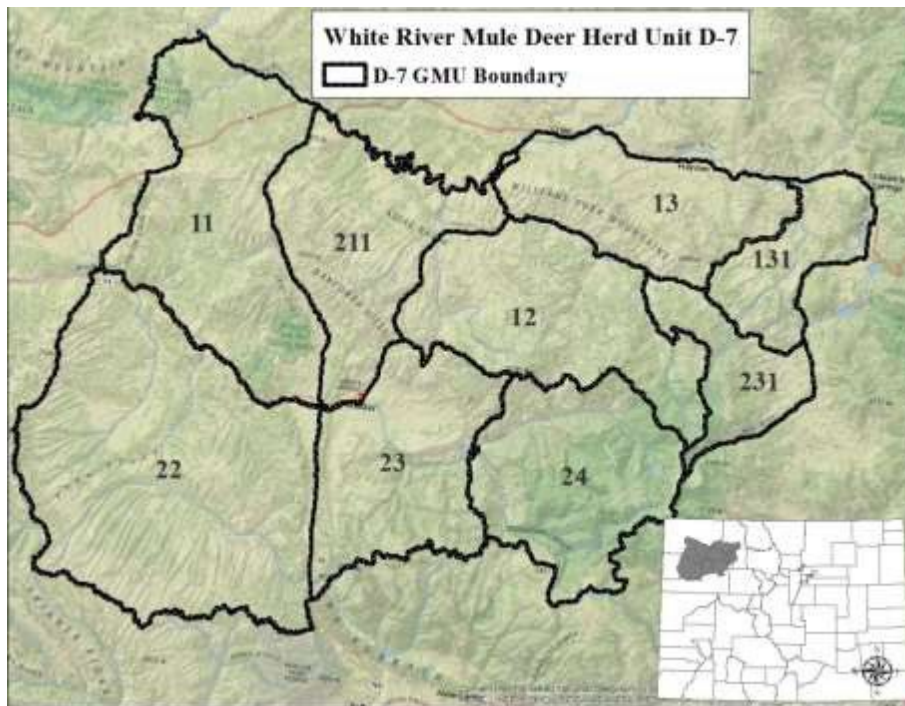
APPENDIX D7-A: Public input survey

Colorado Deer Management in Game Management Units for the White River Herd.

Please return this form no later than ____ to CPW _____. Your contribution to this process is vital; thank you for taking part. This form is also available online at: _____

Colorado Parks & Wildlife (CPW) is interested in your input on the management of the White River deer herd, which includes Game Management Units (GMUs) 11, 12, 13, 22, 23, 24, 131, 211, and 231. Your input is very important. The information you provide will help guide management of deer herds for the next 10 years.

Your responses will remain confidential and at no time will they be associated with your name.



1. Do you currently live within any of the White River deer herd GMUs? (See map above) *(Please check one.)*

- Yes 33 (56.9%)
- No 25 (43.1%)

2. During the last 12 months, have you participated in any outdoor recreation other than hunting (e.g. camping, snowmobiling, etc.) within any of the White River deer herd GMUs? *(Please check one.)*

- Yes 40 (69.0%) _____
- No 18 (31.0%) _____

3. Which of the following best describes how you interact with deer within the White River GMUs? *(Please check all that apply.)*

- As a viewer/wildlife watcher 27 (46.6%)
- As a landowner 25 (43.1%)
- As a hunter 54 (93.1%)
- As a livestock producer 15 (25.9%)
- As an Outdoor recreationist (e.g., hiker, skier, mountain biker, etc.) 21 (36.2%)
- As a Guide/Outfitter 11 (19.0%)
- Other (Please specify): _____

4. How concerned are you about the following items? (Please check one response for each item.)

	Not at all Concerned	Slightly Concerned	Moderately Concerned	Very Concerned
Deer-vehicle collisions 2.5	18.5%	31.5%	27.8%	22.2%
Economic losses to ranchers/farmers due to deer damaging crops, fences, etc. 1.6	53.4%	31.0%	13.8%	1.7%
The potential for deer to starve during the winter 3.1	5.2%	19.0%	37.9%	37.9%
Loss of deer habitat due to development 3.3	5.3%	8.8%	38.6%	47.4%
Increasing outdoor recreation 3.1	5.7%	20.8%	34.0%	39.6%
Economic losses to local residents due to decreased hunting opportunity 2.7	16.1%	30.4%	17.9%	35.7%
The potential for deer to spread disease to humans, pets, or livestock 2.0	43.1%	24.1%	20.7%	12.1%
Predation on deer 3.4	7.1%	10.7%	16.1%	66.1%
Other (please specify AND indicate your level of concern): _____				

5. Because of Chronic Wasting Disease (CWD) in deer, how concerned are you about each of the following? (Please check one response for each statement.)

How concerned are you about...	Not at all concerned	Slightly concerned	Moderately concerned	Very concerned
...your or your family’s health? 2.1	29.8%	40.4%	15.8%	14.0%
...the health of affected deer herds in White River GMUs? 3.3	6.9%	12.1%	22.4%	58.6%
...not having enough healthy deer to hunt in White River GMUs? 3.2	10.3%	10.3%	24.1%	55.2%
...eating meat from a deer harvested in White River GMUs? 2.2	32.8%	31.0%	19.0%	17.2%

6. How, if at all, has the White River deer herd changed during the previous 10 years? *(Please check one.)*

10.7% The number of deer has increased 78.6%
The number of deer has decreased

10.7% The deer herd has not changed

7. How important to you is it that the population of the White River deer herd... *(Please check one.)*

	Not at all important to me	Somewhat important to me	Moderately important to me	Very important to me
...stays the same (i.e., the current population is maintained) 3.3	4.9%	19.5%	19.5%	56.1%
...increases somewhat 3.6	3.6%	5.4%	23.2%	67.9%
...decreases somewhat 2.1	54.1%	8.1%	10.8%	27.0%

8. How important to you are the following... *(Please check one.)*

	Not at all important to me	Somewhat important to me	Moderately important to me	Very important to me
Being able to hunt deer in the White River herd (either sex) 2.7	18.4%	28.6%	14.3%	38.8%
Being able to hunt trophy bucks in the White River Herd 3.4	8.9%	10.7%	12.5%	67.9%

9. Have you ever hunted deer in any of the White River deer herd GMUs? *(If no, skip to question 11)* Yes 89.5% No 10.5%

10. Overall, how satisfied were you with your deer hunting experience(s) in White River GMUs? *(Please check one.)*

Very unsatisfied 13.5%
Somewhat unsatisfied 19.2%
Neither unsatisfied nor satisfied 13.5%

Somewhat satisfied 32.7%
Very satisfied 21.2%

11. In what year were you born? *(Please provide four-digit year.)*

12. In what zip code is your primary residence? _____

13. Please use the space below to describe any other aspects about deer hunting that would improve your hunting experience or to share any additional comments you have about the management of White River deer herds.

Thank you for taking the time to provide comments.

Comment Form - Written Comments

Habitat

- I feel the mulching of oaks has ruined areas. Elk and Deer will have no place to hide. There is no oaks to stop bullets so more people have a chance of being shot. There are now half the stands to hunt from. I never seen an uglier mess then what you guys did at unit 12.
- We need to improve habitat on public land.
- I would also like to recommend more habitat improvements on federal lands. I think we need to be careful with the HPP program congregating animals in smaller areas on private property e.g. alfalfa fields with big gun sprinklers.

CWD

- CWD Has been around forever, Mother Nature has always done her job and harsh winters are just part of the cycle. Killing off the herd to try and combat something is ridiculous, you will thin the numbers to somehow fabricate a buck to doe ratio that a book says you should have, just leave them alone and nature will take its course. If you reduce the herd and then get a winterkill in the near future then what do you have? Kill more predators and you will be fine! Thank you for listening.

- I've had one buck come back positive for CWD and attempted to eat it. I could not finish it all kinda freaked me out. I'm not convinced that consumption of infected deer will transfer to humans. I believe it would have been proven to already done so.
- I appreciate CPWs attempt to get public in put on CWD management but I hope management actions are based on science and not watered down to appease short sighted people who are ignorant of BMPs for CWD management. Lets do what is needed to catch and manage CWD now. Future hunting will benefit more from that than trying to minimize short term impacts to a few outfitters bank accounts.
- I think we need to kill a good amount of deer to cut down the CWD and the start building back up the herd
- I believe we should target CWD in hot spots for management of the disease by decreasing buck to doe ratio and the number of old age class bucks. Once (if) CWD is lowered below the 5% mark, then we can change the focus to growing the herd in healthier ways. We need to work with the municipalities on targeting town deer.
- I would like to see CWD hot spots targeted to have a later season dates, area should be targeted very specifically, not unit wide.
- I am not concerned about CWD and don't support the killing of the big bucks or other deer thinking it will slow or stop the spread of cwd in the animals. It won't work and once you kill the deer it can't be undone and we may loose the deer herds forever if the CPW chooses to slaughter our herds!
- I don't think CWD is a reason to wipe out the mature bucks or deer herds forever. I am not concerned about CWD and there is no scientific evidence to support that any of the tactics tried before in other states or areas have had any effect in stoping or slowing the spread of CWD. Don't increase the buck tags for 3rd and 4th seasons to kill off our bucks thinking it will slow the spread of CWD. It won't work and our deer herds may be lost forever if this happens!
- Salt blocks and other feed should be restricted by ranchers as to prevent access from other wildlife in areas wildlife are infected with CWD. It is unfortunate that salt blocks and other feed sources are being used by wildlife (which is contributing to the spread of CWD) in the White River units. In addition, there could be targeted areas within the state which OTC bow tags could be used to

Population Management

- I seen a increase in deer list year than some of last few years
- We hunted 2018 2nd season rifle and did not see one deer or elk
- Proactive measures to reduce road kill, proactive measures to reduce mortality associated with fences. Continued/increase habitat improvement projects to increase winter range carrying capacity especially on public lands. Work with CDOT to ensure frontage fences are wildlife friendly including modifying larger stretches of the Hwy 13 fence south of Meeker.
- Concerned about: elk and CWD, CJD disease through eating the meat, wild horse impact to wildlife, improving wildlife habitat, financial support, implementation and on a large scale, more wildlife fences where there are no sheep, motion activated flashing lights at frequent crossing spots to lower road kill. Do this massive project with science not state office control or quick and favorite opinions.
- I want to see good numbers of deer with mature bucks. I don't want to see any does killed!

- Forget about making money and focus on the deer and elk numbers and overall quality and health.
- Want more doe tags
- I am supportive of the proposed mule deer management methods as presented at the Meeker meeting on 01/23/19 with the following exceptions: 1) I do not support culling methods similar to the one conducted during the Motherwell CWD discovery. 2) I do not think having antler point restrictions is a wise idea due to hunter error in counting antler points. I support an increase in deer license availability, especially as a CWD control measure in hot spots. There may be opportunity to have more deer hunting in late seasons, such as 4th season to harvest mature bucks. I would support and participate in habitat improvement projects for deer. I would support research to find out if shared salt and mineral stations between livestock and game animals is a factor in CWD and other disease transmission and if livestock salt and mineral stations and/or salt and mineral placement by livestock producers could be developed to minimize use by game animals?
- I believe in the science, do what the data suggests in terms of management.
- I believe deer numbers are related to elk numbers, vegetation (too much decadent growth) and predators. All 3 need to be checked into and \$ spent to fix.
- I think general consensus is increase in deer numbers. If that means a more aggressive approach to begin with to promote a lower prevalence which will in turn promote healthy herds then an increase can be achieved. Thanks for all you do!
- We need to seriously limit the tags in these units especially in units 23,24.ive lived here for 38 years and 25 miles up county rd 8,i have seen a huge decline in deer last 15 years,we used to drive to town in the evening and see 200 deer now we're lucky to see 20,we used to see 10 or so 160 inch trophy type bucks,havent seen 1 in 3 years,predation and disease is definitely a problem but giving tags for people to shoot little immature bucks because thats all there is,and does is the bigger issue.what if we put these units on a harder draw with a lot less tags?Colorado and land owners will loose some revenue but the goal of a bigger,healthy deer heard would be achieved.how can we plan ahead 10 years,its impossible, if we get 2 or 3 years with real bad winters there goes the majority of our deer.
- I think fawn mortality rates may have more to do with a declining herd in the white river valley than does over-hunting and loss of habitat at this point in time, although by no means do I think the latter two conditions are without consequence. I admit my knowledge of CWD statistics are lacking in this region, but I do know that we are seeing less and less fawns every summer.
- I think we have to be very cautious moving forward with planning hunting season dates, issuing too many tags, and managing recreational activities in these traumatized units. I think we have to be more proactive in managing creditors. I don't understand how we can be looking at a five-year management plan win we are not able to take into account the severity of the winters, harvest numbers per year, and fawn mortality rates. It's a fact that our deer numbers have dwindled. The decisions that are being made now to manage our deer herds are going to affect us for a very long time. I hope the correct decisions are made. I think units 23 and 24 need to be turned into trophy hunting units For both deer and elk.
- The white river deer herd needs help! I am a rancher/farmer that was born here and I have seen drastic changes in the deer population over the last 40 years. The hay fields around our house used to be filled with deer(100-400) now we have 10-20 and the ones we do have stay

really close to the house. I believe there is a combination of factors affecting the decrease in the population such as cwd, predators, elk population, traffic, fawn mortality, and lack of certain foods. The solution to these problems; the cwd I don't know, that's out of my realm.

- I would like to see the population increase and the number of mature bucks increase!
- I would like to see the hunting of does put to a stop and the population of the deer herds to increase and the number of mature bucks to increase.
- control mile deer populations which are over objectives and have CWD increasing in the population.

Livestock

- limit domestic sheep over grazing. the more sheep we see the less deer seen. more and more deer are balled up in private fields close to towns and don't migrate look at craig co from knez divide to yampa airport hundreds of deer, in rifle many deer live behind city market . meeker fields loaded with deer year round, i,ve been up there year round. so domestic sheep wiping out deer browse and too many deer in towns not migrating, probably inbreeding
- Cut cattle grazing down on public lands. Cattle should be moved off before hunting seasons, not during.

Hunting Opportunity

- I've hunted deer since 1975 in Colo. every year with the exception of serving in the US Navy 3 years and the few times I wasn't drawn. I want to hunt deer every year and have been 66% successful either sex but lately hunting only bucks. I try to take 2 1/2 year and older animals but have taken younger. I like big deer for their antlers and younger deer for meat.
- pleased with hunting here
- There is too much crowding from OTC elk hunters. I would like to see at least part of a deer hunt not overlap with any elk seasons.
- Too much crowding from OTC elk hunters. Would be nice to see a deer hunting season not the same time as elk hunting.
- Town deer need to have a late season archery hunt. Need to check with ERBM Rec Center for public hunting. Make list B and longer season dates.
- Too many over the counter tags distributed to out-of-state hunters. Plenty of Colorado hunters come from other parts of Colorado to hunt and boost economics for local businesses. Some out-of-state hunters is okay, but it's too many right now. Those of us who have lived here for generations and are teaching our children to hunt depend on the meat year round to feed our families. We pay local taxes, we support local businesses ALL year long and have come to depend on the land for our livelihood.
- In recent years, the CPW has only offered 10 muzzle loader doe tags for these areas. I would really like to see that number increased. I think that 10 is a ridiculously small number. That being said, I will probably not be hunting in these areas much longer now that Caerus Oil and Gas has kicked my family out of our traditional hunting grounds.
- Closed wintering ranges should be somewhat opened to predator hunters. Example: State Wildlife Areas. There are far too many elk hunters in these units during rifle seasons making

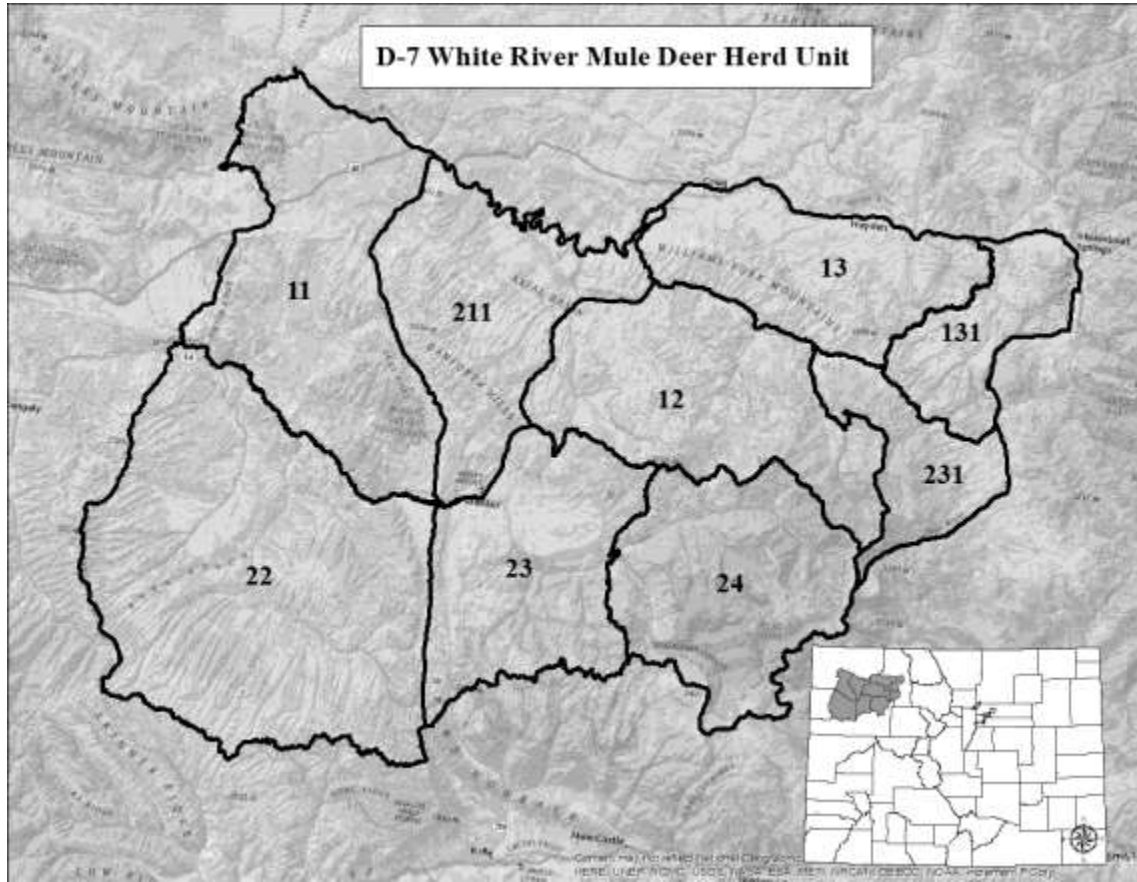
mule deer hunting frustrating. The quantity of deer in the area has become very disappointing over the last decade.

- Need to limit nonresidents, too many residents (myself included) cant draw every year and when we do we are overrun with nonresidents

Predation

- I believe predation is the #1 inhibitor to seeing an increase in the deer population. I believe the mule deer and greater sage grouse are on the same trajectory. Habitat management for both has improved immensley, but too many of the younger are being killed by predators before they can reproduce. That is leaving the population with primarily older, less productive animals.
- need to address predation
- I believe that more emphasis needs to be put on predator control/reduction. By removing predators in critical areas you can actually increase deer numbers. The harvest of mature bucks and harvesting more does will decrease an already struggling population. I think that we need to approach this problem from all sides, just reducing deer is a one sided approach.
- Open bear baiting and dog hunting June 1 - Oct. Kill more lions especially females. Open leg hold trapping for coyotes. Give out free mtn lion license and bear tag concurrent with big game season. Bounty for coyotes. Shut out doe tags completely and limit buck tags. No late deer seasons that are in the rut. No more tagging deer with helicopter. NO WOLVES!
- Predation is paramount. Lion quota: the taking of a female should count as .25 (1/4) of one animal off the quota. Manage predators, then the deer will not go to town and live with people seeking protection from predators. Build watering facilities and available watering impoundments and provide salt to diversify animals and lessen concentrations.
- We need to use all available means to control predators.
- It would also be nice to make a earlier bear hunt e.g. Aug 15.
- More and better control of predators, decrease the elk population, decrease traffic, decrease predators will help in fawn mortality, more controlled grazing for plant regrowth. I believe that if there were more sheep the deer food source would be better because sheep graze on plants that are more in line with the deer so there would be a better supply of regrowth to the plants that the deer thrive on. I am not a sheep rancher but its a fact that the sheep population in this area is some what like the deer population is now. Why has there been a decrease in sheep? just one of the reasons is predators. Between lion, coyotes, bears some of the ranchers cannot stay in business with the percent of lose that they are experiencing. All we need is the wolf and there wont be any deer left.
- Your entire focus seems to be on hunting vs preservation of any kind of 'natural' predator/prey environment. Really disturbing to me. Killing predators to increase herds for hunting income. I am not against hunting- just that it is now the primary reason to serve one segment of the population.
- bring in government hunters and trappers to reduce the predators on the deer and elk, get a handle on the limited licenses, get a handle on the gas and oil fields. Limit even more hunters if necessary.

APPENDIX D7-B: White River Deer Herd Hunter Questionnaire Results



About This Questionnaire

Colorado Parks and Wildlife (CPW) is currently re-evaluating the Herd Management Plan that guides the agency's management of the White River Deer Herd. The White River Deer Herd includes Game Management Units (GMUs):

- 11, 12, 13, 22, 23, 24, 131, 211, and 231.

The purpose of this survey is to better understand the perspectives of hunters' like yourself, who hunt in these GMUs. Learning from you will help CPW effectively manage this herd!

If you would rather complete this survey online, please type the entire web address below directly into your browser's address bar.

<https://www.research.net/r/WhiteRiverDeer2019>

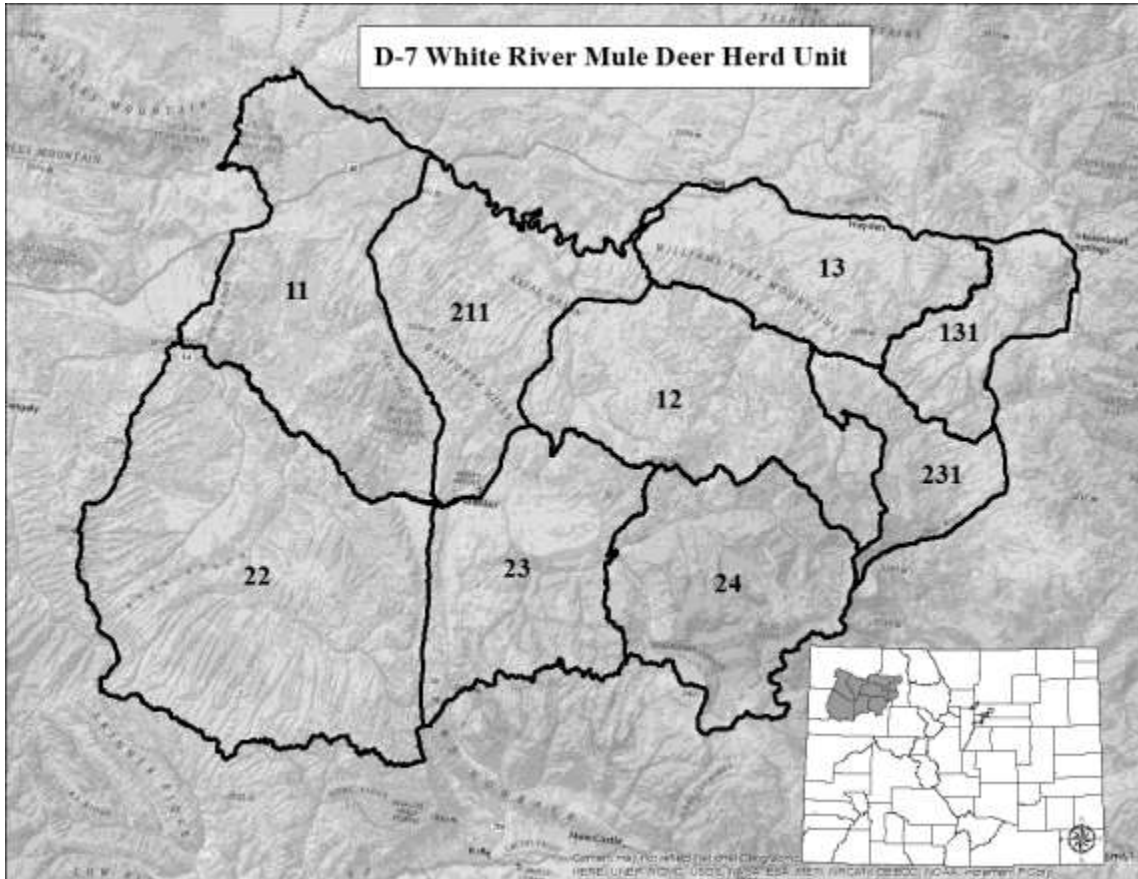
If you choose to participate online, you will be asked to enter the unique number associated with the paper survey located at the bottom of the last page.

Surveys must be complete by April 18, 2019

Background Information

1. Are you currently a resident of Colorado? *(Please check one.)* (n = 1,060; frequency and/or mean included throughout in parentheses) 59.9% (635) Yes
 40.1% (425) No

2. Do you currently live within any of the White River deer herd GMUs? *(See map below) (Please check one.)* (n = 1,049)
 11.5% (121) (Please CONTINUE to Question 3)
 88.5% (928) (Please SKIP to Question 4)



Your Experiences With Mule Deer

3. Do you currently lease or conduct hunts on any of your land for hunting deer as part of the Landowner Preference Program (LPP)? *(Please check one.)*
 20.5% (25)
 79.5% (97)

4. Which of the following best describes how you interact with deer in the White River GMUs? *(Please check all that apply.)*
- 22.3% (240) As a viewer/wildlife watcher
 - 7.1% (76) As a landowner
 - 96.0% (1,032) As a hunter
 - 2.9% (31) As a livestock producer
 - 18.0% (193) As an Outdoor recreationist (e.g., hiker, skier, mountain biker, etc.)
 - 2.7% (29) As a Guide/Outfitter
 - Other (Please specify): (e.g., camping/camper; commuting to/from work; snowmobile; employment)
5. Have you ever hunted deer in Colorado? *(Please check one.)* 98.2% (1,042) Yes
1.8% (19) No
6. Have you ever hunted deer in any of the White River deer herd GMUs? *(Please check one.)*
- 94.4% (981) Yes (Please CONTINUE to Question 7)
 - 5.6% (19) No (Please SKIP to Question 9)
7. Overall, how satisfied were you with your deer hunting experiences in any of the White River deer herd GMUs during the previous 10 years? *(Please check one.)*
- 10.5% (105) Very dissatisfied (Somewhat - Very dissatisfied = 27%)
 - 16.6% (164) Somewhat dissatisfied
 - 12.9% (128) Neither dissatisfied nor satisfied
 - 35.1% (347) Somewhat satisfied
 - 24.9% (246) Very satisfied (Somewhat - Very satisfied = 60%)
8. To what extent have you felt crowded by other hunters while deer hunting in any of the White River deer herd GMUs? *(Please check one.)*
- 15.2% (150) Not at all crowded
 - 25.7% (254) Slightly crowded
 - 32.3% (319) Moderately crowded
 - 26.9% (266) Very crowded

Reasons Why You Hunt

9. How important to you is each of the following reasons to hunt deer in Colorado? (*Please check one response for each statement.*)

(sample size “n”, mean “ \bar{x} ”, and percentages “numerical responses” indicated below)

<i>Reasons to hunt</i>	Not important	Slightly important	Moderately important	Very Important*
To spend time in nature (n = 1,047; \bar{x} = 3.60)	2.5	5.5	21.2	70.8
To harvest a trophy (n = 1,049; \bar{x} = 2.42)	22.8	30.7	28.6	17.9
To spend time with family/friends (n = 1,050; \bar{x} = 3.61)	2.0	6.9	19.1	72.0
To obtain wild game meat (n = 1,055; \bar{x} = 3.27)	3.1	15.4	32.7	48.8
To contribute to wildlife management (n = 1,052; \bar{x} = 3.21)	2.9	15.4	40.1	41.6
To contribute to the local community (e.g., financial benefits from hunters) (n = 1,051; \bar{x} = 2.76)	12.7	25.7	34.3	27.4
To test/improve my skills (n = 1,049; \bar{x} = 2.74)	16.8	21.4	32.7	29.1
For physical exercise (n = 1,049; \bar{x} = 2.90)	11.2	18.4	39.9	30.4
Other (please specify): (n = 76) (e.g., access to land; animal populations; issues with outfitters; enjoyment and relaxation)				

*Top three motivations based on “*Very important*” responses were: Spending time with friends/family, Spending time in nature, Obtaining game meat.

Motivations (“*Reasons to hunt*”) recoded (for ease of interpretation)

<i>Reasons to hunt</i>	Important*
To spend time in nature	92.0
To spend time with family/friends	91.1
To contribute to wildlife management	81.7
To obtain wild game meat	81.5
For physical exercise	70.3
To test/improve my skills	61.8

To contribute to the local community (e.g., financial benefits from hunters) 61.7

To harvest a trophy	46.6
---------------------	------

*Moderately and very important responses were recoded.

Potential Concerns About The White River Deer Herd

10. Please indicate how concerned you are about each of the following in White River deer herd GMUs

(Please check one response for each item.)

(sample size “n”, mean “ \bar{x} ”, and percentages “numerical responses” indicated below)

<i>How concerned are you about...</i>	Not at all concerned	Slightly concerned	Moderately concerned	Very concerned
Deer-vehicle collisions (n = 1,052; \bar{x} = 2.41)	24.3	29.7	27.0	19.0
Economic losses to ranchers/farmers due to deer damaging crops, fences, etc. (n = 1,051; \bar{x} = 2.12)	28.2	38.5	26.1	7.2
The potential for deer to starve during the winter season (n = 1,053; \bar{x} = 3.04)	6.6	21.0	34.0	38.5
Loss of deer habitat due to development (n = 1,058; \bar{x} = 3.25)	7.0	14.4	25.4	53.2
Increasing outdoor recreation (n = 1,049; \bar{x} = 2.84)	10.2	23.9	37.8	28.1
Economic losses to local residents due to decreased hunting opportunity (n = 1,053; \bar{x} = 2.80)	10.9	26.6	33.8	28.7
The potential for deer to spread disease to pets, livestock, or humans (n = 1,055; \bar{x} = 2.49)	25.5	25.8	22.6	26.2
Predation on deer (n = 1,052; \bar{x} = 2.80)	13.9	25.4	27.8	33.0
Other (Please specify AND indicate your level of concern): (n = 13) e.g., wintering grounds; uncontrolled ATV use; development/oil and gas; preference point/hunt draw issues; concerns about predators; outfitters; CWD				

Potential Concerns About Chronic Wasting Disease (CWD)

11. Because of CWD in deer, how concerned are you about each of the following in White River deer herd GMUs? (Please check one response for each statement.)
 (sample size “n”, mean “ \bar{x} ”, and percentages “numerical responses” indicated below)

How concerned are you about...	Not at all concerned	Slightly concerned	Moderately concerned	Very concerned
...your or your family’s health? (n = 1,057; \bar{x} = 2.66)	20.9	26.4	18.8	33.9
...the health of affected deer herds in White River GMUs? (n = 1,055; \bar{x} = 3.31)	2.7	14.6	32.3	50.4
...not having enough healthy deer to hunt in White River GMUs? (n = 1,054; \bar{x} = 3.25)	6.4	14.0	27.8	51.8
...future generations ability to enjoy hunting deer in White River GMUs because of CWD? (n = 1,057; \bar{x} = 3.44)	4.1	9.7	24.0	61.8
...the potential for CWD to reduce deer hunting opportunity in White River GMUs? (n = 1,055; \bar{x} = 3.44)	3.5	10.7	24.0	61.8
...eating meat from a deer harvested in White River GMUs (n = 1,052; \bar{x} = 2.50)	22.9	30.0	21.0	26.0

\bar{x}

Concerns about CWD (recoded for ease of interpretation)

<i>How concerned are you about...*</i>	Concerned**
...future generations ability to enjoy hunting deer in White River GMUs because of CWD?	86.2
...the potential for CWD to reduce deer hunting opportunity in White River GMUs?	85.8
...the health of affected deer herds in White River GMUs?	82.7
...not having enough healthy deer to hunt in White River GMUs?	79.6
...your or your family’s health?	52.7
...eating meat from a deer harvested in White River GMUs	47.0

*Respondents were most concerned about reduced hunting opportunity and herd health because of CWD.

**Moderately and very concerned responses were recoded.

12. How much of a priority should Colorado Parks and Wildlife place on the following herd and harvest management decisions in White River deer herd GMUs?

(Please check one response for each statement.)

(sample size “n”, mean “ \bar{x} ”, and percentages “numerical responses” indicated below)

	Not a priority	Low priority	Neutral	Moderate priority	Essential priority
Striking a balance between controlling the disease and preserving hunting opportunity (n = 1,050; \bar{x} = 4.31)	1.3	2.2	13.1	31.1	52.2
Maximizing quality deer hunting opportunities (i.e., trophy bucks), regardless of how they affect CWD prevalence or overall herd health (n = 1,047; \bar{x} = 2.94)	15.9	19.9	30.5	21.9	11.9
Minimizing adverse effects of CWD on overall herd health regardless of how they affect quality deer hunting opportunities (i.e., trophy bucks) (n = 1,042; \bar{x} = 3.76)	3.6	8.3	24.9	34.7	28.5
Other (Please specify and also indicate priority level): (n = 18) e.g., herd health/long-term sustainability of wildlife populations.					

CPW management preferences recoded (for ease of interpretation)

	High priority*
Striking a balance between controlling the disease and preserving hunting opportunity	83.3
Minimizing adverse effects of CWD on overall herd health regardless of how they affect quality deer hunting opportunities (i.e., trophy bucks)	63.2
Maximizing quality deer hunting opportunities (i.e., trophy bucks), regardless of how they affect CWD prevalence or overall herd health	33.8

*Moderate and Essential priorities were recoded.

**Respondents would prefer CPW prioritize finding a balance between disease prevalence and hunting opportunity.

Herd Management

13. How, if at all, has the White River deer herd changed during the previous 10 years? (Please check one.) (n = 1,033)

10.2% The number of deer has increased 39.6% The number of deer has decreased 10.3% The deer herd has not changed 40.0% I'm not sure

14. How important to you is it that the population of the White River deer herd... (Please check one.) (sample size "n", mean "x̄", and percentages "numerical responses" indicated below)

	Not at all important to me	Somewhat important to me	Moderately important to me	Very important to me
...stays the same (i.e., the current population range is maintained) (n = 936; x̄ = 3.00)	7.5	19.1	39.1	34.3
...increases somewhat (n = 1,004; x̄ = 3.24)	6.3	13.3	30.1	50.3
...decreases somewhat (n = 866; x̄ = 2.03)	50.8	14.7	15.4	19.2

x̄

x̄

Population preferences recoded (for ease of interpretation)

	Important*
...increases somewhat	80.4
...stays the same (i.e., the current population range is maintained)	73.4
...decreases somewhat	34.6

*Moderately and very important responses were recoded.

15. How important to you are the following... (Please check one.)
 (sample size “n”, mean “ \bar{x} ”, and percentages “numerical responses” indicated below)

	Not at all important to me	Somewhat important to me	Moderately important to me	Very important to me
Being able to hunt deer in the White River deer herd most years (either sex) (n = 1,012; $\bar{x} = 3.12$)	12.4	13.4	23.6	50.6
Being able to hunt mature bucks in the White River deer herd (n = 1,016; $\bar{x} = 3.21$)	6.9	15.6	26.8	50.7

Sex-based hunting preferences recoded (for ease of interpretation)

	Important*
Being able to hunt mature bucks in the White River deer herd	77.5
Being able to hunt deer in the White River deer herd most years (either sex)	74.2

*Moderately and very important responses were recoded.

About You

16. How old are you? (*Please write-in your response.*) YEARS OLD = 53 years old

17. In what zip code is your primary residence? (*Please write-in the 5-digit code.*) see open-ended responses

18. Approximately how many years have you lived in Colorado? (*Please write-in your Response. If you are not a Colorado resident, write "N/A" or "Not applicable".*) YEARS
= 35 years

19. With what gender do you identify? (*Please check one.*) 92.1% (972) Male
6.6% (70) Female
1.1% (12) Other (Please specify): N/A
0.1% (1) Prefer not to say

20. How would you describe your racial or ethnic background? (*Please check one.*)
94.2% (950) White, non-Hispanic/Latino
4.0% (40) Hispanic/Latino
0.1% (1) Black or African American
0.7% (7) American Indian or Native Alaskan
0% (0) Native Hawaiian or other Pacific Islander
0.8% (8) Asian
0.3% (3) Other (Please specify): N/A

Please use the space provided below to share any additional opinions you have about the White River deer herd.

D-7 Questionnaire - Written Comments

Hunting Experience

- I have hunted this GMU for 2 years. Although not able to hunt deer during archery. I did hunt elk season. During my elk hunt we observed plenty of deer. My hunting partners, who have hunted this property for over 30 years commented that "although the deer population seems robust, the bucks are not even close to the size they used to be".
- I thoroughly enjoy our hunting trip every year. You guys always do a great job answering questions and making my out-of-state hunting party feel as welcome as your in-state hunters. Keep up the good work, hopefully I'll draw again and head y'all's way in September
- September muzzleloader hunt last year passed on numerous bucks at close range. Did not shoot at any deer (1 reason because of high temperatures - Sept.8-16) (2nd reason was looking for mature 4x4 and did not have a deer in that category within range)
- 2018 I harvested a mature mule deer (buck). Came out primarily for elk. Concerned for overall hunting productivity in the near future 5-10 years.
- Colorado has to be one of the most beautiful states in the Americas. 70% of the time hunting 3rd season deer population is good or above average.
- Had a fun time with my three married boys. Ate 9 points to draw. Only saw 1 -180" buck - mostly 160"-170". Didn't shoot a deer - hopefully someone next year will be able to shoot a 180 plus buck.
- When trying to apply for a big game license this year, it appears that I am required to purchase a small game license, even though I won't be using it. What a waste of money. This is extremely frustrating as your rates for non-resident big game licenses are already outrageous.
- I have hunted area 22 since 1983 seen up and down changes but for most part it has improved over last 15 years. I do believe there is more poaching going on in off-season. As I or hunting buds have come across old carcass with heads missing/cover-up elk and deer. My last two years to draw a buck tag in 22 were 2007 and 2018. Went just to camp 2015, seen nice mature buck and doe all 3 years.
- Used 20 PP to obtain a 4th season buck tag unit 22. Very disappointed with the hunt. Several smaller 4 points seen but no big bucks spotted after a week of hard hunting. Deer numbers were low.
- I have hunted in units 11, 211 one time. It took 3 years to draw the tag. The hunting was superior to Utah for a 3 point unit. The only thing I would change is reducing the number of 3rd season tags to allow more bucks to mature
- As an out of state hunter, I've seen price increases on deer and elk tags. Deer have increased every year since we started hunting in Colorado, same with elk. Tags continue to increase and make it harder to afford. We've been going to Colorado since 1989. We have our 4th generation starting to hunt there and would really like to see some kind of price break for non-resident.
- New mandatory small game license requirement is bad for hunter relations problem for big game hunters.
- This area is severely overhunted. Bow season, black powder season and I hunted the third rifle season. In 6 days of hunting, I saw no elk tracks and no one in the gmU got an elk that I

know of. I saw one set of deer tracks in 6 days. Never saw a deer or an elk and neither did anyone of the five of us. Just a waste of time and money.

- The area over in Area 11 south east by Meeker area, that herd is really low. It was very crowded this past season and we only saw a heard with does, no bucks. I did end up filling my tag but had to go up by Maybell in that section to get a buck.
- Overall, love hunting the White River area.
- I have hunting in the White River area for 18 of the last 21 years. I used to be able to harvest, or at least hunt a doe every year. During the last 5 or 6 a doe license has been more difficult to obtain, yet I have never seen more does in the area than ever before.
- Stop w/ the new draw system. That does nothing to give residents a fair chance at getting tags. These units were flooded by out of state hunters who had very little regard for our laws, safety, regulations or the environment!!!
- The deer in our area, we felt hunting was good. My dad and myself each got a buck - we'd like to see more deer though - we had a very enjoyable hunt - when hunting last year we met a young game warden in district (12, 13, 23, & 24) he was very helpful and professional very courteous and have us a lot of good information.
- I only saw 1 mature buck in 10 day of hunting 6-8 hrs a day with a group of 14 guys who had hunted the area for 30 years. The group I hunted with will not return for the 2019 season.
- many mule deer = (happy face on survey)
- This last year was my 1st year hunting unit 22, 3rd season - ONE OF THE BEST experiences of my life. However, it's not what it used to be. We have friends from Meeker they hunt regularly there and over the years, the herd has gone downhill. Both in quality and quantity. That said, it was my best deer hunt. I can't imagine what 10 years ago would have looked like. I only wish I could hunt this again in my lifetime. Thank you!
- I have hunted the area for many years. My experience has been fantastic!!! It is a family trip we look forward to every year. Thank you.
- I have been hunting 28 years in units 23 and 33. You need to combined units 23 and 33 together again.
- The last 2 years hunting in area 131 I have seen 2 deer total. Both deer were does and I hunt all day, every day of the season. My hunting is in the cow creek area of Emerald Mountain, nut even with an occasional hiker or biker I always used to see deer and some bucks.
- I am extremely disappointed in the new policy relative to an out of state application for a preference point or a license. I thought I was misreading the instructions when they directed me to buy a small game license before I was eligible to purchase a preference point this year. Your department must know that a very high percentage of out of state individuals will never use the small game license. So the requirement is simply piling on the already hefty cost of deer/elk licenses. Quite frankly it's a ridiculous requirement...almost blackmail like. I have, in the past, always been happy to cooperate with your surveys; however, until Colorado adopts a more reasonable approach to it's out of state patrons, I will no longer be interesting in helping. Please, drop this insane small game license requirement and/or other schemes to balance your budget on the backs of people outside the state.
- Very satisfied with the hunt I had. have enjoyed Colorado hunts. I have had the opportunity to hunt on 7 different hunts since 2005. P.S. I didn't care much for the small game tag,

\$81.00, that I had to purchase this year in order to put in for large game tag. Why didn't you just save the permit?

- Used 14 bonus points - hunted with guide service. Saw 2 buck the first day (1 trophy) and did not see another DEER in 6 more days of hunting!
- My first trip to Colorado was in 1986. I fell in love with Colorado (don't tell my wife). Moved to Colorado in 1997. Lived in Meeker for a number of years. It's still home to me even though I now live in Sterling. Hopefully, I will hunt and fish northwest Colorado until the day I die! Keep up the good work at Colorado Parks and Wildlife for future generations.
- I've carried a license in the White River for deer for several of the last 20 years. I have never harvested.
- I have been hunting 11, 211 for 15 years. Never had a problem harvesting my buck. Now my two boys have hunted same area with me for 3 years and are successful every year. Not once have we had (CWD). The hunters are very nice just too crowded some years.
- Very dissatisfied with hunt used 9 preference points to draw!
- I really enjoy seeing all the deer in the area. Please keep them healthy.
- I started hunting at age 12 there were 100 deer in Craig at that time we had to go to the hills to find them. Today there are some big bucks in my yard.
- I have experienced out of state people that cannot shoot wounding and wasting animal you harvest and I'm not seeing a lot of that these days and I hurts to see. I think people that are new comers should be better looked at before they are allowed the privilege to take any animal people need to have respect of the land and the animals they are harvesting meat should be the priority.
- Last year I only saw one deer in 8 days
- I primarily hunt elk and deer for meat and trophy only with my family and have my whole life.
- I love hunting in the Flattops because I am not hunting around other hunters. It is one of the last hunting gems in the west. We love it!!! Thank you for all your good work!!!
- Was disappointed in the low number of mature bucks to hunt. I hunted on private property and didn't see any fully mature bucks.
- We did not see many deer, but we all harvested 4x4 mule deer. The hunt was enjoyable!
Thanks
- Didn't see very many deer or elk and we hunted hard, going further back than most. I did see a radio collared doe and several moose. There did seem to be a lot of deer and elk sign that looked to be several weeks old. This seems to be the case each time we hunt in Colorado.
- Hunted 3rd season and saw multiple mule deer so quantity was prevalent. Quality, trophy bucks was non-existent! Even when we brought our animals into the processor there were NO trophy bucks in his shop in Meeker from the hunters in the area.
- Didn't see very many deer also had hunters shooting over my head at deer I was about to shoot. Only two shooters all week for 3 guys.
- I have hunted these areas. I love 11 and 211 areas I feel these areas all being well managed. And I hope to be able to return in 2019. Really, love the Meeker area. Very satisfied with the hunt I have enjoyed Colorado hunts. I have had the opportunity to hunt on 7 different hunts since 2005.
- Last year was my first year to hunt in the White River area. I thought it was wonderful. I'm coming back for the 2019 season.

- I have hunted 131 four times. The first 2 times I harvested 2 really nice bucks. Hunted there 1st season 1 year, deer not in season, 1 time 3rd season and the deer had moved out due to snow. Still enjoyed being there.
- great place to hunt
- The deer in our area, we felt hunting was good. My dad and myself each got a buck - we'd like to see more deer though - we had a very enjoyable hunt - when hunting last year we met a young game warden in district (12, 13, 23, & 24) he was very helpful and professional very courteous and have a lot of good information.
- It is a great experience being in the White River Nation Forest. Thank you for providing us the opportunity. Cost is what keeps so many from being able to do it but I understand the costs involved.
- We hunt the Yampa River. Seven years ago there was next to no deer. Last year it was crawling with deer, several mature bucks. We got a couple. The elk herd is almost nonexistent. We have not seen anything but a spike for two years.
- We see better deer some years than others I say winter has a big part in that and now with the warm weather the big buck lay just like the elk (2nd season). We love hunting your state but lately it's been very warm which sucks but there is nothing anyone can do about that other than back the dates up. If possible, don't raise the cost of licenses for nonresidents. Soon we won't be able to come.
- All though not always successful deer hunting I have always enjoyed my hunting visits to Colorado. I wish the best for the animals and the citizens of Colorado. Unfortunately Michigan also has a CWD issue
- Very disappointed in the hunting in 11, 211 this last year. Especially for a 4th season. Very few deer. Wasn't anywhere near worth the points I used to get it. If I had it to do over again. I'd pick something else. I hunted 22 3rd in '16 and we at least found a few deer (my Dad's tag). Still didn't find the buck we were looking for. Been hunting in CO as much as I could for the last 20 years. Seems like it just keeps getting less deer every year. More and more demand for the tags and fewer of them.
- Have taken quality deer there. Drawing tags has become harder to get for non-resident. Herd seems to be about the same since I started going. Sometimes gets a little crowded at times. Overall good experience.
- Hunting White River deer herd has been the best experience. I look forward to setting on top of a mountain reflecting on family, friends, and priority in life.
- The hunting has been great all deer look healthy
- I am a hardcore hunter from NM and really was not impressed with the GMU23. On my hunt I only saw 1 buck (a small forky). I would have really enjoyed seeing more deer and the opportunity at a mature deer.
- Thankful for being able to hunt in your great state
- We spend a lot of money hunting in this state for about 15 year and now can hardly find a deer or elk. The prices go up and the deer, elk population go down.

Hunting Opportunity

- I have had great success taking both young bucks, mature bucks and doe. I hunt only public lands and only draw a buck tag every other year.

- Increase number of antlerless deer tags issued during all seasons. Point creep is killing us. Used to draw DM02203R every other year it's now taking 3-4 points to draw for resident. Non-residents are taking about 10 years. 14 years for resident to draw, a 4th season buck tag is crazy! Increasing number of lion tags would help with predation.
- Thanks for your effort! We have had a large increase in hunting and fishing in Colorado over the last 5 years. Please do what you have to keep me hunting.
- This also includes elk hunting, being an out-of-state hunter and the very "high" price to pay for deer and elk license I wish you would consider adjusting hunting dates back due to weather conditions. Missing now the migrations because of warmer weather trends. Thanks.
- Don't penalize youth hunters. We are losing them to price and dumb rules. Make it enjoy and less expensive for youth hunters in all areas.
- Create more resident opportunity - less nonresident!
- Residents should be priority on drawing in state licenses and GMSs. It's very overcrowded while hunting, too many out of state licenses are granted - so there should be a limit.
- Might as well harvest the "big" bucks - They would die anyway. I am a meat eater and hunter. Less and less opportunities to harvest deer for the non-wealthy.
- Would like to harvest one trophy in my lifetime
- Considering the price of non-resident tags and licenses and the fact that non-residents bring outside revenue to local Colorado areas, please re-consider your tag allocation numbers to non-residents by increasing opportunities to hunt your state. Thank you!
- No more Ranching for Wildlife. It's not ethical!! I'm a landowner and I can't imagine wanting to harvest a deer in Dec, Jan, or Feb. It's not ethical and the meat is inedible! Ranching for wildlife is stealing from the ethical public hunter and responsible landowner.
- Ranching for wildlife needs to go away.
- Questions about the price increase of CO resident tags. i understand why they are increased but the amount of money my family now has to spend for deer and elk tags is incredibly expensive. Why was the non-resident tags not increased the same? We will always hunt and raise our children to, but it's frustrating that we're the cheapest non-resident state for tags yet resident prices increased more than 10% and small game license is required and that also went up in price.
- Units 23, 33 should be combined like it was before for many years!
- I look forward to taking my children hunting in the white river GMU.
- I would like to see either sex licenses for the public land in the White River GMUs. I think it would keep the herd healthier.
- We need special tags and hunt dates for senior citizens 65 and older and discounted license fees.
- Colorado DOW keeps increasing the out of state hunting fees. New for 2019 is an increase in the application fees and I must purchase a qualifying license to apply for a big game license. With the current cost of big game tags for out of state hunters this is getting to the point of pricing myself and other hunters out of the Colorado market.
- put out more tags for locals
- Limit non-resident tags
- I want to be able to hunt in Area 10. That is where I live. Why do we have to drive 50 miles and hunt in area 11? I think the people of Dinosaur should at least be able to hunt cow elk and doe deer in our own area. Area 10 is no longer a big trophy area. Those trophies were

taken out a long time ago. I think area 10 needs to be re-designated as a regular hunting area. It's not prime anymore.

- limit tags to higher percentage for resident tags only.
- we all need tags every year not every 4-5 years especially youth
- Please cut down on the number of out of state licenses being sold. All of the out of state hunters I met do not respect our hunting privileges. Most do not obey the non-motorized areas and have no respect for our lands. Just because CPW makes a ton of money off the out of state licenses doesn't mean they should be a priority - our lands and animals come first.
- There has been an extreme uptick in non-hunter recreational activity in this area during archery season. It would be nice if the archery season could be extended 1 week or the season adjusted to start a week later. Another option would be to offer an option where archery hunters can purchase an extended license or offer it as a draw option so archery hunters have the option to catch more of the cooler season. Keep up the good work!!! Thank you
- It takes too long to draw a tag. To many nonresident hunters
- have only hunted 1 time in past 10+ years
- I would like to be able to hunt deer each year or at least shoot a doe each year. Many deer are killed in highway collisions. More hunting opportunities for archery deer.
- When we reach 70 years of age we should receive a buck tag every year. We don't have that many years left to hunt!!!
- I have hunted deer in area 23 only - muzzle loading. We hunt elk, rifle, same place (area 23) and deer population is definitely down - they do move down to the meadows/river as the winter and rut take over. It is really hard to get a permit in Area 23 - I am assuming it is because of reduced herds - not increased hunters. PLEASE consider changing permit rules to issue permits to VETERANS or over 70 years old that are Colorado residents. I am 77 now and get a permit only every other year - bucks muzzle loading. I don't have many years left.
- About 45 years ago the game department told us how important the Piceance Creek river bottom was to the survival of the deer herd. You used to advertise that you could drive that road in Jan and Feb and see 5000 deer along the river. In time about 2 miles of river bottom was purchased. It proved great duck hunting a campground and access to very good hunting. Later when elk numbers were growing in the area, elk hunting was good. I've taken 2 very good 6 point bulls close by, also several trophy deer and then one year it was posted, were told by your personnel in Meeker that it was traded for 2 sections of private land that was surrounded by thousands of acres of BLM, no road access, no water, nothing special that was apparent. So maybe we need to talk more about the mismanagement of our natural resources.
- I have hunting in the White River area for 18 of the last 21 years. I used to be able to harvest, or at least hunt a doe every year. During the last 5 or 6 a doe license has been more difficult to obtain, yet I have never seen more does in the area than ever before.
- I'd like to see the herd managed in a way that allows people to hunt with some regularity but that allows those that hunt hard to find a trophy. This likely mean limited 4th season tags. At the end of the day, priority number one is the health of the herd. Then balancing opportunity and trophy potential. Appreciate all you guys/gals do.

- Stop w/ the new draw system. That does nothing to give residents a fair chance at getting tags. These units were flooded by out of state hunters who had very little regard for our laws, safety, regulations or the environment!!!
- Consider having more 2-weekend seasons. It is hard to give younger hunters and families enough time in the field with single weekend seasons. If we can't grow hunter participation, you will be forced to market only to out-of-state hunters for revenue (management costs) and they won't travel for only 5 days because of planning windows being too tight. Less family=less advocates!
- We have been hunting that area for years, over 20 years. It took me 5 points to get a tag for this area and most of the people there were non-residents. Why?
- resident should be able to hunt his own state every year vs draw against non-resident
- Seems like I have seen a lot of does the last few years (units 23 and 24) but it still takes points to get a doe tag. I believe there are now wolves in Units 23 and 24.
- Youth need more opportunity to hunt right here in our back yard. More youth hunts need to be in place. I understand about deer but mainly for elk either in units 21, 22 because there are too many cow elk hunts and they are hunted from August to Jan 15. This is way too long. Remember back in the 80s and 90s there were two 10-day seasons for rifle deer and elk? That's what we need.
- In the 1980s when I first started hunting in Colorado. We bought deer tags over the counter then we applied for the draw and got our tags every year. Now every 3-4 years.
- I feel fortunate to have had the opportunity to hunt in Colorado and would hope future generations enjoy the same.
- I appreciate the opportunity to hunt on public land especially in units 11, 211 and 22. I do not have funds available to hunt on private lands or to hire a guide.
- Considering the price of non-resident tags and licenses and the fact that non-residents bring outside revenue to local Colorado areas, please re-consider your tag allocation numbers to non-residents by increasing opportunities to hunt your state. Thank you!
- Stop late season hunts where locals kill them from highways. I bought my 1st deer tags 30 years ago for \$50 and my elk tag for \$75. You are fucking out of state hunters. I've been told 3/4 of Colorado land is either state or federal. I own as much of the federal land as the guy living in Meeker who gets his license for \$28. Get a bigger envelope.
- I've seen some tremendous bucks over the years. It would be nice if I could get at least a buck tag while I'm elk hunting to make the trip a little more cost worthy. It's only happened once or twice in the last ten years. We primarily elk hunt, but I would like to easily get a mule deer buck tag just in case the opportunity would arise to tag a trophy sized mule deer. The times I had a tag I passed on small bucks/does.
- Over the last 12 or 13 years I have seen Craig , CO restaurants and hotels go from packed to half empty during 3rd season elk/deer. It is a shame that drawing a deer tag is tough. Most folks need the tag to motivate them to go spend time outdoors and most never kill a deer. It kind of follows 2 rules from what I see 1)no tag-no go-no deer-no money spent in CO. 2) tag - go hunting-probably not shoot a deer-spend money on food and fun, think about going back next year and try again
- Making me buy a small game license to apply for preference points for big game is ridiculous. If that doesn't change I may find a new state to hunt in.

- To be out hunting more important than harvest. Ok if you wanted to put minimal antler count to harvest like on elk 4 point or better.
- The deer season dates are finally skewing in the right direction to allow out of state people the opportunity to harvest a mature buck during rut during 3rd seasons. 10 years ago out of state hunters wouldn't draw a license during the rut and lots of hunters moved to other states because of that.
- Have family with land hunted deer and elk for 39 years in the White River units have seen the herd come and go just wish it didn't take 5 years to get tags.
- As an out of state hunter, I've seen price increases on deer and elk tags. Deer have increased every year since we started hunting in Colorado, same with elk. Tags continue to increase and make it harder to afford. We've been going to Colorado since 1989. We have our 4th generation starting to hunt there and would really like to see some kind of price break for non-resident.
- I enjoy the opportunity to hunt elk and mule deer in the same season.
- The ranching for wildlife should have to play by the same I do. Season dates etc I do not get hunt buck in DECEMBER!!!

Hunter Crowding

- In the west side of area 12 it is elbow to elbow hunters. Can you split that area into 2 season and ensure doe tags for one of the areas; more doe tags mean more hunters but less deer/ car accident. if you could see your way to giving more tags in 12 and 23 (public land) just for 2 or 3 years I believe that might help both CWD and deer/car accidents
- Is difficult to answer since deer season and elk season are concurrent I can't tell deer hunters from elk hunters. However, there are a lot of hunters in the units I hunt.
- I hunted 11/211 in 2018 3rd season. The amount of deer hunters was reasonable but having OTC elk hunt simultaneously leads to over-crowding. Especially considering how few elk I saw during the week. I recommend moving this elk season to a 1-2 point draw at minimum.
- over the past two years it seems this area is being overrun with out of state hunters in large hunting camps
- I have been an avid Colorado hunter for 21 years, most years in the white river (area 12). In that, time hunting has become increasingly difficult due to the massive amount of elk hunters. I know this survey is for deer, but obviously, the seasons are the same. Limiting the bull elk tags for private and public would severely help with overcrowding, and help some of these animals mature further.
- Been hunting there with my family since I was 12. Gotten more crowded and the ranch owners are aggressive and rude
- So I'm not sure if the crowd was because of the fire or if there were that many more people hunting but I saw more hunters than animals. I will not be hunting there any more if the crowd is as big this coming season.
- New people coming into the area are setting up camps in the daily nightly game routes, which disrupts game movement.
- Too many hunters!
- too many hunters in 2 season for deer

- Over the last 3 years, I have hunted in the Oakridge Area. Hunter numbers seem to be high. Mostly out of state hunters.
- Had a good hunt, saw a handful of mature bucks. The only thing I did not care for was there were people everywhere! Almost every spot I would glass there would be orange.
- To whom it may concern: I have not hunted in this area for over 8 years. Too many hunters! I do not have any valid inputs for you concerning this area
- There are too many outfitters and out of state hunters that crowd the areas and make it difficult to hunt.
- The deer hunting would be more enjoyable if there were not so many OTC elk hunters in the field and a person could feel like they could get away from the pumpkin patch some. There is more orange out there than at a Bronco's game.
- I believe that the number of elk hunters has increased. As far as crowded hunting, maybe it is time to separate the deer and elk hunters.
- 4 years ago, this unit had far fewer hunters resulting in a better experience and better deer quality. This last season had far too many hunters for the amount of public land available.
- Hunting pressure drops to near zero after opening weekend.
- I feel like some of the issues with crowding of other hunters while hunting is do to less public land than there used to be.
- Overall the hunting is fun and enjoyable in the area. It is somewhat crowded, with all of the elk and deer hunters there at the same time. I wish there was a way for everyone to get their chance to enjoy the outdoors without the added pressure of everyone there at the same time.
- OTC elk hunters are hunting deer during the 3rd rifle. Too many people riding through areas that are off limits to driving. Too many points for a non-resident to have OTC elk hunters stomping the place flat.
- It takes too long to draw a tag. Too many nonresident hunters

Habitat

- I think all the drilling for gas has affected the animals
- I have noted a decline in the deer herd since the drilling for gas started up especially in Unit 22!
- I believe loss of habitat is of major concern to the white river deer herd. This and disruption to migration habits has effected the herd. Thank you for the opportunity to comment on our wildlife. Pease keep politics out of this.
- Managing for the long term with regard to habitat and population would be my priority.
- Habitat is decreasing due to oil and gas. Migration is affected by increased road travel and new roads.
- too much gas production in good feeding and water areas
- I believe with more prescribed burns to bring back better feed and kill off diseases in the ground would help with CWD.

Predation

- Predation. I've seen more bears and mountain lions chasing deer while bow hunting. Elk too especially young cows/calves
- Predation is out of control: I have hunted the same place for 25+ years lots less deer way more coyotes and bears.
- I feel that predation is effecting the deer numbers more than CWD. I have hunted both private and public land in units 12 & 211 for 25 years straight and have seen a constant increase in the numbers of lions, bears, coyotes. It is too much for the deer herd to suffer high winter kill rates and then deal with the high number of predators on top of it and increases the rebound time
- The white river deer herd is more affected by predation mainly coyotes and road collisions than by sport hunting. In my opinion, the deer and fawn survival could be greatly improved by killing coyotes, best tool aerial gunning which does cost money but the trade-off will be more animals to hunt and possibly greater license sales should more than offset the cost.
- Cougars are a big problem. Coyotes are a big problem put out more tags for predators and put a bounty on coyotes. We should be hunting lions in April. Silly were not.
- I believe the amount of tag's given and not enough concentration on predator control is playing a big role in the decline of our deer herd.
- My observations on deer herds, too many dry does. This area has too many bear, coyote, and mountain lion. For example, 21 does in field, only 2 fawns. This is not for lack of habitat, it is predation!! When the spring bear hunting stopped, the decrease due to predation is very evident.
- I have talked to sheep ranchers that tell me they know exactly when the mule deer does are fawning - the bears leave the sheep and go for the fawns. Like clockwork.
- More concerned in predation if wolves are introduced.
- The deer herd is in bad shape too much hunting pressure: coyotes need to be reduced
- The potential damage to deer and elk herds as well as livestock due to wolf introduction would be devastating!! All you have to do is look at what's happened in surrounding states to elk and moose populations from wolves. Huge loss in revenue as well as game populations! DON'T CUT OFF THE HAND THAT FEEDS YOU!!!!
- I believe CPW does a great job overall in wildlife management. I do believe predation is an increasing problem and possibly under estimated.
- I believe predators are the #1 problem creating a decline in our deer herd. My observation is that very few fawns survive due to predator kills. It is rare to see a doe with a fawn by her side at summers end.
- reduce lions and coyotes, as too much depredation
- predators are biggest problem that needs addressed by DOW.
- Get a better handle on predators. Kill more lions and coyotes.
- No wolves
- You need to control bear, mountain lion, and coyote populations - they are killing to many fawns
- Wolves should not be allowed anywhere in Colorado. Mule deer cannot get away from them
- Your predator population is out of control, to include lions, bears, coyotes and bobcats! This should be the most critical factor in management of these units! You need to start standing

up for us the hunters and not the environmentalist whackos before all of us native Colorado residents find another state that will stand for us!

- to many predators
- Keep wolves out of CO!
- Increasing number of lion tags would help with predation.
- coyote predation is out control. Own 20 acres in Area 33 coyotes are killing mature deer and fawns (all year) UT has a \$50 bounty we should too.
- I am extremely concerned about the effects that wolves will have a devastating effect on the herds even more so that the increase in the bear population after management was taken away from CPW by the ballot measure to remove spring hunting and the use of hounds and baits.
- Keep wolves out of the state.
- I don't hunt predators and don't believe in the unethical hunting of treeing cats and shooting them out of a tree but the cats need to be controlled, along with all predators to help increase or maintain the deer and elk population. (please DO NOT introduce the wolf to Colorado) They DO NOT belong in Colorado! Our elk and deer herds are already having a hard time with their populations and introduction of the wolf would be very detrimental to our herds! The idea of taking our hunting away and introducing natural predation with introducing the wolf is absurd! NO INTRODUCTION OF WOLVES IN COLORADO, PLEASE! Thank you!
- In the past predator control was help to ranchers but without the foot hold traps coyotes are hard to catch. So best predator control tools have been reduced along with baiting bears and using dogs. The deer and elk both get overwhelmed with predators during calving and fawning season. And I am not in favor of Front Range being able to vote on ballots for issues that they know nothing about on this side of the state. P.S. thank you for what you do
- old timers rancher said in the 50s we didn't have many deer but when the government came in and removed coyotes, lions and bears the deer herd exploded and deer hunting was great in the 60s and 70s in the 80s you could still go for a 2 hour ride and see 500 or more deer now your lucky to see 20. Game wardens in our area say its because the sage brush is to old.

Well let's do some burns and replant and get rid of predator. Utah's bounty on coyotes has helped greatly on the numbers in their herd in the last several years and lets fight the anti- hunting group that are always changing what's good for our animal herd healthy recovery.

- I saw several predator kills.
- I have hunted deer and elk in unit 12 for the past 16 years and have seen the herd decrease due to predation from coyote and bear.
- This year I saw more black bears than mature mule deer bucks....
- Predation is out of control: I have hunted the same place for 25+ years lots less deer way more coyotes and bears.

Also, all of the debate over introducing the wolves Please, send surveys out to the people, the sportsman, landowners... Ask if they them I do not!! I have not had one person that hunts deer/elk say they want wolves or see the benefit of having them. Please do not introduce wolves!!

- You need to control bear, mountain lion, and coyote populations - they are killing to many fawns
- Wolves should not be allowed anywhere in Colorado. Mule deer cannot get away from them.

CWD

- Test all deer taken for CWD. Must understand magnitude of problem.
- CWD has an ever-widening effect on the deer/elk population.
- Have CWD in our area; Shot CWD not a problem too much. Landowner/farmer/rancher have whitetail crop damage because overpopulation. Believe CWD is an overpopulation disease.
- CWD is number one problem statewide!
- CWD =s no more hunting Stop CWD! Stop CWD! 1. Stop CWD in CO. Should be top priority though out state!
- I have hundred deer in this area my whole life with family and friends and have not a single time seen a deer that showed any symptoms of CWD.
- 2018 season I noticed no visible CWD in deer taken by fellow hunters
- "Teach" ranchers, hunters, and other wildlife volunteers to recognize CWD and cull from the herds and relay the info. The herd has dropped from 12000-2000 animals. 3 out of 4, 3 year old bucks tested positive for CWD.
- I would like to get information on eating CWD deer and elk. CWD has been a issue for 50 years in other places in the U.S. We have been eating deer for decades and no one has gotten sick so what us the real facts.
- CWD needs to be managed. Killing all the deer is not the answer. The deer are stressed we start hunting in august and stop hunting them in December.
- Does CWD cause by charged particle (ie. any type of reaction)? Just wondering how does deer end up with CWD?
- I am glad to see that CWD has not been a huge factor in mule deer population and human health. If it is ever proven to be passed on to humans, it will be the end of deer hunting.
- I trust and respect greatly CPWs efforts regarding all the hunting opportunities all to include conservation and management. I am not sure I truly believe that CWD is a real threat but am also aware I am uniformed greatly. Thank you
- Please do not kill off this deer herd. You tried that back in the 90s with no effect on the spread of the disease. I have harvest deer from this area for most of 28 years. I have eaten these deer, all of which have been bucks. My children grew up hunting deer in this area. It is one of the few areas of the state where the deer herd is stable or increasing.
- I operate in GMU 22 mainly. CWD was not found to be present that much in 22. I don't feel we should try and kill deer out in 22 like the other units.
- The CWD in Area 13 is out of control. Last year at my place of work on private land we had 1 out of 9 deer killed positive!!! My 12 yr old son killed his first buck of his life and it came back positive for CWD. I don't know the answer to the problem but something has to give. Only thing I can think of is give out more tags to get a handle on this mess. Thanks
- I continue to see more and more deer testing positive for CWD. I am very concerned that if we don't get a handle on this disease we will not have a huntable population of mule deer for future generations. I support efforts to minimize or eliminate CWD in this area.
- CWD has been around since the 1960s. No state has been able to control the disease!
- I have hunted most of my adult life. I used to enjoy eating the meat we got (mostly from elk) I don't think I will ever eat another wild game animal because of CWD. I'm sure I don't need to tell you if CWD crosses the human barrier say good bye to your job and all the game that's affected.

- Contain or eliminate CWD. You want to have mature deer or healthy herds if they die to illness.
- I would like to see free head testing again like you did a couple years ago. I am always willing to partake in that, for it helping research to find out where this came from, how to stop it, and the spread of it to humans or animals (CWD). Perhaps more emphasis on this would lead to better understanding of CWD. I would like to thank all of you for your work in managing these units. This is the greatest country and the greatest sport in this country.
- Hunters should be notified of negative or positive results to any possible testing
- If CWD is a problem facing the units I would rather have a healthy population in the lower numbers.
- I have lived in Rio Blanco county my entire life. In that time (65 yrs) I have seen the deer herd shrink in size considerably. I also believe that CWD has always been here. I can remember deer occasionally exhibiting the symptoms when I was a teen and into adulthood. I am also concerned that the herds moving to towns and setting up residency is detrimental to their health.
- I have had one deer test suspect for CWD out of this herd. The test came back suspect. When the sample was pulled at the Meeker Office (DOW) the agent just used any dirty used instrument that was available. Leads me to question if the Meeker Office is cross contaminating the samples. Table also had blood from other deer all over it. Not how I would think a study/sample should be collected. Then, I did not get to eat my deer (doe).
- I was lucky enough to harvest an old buck on private land this past season. The guide took the deer for processing and taxidermy. In the rush of the moment, he did not recommend testing for CWD. Upon packing up the meat, the processor told me there was testing positive at a rate of 23% for CWD. So I paid for all the services but ultimately disposed of the all the meat (instead of risking my family's health). I believe the guide took advantage of my naïveté to help himself and his local buddies. You should require the guide or processor to test all harvests through CPW in the future.
- I believe that CWD needs to be managed and that people that are just out for trophy bucks. They need to go to trophy areas. I don't believe that trophy areas need to be but everywhere.
- I am in the WR herd 60-70% of September 1 through Jan. The number of visually identifiable CWD deer is maybe 7-8 over the last 20 years since paying attention to it.
- Thank you for trying to find a balance between promoting trophy deer and eliminating CWD
- Two people in my party did manage three small bucks the last two years and sadly, they all tested positive for CWD. CWD is obviously a growing problem.
- Any incentives for encouraging hunters to test their harvested deer for CWD are appreciated
- I guide for Superior Guide Service all thru the general seasons in GMU 12. Spending a lot of time in the woods. I am fortunate to see more deer than most hunters. Although the numbers of deer seem up, we have had a mild winters until this year. Additionally, whenever the first bit of snow happens up there the deer start migrating in droves now. I also guide in Unit 301 for Walz Guide Service in the RFW program on Deakins Ranch from Nov 21 til Jan 30. We consistently gain migratory deer as the season goes on and a lot of our incoming deer will winter on that ranch. That being said, a lot of our incoming deer are coming directly from Unit 12. I personally strongly believe that a containment of CWD in specific units is attainable in a migratory deer and elk herd. If anything, before another mass

slaughter of deer for testing by CPW, make it mandatory for all deer harvested, statewide, to be tested and either give multiple tags or more licenses to hunters and let the paying hunter do the work for the CPW at their expense and all along CPW is making more money for other endeavors rather than spending 10s of 1000s to go kill deer just to test for CWD. An additional thought would be an "earn a buck" program like many other states have done or "earn another tag" program. Have a successful hunter bring their deer in for testing. Then they can get another tag at a discounted price (1st tag full price). Lastly, with all the deer harvested, tested and consumed nationwide, it is my understanding that no human has contracted CWD. States should not eradicate deer and elk herds in the hopes of stopping CWD. It's always been there in mother nature, we just now have a name for it.

- I have been told that CWD hasn't been transferred to humans. I don't know to what extent CWD is found in deer in the White River herd. I have not seen any deer that appear to be sick.
- CWD is huge concern for me. I would like to see mandatory testing expanded to more GMUs. I feel that this disease needs managed so that we can have animals to harvest in the future. I support rate increases as needed if it will directly help manage CWD.
- Concerned for overall hunting productivity in the near future 5-10 years. CWD has a ever-widening affect on the deer/elk population.
- Me, like a lot of other hunters that I know from California that hunt in CO are seriously thinking of not hunting CO any more due to the way CPAW has handled the reimbursement of cost after pay out a lot of money to hunt there then have our animals tested. We ask biologists there and they tell us that CO would like to deplete the herd completely cause of CWD so why should we spend our time and money when this is the case.
- As far as CWD I haven't seen any deer with symptoms but agree with CPW concerns for future of herd.
- lived in CO until age 24, Interested in more information on other wildlife in the area elk, moose, bighorn sheep, black, bears, predators and how CWD may be affecting them. Also interested in how to look for/id CWD in animals and harvesting best practices (better to de-bone your deer?) Has there been any impact to people by eating the meat of deer that had CWD?
- From WI; Have CWD in our area; Shot CWD not a problem too much. Landowner/farmer/rancher have whitetail crop damage because overpopulation. Believe CWD is an overpopulation disease.
- I recognize that CWD is a threat to herds across the west but do not believe it to be the biggest problem.
- When someone buys a license there should be an opportunity to donate to CWD research or other wildlife challenges.
- disappointed that 25% positive for CWD. My buck 2019 was positive we threw it away got no compensation from DOW. I think your license fee and processing fees should be returned when CWD positive so far I have not got anything returned. I applied for \$200 processing fee returned last fall still didn't get money. In PA if you shoot a diseased deer at least they give you a new license I have hunted in CO for mostly elk about 35 yrs.

Population Management

- From what I can tell the deer herd in the White river area has decreased a lot. I mostly hunt in unit 22 but the number of bucks I believe are way down from 10 years ago
- The deer herd has now decreased more than 50% since the 1960s and 1970s. Since I live in Rangely all my life I have seen this first hand.
- Over the past few years the deer herd on our ranch has decreased significantly. I don't harvest a deer every year by choice but I love to have a tag to take my kids hunting with me. I am extremely concerned with our state government's conversations around introducing wolves. Our deer and elk herds will be destroyed. This should be a MAJOR concern of yours as well. Please help protect Colorado.
- Seemed like 3 years ago, or so, the population was through the roof and tags were at a minimum. Now tags seem more evenly distributed, but population is down. Have to assume a herd die off. Game wardens where I hunt indicated that we would see this. Old deer monopolizing food supply to die of old age while young deer starved.
- Deer and elk numbers are way down
- The number of deer has decreased tremendously from 2005-2008 the deer population has diminished. On 3,000 acres of land our group will be lucky if we see 5 deer. Before we used to see 50-75 deer on the mountain and along the river.
- Cross breed, the deer with deer from other areas (strengthen the bloodline). Keep deer away from cattle.
- The deer herd has definitely decreased over the years. Not sure why. I have never seen a deer with CWD but have seen one cow elk about 5 years ago affected. I hunt close to Milner, CO for the last 25 years. Good luck with all your efforts.
- My main concern would be controlling the doe population. Texas has a strong management program on its doe herd but then again I don't believe whitetail migrate like a large portion of the mule deer seem to.
- I believe based on my experience over the last ten years the quantity and quality of deer has decreased. I feel an antler size restriction would help the quality of the herd improve.
- I have witnessed the population of mule deer decrease dramatically over the last 20 years
- Deer population is low in the public hunting areas
- buck have increased 10x fold in the last 20 years. It has changed a lot.
- We need to get the bucks into a 4 point range to make hunting exciting again. Put in a rule that 2-3 point bucks can only be harvested by youth hunters. 4 point or better by 18 up. I've started to see a lot of 2-3 pointers and no bigger bucks so they are harvested with no chance to grow up
- I think you should stop doe hunts all together. Deer herds are low in my area
- I am very disappointed in the number of deer. I have land in Unit 11 and deer numbers are way down. I would also like to see point restrictions and the end to shooting does.
- Fences today are like a fortress. Fawns born in a 600 acre pasture can't escape a woven wire fence. They will be killed by predators. You can't control that. Only thing DOW can control is number of licenses issued. Needs to be cut in half. We are overhunting deer and elk way too much. We need NO doe killing and more limited cow elk killing. Time to take a look at outfitting. Don't have an answer, but it needs to be phased out somehow. Only a landowner

should be allowed to make a little money. No guides and outfitters, no leasing. Bottom line - quit hunting them so hard, and I have been a hunter all my life. Thank you.

- I think the White River deer herd is strong and growing and healthy. The game and fish is doing a great job. You need to worry more about the antelope. In the whole northwest corner. If you think there is too many deer, five more tags out. But monitor very closely. Too many tags and a bad winter could really hurt the deer herds. It is a very fine line. Good luck and God bless.
- There seems to be a lack of trophy bucks
- Where I have hunted, the herd seems to be in good shape
- Few trophies left as may be too much hunting pressure. Need to promote female deer hunting for meat to control herd size.
- Have deer tags OTC instead of draw only.
- Since 98 it's fewer. Temperature raised. The head are moving to area 21 and others. Herds have diminished. Keep trying guys.
- The herd has been destroyed by winterkill, industry, and management.
- The deer herd in area 23 seems to have decreased significantly since I began hunting in Colorado. approx. 30 years ago.
- DEER HERD THOUGHOUT THE YEARS SEEMED TO BE INCREASING. LAST YEAR (2018) BECAUSE OF FIRES VERY FEW DEER OR ELK WERE SEEN. HOPEFULLY 2019 WILL BE A BETTER SEASON.
- I would like to see a horn restriction on bucks. Such that there would be more trophy bucks. I would also like to see more does harvested as it is out of balance as the does far outnumber the bucks.
- I have been hunting this area for 25 years and the deer herd has been getting smaller but the last 3 years I have seen a great improvement more and bigger deer. The elk population is now getting smaller. We have seen the bear and mountain lion population increase in the past 10 years also.
- Reduce tag quantities in all GMUs to help deer herds rebound. Too many tags and too many hunters are chasing big bucks. The deer don't have a chance these days.
- Piceance Creek herd is in trouble worst seen in my lifetime
- deer numbers have always been good
- Numbers are low! Doe hunts should not happen when your trying to rebuild your herd
- I also think there needs to be an antler point restriction on deer. 75% of the deer I see harvested are immature deer, these are not first time hunters, but the same people every year that "just want something to shoot" after they didn't harvest elk meat. I think antler point restrictions would severely help that problem. My family and I have hunted the White River forest for a long time, please take some of this into consideration. Keep the White River thriving for reasonable/ethical hunters. Thank you.
- Too many tags given out in White River area 2nd season.
- It is very alarming that while deer hunting in 2018 I did not see single buck over 2 1/2 years old. In unit 23 at our residence we do not have any bucks over 2 1/2 and mostly fork horns. Lots of does and fawns but no bucks. This mostly on Oakridge area 5 plus years ago we had multiple larger bucks and many over 170".
- It would be nice to see the herd built up again. Time was one could see 100 deer opening day and now we are lucky to see a few. The winter of 07 and 08 wiped them out due to winterkill.

- Maintain or grow herd. Shrinking herds are bad for Colorado!
- There are fewer deer the last 3 years than in years past. I have hunted the same area for the past 12-15 years and there are fewer animals in general. I only buy a deer tag for meat. I primarily hunt elk. The Cabin Lake fire really screwed things up this year.
- I believe the amount of tags given and not enough concentration on predator control is playing a big role in the decline of our deer herd.
- We need to build up the deer herd
- Hunting seasons (late) are way too long. All seasons (big game) should end Dec 15. You're running game off public land onto private. This is about our herds, not your money. More limits (increased on all doe tags). Deer and elk herds have plummeted; I border BLM between Harvey Gap and Rifle Gap. DOW = poor management or management for profit. Disgusting!
- Over last 3 years, deer numbers have remained unchanged over this period. However, mature bucks, 3 plus, have seemed to decrease in my experience hunting this area.
- I have lived in Rio Blanco county my entire life. In that time (65 yrs) I have seen the deer herd shrink in size considerably.
- Hunt Morapos area. Elk herd good. I've seen some nice four point buck last two years no trophies but healthy looking maybe this year. Lots of does.
- I have hunted and fished, lived and worked among the WR deer herd for 61 years. I have only hunted bucks (not only trophy but mainly for meat). Buck quality was small and sparse 20 years ago - almost to zero on public lands 15 years ago - but over the past 5-6 years has improved in number, size and quality. On the same plots of public land, you can see 5 point bucks starting to gain mass where 12 years ago we would be lucky to see only does.
- Deer and elk numbers are way down
- I have noticed a large decrease in the total number of deer on our property in the past 3 years. It's my opinion that the buck to doe ratio too low. I think the state should consider incentives to harvest doe mule deer while keeping the draw odds low for buck tags. Mule deer are a trophy species and should be managed accordingly.
- I would like to see either sex licenses for the public land in the White River GMUs. I think it would keep the herd healthier.
- suggest you increase the licenses increase both buck and doe tags
- It has been obvious the party I hunt with that we have seen less deer the last 5 years.
- The Division of Wildlife also should consider carefully watching areas 22, 21, 10 for deer management, area 21, deer quality is very poor, there has to less tags given out for both seasons. I have switched to area 10. The deer in unit 10 are much better quality these days. I would focus more time with units 22, 21, 10 rather than the White River herd. These units are managed for better quality. Thanks for your hard work.
- The father of a guy in our group has hunted units 11 and 22 since the 1950s. He has told us of the population cycles. After hunting unit 11 last year, I believe that the deer numbers are in a upswing in the cycle.
- Place horn limit on deer on locals also to help increase deer age and size reduce the # of elk cows
- Where I have hunted, the herd seems to be in good shape.
- The bucks have gotten much bigger.

- Colorado has to be one of the most beautiful states in the Americas. 70% of the time hunting 3rd season deer population is good or above average. My main concern would be controlling the doe population. Texas has a strong management program on its doe herd but then again I don't believe whitetail migrate like a large portion of the mule deer seem to.
- Too many young bucks taken each year!
- Hope to see the hunting future to be as high quality as possible for my family in the future. Really fun to hunt in Colorado. Thanks
- I've only hunted deer last year for the very first time in Colorado. I believe I've hunted your beautiful elk for the last six years. During those years the herd has increased in numbers. I believe the herd has pretty healthy numbers. There were plenty of bucks to choose from, sizes from spikes to one eleven point (4x4 with 3 stickers). We did not see any deer that were in poor health. I'm a hunter that appreciates taking a trophy animal. I'd rather pass on a small buck; preferring to watch them and allow them to grow larger.
- I believe that I have seen an increase in both the quantity and quality of bucks since the draw.
- First don't shoot does, second control all predators.
- When I was at that unit I noticed the hay pens were empty. I really worried about another bad winter and another big deer die-off. Just something I noticed. Thanks
- The deer numbers are still not up to where they were about 14 years ago. Winter weather and predators does hurt.
- I've only hunted unit 22 one time. I used 10 points to draw it, seemed as if there are plenty of deer but need to have youth hunt and reduce the number of three points. I saw 150 bucks of them 120 were three points or "management bucks" young herd.
- I have witnessed the population of mule deer decrease dramatically over the last 20 years
- Deer population is low in the public hunting areas
- I think the deer herd has been sustained at the same level for the last 15 years
- I also feel there were less mature bucks the last 3 years. Each year I have seen less trophy quality deer.
- I've been hunting deer in the white river region for our 20 years. My concern is a healthy population - whatever it takes
- There should be either sex hunt when doe to buck ratio is too high.
- Seems to me that quality and quantity are both down in recent years.
- Numbers are low! Doe hunts should not happen when you're trying to rebuild your herd.
- Place horn limit on deer on locals also to help increase deer age and size reduce the # of elk cows
- The overall health of our Wildlife and Wilderness areas are Paramount!! - Although, I all to often see human intervention Backfire. - We can all do better.

Access

- Because of physical disabilities, I would like to see more and easier access to public lands such as BLM lands that are surrounded by private property without having to hike miles. Also I have seen numerous instances of private landowners DRIVING and hunting on state lands where we, the public, are not allowed to drive. I see this every year on BLM land State Trust

Lands where we hunt. They also harass us as to how we gained access!! We hiked in - they drove in and I am tired of it and it is festering into a confrontation!!

- The area I hunt is adjacent to several private hunting ranches. Their harassment of the herds, to keep them on their property, and the harassment of hunters, is at an all-time high in the 16 years I have hunted this area. Regulation and enforcement of these profiteers selling horn hunting should also be a priority.
- Get Cross Mountain Outfitters to pick up their signs and shut the hell up
- As in every area of the state, the majority of animals are on private property. The Division sells large numbers of licenses but majority of hunters have no access to the animals. The status quo favors guides and private property owners that want \$3,000 to hunt or 7L Ranches that don't allow hunting at all.
- Due to a large portion of unit 22 being closed off to hunters (private property and outfitters) south of road 122, and along road 103 toward Cathedral Bluffs, there now are way too many hunters hunting on the north side of road 122. along the Calamity Ridge/Monument Gulch. Constant vehicle traffic, and hunters now camping along Ridge road right where deer cross from unit 21 into unit 22.
- Being non-resident, provide easier access to hunting in all areas of Colorado made easier. "Not just for the rich and famous!" Very unfair!
- 1) The actual public hunting land is getting smaller and smaller each year due to sale of certain areas sold to Colowyo mining company. There are not enough areas available to hunt in unless I pay a small fortune to hire an outfitter. (2) It is so difficult when in the field, for me to actually know where I can hunt i.e. which is public or private land. There are not enough signs or fences. (3) Also, when out in the field (for example road 51), a lot of times there is small pockets of public land that is impossible to get to because there is privately owned land surrounding it (land locked).
- You sold BLM land and now it is closed to some ranch. Closure of the old Shell lease area ranch that has closed down 80 to 70 on county rd 103? I have hunted those bluffs for 32 years. Now a couple of years ago a ranch sign went up and is now closed WTF? How can they do that? It was Shell originally out there for oil. Now its a ranch that has public land in it but the road is closed because it is private? Please let me know why.
- Landowners are bottling up herds for private gain and impeding access.
- Create better access to state and BLM land especially for resident hunters and include access routes on website.
- Reduce # tags for landowner resale creates private reserve hunting at public expense. Landowners used to grant access but are now selling access. Hunting is public resource and not be privatized!
- Non-resident hunters no following rules (ex) driving on closed roads / road hunting
- My access to BLM properties are limited.
- Please keep the bikes out of the wilderness areas! The whole reason I came to CO is to go to these areas free of wheeled vehicles. On some of the trails, it would be very dangerous for a string of horses to get buzzed by some dumbass on a mountain bike. Thanks for listening
- Open up more roads to ATV's so deer viewing can happen stop closing camping and 4x4 trails to the public. Offer more hunting tags for archery deer and use the added revenue to open more roads to ATV's.

- My concern is to many guide and outfitters took the fun out of the hunt do to you can't even stop on county roads and look without someone wondering what you're doing. I'm not putting in for hunting this year. Out of state hunters have taken over the little BLM we have. thanks to who ever
- Do to private property ownership in and around public grounds, it appears to me the deer have plenty of safe place's to be. It's pretty much private all along the white river and seem the deer know where the boundaries are. The elk also.
- I hunt the 3rd rifle and most deer are on private land and ranchers tend not to allow you to hunt because of their HIGH DOLLAR hunters. This game belongs to Colorado and not to THE RANCHERS
- You asked how much I care about the economic losses to ranchers/farmers due to deer. I put the lowest possible concern because I feel if these said landowners are so concerned about the economic loss there are a whole bunch of hunters that would be glad to help them out. They should allow access for free. No trespass fee, no fees at all. If they need help, we will be more than happy to take deer off the property. If they are unwilling to allow access there should be NO damage money going to them. They do not own the deer... they just feed them.
- The large number pf deer that I saw were on private land. These folks refused to allow anyone to hunt. The state needs to stop this somehow. We farm and will let people hunt if they ask. Landowner tags are given and the relationship between the state and the landowner needs to improve. Incentives should be given to landowners who participate in walk-in.
- I think more people could enjoy the white river deer herd if more public access was also secured. Too many public tracts have named/numbered BLM roads blocked by private property. The state should find ways for the public land hunter to access their public lands and enjoy the opportunities available.
- It's being doing a good job, but there's always space to improve a bit.
- The deer herd seems to be less but that might also be because the landowners have landlocked public lands and we as hunters have trouble getting to them and get harassed when we do.
- Sometimes hunters are about BLM land zone. Few hunters were stopped entering BLM land. Citizen agency may not know up to date public hunting zone. Almost every time got there. We stop by DOW office to look at map.
- The ranchers feed the deer and elk to keep them on their land and then last year one rancher told us you can hunt on my property for \$4000 because I have about 2400 head of elk and deer on my property.
- many ranchers get lots of money from hunting, to much private and state lands tied up by outfitters.
- Area 22 locked gates preventing access across private to public. Restriction and reduction of access to public (BLM) leased by oil or ranching or private enterprise. We seem to be continually losing access to BLM hunting ground.
- I hunt the 3rd rifle and most deer are on private land and ranchers tend not to allow you to hunt because of their HIGH DOLLAR hunters. This game belongs to Colorado and not to THE RANCHERS
- Most of the deer and elk are on private property

- I am disturbed by the amount of land either leased or sold to Colowyo Coal company and how completely locked up and off limits to hunter use for deer/elk. It seems every visit to Axial Basin it presents fewer access opportunities.
- We hunted third season last year in the White River area for deer. The reason I marked VERY DISSATISFIED on your questionnaire is because although we saw deer, they were all on private land and didn't move to public or BLM land. Many of the ranchers won land all around BLM land and have blocked access to the BLM property with no way for the average hunter to be able to hunt this property. Average hunters have no recourse to get on the BLM land unless they want to pay ranchers an exorbitant amount to cross on to property that they pay their hunting fees to be able to hunt. How can the deer and elk herds be managed by the DOW when they do not move off of private property? This is extremely unfair to the average hunter that can't afford to pay to hunt on private property or to pay the land owners to cross their land. My future hunting days look very bleak, to say the least.
- More walk-in access less driving like the back side of Duffy
- Also being disabled makes it hard to hunt when more and more trails are closed.
- The large number of deer that I saw were on private land. These folks refused to allow anyone to hunt. The state needs to stop this somehow. We farm and will let people hunt if they ask. Landowner tags are given and the relationship between the state and the landowner needs to improve. Incentives should be given to landowners who participate in walk-in.
- Put a limit on ATV/UTV use on public land. They are running hunting in Colorado.
- Very disappointed that the game department let the shell oil land in Unit 22 to fall into private hands. It was a very important piece of land, critical to the winter migration.
- I hunt in the southern area of Unit 22 on the west branch of Cow Creek. Last summer I called the Meeker CPW and BLM offices for a determination of the possibility of land closures in the area we hunt 3 times and the local game warden. Even 1 week before our hunt no one knew anything. When we go there every place we hunt was posted and both offices had maps of all the posted land for us. Seems to me they both lied to us. What's up with that? Probably won't be back.
- Again, road closures, cable on road 211, make it very hard to bring in a deer on foot to ATV and other roads being closed off.
- I think more people could enjoy the white river deer herd if more public access was also secured. Too many public tracts have named/numbered BLM roads blocked by private property. The state should find ways for the public land hunter to access there public lands and enjoy the opportunities available.
- I am most concerned about hunters sneaking onto property. We have run across people walking thru areas they don't belong.
- Too much BLM ground not available due to private lands. Sometimes only a 1/2 mile piece separates 2 BLM grounds.
- Also show public access to non-private or leased hunting areas accessible to people of moderate physical ability and post it with restricted camping availability. Last time we were there all land was either bordered by private land or leased by guided outfitters with no access to open indication of public land access.
- The ranch I hunt manages the deer populations well with cattle. Harvest of male deer is limited to only mature bucks of five years and older. Excellent for trophy hunters.

- Most of the deer and elk are on private property we need to build up the deer herd
- Hunted in 2018 muzzleloader season. Was very disappointed to find hunting area closed in unit 22 Cow Creek area. Calls were made to the BLM office prior to leaving to CO but no answers were available about land closures.

Highway Crossing

- Also traffic collisions could be greatly reduced by lowering speed limits at night and instilling more public awareness type signs for wildlife crossing. 1 or 2 signs between Rifle and Meeker and 1 or 2 signs between Meeker and Craig are insufficient. Maybe lighted signs would be more noticeable. Solar technology could be an answer.
- I live in Meeker and it is hard not to hit a deer. They are all does.
- I think we have more deer than rabbits. Maybe thin down the doe population a little to keep the herd healthy and have less car/deer accidents. Install electronic signal devices on highways like Hayden to Craig, Craig, to Meeker, Craig to bags to signal when animals are crossing areas like they had in Wyoming north of Rock Springs.
- Hwy 64 is horrible for vehicle deer kills. No one will shut the speed limit down when the deer hit the highway.
- Managing deer to vehicle accidents can be prevented. Not with bridges but fences. I think the overhead by passes are a waste of money.
- My property and hunting experience is south of Craig on Highway 13. Would like to see water resources on both side of the Highway 13 to help keep deer from crossing highway to get to water. I feel this would be great in preventing deer and vehicle accidents, which will help people and deer populations.

Law Enforcement

- Minimize poaching/unnecessary waste
- Over the last 4-5 years we have watched those who own/work at the hunting lodges, private hunting clubs, harass wildlife in order to keep the "elk" on their property. Wildlife officer try to help us, however, they are few and very busy.
- *I feel that Enforcement of Littering violations should be one of the highest priorities of all. *
GO GET THEM TRASHEY BASTARDS

Livestock

- The sheep and cattle in unit 23 during the muzzleloader hunt is excessive. I believe ranchers should have ALL their livestock out by Labor Day
- sheep herding interferes with hunting season

General

- Too many to list: The point fee increases for moose. Killing our fish in the Yampa for a sucker, wolves, shed hunting season on us, just to name a few!
- Upset with the new licensing of purchasing a small game license. It's bad enough that way pay a habitat fee.

- I hunt mainly in unit 11. During the last 10 years I have noticed a lot less of all species, mostly pronghorn.
- Really the biggest concern for me is watching deer suffer in the city limits of Craig from them being hit by cars to being sick. Seems like it isn't a big concern to DOW.
- Fix the application process where I apply for a license, am not successful and there ends up multiple tags remaining and cannot get access for the left over tags!
- Shed hunters are disturbing deer and elk in spring. May 1 opening needs to be enforced. I have seen shed hunters and turned them in and no action was taken. I had pictures of sheds in vehicles in closed shed hunting areas.
- FYI - I have verified 3 sightings of whitetail does in WR herd area. One outside of Meeker and two Unit 13 (Yampa River).
- Please be careful with your management. Remember the sage grouse lived in the same areas and range degradation almost got them listed land out of our states control.
- Protect earth please, protect animals please, protect Colorado please, limit the number of people moving to Colorado. Thank you for all you do for Colorado.
- Your survey is poorly worded and difficult to understand what you are asking in the questions. Putting this survey in the envelope provided, by folding I in half is a joke. More though should be put into the survey before using precious monies sending it out.
- Not happy about 2019 requirement to purchase a qualifying license if unsuccessful in draw or applying for preference point. Paying for something that won't be used (+/- \$100) would rather CPW raise cost of preference point to (+/- \$50) Seems like CPW is trying to find way to make money
- the interaction I have had with our department of wildlife officers has been good Thanks
- To buy a small game tag is out of line \$87.25 for what
- I didn't care much for the small game tag, \$81.00, that I had to purchase this year in order to put in for large game tag. Why didn't you just save the permit?
- Stop raising the hunting fees!!
- Since DOW became CPW I have noticed a major change in the folks who are now in CPW by their many contacts I have had with the change-over in personnel. I have seen how their attitudes of many in the field are indifferent to hunters I have seen from local hunters, to out-of-state hunters. I am not happy with the taking of our hunting and fishing revenues, which have taken funds away from support for mule deer at the cost of elk over deer (brings more money from out-of-state hunters buy #680 tags to hunt elk) etc. The funding's we had in place have been subjected by parks people to be used in parks directives and building parks in areas where the hunters cannot hunt in the same area anymore because of restrictions against hunting but everything else as recreation is "okay". I have hunted, fished

and traveled out of state to hunt in Colorado since the 1950's so I am aware of how the times, herd populations, etc have changed. (I have my degrees and experience as a mule deer/trout/lion wildlife manager and warden). I talk to every CPW person I meet and I have noted that many of the cross-over personnel who once parks people now wear the patch of old DOW (with modifications) and have promoted over other former DOW folks due to politics and ambition, not all which show a positive, or even supportive stance for hunters in Colorado. This is sad, I am concerned that my grandchildren's future in one of the best hunting states in our USA is being politicalized to do-away with their hunting rights and outdoor rights in Colorado. I am fully aware of agenda's 21 & 30, have decreased it with

USFS/BLM, CPW field folks and see our access to vast areas being decimated; roads closed off; to our recreational uses (including hunting) and yet open to ranchers who lease our lands, use the waters for sheep and cattle at pennies on the dollar. I also see oil companies who are gracious enough to allow limited hunting of which CPW keeps raising the preference points out of sight. Loggers can use the roads, but the gates are locked to keep hunters off the public lands during hunting season. CPW closes most parks for camping facilities as does the BLM and USFS tourist/local campgrounds during hunting season 95% off limits behind locked gates and campsites toilets etc...all claiming "lack of funds" to operate or "our camp hosts have gone home" - poor planning? or is it an implied directive against hunters having a nice place to camp during hunting seasons? by adding hardship to the equation, if the same access was denied (during prime summertime-moneymaking season) to campers, fishermen, tourists et al - there would be a vast public outcry and the availability of "no camping" or "campsite closed signs and gates would be stopped immediately by such an outcry. So here is where the facts summarize. CPW needs to represent our hunter's grievances with hunter- supportive policies - not "anti-hunter" agenda's. Not all hunters are uninformed, uneducated, buffoons no slobs - we do keep track of how we influence others and our image in the eyes of the public and CPW employees at large. I cover my legally taken harvest under a tarp. I use ALL of my game, consuming edible portions, tanning the hides, mounting the antlers/horns, and I share the "gut pile" (which I cover with brush and dirt with predator wildlife. Often I take the bonded carcass to our world sanctuary nearby. After fighting wars for 40 years for our country and people, all I wish to do is to be able to hunt and fish and explore our beautiful Colorado created by God almighty with my family until my wounds catch up with me one day. Think about it freedom.

Appendix D7-C: HPP Letter from 2020



July 30, 2020

Darby Finley
Colorado Parks and Wildlife
73485 Hwy 64
Meeker, CO 81641

RE: White River (WR), Northwest CO (NWCO), and Upper Yampa River (UYR) Habitat Partnership Program Comments - Deer HMP D-7

Dear Darby:

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

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

The three HPP committees had previously been presented with comprehensive information about D-7. At the July 29th video conference, the committees were represented by five members and, after your summary presentation, were in agreement with the following comments pertaining to proposals for the population range and sex ratio objectives for the above HMP plan.

The WR, NWCO, and UYR committees support the preferred alternative 2, to decrease the population range objective to better reflect the current population estimate. We believe this alternative responsibly balances local range and habitat conditions with sportsmen desires and landowner concerns. While there are concerns about the current population and a desire to increase the local herd size we believe the preferred alternative is appropriate given the increasing trend in CWD prevalence, concerns over adequate winter range and the other factors you identified. Any issues we do have are more likely related to distribution of the herds in the area and not the overall population size.

The three HPP committees also discussed the proposed sex ratio alternative. We support a moderate reduction in the current sex ratio objective to a range that would ultimately increase the opportunity for more hunters in the field but would still allow for the ability to address high CWD prevalence rates.

As stated above, HPP is also directed by statute to assist the Division to meet game management objectives. The WR, NWCO, and UYR committees have worked with both public land managers and private landowners to improve the quality and quantity of the habitat in D-7. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area.

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

On behalf of the White River, Northwest CO, and Upper Yampa River HPP Committees

Sincerely,

A handwritten signature in blue ink that reads "Bailey L. Franklin". The signature is written in a cursive style.

Bailey Franklin, CPW Rep-WRHPP

Appendix D7-D: County Input



BOARD OF COUNTY COMMISSIONERS
OF RIO BLANCO COUNTY, COLORADO
RIO BLANCO COUNTY HISTORIC COURTHOUSE
555 MAIN STREET, P.O. BOX 599
MEEKER, COLORADO 81641
970-878-9430

August 4, 2020

Bill de Vergie
Colorado Parks and Wildlife
Meeker Service Center
PO Box 1181
Meeker, CO 81641

Re: White River Herd Management Plan – Unit D-7

Dear Bill,

The Board of County Commissioners of Rio Blanco County, herein "County", support the White River Herd Management Preferred Plan. The analysis shows significant degradation of the deer population based on numerous factors which will negatively impact northwest Colorado if immediate action is not taken.

The County urges CPW to provide ongoing information specific to the impacts on the herd due to the existing wolf population as well as a potential increase in the population of wolves pursuant to a forced wolf introduction. Additionally, to enhance the survival of the deer population, predation in general should be closely monitored and managed to maintain or decrease existing mountain lion, coyote, bobcat and bear populations.

The County is obligated to protect and ensure the local socioeconomic wellbeing, the culture and customs of the constituents, and conservation of natural resources of the County. The County adopted the 2016 Rio Blanco County Land and Natural Resources Plan, herein "RBC LNRP" with the intent to address issues at a federal level, however, the County relies on this document to guide all of our natural resource actions. After a thorough review of the proposed Herd Management Plan, the plan appears to be consistent with the RBC LNRP. Section 4.14.3 paragraphs 3 and 4 of the RBC LNRP address wildlife management plans:

3. Consultation and coordination should occur with the Districts and County where federal monies or resources are committed for the development of management plans, population objectives, wildlife introductions (e.g., moose or big horn sheep), or other decisions that may affect the economic viability of Rio Blanco County.

- 4. Peer-reviewed science, or those meeting the agency data specifications, should be used in the management of disease spread between native and domestic species, with consultation and coordination of local government.

We invite you to review the RBC LNRP in its entirety by visiting the following address or by clicking on the following hyperlink: <https://www.rbc.us/578/Natural-Resources>. Should you have questions or require additional information, please do not hesitate to contact us. Our email address is bocc@rbc.us.

Sincerely,



Jeff Rector
Chairman



Si Woodruff
Commissioner



Gary Moyer
Commissioner

Appendix D7-E: Federal Input



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
White River Field Office
220 E Market Street
Meeker, Colorado 81641

In Reply Refer To:
1170 (LLCON05000)

August 2, 2020

Colorado Parks and Wildlife
ATTN: Bill de Vergie
Area Wildlife Manager
73485 CO-64
Meeker, CO 81641

Dear Bill,

Thank you for the opportunity to review the Draft 2020 White River Herd Management Plan for Data Analysis Unit D-7. Our office has completed a comprehensive review of the plan and has concluded the plan to be consistent with our approved Resource Management Plans. We fully support Colorado Parks and Wildlife's Preferred Alternative for both mule deer population and sex ratio objectives that would allow for modest reductions in current herd numbers and sex ratio objectives. BLM supports the management flexibility inherent in proposing a desired population range as outlined in the Preferred Alternative.

If you have questions concerning our response to your White River Herd Management Plan, please contact myself or Lisa Belmonte of my staff at 970-878-3816.

Sincerely,


fsw Kent Walter
Field Manager

Forest
Service

Blanco Ranger District

220 E Market St
Meeker, CO 81641
970-878-4039
Fax: 970-878-5173

Date: August 6, 2020

Darby Finley
Terrestrial Biologist
Colorado Parks and Wildlife
73485 Hwy 64,
Meeker, CO
81641

Dr. Mr. Finley

The Blanco Ranger District of the White River National Forest has reviewed the Draft D-7 Herd Management Plan. I would like to submit full support for the preferred alternatives identified in the plan. The preferred alternatives allow CPW the most ability to effectively manage ever changing conditions and challenges while still maintaining a viable mule deer population in the D-7 Management area.

The Blanco Ranger District is committed to providing use of public lands to a variety of users while at the same time, managing effective wildlife habitat for a variety of wildlife species including mule deer. Management objectives for the Forest Service is not to manage populations but to manage existing habitat. The D-7 Herd Management Plan will be used as a point of reference as we plan new vegetation treatment projects on the Blanco District. Herd management plans provide important information on goals and population objectives so we can ensure we are in alignment with our vegetation management.

The majority of the mule deer habitat on the district would be classified as summer and transition range. Vegetation treatment projects takes into consideration effects to big game and non-game species and focuses to improve habitat conditions as much as possible. It is our commitment to continue treating habitat effectively through but not limited to: timber harvest, prescribed fire, wildfire management, noxious weed treatments and active livestock grazing management.

Recent wildfires on the district include the Lost Solar and Cabin Lake Fires. Monitoring of these two fires has shown a dramatic increase in aspen regeneration. This is a promising result that benefits a variety of species including elk and mule deer. We will continue to look for opportunities to allow fire to take a natural role on the landscape while still providing for public safety and protection of private property.

The Blanco Ranger District has completed an analysis in our mountain brush vegetation communities to allow for Prescribed (Rx) burning to enhance wildlife habitat while reducing fuel loads. We plan to continue these treatments when conditions allow. We are also working to include an analysis to provide opportunities for mechanical treatments in our mountain shrub species to increase our opportunity for habitat improvement projects on the district.



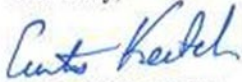
Darby Finley

2

CPW has always been an active partner and supporter of activities on the Blanco Ranger District. We are committed to maintaining this partnership as we work together to provide hunting and wildlife viewing opportunities to members of the public as they enjoy our public lands. While we continue to maintain and improve wildlife habitat conditions.

Thank you for the opportunity to review and provide support to the management of our mule deer population and this plan.

Sincerely,



CURTIS KEETCH
District Ranger

APPENDIX D7-F: Comments from 30-Day Comment Period

I write this comment with absolute disgust and disdain for the current deer management practices present in NW Colorado. I honestly can not relay how sickening it has been to watch the slaughter of our once great deer herds in the NW. Watching the last 2 falls and seeing piles of healthy doe and fawn deer at the processing plants is simply beyond comprehension. It is wrong on so many many levels. Between that and the disastrous CWD mitigation process the deer hunting has been all but destroyed in the NW corner for a decade if not more...

Sorry but I can not fathom how poorly the herds in the NW have been managed. For decades I worked with CPW and supported the work being done. Served on several groups and worked with managers on a wide variety of issues. Now I no longer see CPW as an ally in management but a foe.

Having volunteered with Chuck Anderson on his many studies in the NW I find it interesting that his data, his reporting appears to be contrary to what is currently being reported in the HMP. I recall public meetings in which his data was shared to prove that habitat (at least in the Basin) was not a limiting factor to the herds. He had significant data that showed that the deer were healthy and on all but the harshest of winters they wintered well. His data showed that the Oil and gas development in 22 was not a major concern for the health and longevity of the herd. He presented slides that showed the area could likely support larger herds. Between the long term body condition scores, the pregnancy rates, the number of doe birthing fawns(including the really high rate of twins) and the number of viable fawns hitting the ground in the spring with good body weights, his presentations and data suggest that the habitat in the area was not a limiting factor. Yes the winter of 07/08 was an exception, but the conditions that winter were different than any winter I have personally observed since 1984. Between the data he had shared and published and the hands-on experience I had with his project (including the collaring, capture, preg checking, etc.) I simply do not but that the range can not sustain the herds and that we need to cull.

The last HMP was simply wrong(I am not sure how I missed it but I can honestly say I had no idea that the numbers/herd objectives were being so drastically cut). I do not understand at all how we can kill thousands of female deer in the NW and call it management, especially after myself and hundreds of other sportsmen fought so hard just a few years ago to end doe hunting in all areas where the populations are under objective. So instead of working and managing wildlife, growing our herds, CPW simply moves the goal line. Moves it so much that the currently struggling population is somehow instantly a surplus and we slaughter doe and fawns by the thousands over the last 2 years.

I strongly encourage the following actions to save the deer herds and restore quality to the hunting in the NW...

1. End all doe and fawn hunting immediately.
2. Set a good population goal that actually maintains what we used to have, while I understand the old objectives, prior to the last HMP update, were unattainable(at least by the management strategies in use) split the difference between the new low goals and the old. Raise the herd objective in each area by splitting the difference between the old objective and the new low number objective that have been used as an excuse to slaughter the doe and fawns. This includes all HMP areas.
3. Greatly reduce the war on mature bucks. It is sickening that CPW has taken this position. What is the point of hunting if you can not hunt a mature deer? Simply put you have no idea how to manage

CWD and as a result everything you try is experimental at best. Seriously this year for the first time ever I watched spike and forked horn bucks do the majority of breeding.

4. Make the 3rd and 4th season hunts extremely limited and restore quality to hunting.

5. Support and push for expanded bear hunting. Simply put the CPW can no longer ignore and play stupid on bear management. It is horrible how poorly CPW has handled this situation. Then to think that you demote and remove the one guy in the NW who understands the issues and speaks up?

Lastly, figure out who has it wrong? Was Chuck Anderson lying when he sat in meetings in Rifle, Meeker etc. and reviewed his data or is the HMP justifications wrong? I know in my gut who I trust and it is the researcher who appeared to be there for science and for the deer...

I know that this comment is likely to hit hard and it should. As I consider the current management in the NW to be some of the worst practices I have observed in CO. I would put the current management in the NW on a lower level than Montana management, which is sad as we used to laugh at MT and how they managed the herds.

This has done one thing for certain, it has taken away my desire to hunt Colorado entirely. I have seen several of my good friends in shock dismay at the current status in NW Colorado and several of them are done hunting deer in CO. It is sickening to think that NR are cashing in 20 points to hunt 4th season deer in 22 and the odds of them seeing a buck over 180 are virtually 0. That seeing any mature buck in 22 is now a miracle...

Do the right thing and restore quality to the hunts in the NW.

In response to the prospective mule deer plan, I desire to provide knowledge and perspective regarding the D-7 herd. On behalf of everyone who enjoys hunting mule deer or has a passion for the mule deer herd, I hope this decision is not taken lightly. After reading the draft plan on the D-7 mule deer herd, while watching and living amongst this herd for the last 20 years, I'm very concerned, and I believe EVERYONE feels the same way I do. According to the CPW research numbers, it is believed the herd size is currently around "34,000 in the 2010s". I personally believe those numbers are much less than that since 2017. Here's why I understand that I'm not a wildlife biologist, and I don't get to know every statistic but sportsmen like myself know and see much more than we get credit for. I grew up in Meeker, Colorado and have lived here my whole life. I have always loved to hunt, and hunting mule deer is by far my favorite species. My family and I are experienced hunters that have been very successful. In addition to my own accomplishments, I work as a private hunting guide in GMU 23. I grew up hunting and continue to hunt GMUs 11, 21, 22, and 23. 11, 22, and 23 were my favorite deer units. There wasn't another deer unit in the country I would hunt over hunting unit 22, 3rd season. This was because I knew I could find a 200" deer every time, which not many people can say, other than local deer hunters. The quality and quantity of bucks in the unit was magnificent. 2011 was probably the best year I remember, then again every year was phenomenal trophy buck hunting. According to CPW numbers, the D7 deer herd would have seen its lowest numbers in the 2010s, but those years were extremely great. We would see 150-200 deer daily while hunting in GMU 22 with dozens of those deer being mature bucks. I can remember my family and I passing up 180" deer ALL THE TIME. We were always looking for 195" bucks or better. My family killed many 190" class bucks throughout the 2000s. It was the most fun I ever had and notably it wasn't difficult. Many other locals would have similar things to say. Everyone I know was killing big bucks every year....until around 2017. CPW management destroyed

the deer herd, and it has not recovered since. This was the year the season dates changed to later hunts, and the tag distribution increased. I remember going to the game processor in Meeker to get my mother's 195" buck processed. What I saw made me sick to my stomach. The number of B&C bucks that got slaughtered that season was unbelievable. The mule deer foundation confirmed to me that hunting season is what crippled the deer herd. The winter storm before that hunt pushed the mature bucks to the winter range. Combine this with late hunts and significantly more tags. The result was an onslaught of mule deer. Then came 2018. Deer hunting became significantly tougher. It was like someone flipped a switch. 2019 was worse, 2020 even worse, yet surprisingly, we were able to dig up a couple 180" bucks on the last 2 days of the hunt. It continued to get more and more scarce. This year, 2022 we had 3 buck tags in my family. All 3 tags went unfilled with no opportunity at anything more than a 2-year-old buck. Not just the bucks dwindled, this was the least amount of does that we had ever seen. With the deer in full blown rut, it was surprising to see the little groups of does not occupied by a single buck. It was flat disgusting. We would see maybe 20 deer a day. It was usually one or two bucks, lucky to be older than 2. We saw around a dozen bucks in total over our 2 seasons of hunting. None of them of any size or age. I am also a die-hard shed hunter. The last few years I have hardly been able to find a new shed of any size if I can find very many sheds at all. My point with this is there are no deer. There may have been 34,000 deer in the 2010s, but piecing these observations together, this no longer reflects the D7 deer count. At least not in units 11,21,21,22,23. These units are where I call home and there is not much for deer anymore. Known to be outstanding deer units, this is shameful. Where did they go? Hunters have killed them. Yes, there are dozens of factors. The CPW claims CWD is the leading cause of mule deer population decline within the D-7 herd. I would have to disagree. At least in my neck of the woods. The CWD infection rate is around 2-3% in GMU 22. Well, if CWD had a 100% fatality rate, you would still not see this kind of population decrease within the unit. Attached is a picture of my "On X" tracker in the spring during a shed hunt. I spend many days like my pictured hunt. I walk every square foot of the landscape during shed season. Surprisingly after walking 32 miles inside a one-mile radius I found zero skeletons from diseased kill animals or even lion or coyote kills. If the mule deer were dying in the masses due to CWD wouldn't a deer skeleton be found occasionally? If not hundreds? If there were deer skeletons, wouldn't people come across something? I know where these deer live and meticulously follow their habits. Even if predators were killing them all I would find some evidence at some point. I think the D-7 herd's biggest problem is due to overhunting. I've never seen as many hunters as I have in the last few years. It's extremely crowded and impossible to get away from people during the season. 10 years ago, everyone was tagged out and home by the middle of the hunt leaving the second half of the hunt to a few select trophy hunters. Now, there are swarms of hunters up until the very last hour of the last day. I'm going to conclude it's because they can't find any deer. Even the OTC elk hunters are hurting the deer herd. According to the mule deer foundation, the stress from any type of hunters swarming the outdoors forces unnecessary stress and migration on the deer causing the does to have decreased fertility rates. We are not creating any new population, the population that is born is being eaten by predators. Drought and winter are killing some, grazing competition forces others to new habitats, and whatever is left, is killed by hunters. CWD may be a factor, but not the leading cause. Let's say theoretically CWD is the biggest problem. The proposed plan is to continue to kill the older bucks since they are the carriers of it. They have already decimated the quality and age of this deer herd. There are very few mature bucks, with few deer left at all. Please consider changing your plans. I fear may be too late for the deer in GMUs 11,21,22,23. These units have now been "shot out". I watched it happen with my own eyes. It only took a couple of years to completely change. It surprises me how fast those units could be ruined. I'm thankful that I have the memories of hunting trophy mule deer for so many years. They will just be memories unless we make big changes, fast. My goal is to see a strong deer herd for D7. It seems like everything is against them. Watching what happens during hunting season is sickening. Whatever changes the CPW has made in the last few

years hurt the deer and continue to hurt them. These new plans will only continue to diminish their numbers. I speak on behalf of many residents, outfitters, and sportsmen. I strongly urge the CPW to draft a new plan.

I'm a hunter and general outdoor enthusiast that lives in Colorado. Below are my comments on the northwest Colorado Deer draft HMPs:

Unfortunately my comments will be brief, especially as it is hard to comment on each plan specifically given the amount of reading material.

I am curious about the motivation for CPWs response to some of the trends seen in the HMPs.

Let's use D-7 as an example:

- "The average population size had declined from 92,000 in the 1980s, to 61,000 in the 1990s, to 53,000 in the 2000s, and to 34,000 in the 2010s" (page 55 from draft plans)
- "The declines observed are evidence the carrying capacity is, and has been, on a downward trend" (page 55 from draft plans)

For starters it goes without saying that is a meteoric drop in estimated population over the years.

I have a couple primary concerns:

1. It feels like we're moving the goal post. For starters, how extensively has the biological carrying capacity in DAUs throughout Colorado been studied? What evidence do we have that the carrying capacity has been so dramatically reduced in DAUs like the White River? Certainly it's lower than it used to be due to population and development changes. But so much lower that the deer herd has been reduced by nearly 70%? Where is the evidence for this meteoric drop in carrying capacity? Wouldn't we want the goal then be to increase the deer herd? Rather than, when we see declines just shrug our shoulders and change the population objective to match the new further declined herd? Are we gonna just do this until the deer are gone? Are we going to ever adjust hunting seasons accordingly? Eliminate doe harvest?
2. The doe harvest here is what is most concerning to me. We have a deer herd that falls below it's objective population range. Per CPWs standards that mean there can no longer be a doe harvest as doe harvest has the biggest impact on future population and is the quickest way to reduce a population size. Yet, CPW then just decides to change the population objective and then boom doe harvest can resume because "it's back in it's objective range". Doe harvest criteria should not be this simple. It should take into account herd performance over the years such as the direction it has been trending regardless of the population objective. Herds that have been historically declining should not have doe harvest. Period.
3. In these plans i'm reading a lot about declining population sizes and reduced habitat carrying capacity. The results of which just bring about a new population objective that makes everything seem fine. Talk about shifting baseline syndrome huh? I don't see enough in these plans about how we work to increase deer numbers. We seem to be writing off the losses as an inevitability, move the goal post, and resume our 3rd season high quota rut hunting with doe harvest? Are we just going to continue down this path until we start wondering where all the mule deer went? What are the priorities to work on as sportsmen and women to reverse these declines? Stakeholder discussions, habitat priorities, etc.

I'll admit, hunting the 3rd season is a lot of fun right now given how close it is to the rut. But I think we're playing with fire with such a high quota hunt being held this much later, we need to shift the seasons back again. We can't risk over harvesting mature bucks in this state given the declines we're seeing with mule deer.

Thank you for the courtesy of allowing those of us in the public forum to comment on, and participate in the deer herd management plans that are being submitted statewide, by your department.

Specifically, I am writing to you regarding the D-7 White River herd in unit 23, located in the Northwest region of the state.

I. In 2011, LK and Grady Ranches (contiguous parcels located in Meeker, CO) partnered as active participants in the Colorado Ranching For Wildlife program, and for years they achieved stellar results which have been well documented.

In 2017, the LK Ranch (formerly a landowner of the year recipient) completed a landowner transaction with their eastern most neighbor, M/R White River Ranch.

Upon acquisition, M/R Ranch became the majority shareholder via total acreage, thereby creating an RFW trifecta with LK & Grady ranches that is still going strong today.

Since 2011 M/R, LK, and Grady ranches, with the help of HPP funding, have worked together with local biologists and game officials (who we know, like, and respect), to produce and promote optimum wildlife habitat, i.e. - installing water systems, planting food plots, combatting noxious weeds, combatting predators, flash grazing, controlling burns, installing mosaics, and replacing aged and exhausted goat proof fences with today's modern, game friendly fences. As a result, we have achieved and maintained an "A" status within the RFW program based on overall hunter satisfaction, as well as keeping our annual game harvest objective requirements around, or above 90%.

We have harvested exactly the number of bucks annually that C.P.W. recommended, based on their surveys, data, and statistics-when applied to our total acreage of prime summer and winter habitat as optimally described in this Herd Mgmt Plan; forbs, shrubs, grasses, serviceberry, rabbitbrush, gamble oak, snowberry, sage brush, 60/40 mosaic areas VS foraging areas, controlled burns, water systems, zero development, zero gas/oil leases, zero wild horses, and zero deer chasing dogs.

We have remained careful to harvest mature and post mature bucks only, and have (until this year) strictly prohibited bucks 4 years or younger, from intentionally being shot.

From 2011 until 2015 we would pass on 4 year old deer, and see them again the following year, whereas today, bucks that we recognize from the previous year are nonexistent, and shed antlers are now rare finds.

Return clients since 2011 are more than skeptical about hunting with us again, after this years lack of deer sightings, and/or opportunities.

Looking back through our photo archives, there is an unmistakable contrast in the quality of mature bucks that we harvested with ease 6-10 years ago, VS the quality of immature bucks that we've labored to harvest over the past 3-4 years.

To say the least, the buck hunting on our land (deemed prime habitat by C.P.W. standards) has been nothing short of dismal since 2020.

II. We clearly understand after studying C.P.W.'s Deer Management Plan, how C.P.W. hopes to monitor its deer herds every 5 years for C.W.D. prevalence rates, how they encourage actions to be taken to reduce deer populations and densities, balance male/female ratios, change age structure,

remove diseased animals, remove “motivations that cause animals to congregate”, and minimize prion point sources...which live in the soil.

By any standard, C.P.W.’s goal of “reducing deer densities” has been a big success. This year, we found almost no mature bucks. We found almost no middle aged bucks. We found far less does than ever before.

However, during the public deer seasons we found a shocking number of two year old fork horned bucks in our local processing facilities, most all of which were killed by public hunters.

It’s impossible to understand how anything advantageous comes from C.P.W.’s willingness to allow two year old bucks to be slaughtered in the state of Colorado, given the dire challenges that are highlighted in this C.P.W. Deer Mgmt Program.

Deer Aging: As the reality of deer decline became more apparent in our program, we began sending tooth samples from bucks harvested, to the University of Wyoming where they were professionally aged. In 2018, we were pleased to see that our average age of bucks harvested came in at 5.5 years old, with older bucks in the mix as well.

By 2020, we struggled to find a representative of the older class of deer that we were used to, and as a result, we were reduced to harvesting younger deer, due to the lack of “inventory.”

It came as no surprise then, when our latest results came back from the University of Wyoming averaging

4.5 years old, with a cringe worthy 3.5 year old in the mix as well. We also turned in secondary tooth samples to the Meeker office for second opinions, but never heard anything afterward.

C.W.D. Our program mandates that every deer harvested on the ranch be tested for CWD, and for the previous three years of testing, our rate of prevalence was around 30%. (4 out of 13)

This year however, we tested 100% NEGATIVE for C.W.D., which was welcome news, and hopefully will serve to relax some of the C.W.D. related restrictions in favor of less deer tags issued.

III.

The truth is, most outfitters, guides, and ranchers in unit 23 collectively point at overhunting and predation as the key causes to deer decline, while C.P.W. seemingly points at Chronic Wasting Disease as the main cause of deer decline. Similarly, it appears that C.P.W.’s go to blue print for deer management objectives starts and ends with the full eradication of CWD, which by association, translates into the near eradication of the White River deer herd. Many of us would like to see plans equally as ambitious drafted for combatting predation, overhunting, and removing or restricting OHV trails--all major issues that could be improved.

Underlined below are lines found within the C.P.W. Herd Management Plan pertaining to the D-7, White River deer herd, followed by a response.

C.P.W. : “Mule deer have been one of the most studied species in wildlife conservation, but there is still no single factor that has been identified to fix the decline and grow populations.”

&

C.P.W. : “Through all of the monitoring efforts, research, and public input, we have identified a list of issues that impact deer populations and herd health in Northwest Colorado. Chronic Wasting Disease has become one of the greatest issues affecting deer survival and has become a significant driver in establishing population and sex ration objectives. Habitat quality and quantity are the other biggest

factors affecting the potential for deer population size and growth based on other grazers, and protection from disturbance, weather, and predators. Oil and gas development, renewable energy development, recreation, and residential development can impact deer populations through direct loss of habitat, and indirectly by affecting behavior and use of quality habitat. There’s also

competition with free-roaming horses, elk, and livestock. Highway fencing and crossing structures have become a greater focus on deer management as well, as fencing is being used to minimize vehicle collisions, but those fences also create barriers to migration and suitable habitat. Finally, predation is always a factor for deer management with coyotes, lions, and bears on the landscape, and following Proposition 114, wolves will be a factor as well in the future.”

Re: Based on this, CPW’s own admission above, we are all faced with the daunting, and seemingly impossible task of bringing back “one of the most studied species in wildlife conservation”-when every factor mentioned above is our reality here in Unit 23. “With no single factor identified to fix the decline and grow populations,” its obvious the odds are long, and stacked against us.

Most trophy hunters just want to know the answer to the following question:

With all the negative factors threatening the mule deer herd today, why is C.P.W. still issuing so many deer tags to the public hunters who are responsible for killing the majority of immature, fork horned bucks?

The standard answer from C.P.W. regarding this question, is that the deer herd has to be “turned over”. Again, it seems that C.P.W. should receive credit for turning the deer herd over, spectacularly.

Simply put, the majority of outfitters, guides, and cattle ranchers taking part in this conversation support issuing fewer deer tags, and reincorporating the 4 point rule for bucks harvested.

C.P.W.’s counter argument for reincorporating the 4 point rule is: “The four point rule doesn’t work because too many hunters erroneously kill three point bucks, then leave them laying in the field to avoid being issued a citation.”

It would seem that when going by percentages, the amount of hunters leaving three point bucks in the brush, happens with FAR less frequency on a yearly basis, than does the number of public hunters shooting and tagging two year old fork horned bucks in the National Forest.

It would be interesting to see Colorado reintroduce the 4 point rule on a county by county basis. If the counties abiding by the rule begin to see better results than the counties who do not, then the disparity in deer quality between participating and non participating counties will soon be undeniable, and provide a clear contrast that would point the way to proper deer management practices. At the same time, what could it hurt, especially if CWD was not a factor?

Last week I received a call from a public hunter who was hoping to buy a private deer hunt in 2023. His reasoning was that after hunting deer in the National Forest on opening day this year with his son, he felt it was too dangerous with all the hunters shooting wildly at every legal deer they saw. Because this man and his son were unable to find an area with no other hunters present, they packed up and left, which brings us to the next topic of discussion...

IV.

The introduction of Public OHV trails in the National Forest.

C.P.W.: “In addition to weather, human activity can also influence time spent in transitional ranges. Deer tend to spend less time in highly developed areas, increasing the rate of movement through or altering the use of habitats within these areas. Therefore, knowing how deer use transitional ranges is important to making informed land-use decisions in order to avoid or minimize impacts to these critical transition ranges.”

“Recreation on winter ranges, including hiking, snowshoeing, biking, skiing, and snowmobiling can negatively impact ungulate behavior by causing them to flee and altering their feeding, resting and travel patterns. When a deer is disturbed, it forgoes foraging in favor of hiding until the disturbance has ended.”

“Figure 11 illustrates the densities of roads and trails across NW Colorado. The cumulative effects of multiple routes with intersecting and overlapping avoidance buffers can impact a substantially larger area compared with the habitat loss from direct disturbance from the miles routes. Increased recreational activity associated with the increased density of roads and trails leads to both immediate and long-term effects on individual animals and populations by displacing wildlife into less optimal habitats. The result is a decrease in available energy for winter survival, growth and reproduction, and ultimately reduced fitness of population.”

Re: We couldn't agree more, and yet OHV trails that run for miles throughout the National forest are still in existence. Deer and elk reflexively panic and run from the sound of and OHV, which is why we only use small gas engines on our ranch during hunting season. The public OHV trails are negatively affecting the deer and elk in exactly the manner as laid out above, yet they are still allowed to remain in place.

Before the OHV trails were installed in the White River National forest, the XXXXXXXXXXXX family would ride horseback on their forest permit and see multiple herds of elk and deer that were calm, and unafraid.

Since the inception of the OHV trails, the elk no longer summer above us with the frequency that they once did. The XXXXXXXXXXXX family will tell you that they seldom see elk or deer standing around any more when riding their permit. Without a doubt, the OHV's buzzing all over the national forest during hunting season have resulted in fewer places for the deer and elk to find respite. As a result, disgruntled public hunters, after riding their OHV's all over the national forest for days on end, conclude that all the elk are on private land, and like clockwork, begin dropping by our headquarters to ask for permission to hunt. Again, it's difficult to understand how anything advantageous comes from C.P.W.'s willingness to allow people to ride OHV's throughout the most remote locations of the National forest, elk and deer be damned. At some point we need to question whether the revenues associated with the OHV tags, are worth the stress that's placed on the deer and elk as a result of the constant pressure.

IV.

Predation.

C.P.W. “Mule deer and their habitat can be impacted by a variety of issues including predation, disease, and disturbance.”

“Because deep snow and extreme cold tend to concentrate mule deer and reduce the amount of available forage, mule deer are more vulnerable to predation and in physically poorer condition.”

Re: This subject has been a hot topic for years, so there's no need to re-litigate it now, as our ranches have done their best to combat the problem effectively through the help of XXXXXXXX- the USDA trapper who has been contracted by our ranches to eradicate coyotes, and in some instances, bears and lions as well. For the record, our fawn crop undoubtedly increased after Justin began eliminating coyotes. It is now routine for our trail cameras to capture as many bear and lion photos around water holes, as deer photos. With each passing year, the amount of bear and lion sightings on our ranches increase.

Certainly, as pointed out in this herd management plan, predation is a real issue for the struggling deer population, but tends to go unchallenged, from our perspectives.

Reestablishing the spring bear hunt would be one way of helping this situation.

I was very surprised to see in this management plan, that C.P.W. listed predation as a secondary threat to mule deer, while listing free ranging horses as a primary issue. Certainly I was unaware that free ranging horses posed this degree of threat to the habitat.

V.

Final Thoughts.

Within the herd management plan were a few charts and graphs, and one in particular stood out to me. It posed the following question:

“Which statement comes closer to your own opinion:

- A) I want to hunt more often, even if it means less mature bucks.
- B) I want to hunt mature bucks, even if it means I hunt less often.

In our D-7 unit, there was an overwhelming response of 96% in favor of hunting more often, even if it means less mature bucks. That mentality simply doesn't apply to trophy hunters, and therein lies our problem. This seems to foreshadow the inevitability that the White River deer herd will indeed be “turned over” as C.P.W. hopes. The next question is, will we ever get it back, afterward?

There is a similar chart that shows only 34% of the hunters in the D-7 unit were satisfied with their buck hunt, and only 16% of the hunters were satisfied with the number of bucks seen.

So where do we go from here?

There is a saying that I often share with the guides during these hunting camps: “Control what you can control, and forget about the rest.”

We can't control severe winters, and we can't control drought. But we can, and we have worked alongside C.P.W. to provide the best habitat and the best situations possible to sustain the animals through rough weather patterns. Will that be enough?

We can't control the implementation of the wolves, or lions killing multiple deer in a small area, but we can continue to harvest a few predators during the appropriate seasons. Will that be enough?

We can't wish CWD away, or eliminate the prions in the soil, but we can, and we have harvested more bucks at the request of the department. Will that be enough?

We can't control how or when C.P.W. chooses to set it's 4 public seasons by calendar dates, (which some think are too late), but we can set our 90 day RFW season such that we at least attempt to rest the animals at every opportunity, while still achieving our harvest objectives at a high percentile.

Will that be enough?

We can't control the OHV traffic on the forest, but we can choose to use them as little as possible during hunting season on our ranch. Will that be enough?

We can't control public hunters wiping out two year old bucks each year, but we can choose to pass up young deer on our property in hopes of allowing them to grow. Will that be enough?

It is hoped that these rhetorical questions are not interpreted as sarcasm. To the contrary. I've always wondered where this is all going to wind up, if C.P.W. erroneously chose the wrong course of actions in their attempt to turn the herd over. While we appreciate their efforts and would never question their sincerity, the fact remains that the results of their plans to date, have been anything but encouraging. Honestly, the lack of results are what stand out, and unfortunately, nothing more. Hopefully more people will choose to write in and share their thoughts. There are many guides, trophy hunters, and outfitters who have good information to share based on experience, and we truly appreciate this opportunity to be heard.

At the end of the day, we all share the same common interest-which is preserving and promoting the mule deer herd. If we all do whatever we can to help, hopefully the answers to the rhetorical questions above will soon be “yes,” but as we can all clearly see, time is of the essence.

APPENDIX D7-G: HPP Comment Letters



December 14, 2022

Darby Finley
Colorado Parks and Wildlife
73485 Highway 64
Meeker, CO 81641

RE: Northwest Colorado Habitat Partnership Program Comments - HMP D-1, D-6, D-7

Dear Mr. Finley:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsperson, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the Northwest Colorado HPP (NWCOHPP) Committee has reviewed the D-1, D-6, and D-7 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The NWCOHPP Committee supports the draft alternatives for the population objective and the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsperson desires and landowner concerns. While there are concerns about the current population and a desire to increase local herd sizes, we believe the preferred alternative is appropriate given the increasing trend in CWD prevalence, concerns over adequate winter range, and the other identified factors.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat across the committee area. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The Northwest Colorado HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Gary Visintainer, Chair
Northwest Colorado HPP Committee



December 8, 2022

Darby Finley
Colorado Parks and Wildlife
73485 Highway 64
Meeker, CO 81641

RE: White River Habitat Partnership Program Comments - HMP D-7

Dear Mr. Finley:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsperson, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the White River HPP (WRHPP) Committee has reviewed the D-7 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The WRHPP Committee supports the draft alternatives to maintain the current population objective and extend the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsperson desires and landowner concerns. While there are concerns about the current population and a desire to increase the local herd size, we believe the preferred alternative is appropriate given the increasing trend in CWD prevalence, concerns over adequate winter range, and the other identified factors. We ask CPW to apply adaptive management practices and update the plan as needed to sustain deer populations.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat in D-7. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The White River HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Angelo Theos, Chair
White River HPP Committee

APPENDIX D8: Stakeholder Input

Appendix D8-B: Results of Hunter Questionnaire, September-October 2019

To view the complete results of the D-8 hunter survey, go to the following website link:
https://drive.google.com/file/d/19_FRLFIWZs1fSRvhtKMmr4PoZv7rnnlQ/view

or use the following shortened URL:

<https://tinyurl.com/D8huntersurveyresults2019Oct>

Appendix D8-C: Comments from Public Comment Period, June-July 2020

To view the complete results of the D-8 public comment period online survey, go to the following website link:

https://drive.google.com/file/d/1Sh3BJp8DM3wgu1EQ8l-MldM_XW_XYOtd/view

or use the following shortened URL:

<https://tinyurl.com/D8publiccomment2020June>

Appendix D8-D: HPP Committee Comments



July 13, 2020

Julie Mao
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

RE: Middle Park (MP), Lower Colorado River (LCR), and Upper Yampa River (UYR) Habitat Partnership Program Comments - Deer HMP D-8

Dear Julie:

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

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

The three HPP committees, with the one exception noted below, are in agreement with the following comments pertaining to proposals for the population range and sex ratio objectives for the above HMP plan.

The MP, LCR, and UYR HPP committees support the draft alternative 2, to decrease the population objective to reflect the current population within this DAU and within our committee areas. The committee members have heard from landowners and land managers about poor range conditions on both public and private lands. While many factors play into these conditions, keeping the number of big game animals at current levels is one step that would help to improve range conditions and forage resources.

The three HPP committees also discussed the proposed sex ratio alternative. We believe the current sex ratio is a good balance and provides ample hunting opportunity while also providing for a reasonable range of mature animals for those hunters who want to take a larger buck.

Minority Opinion: There was a dissenting opinion expressed by a sportsperson's representative who is not supportive of the preferred alternatives. He believes range and habitat conditions can support a larger population than what is currently recommended. He also believes the proposed sex ratio could be increased. Both increases would provide more hunting opportunity to sportspersons.

As stated above, HPP is also directed by statute to assist the Division to meet game management objectives. The MP, LCR, and UYR HPP committees have worked with both public land managers and private landowners to improve the quality and quantity of the habitat in D-8. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area.

Our committees are concerned about CPW being able to achieve the proposed objectives over the long term due to:

- Residential growth continues to occur in winter range, resulting not only in a loss of critical habitat but also habitat fragmentation and increased disturbances.
- Public land recreation demands continue to increase throughout the year for both motorized and non-motorized user with similar effects.
- The belief that predation is having a larger impact on deer recruitment than is what is being accounted for in the plans.

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

On behalf of the Middle Park, Upper Yampa and Lower Colorado River HPP Committees

Darren Chacon, Co-Chair LCR HPP

A handwritten signature in black ink, consisting of a large, stylized 'D' followed by a cursive 'K'.

Appendix D8-E: Eagle County Community Wildlife Roundtable comments

Colorado Parks and Wildlife
Attn: Julie Mao
0088 Wildlife Way
Glenwood Springs, CO 81601

August 1st, 2020

Subject: State Bridge Mule Deer Herd Management Plan

Dear Ms. Mao:

The purpose of the Eagle County Community Wildlife Roundtable (ECCWR) is to gather a group of diverse stakeholders in the valley to understand and address issues facing wildlife populations. Together the ECCWR will identify a shared vision and realistic actions that the community can rally around to support wildlife. Diverse values, creativity, and resources will be leveraged to move to positive action. The goals of the ECCWR focus on maintaining healthy populations of wildlife, species of local concern, protecting from fragmentation, and enhancing important habitats such as reproduction areas, movement corridors, seasonal feeding areas, and riparian wetland areas. We also emphasize conservation and coexistence with species involved in human/wildlife conflicts.

The purpose of this letter is to express comments on the proposed State Bridge Mule Deer Herd Management Plan on behalf of the ECCWR. The main objective of the proposed project is to integrate CPW's plan and the concerns and ideas of land management agencies and interested public entities, in determining how the herd should be managed.

ECCWR recognizes CPW for their thoughtful approach in drafting the State Bridge Mule Deer Management Plan and very much appreciates their efforts. ECCWR supports these specific goals for the project:

1. Habitat conservation methods including safe passages and habitat connectivity, conservation easements, and others
2. Maintaining recommended sex ratio of 26-30 bucks per 100 does
3. Seasonal trail closures

However, the ECCWR requests CPW to manage the herd toward the top end of the population range of Alternative 2. In the future, the ECCWR asks CPW to consider revising the population objective, if healthy habitat conditions allow, and raise the objective population range of Alternative 2 to incorporate the existing top of the range at 16,500. The 2019 population estimate of 12,476 is just below the current objective and the ECCWR proposes lending our support and partnership to achieve strategies outlined in the executive summary to mitigate the population decline through protecting and enhancing mule deer habitat. The ECCWR will take part in the public comment period of hunting licensing, and be an engaged partner of CPW in the decision making process. The CPW management plan lists several strategies that align with ECCWR priorities including conservation easements, land acquisitions, and maintaining landscape connectivity and movement corridors. The common interest we all share is a healthy ecosystem

that supports abundant wildlife, and working together, we can mitigate further decline and achieve a higher threshold for sustainable mule deer population.

ECCWR also encourages CPW to expand their holistic approach where possible, recognizing data sources may include partner organizations. Incorporating the following data would further articulate possible reasons for decline and enable a targeted approach to address areas of opportunity:

1. Recreation impacts: include data specific to the impacts of increased recreation
2. Consider a systemic approach that incorporates keystone species and the inter-relationship of the ecosystem as a whole as a part of the management plan
3. Include roadkill data to assess impacts

ECCWR commends CPW's action to require licensing of all SWA users including hikers, wildlife watchers, and others, as appropriate. In the future, we encourage CPW to issue them a separate license that accommodates recreational users - for example, a Conservation, CPW Friends of Wildlife, or similarly named pass. This would allow the agency to gather valuable contact data on size, composition, & financial impact of this block of users. Additionally, it is requested that CPW engage with a variety of constituent groups in addition to hunters when determining annual license targets. A broad group of stakeholders would be beneficial to ensure varied interests are represented. As the ECCWR works with CPW to enhance wildlife habitat and mitigate species population decline, it may be possible to attain a higher deer population which would impact CPW's population objective and subsequent licenses issued.

The ECCWR offers their assistance and resources in:

1. Habitat area prioritization and connectivity focused on preserving critical habitat and ensuring corridors for safe passage
2. Outreach and helping community groups advocate for land use regulations consistent with ECCWR wildlife objectives
3. Coordinate with Outdoor Stewardship Coalition to develop wildlife-friendly recreation guidelines and establish support to prioritize wildlife when considering recreational activities
4. Human-wildlife management support including education and outreach to mitigate conflicts
5. Identify potential funding streams to further support wildlife and healthy ecosystems

In summary, the ECCWR supports Alternative 2 with a proposed increase to 16,500 at the top of the population objective range if conditions allow. The ECCWR is hopeful that our actions as a coalition will increase carrying capacity through improved habitat and decreased disturbances, thereby increasing sustainable population. Additionally, it is recommended that local considerations be factored into license limits and increases in carrying capacity be considered during this management plan period as well as future population objective ranges. The ECCWR appreciates the opportunity to be involved in the planning process for the State Bridge Mule Deer Herd Management Plan and thanks CPW for their comprehensive report.

Sincerely,

Eagle County Community Wildlife Roundtable

Appendix D8-F: Federal Agency Comments



United States
Department of
Agriculture

Forest
Service

White River National Forest

900 Grand Ave
Glenwood Springs, CO 81601-3602

File Code: 2600
Date: August 20, 2020

Matt Yamashita
Area 8 Wildlife Manager
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

Dear Matt

On behalf of the White River National Forest, I would like to provide my support for the State Bridge Mule Deer Herd Management Plan. I understand that the population objective would be lowered from 13,500 – 16,500 to 10,000 – 14,000 deer to better meet the current herd estimate.

The plan identifies fragmentation and human activities, principally recreation, as one of the causative factors for the herd's decline. The Eagle-Holy Cross Ranger District has partnered with Vail Valley Mountain Trails Association to monitor our seasonal trail closures and train community volunteers in wildlife education at the trail heads. Additionally, gates and signs have been installed at all of our seasonally closed trails. We are still seeing an increase in violations during the closures however, particularly with the COVID-19 pandemic. As a result, next year we will be further exploring enforcement options to reduce use during sensitive times of year for mule deer. The White River National Forest welcomes the opportunity to continue to collaborate with CPW in this effort.

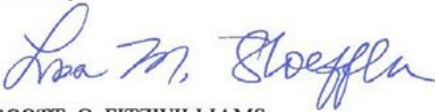
In addition, we will continue to identify unauthorized travel routes that need to be restored and habitat improvement projects designed to improve range conditions.

Next week, crews will be removing juniper in mule deer winter range in the Muddy Pass area to improve forage productivity for the species. Next year, we plan on conducting prescribed burns in D-8 as well, and initiating the NEPA for a forest-wide sage enhancement project that will benefit sagebrush obligate species and mule deer herds across the forest.

Thank you for the opportunity to share my support and comment on the plan.

If you have any questions or would like to discuss further, please contact District Wildlife Biologist Jennifer Prusse at 970-827-5160.

Sincerely,


for SCOTT G. FITZWILLIAMS
Forest Supervisor

cc: Sarah Hankens, Natasha Goedert, Leanne Veldhuis, Jennifer Prusse



APPENDIX D9: Stakeholder Input

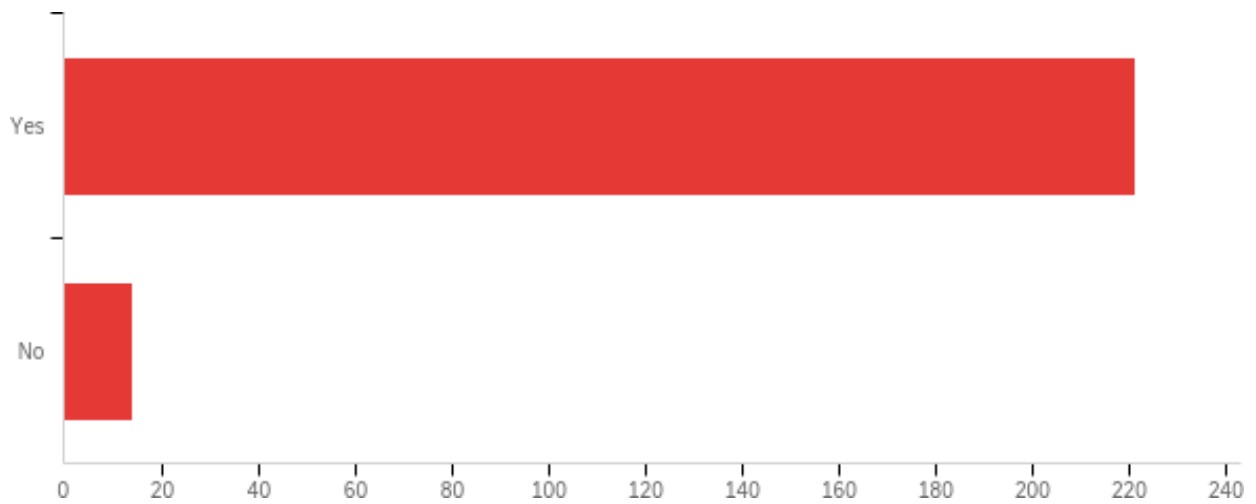
Appendix D9-A: Results of D-9 Hunter Questionnaire, March 2020

D-9 hunter survey March 2020_Results

D-9 hunter questionnaire 2020-January_BL

May 11th 2020, 4:20 pm MDT

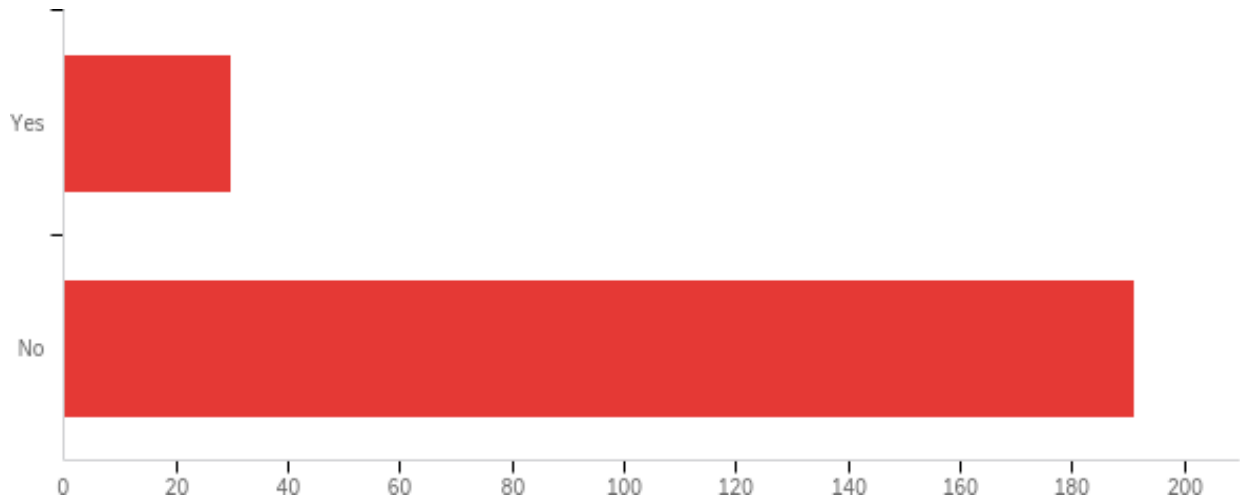
Q1 - Are you a resident of Colorado?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Are you a resident of Colorado?	1.00	2.00	1.06	0.24	0.06	235

#	Answer	%	Count
1	Yes	94.04%	221
2	No	5.96%	14
	Total	100%	235

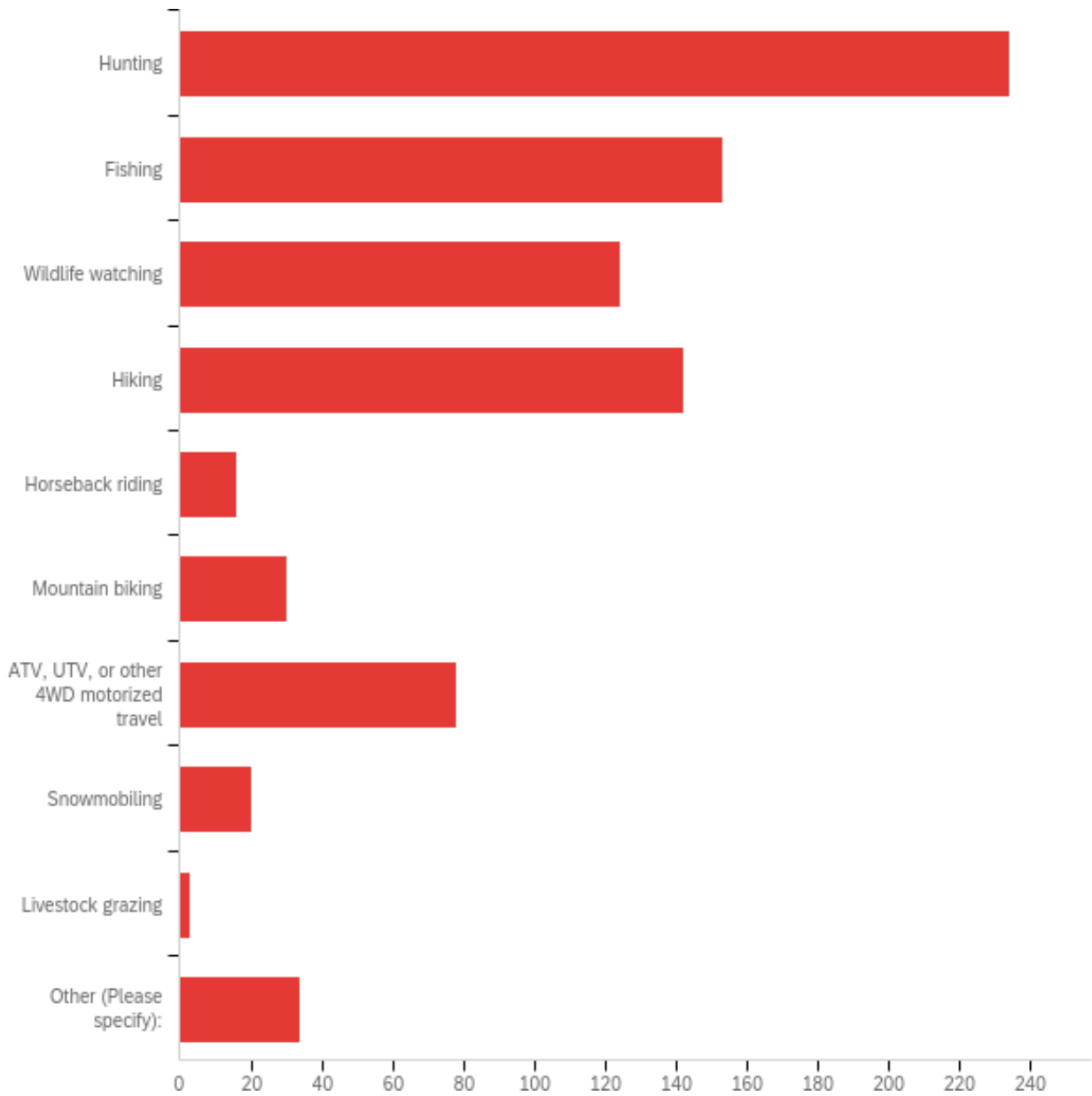
Q2 - Do you currently live in GMUs 18, 27, 28, 37, 181, or 371?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you currently live in GMUs 18, 27, 28, 37, 181, or 371?	23.00	24.00	23.86	0.34	0.12	221

#	Answer	%	Count
23	Yes	13.57%	30
24	No	86.43%	191
	Total	100%	221

Q3 - Which of the following outdoor activities do you enjoy in GMUs 18, 27, 28, 37, 181, and/or 371? (Please check all that apply.)



#	Answer	%	Count
1	Hunting	28.06%	234
2	Fishing	18.35%	153

3	Wildlife watching	14.87%	124
4	Hiking	17.03%	142
5	Horseback riding	1.92%	16
6	Mountain biking	3.60%	30
7	ATV, UTV, or other 4WD motorized travel	9.35%	78
8	Snowmobiling	2.40%	20
9	Livestock grazing	0.36%	3
10	Other (Please specify):	4.08%	34
	Total	100%	834

Q3_10_TEXT - Other (Please specify):

Other (Please specify): - Text

Camping

Lake

backcountry skiing, snowshoeing

Trapping

Camping

I hunted in these areas in 2018 not 2019.

Backpacking

camping

Trail Running

Mushroom Hunting

Skiing

camping

Camping

camping

X country skiing

Shed Hunting

motorcycle riding

shooting sports

competitive shooting

backpacking & camping

Skiing

Camping

Camping, skiing

Skiing

Camping

camping

Camping

Camping

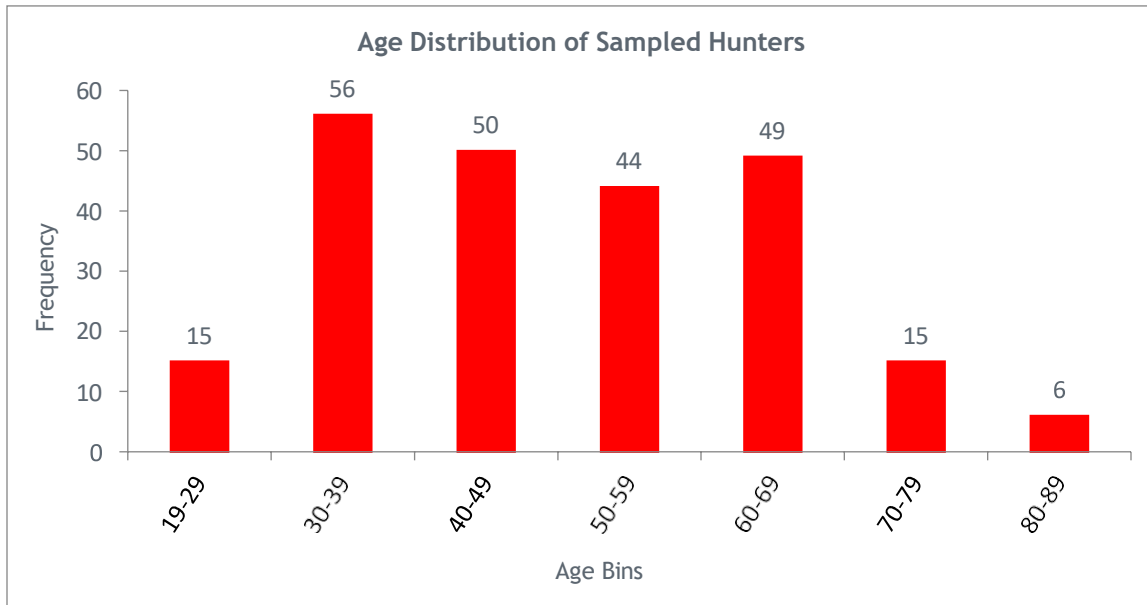
Skiing, gold panning

live in this part of colorado for the wildlife

Camping

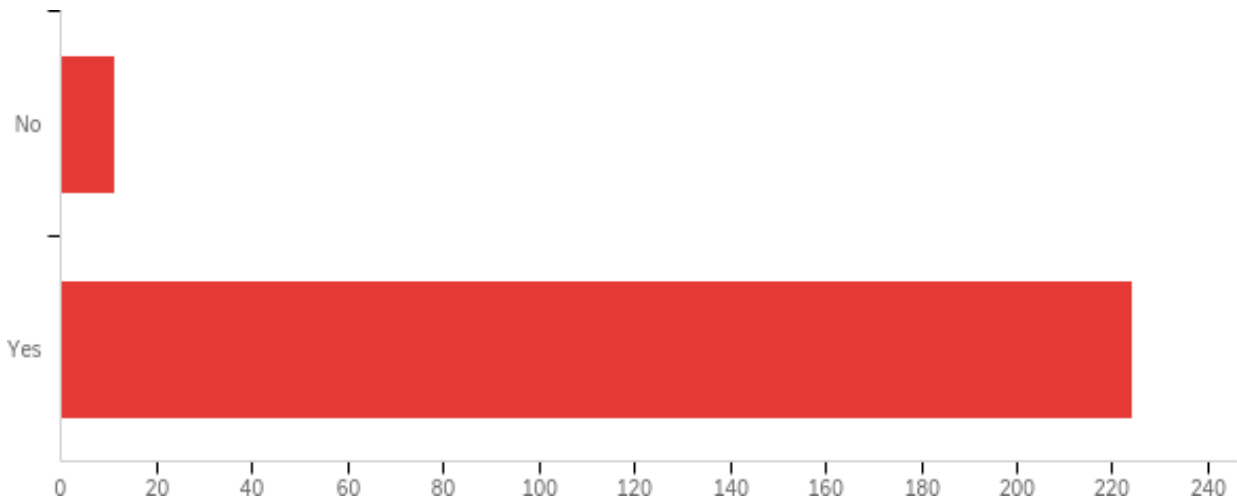
camping

Q4- How old are you? (Please write in your response)



Mean	Min	Max	SD
50	19	81	14.5

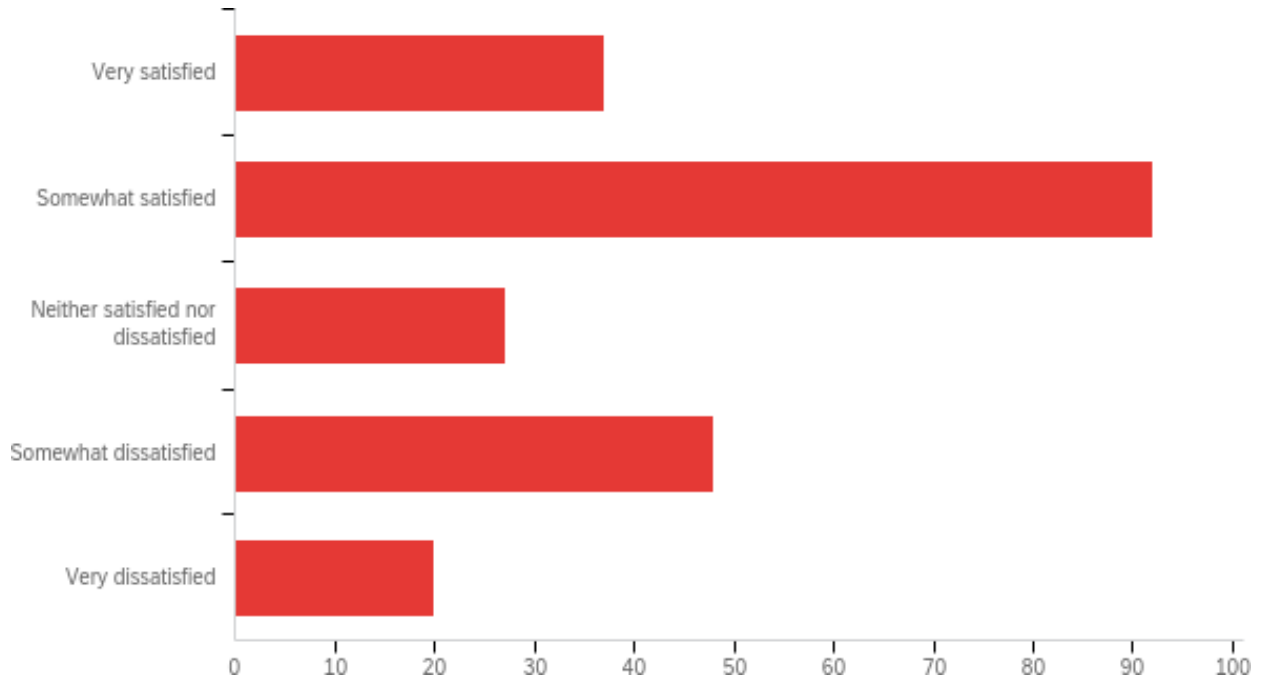
Q5 - Did you hunt deer in GMUs 18, 27, 28, 37, 181, and/or 371 any time during the previous three years (see map above)? (Please check one.)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Did you hunt deer in GMUs 18, 27, 28, 37, 181, and/or 371 any time during the previous three years (see map above)? (Please check one.)	1.00	2.00	1.95	0.21	0.04	235

#	Answer	%	Count
1	No	4.68%	11
2	Yes	95.32%	224
	Total	100%	235

Q6 - Overall, how satisfied were you with your DEER hunting experience(s) in GMUs 18, 27, 28, 37, 181 and/or 371 during the previous three years? (Please check one.)

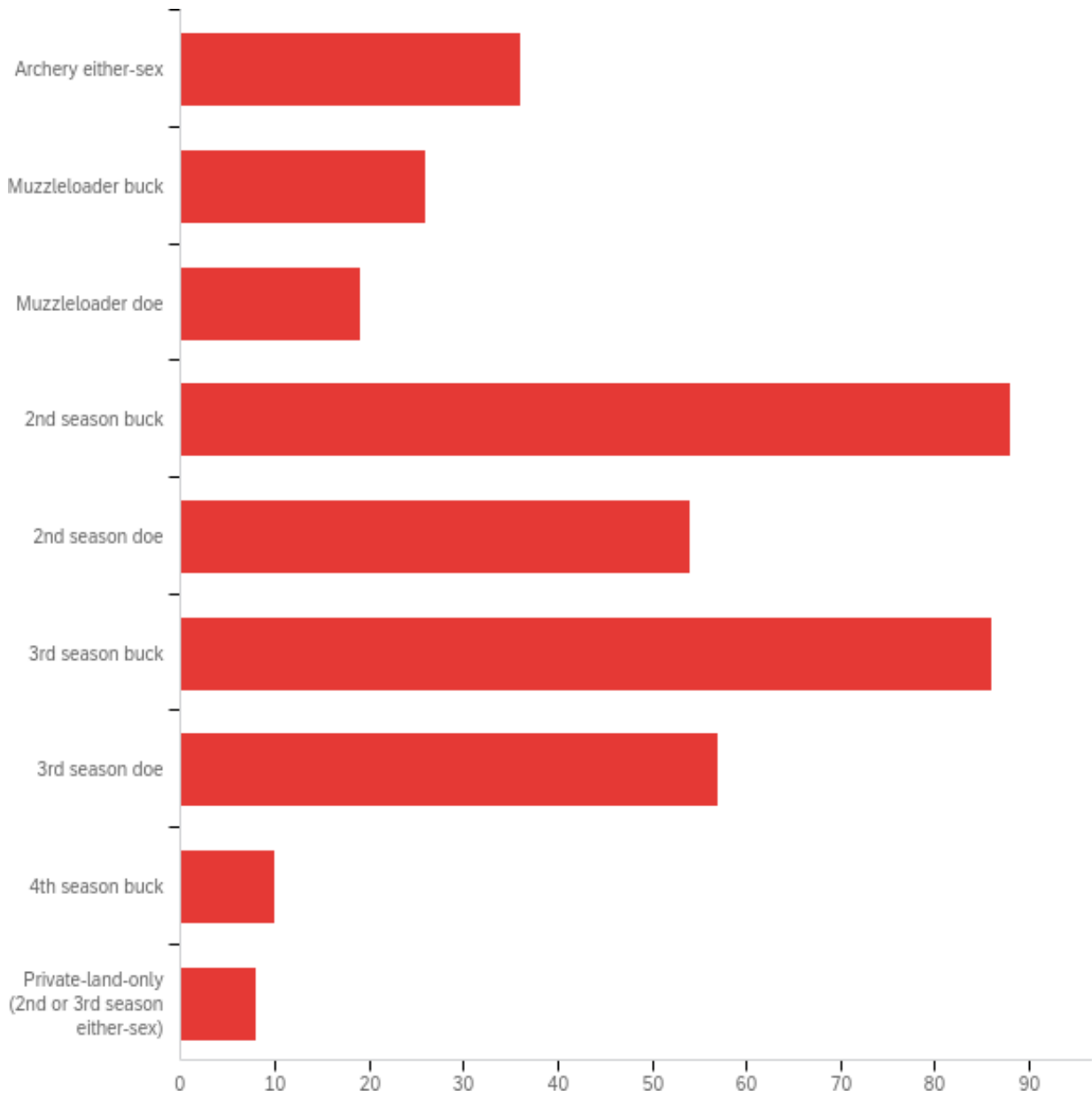


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Overall, how satisfied were you with your DEER hunting experience(s) in GMUs 18, 27, 28, 37, 181 and/or 371 during the previous three years? (Please check one.)	1.00	5.00	2.65	1.23	1.52	224

#	Answer	%	Count
1	Very satisfied	16.52%	37
2	Somewhat satisfied	41.07%	92
3	Neither satisfied nor dissatisfied	12.05%	27

4	Somewhat dissatisfied	21.43%	48
5	Very dissatisfied	8.93%	20
	Total	100%	224

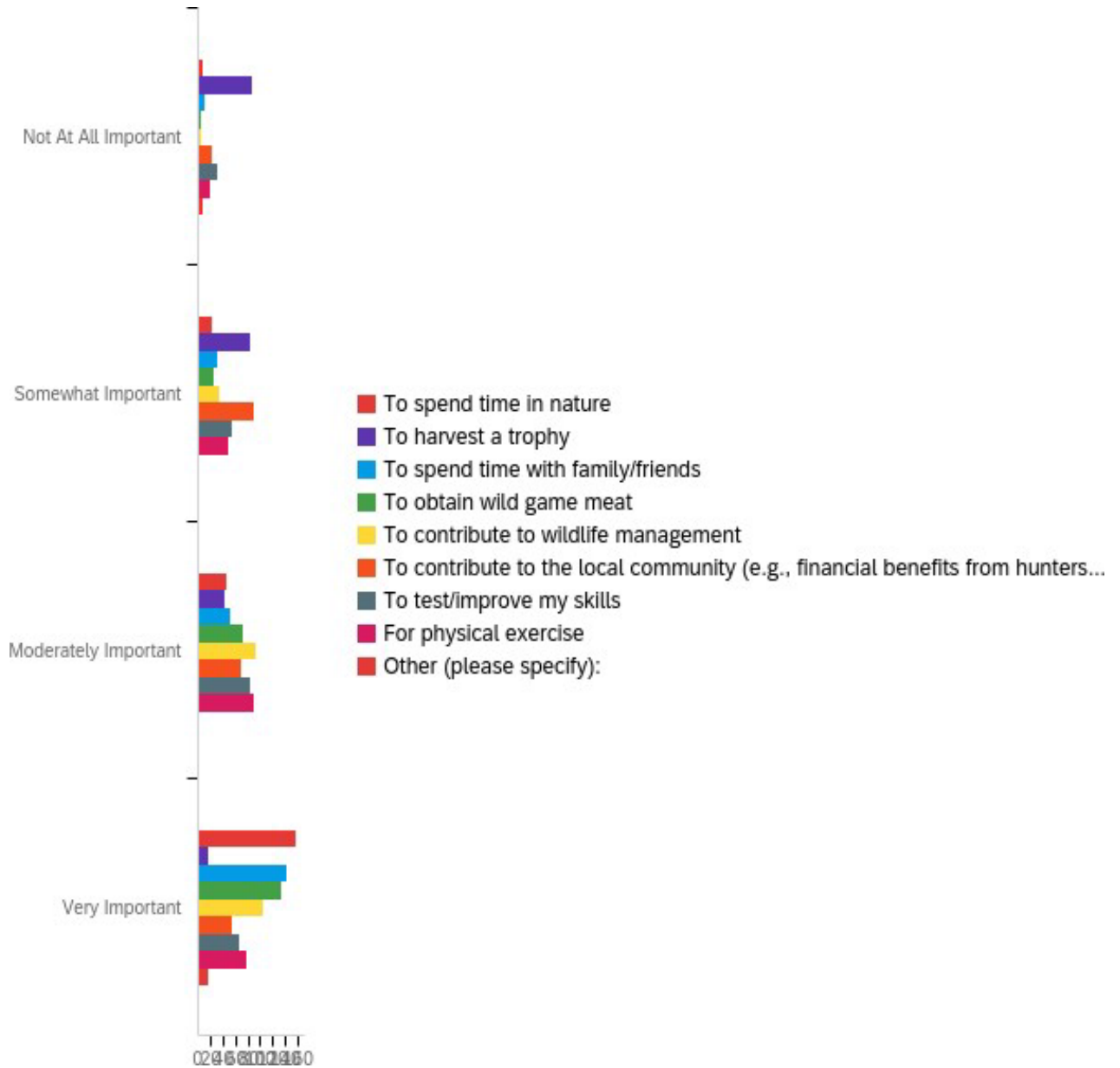
Q7 - During which of the following seasons have you hunted deer in GMUs 18, 27, 28, 37, 181, and/or 371 in the previous three years? (Please check all that apply.)



#	Answer	%	Count
1	Archery either-sex	9.38%	36

2	Muzzleloader buck	6.77%	26
3	Muzzleloader doe	4.95%	19
4	2nd season buck	22.92%	88
5	2nd season doe	14.06%	54
6	3rd season buck	22.40%	86
7	3rd season doe	14.84%	57
8	4th season buck	2.60%	10
9	Private-land-only (2nd or 3rd season either-sex)	2.08%	8
	Total	100%	384

Q8 - How important to you is each of the following reasons to hunt deer in GMUs 18, 27, 28, 37, 181, and/or 371? (Please check one response for each statement.)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	To spend time in nature	1.00	4.00	3.51	0.80	0.64	233

2	To harvest a trophy	1.00	4.00	1.95	0.92	0.84	233
3	To spend time with family/friends	1.00	4.00	3.40	0.87	0.75	234
4	To obtain wild game meat	1.00	4.00	3.43	0.76	0.58	234
5	To contribute to wildlife management	1.00	4.00	3.26	0.78	0.60	234
6	To contribute to the local community (e.g., financial benefits from hunters)	1.00	4.00	2.68	0.93	0.87	234
7	To test/improve my skills	1.00	4.00	2.80	0.99	0.99	234
8	For physical exercise	1.00	4.00	2.97	0.92	0.84	235
9	Other (please specify):	1.00	4.00	2.92	1.36	1.84	26

#	Question	Not At All Important		Somewhat Important		Moderately Important		Very Important		Total
1	To spend time in nature	3.43%	8	9.44%	22	20.17%	47	66.95%	156	233
2	To harvest a trophy	37.77%	88	36.48%	85	18.88%	44	6.87%	16	233
3	To spend time with family/friends	4.27%	10	12.82%	30	21.79%	51	61.11%	143	234
4	To obtain wild game meat	2.14%	5	10.26%	24	30.34%	71	57.26%	134	234
5	To contribute to wildlife management	2.14%	5	14.10%	33	39.32%	92	44.44%	104	234
6	To contribute to the local community (e.g., financial benefits from hunters)	8.97%	21	38.03%	89	29.49%	69	23.50%	55	234
7	To test/improve my skills	12.82%	30	23.08%	54	35.47%	83	28.63%	67	234
8	For physical exercise	7.66%	18	20.85%	49	38.72%	91	32.77%	77	235
9	Other (please specify):	30.77%	8	3.85%	1	7.69%	2	57.69%	15	26

Other (please specify): - Text

I grew hunting there

to pass skills, knowlage to grandkids

To help conservation, to keep a good healthy population of healthy beautiful animals

Hunting Mule Deer is a passion

To have a place to pass on hunting to my child.

The grouse :)

Hunt an area high success ratios

to be off trail in nature

explore new areas and enjoy the outdoors

To enjoy friendships

The ability to get away from the general public.

just quality time w friend

To accompany my father in law

Quite time

I would never hunt these unit again no deer seen at all and I do not hunt from the road I go way back in.
Very displeased

not pestered by other hunters

It's important to identify myself and family as part of the hunting community

To learn more about the wildlife.

Fun, and to hunt elk

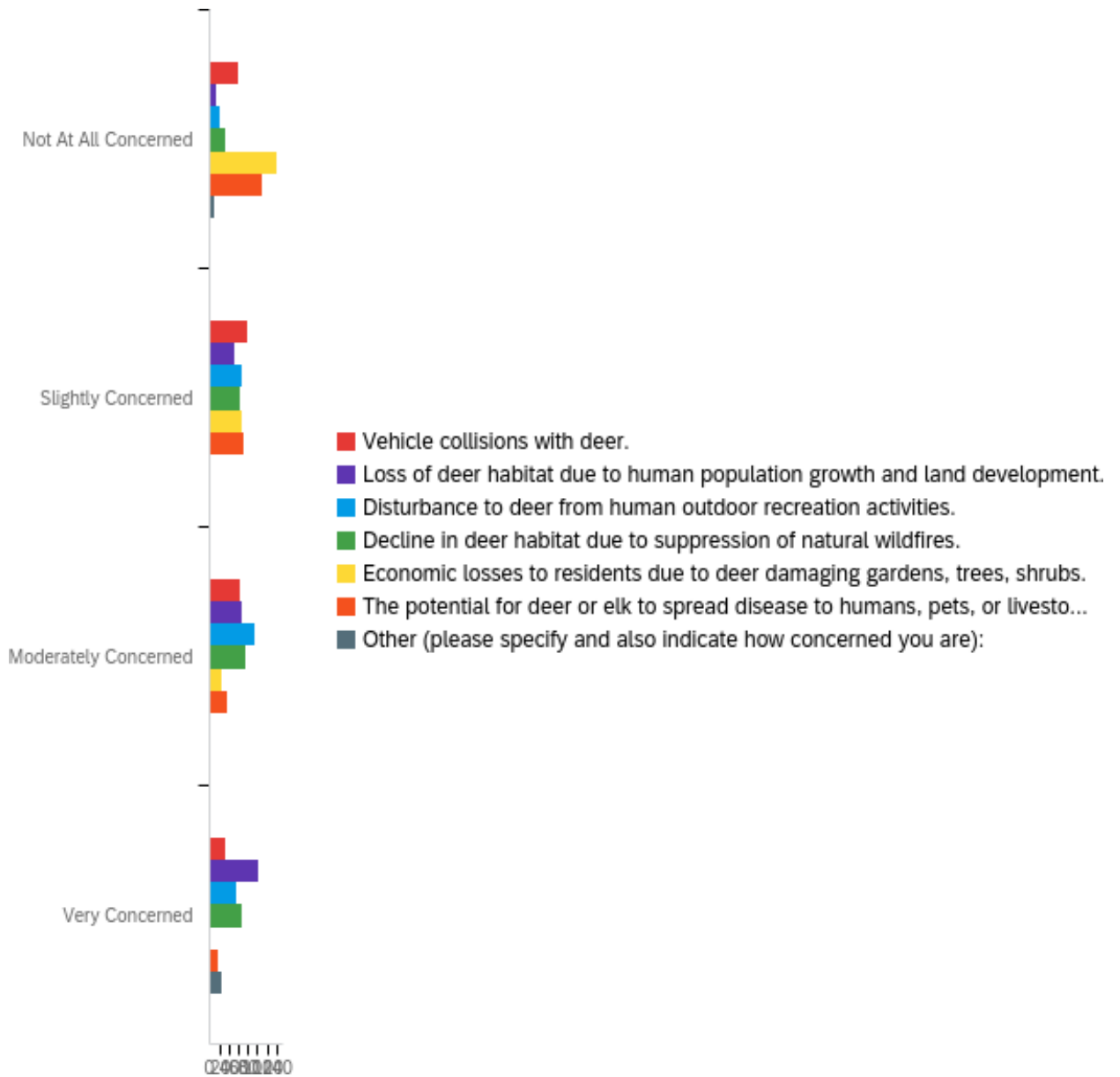
To promote responsible and non-intrusive recreation

to get out there chase mule deer. Go hunting

See new places

heritage, involve my grandchildren

Q9 - Potential Concerns About the Middle Park Deer Herd Please indicate how concerned you are about each of the following in Middle Park deer herd GMUs 18, 27, 28, 37, 181, and/or 371? (Please check one response for each item.)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Vehicle collisions with deer.	1.00	4.00	2.29	1.00	1.00	235
2	Loss of deer habitat due to human population growth and land development.	1.00	4.00	3.11	0.93	0.86	235
3	Disturbance to deer from human outdoor recreation activities.	1.00	4.00	2.77	0.91	0.82	235
4	Decline in deer habitat due to suppression of natural wildfires.	1.00	4.00	2.75	1.01	1.01	235
5	Economic losses to residents due to deer damaging gardens, trees, shrubs.	1.00	4.00	1.53	0.73	0.53	235
6	The potential for deer or elk to spread disease to humans, pets, or livestock.	1.00	4.00	1.83	0.93	0.87	234
7	Other (please specify and also indicate how concerned you are):	1.00	4.00	3.21	1.26	1.59	38

#	Question	Not At All Concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Total
1	Vehicle collisions with deer.	25.53% 60	34.04% 80	26.38% 62	14.04% 33	235
2	Loss of deer habitat due to human population growth and land development.	5.53% 13	21.70% 51	28.94% 68	43.83% 103	235
3	Disturbance to deer from human outdoor recreation activities.	8.94% 21	28.09% 66	39.57% 93	23.40% 55	235
4	Decline in deer habitat due to suppression of natural wildfires.	13.19% 31	26.38% 62	32.34% 76	28.09% 66	235

5	Economic losses to residents due to deer damaging gardens, trees, shrubs.	59.57%	140	28.94%	68	10.21%	24	1.28%	3	235
6	The potential for deer or elk to spread disease to humans, pets, or livestock.	46.58%	109	30.77%	72	15.81%	37	6.84%	16	234
7	Other (please specify and also indicate how concerned you are):	23.68%	9	0.00%	0	7.89%	3	68.42%	26	38

Other (please specify and also indicate how concerned you are): - Text

The number of deer significantly decreased in the 2019 hunt

drop in deer population

using license fees for non-hunter activities

Over abundance of large predators

not enough public access

there aren't many deer or elk there

Mountain lion killing excess amounts of deer.

Myself and many friends and family members are very concerned about the potential reintroduction of Wolves. Why is this not an option on your survey? Does CPW have any information on the facts behind this issue. There are a lot of anti hunting groups in Denver and Boulder pushing for the introduction of Wolves. I have'nt seen anything from CPW on this issue. If you look at states like Wyoming and Montana their biologists report that the Wolves have destroyed their deer and elk populations.

Not

Access to private ground.

Access to public land off a public road to Lake Agnes is not made apparent, in my opinion there should be a parking area.

to many hunters

there may be too many hunters some years

Too many out of state hunters

xxxxx

Too many ATVs driving too fast

Overgrazing in Sheriff creek and surrounding area

providing public access on existing roads and keeping wild places wild

very

Concerned about how many out of state hunters Colorado is allowing

potential loss of public land for hunting

CW Disease in herds

not concerned

CWD

N

Cwd

Very concerned about the amount of roads that go through the mountains to take away from the habitat of deer and elk and other animals they need to be shut down during periods of time or even altogether. that includes ATV's and snowmobilers.

kjgiu;l

Chronic wasting disease in the herd

Na

over grazing of BLM and National Forest land BLM land and Nati

poor management of CWD

Hunter Pressure from too many tags

froest management - do some logging

cwd

no other

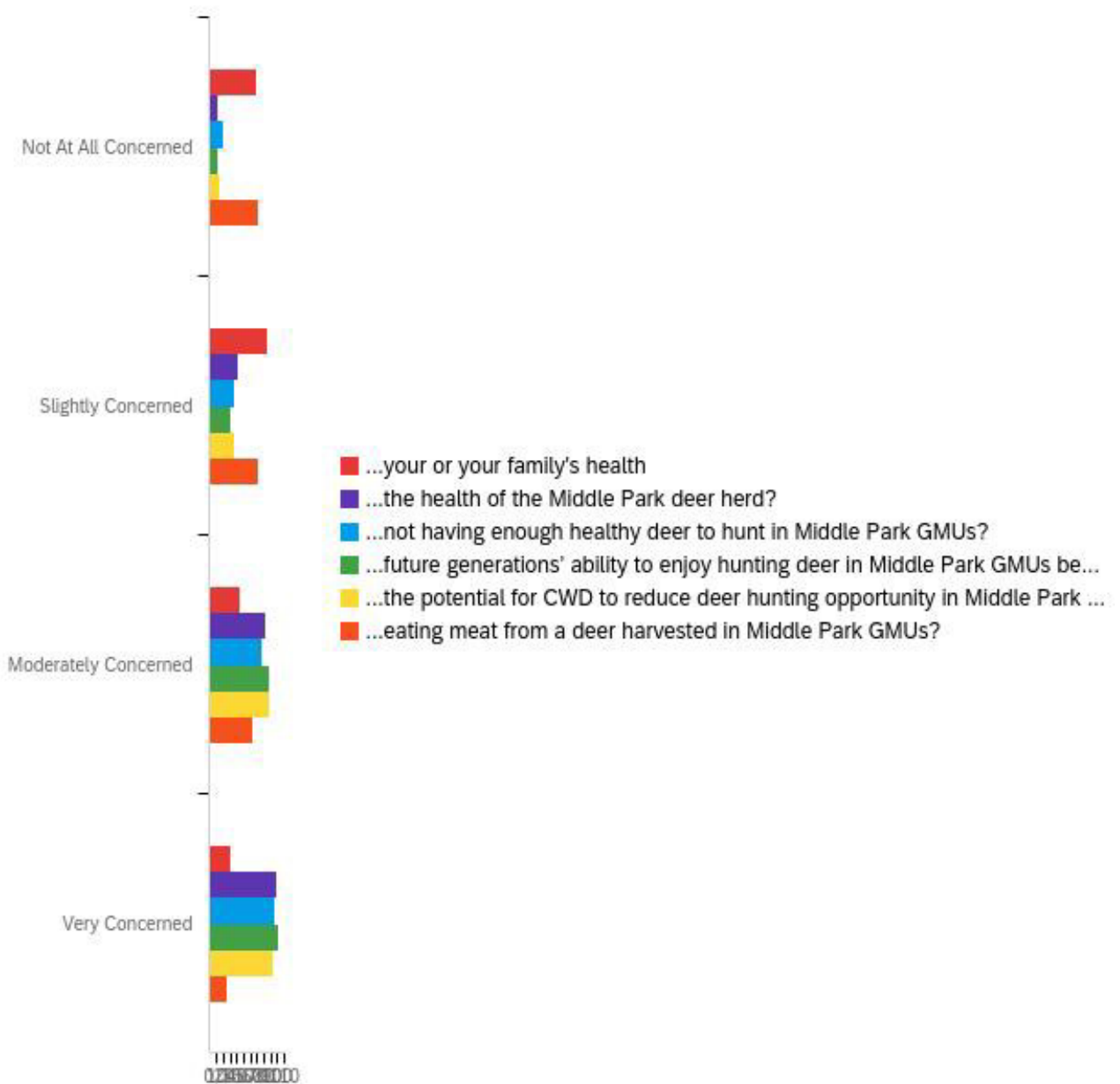
future hunting generations

hunter pressure

people who rent atv's and side by sides with no respect to the environment

afdf

Q10 - Potential Concerns About Chronic Wasting Disease (CWD) Because of CWD in deer, how concerned are you about each of the following in Middle Park deer herd GMUs 18, 27, 28, 37, 181, and/or 371? (Please check one response for each statement.)

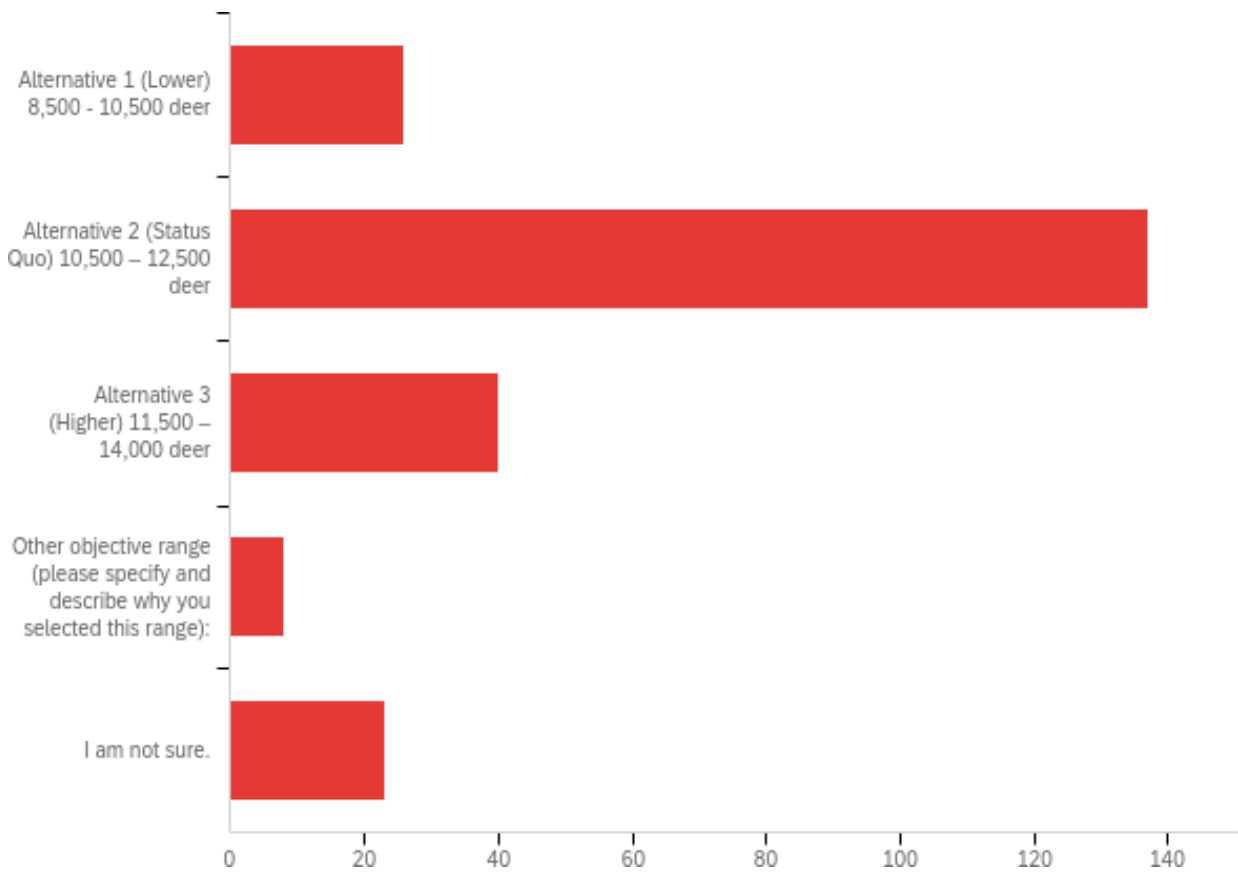


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	...your or your family's health	1.00	4.00	2.17	1.01	1.01	233
2	...the health of the Middle Park deer herd?	1.00	4.00	3.15	0.87	0.76	233
3	...not having enough healthy deer to hunt in Middle Park GMUs?	1.00	4.00	3.09	0.95	0.90	232
4	...future generations' ability to enjoy hunting deer in Middle Park GMUs because of CWD?	1.00	4.00	3.22	0.85	0.71	232
5	...the potential for CWD to reduce deer hunting opportunity in Middle Park GMUs?	1.00	4.00	3.12	0.89	0.79	231
6	...eating meat from a deer harvested in Middle Park GMUs?	1.00	4.00	2.19	0.99	0.98	232

#	Question	Not At All Concerned		Slightly Concerned		Moderately Concerned		Very Concerned		Total
1	...your or your family's health	30.04%	70	36.91%	86	19.31%	45	13.73%	32	233
2	...the health of the Middle Park deer herd?	4.72%	11	17.60%	41	35.62%	83	42.06%	98	233
3	...not having enough healthy deer to hunt in Middle Park GMUs?	8.19%	19	16.38%	38	33.62%	78	41.81%	97	232
4	...future generations' ability to enjoy hunting deer in Middle Park GMUs because of CWD?	4.74%	11	12.93%	30	37.93%	88	44.40%	103	232
5	...the potential for CWD to reduce deer hunting opportunity in Middle Park GMUs?	6.06%	14	16.02%	37	37.66%	87	40.26%	93	231

6	...eating meat from a deer harvested in Middle Park GMUs?	30.60%	71	31.03%	72	27.59%	64	10.78%	25	232
---	---	--------	----	--------	----	--------	----	--------	----	-----

Q11 - Which of the three population objective alternatives do you prefer for the Middle Park mule deer herd for the next 10 years. (Please check one.)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which of the three population objective alternatives do you prefer for the Middle Park mule deer herd for the next 10 years. (Please check one.) - Selected Choice	1.00	5.00	2.42	1.06	1.12	234

#	Answer	%	Count
1	Alternative 1 (Lower) 8,500 - 10,500 deer	11.11%	26
2	Alternative 2 (Status Quo) 10,500 – 12,500 deer	58.55%	137
3	Alternative 3 (Higher) 11,500 – 14,000 deer	17.09%	40
4	Other objective range (please specify and describe why you selected this range):	3.42%	8
5	I am not sure.	9.83%	23
	Total	100%	234

Q11_4_TEXT - Other objective range (please specify and describe why you selected this ra...

Other objective range (please specify and describe why you selected this range): - Text

managing a healthy herd is going to be tough with urban sprawl it will be difficult to grow the population unless other activities such as grazing live stock and ATV/motorcycles/snowmobiles running constantly. Need to have seasons for this. not during birthing seasons and the difficult winter time.

I don't know where they hide except in town and the rifle range

I would like to have more deer in middle park. I remember the 70's and 80's and we did have to many deer. On the bad snow years it did kill alot of deer ,but there were enough to recover quickly in the easy years. Also it seems to me there were many more cows on the range , especially in Summit. It seems to me the range is in better shape going into fall now than when we had those large herds of deer before. I think the real issue in middle park is the over abundance of lions. I have trapped and hunted for 40 years here and lions are just about everywhere, reduce them and the deer population will increase and that is what I would like to see happen.

Lower numbers to help with CWD if that is an issue with deer herd size

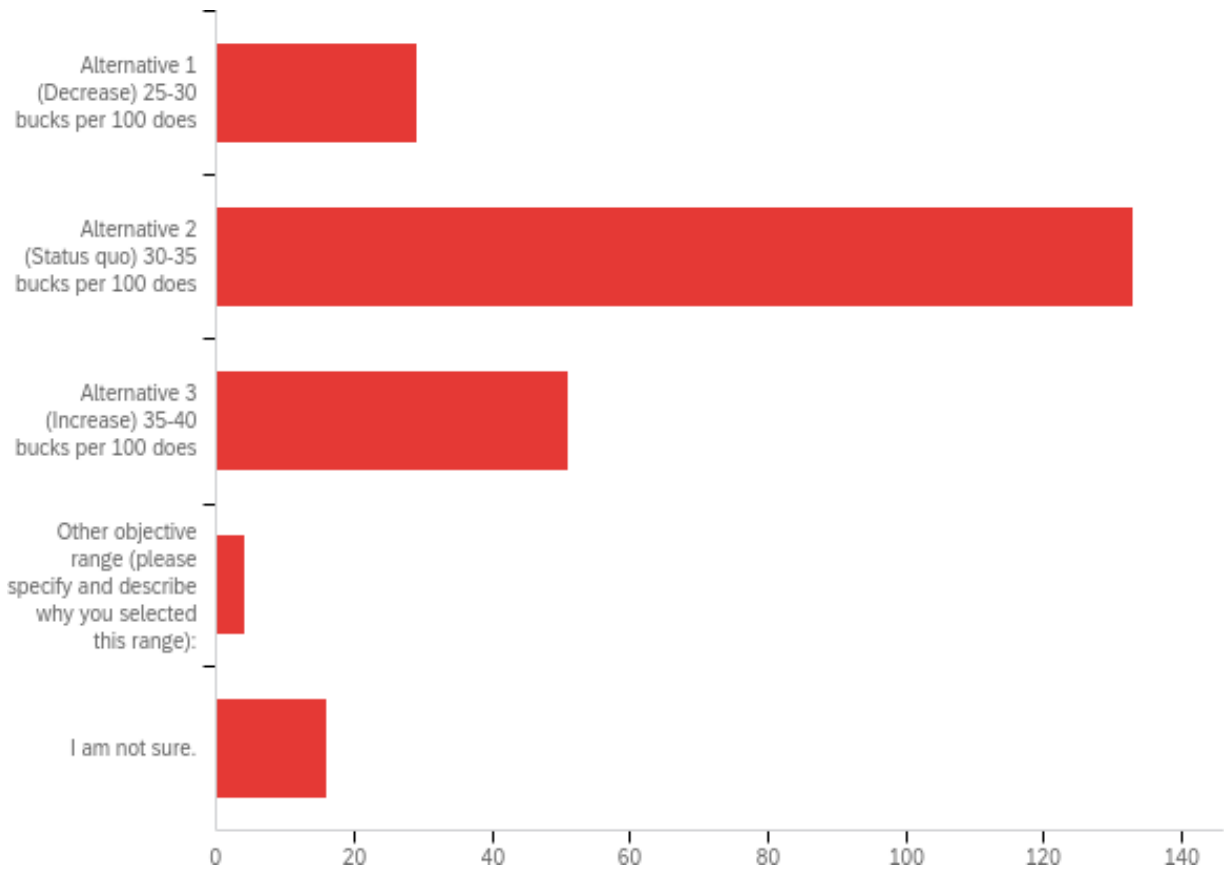
habitat changed due to beetle tree kill

These are figures and numbers and do not account always for winter loss, roadkill or CWD. These numbers definitely needs to be higher accounted for on population growth

I prefer the either sex license availability

We have hunted a lot in the area for deer in the past 3 to 4 years only but have never been overwhelmed by deer numbers. they seem quite low

Q12 - Please indicate which alternative for sex ratio objective you would prefer for the Middle Park mule deer herd for the next 10 years. (Please check one.)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please indicate which alternative for sex ratio objective you would prefer for the Middle Park mule deer herd for the next 10 years. (Please check one.) - Selected Choice	1.00	5.00	2.33	0.96	0.92	233

#	Answer	%	Count
1	Alternative 1 (Decrease) 25-30 bucks per 100 does	12.45%	29
2	Alternative 2 (Status quo) 30-35 bucks per 100 does	57.08%	133
3	Alternative 3 (Increase) 35-40 bucks per 100 does	21.89%	51
4	Other objective range (please specify and describe why you selected this range):	1.72%	4
5	I am not sure.	6.87%	16
	Total	100%	233

Q12_4_TEXT - Other objective range (please specify and describe why you selected this ra...

Other objective range (please specify and describe why you selected this range): - Text

Get rid of elk and the ratios will get better

I want to say alternative 3 but want to explain. It seems to me what CPW has done is kill does to bring their numbers down enough to get the desired buck to doe ratio. I would like to see the does protected, for a while, and the buck tags reduced to raise the numbers of deer overall. I believe middle park can sustain more deer than we have now, and I would rather get a buck tag every other year and have a chance to kill a mature one. Right now there are not many large mature bucks out there.

40-45 bucks per 100 does. Your 'aggressive' management approach has not been working for a decade!

We especially see few bucks around

Comment from 30-day HMP Comment Period:

Hunters are dangerous. They shoot at people and pets and have no regard for the pain they cause when they don't get a kill shot. Nonlethal herd management should be used, like birth control.

Appendix D9-B: HPP Committee Comments



June 10, 2020

Bryan Lamont
Colorado Parks and Wildlife
346 Grand County Road 362
Hot Sulphur Springs, CO 80451

RE: Middle Park Habitat Partnership Program (MPHPP) Comments - Deer HMP D-9

Dear Bryan:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input into big game management in their areas. The diverse makeup of local HPP committees (3 livestock growers, a Forest Service, BLM, CPW and sportsperson representative) provide a good cross section of local interests to review HMP 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 MPHPP committee has discussed your presentation, reviewed the draft alternatives and offer these comments for consideration.

The MPHPP committee is in agreement with the following comments pertaining to proposals for the population range and sex ratio objectives for the above HMP plan.

The MPHPP committee supports the draft alternative 3, to keep the lower end of the current population objective, while widening the overall objective and increasing the upper end. We believe this alternative responsibly balances local range and habitat conditions with sportsmen desires and landowner concerns. We have not heard of any concerns about the current population or any desires to increase the local herd size and so we believe the current levels are where they should be. Any issues we have are more likely related to distribution of the herds in the area and not the overall population size.

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

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

Sincerely,


Chuck Alexander, Co-Chair
Middle Park HPP Committee

Appendix D9-C: Federal Agency Comments



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Kremmling Field Office
2103 East Park Avenue, PO Box 68
Kremmling, Colorado 80459

In Reply Refer To:
1610 (CON020) P

June 29, 2020

Colorado Parks and Wildlife
ATTN: Lyle Sidener, Area Wildlife Manager
346 Grand County Road 362
Hot Sulphur Springs CO, 80451

Dear Mr Sidener,

I am writing in support of Hot Sulphur Springs Colorado Parks and Wildlife recommended objectives for the Middle Park Mule Deer Management Plan, data analysis unit D-9. We do not intend to offer additional comments regarding scoping for the increase in the Population Objective for D-9.

My point of contact for this action is Tifany Rubalcaba, Wildlife Biologist, (970) 724-3013, or email at trubalcaba@blm.gov.

Sincerely,

William Mills
Field Manager



United States
Department of
Agriculture

Forest
Service

Dillon Ranger District

680 Blue River Parkway
P.O. Box 620 Silverthorne CO 80498-
0620
970-468-5400 970-468-7735

File Code: 2600

Date: August 17, 2020

Jeromy Huntington - Area Wildlife Manager
Colorado Parks and Wildlife
346 Grand County Rd 362
Hot Sulphur Springs, CO 80451

Dear Jeromy,

I am writing in support of Colorado Parks and Wildlife’s recommended objectives for the Middle Park Mule Deer Management Plan, data analysis unit D-9.

Wildlife Biologist Ashley Nettles can be reached at ashley.nettles@usda.gov if you need additional comments of support for this project.

Thank you for the opportunity to comment on an important project for the Middle Park mule deer herd.

Sincerely,

SHELLY GRAIL
BRAUDIS

Digitally signed by SHELLY
GRAIL BRAUDIS
Date: 2020.08.17 15:06:47
-08'00'

SHELLY GRAIL
Acting District Ranger

cc: Ashley Nettles





United States
Department of
Agriculture

Forest
Service

Sulphur
Ranger District

9 Ten Mile Drive, P.O. Box 10
Granby, CO 80446
Voice: (970) 887-4100, Fax: (970) 887-4111
Web: www.fs.fed.us/r2/arnf

File Code: 2610

Date: August 19, 2020

Jeromy Huntington
Area Wildlife Manager
Colorado Parks and Wildlife
PO Box 214
Hot Sulphur Springs, CO 80451

Dear Jeromy,

This letter is in response to Colorado Parks and Wildlife's (CPW) request for comments on the Draft Mule Deer Management Plans for Data Analysis Unit D-9 (Middle Park Herd).

As very few changes are proposed, we support this revision and do not have any comments on the new population objectives, or CPW's management of it, presented in the plan.

Thank you for the opportunity to comment on the Draft Pronghorn Management Plans for D-9. If you have any question, please contact Aurelia DeNasha, South Zone Wildlife Biologist, at aurelia.e.denasha@usda.gov.

Sincerely,

SHOSHANA M. COOPER
District Ranger

CC: Kevin McLaughlin, Aurelia DeNasha



Appendix D9-D: County Commissioners Comments



BOARD OF COUNTY COMMISSIONERS

970.453.3402 ph | 970.453.3535 f 208 East Lincoln Ave. | PO Box 68
www.SummitCountyCO.gov Breckenridge, CO 80424

July 24, 2020

Colorado Parks and Wildlife
Attention: Rachel Sralla, Acting Area Wildlife Manager
346 Grand County Road 362
Hot Sulphur Springs, CO 80451

Dear Ms. Sralla,

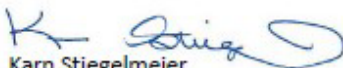
We are writing to express our support for the proposed herd management plans for deer and pronghorn in Middle Park.

CPW Biologist Bryan Lamont presented the D-9 deer management plan and the PH-37 pronghorn plan to us on June 9, 2020. We were very impressed by the solid science, data and research behind these proposals, and we support the preferred management objectives in both plans.

Thank you for including us in your outreach efforts.

Sincerely,

The Summit County Board of Commissioners


Karn Stiegelmeier
Commissioner


Thomas Davidson
Commissioner


Elisabeth Lawrence
Commissioner



GRAND COUNTY BOARD OF COMMISSIONERS

RICHARD D. CIMINO
 District I, Fraser 80442
MERRIT S. LINKE
 District II, Granby 80446
KRISTEN MANGUSO
 District III, Kremmling 80459

E-Mail: grndctyl@co.grand.co.us
 PHONE: 970/725-3100
 Fax: 970/725-0565
KATHERINE MCINTIRE
 County Manager
CHRISTOPHER LEAHY
 County Attorney

July 21, 2020

Colorado Parks and Wildlife
 c/o Bryan Lamont
 P.O. Box 216
 Hot Sulphur Springs, CO 80451

Delivered via electronic mail to: bryan.lamont@state.co.us

RE: Support of D-9 Deer Herd Management Plan

Dear Mr. Lamont,

The Grand County Board of County Commissioners wishes to express their support for the Middle Park Deer Herd Management Plan for Unit D-9. In addition, we support Colorado Parks and Wildlife (CPW) Strategic Plan and their effort to manage wildlife for the use, benefit and enjoyment of the people of the state and Grand County. We understand that Colorado's wildlife resources require careful and increasingly intensive management to accommodate the many and varied public demands and growing impacts from people. Therefore, we appreciate the work done and the time to share these findings.

With sincere appreciation and support,

		
Kristen Manguso Commissioner Chair	Merrit Linke Commissioner	Richard Cimino Commissioner

P.O. BOX 264, HOT SULPHUR SPRINGS, CO 80451

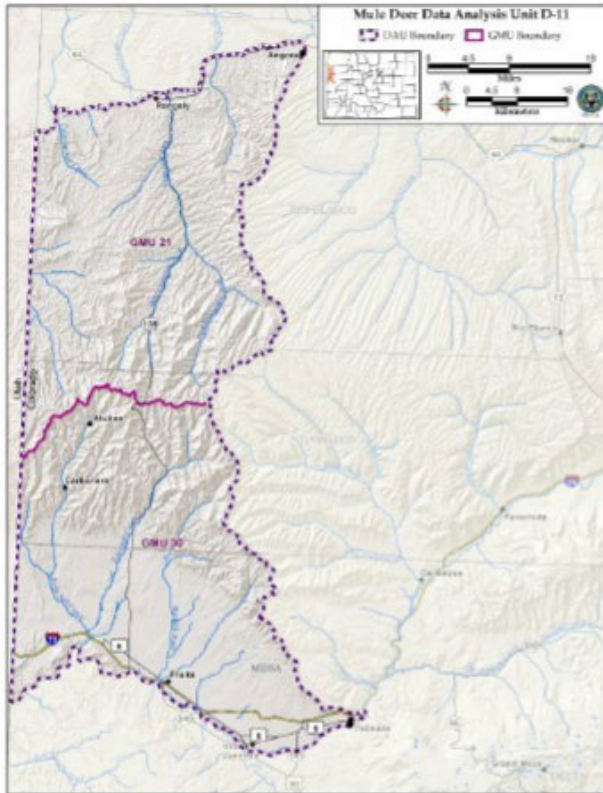
APPENDIX D9-E : Comments from 30 Day Comment Period

I have also spent many days in the D-9 region, primarily in unit 18. With the troublesome fire in 2020, I have noticed a large reduction in the amount of game I see compared to previous years. The loss in habitat and vegetation is clear and it shows. The vegetation appears to be increasing but with how hot the fire burned, it appears to me it may take another year or two to be fully recovered. In 2022, the deer numbers seemed to be a little better than 2021. My recommendation would be a slight decrease in tag allocation.

APPENDIX D11: Stakeholder Input

APPENDIX D11-A: PUBLIC SURVEY

Bookcliffs Deer Herd (D-11)



About This Questionnaire

Colorado Parks and Wildlife (CPW) is currently re-evaluating the Herd Management Plan that guides the agency’s management of the Bookcliffs Deer Herd (D-11).

The Bookcliffs Deer Herd includes Game Management Units (GMUs): 21 and 31

The purpose of this survey is to better understand the perspectives of hunters’ like yourself, who hunt in these GMUs. Learning from you will help CPW effectively manage this herd. Thank you for your participation in this process!

Surveys must be complete by October 15, 2020

Did you attend the online public meeting for the D-11 Bookcliff deer herd management plan held on August 25, 2020?

- Yes (4)
- No (5)

Background Information

Q1 1. Are you a resident of Colorado? (Please choose one)

- Yes (6)
- No (7)

Q2 2. Do you currently live in D-11? (Please choose one)

- Yes (1)
- No (2)

Q3 3. Do you own property in D-11? (Please choose one)

- Yes (1)
- No (2)

Skip To: Q4 If 3. Do you own property in D-11? (Please choose one) = Yes

Skip To: Q6 If 3. Do you own property in D-11? (Please choose one) = No

Q4 4. How many acres is your property? (Please choose one)

- a. Less than 40 acres (1)
- b. 40 – 159 acres (2)
- c. 160 – 999 acres (3)
- d. 1000 – 4999 acres (4)
- e. Greater than 5,000 (5)

Q5 5. What is the primary land use of your property? (Please choose one)

- a. Primary residence (1)
 - b. Ranching (2)
 - c. Farming (3)
 - d. Seasonal home (4)
 - e. Energy/mineral extraction (5)
 - f. Recreational (6)
 - g. Other (please explain) (7)
-

Your Interest In Hunting

Q6 6. Which of the following outdoor activities do you participate in D-11? (Please choose all that apply)

- a. Hunting (1)
 - b. Fishing (2)
 - c. Wildlife watching (3)
 - d. Hiking (4)
 - e. Horseback riding (5)
 - f. Mountain biking (6)
 - g. ATV, UTV, or other 4WD motorized travel (7)
 - h. Snowmobiling (8)
 - i. Livestock grazing (9)
 - j. Outfitting/guiding (11)
 - k. Other (Please specify): (10)
-

Q7 7. Did you hunt deer in D-11 during the previous three years? (Please choose one)

- Yes (1)
- No (2)

Skip To: Q8 If 7. Did you hunt deer in D-11 during the previous three years? (Please choose one) = Yes
Skip To: Q10 If 7. Did you hunt deer in D-11 during the previous three years? (Please choose one) = No

Q8 8. During which of the following seasons have you hunted deer in D-11 in the past three years? (Please choose all that apply)

- Archery (2)
 - Muzzleloader (3)
 - 2nd Season (4)
 - 3rd Season (5)
-

Q9 9. Overall, how satisfied were you with your deer hunting experience(s) in D-11 during the previous three years? (Please choose one)

- Dissatisfied (1)
 - Neither satisfied nor dissatisfied (2)
 - Satisfied (3)
-

Potential Concerns About the Bookcliffs Deer Herd

Q10 10. Which of the following are concerns you have about your future deer hunting experiences in D-11? (Please choose all that apply)

- a. Overcrowding (1)
 - b. Population size (2)
 - c. Male antler size (3)
 - d. The amount of public lands available to hunters (4)
 - e. Private lands access creating sanctuaries during hunting seasons (5)
 - f. Motorized access for hunting (6)
 - g. Non-motorized areas to provide for solitude and backcountry hunting opportunities (7)
 - h. Other (please specify): (8)
-

Reasons Why You Hunt

Q11 11. How important to you is each of the following reasons to hunt deer in D-11? (Please choose one response for each statement)

	Not important (1)	Somewhat important (2)	Very important (3)
a. To spend time in nature (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. To harvest a more mature buck (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. To spend time with family/friends (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. To obtain wild game meat (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. To contribute to wildlife management (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. To contribute to the local community (e.g., financial benefits from hunters) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. To test/improve my skills (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. For physical exercise (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Other (please specify): (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 12. How concerned are you about the following potential issues between deer and human activities/property in D-11? (Please choose one response for each potential issue)

	Not concerned (1)	Somewhat concerned (2)	Very concerned (3)
a. Vehicle collisions with deer/elk (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Loss of deer habitat due to human population growth and land development (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Loss of deer habitat due to energy development (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Decline in quality of deer habitat due to energy development (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Disturbance to deer from human outdoor recreation activities (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Economic losses to residents due to deer damaging gardens, trees, shrubs (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. The potential for deer to spread disease to humans, pets, or livestock (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Impacts to deer habitat and populations from the recent Pine Gulch fire (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Other (please specify): (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Buck-Doe ***Please read the following brief description about managing the D-11 mule deer herd's population before answering Question #13.*

In Colorado, there is evidence that high buck-to-doe ratios, limited licenses and older age-class of harvested bucks are associated with lower fawn-to-doe ratios and lower herd performance. Since 1995, when all buck deer licenses in D-11 were limited, buck-to-doe ratios have doubled, while the total population size and winter fawn-to-doe ratios have decreased ~20%. The sex ratio objective for the D11 mule deer herd was set in the 2006 Herd Management Plan to a range of 30-35 bucks-to-100 does. The buck-to-doe ratio has generally been at or near this range since its establishment. The three proposed alternatives for a buck-to-doe ratio objective and the expected relative consequences of each alternative, are shown in the table below:

BUCK-TO-DOE RATIO ALTERNATIVES				
ALTERNATIVE	MANAGEMENT	HUNTING FREQUENCY	DISEASE PREVALENCE	POPULATION HEALTH
1	Status quo	No change	Increase	Slight decrease
2	Slight decrease	Slight increase	No change	Slight increase
3	Moderate decrease	Moderate increase	May decrease	Moderate increase

Q13 13. Considering this information, which management approach to the buck-to-doe ratio objective and hunting frequency do you prefer? *(Please choose one)*

- a. Status quo for ratio / no change in hunting frequency (1)
 - b. Slight decrease in ratio / slight increase in hunting frequency (2)
 - c. Moderate decrease in ratio / moderate increase in hunting frequency (3)
-

Potential Concerns About Chronic Wasting Disease (CWD) In D-11, the prevalence of chronic wasting disease (CWD) is currently unknown primarily due to a low number of voluntary submissions. Additional testing and mandatory submissions are planned for the 2020 season.

Q14 14. How concerned are you about each of the following potential issues involving chronic wasting disease (CWD) in the D-11 deer herd? (Please choose one response for each potential issue)

	Not concerned (1)	Somewhat concerned (2)	Very concerned (3)
a. You and your family's health? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Eating meat from a deer harvested in an area of high (>10%) CWD prevalence? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Eating meat from a deer harvested in D-11? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. The disease status of the D-11 deer herd? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The potential for CWD to reduce deer hunting opportunity in D-11? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Future generations' ability to enjoy hunting deer because of CWD in D-11? (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Herd Management

**Please read the following brief description about managing the D-11 mule deer herd's population objective before answering Question #15. The current population objective for the D-11 mule deer herd, which was established in the 2006 Herd Management Plan, is 10,000 - 12,000 deer. However, the herd has not reached that range since 2008. The population is currently estimated at ~7,500 deer. Due to ongoing declines in fawn-to-doe ratios, significant habitat loss across this area, poor forage availability, the potential for higher CWD prevalence, and ongoing drought, CPW is proposing three alternatives for this herd: one status quo, and two population size decreases. The three proposed alternatives for population objective and the expected relative consequences of each alternative, are shown in the table below:

POPULATION SIZE ALTERNATIVES				
ALTERNATIVE	MANAGEMENT	ANTLERLESS LICENSES	CWD PREVALENCE	POPULATION RESILIENCE
1	Status quo	Long-term decrease	Increase	Decrease
2	Slight decrease	No change	No change	Slight increase
3	Moderate decrease	Moderate increase	May decrease	Moderate increase

Q15 15. Considering this information, which population size objective do you prefer? (Please choose one)

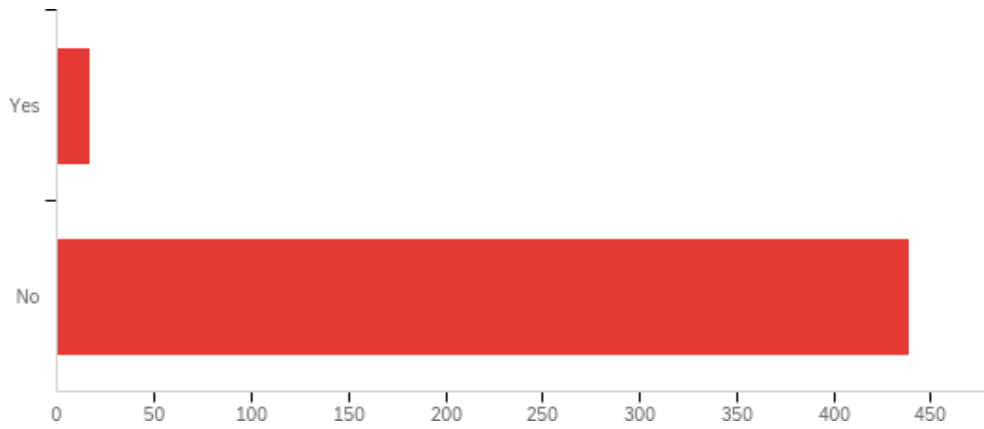
- a. Status quo (1)
 - b. Slight decrease (2)
 - c. Moderate decrease (3)
-

Comments Please provide any additional feedback related to D-11 deer herd issues that you feel are important.

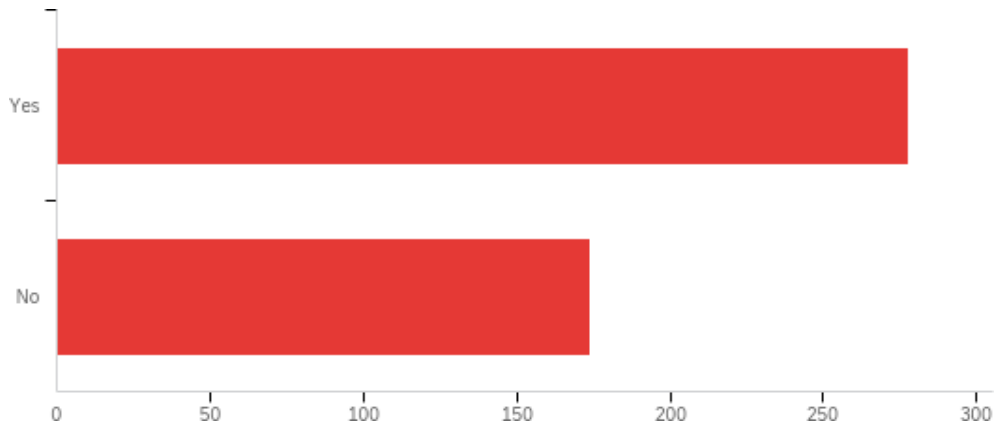
Thank you for participating in this survey!

APPENDIX D11-B: PUBLIC SURVEY RESPONSES

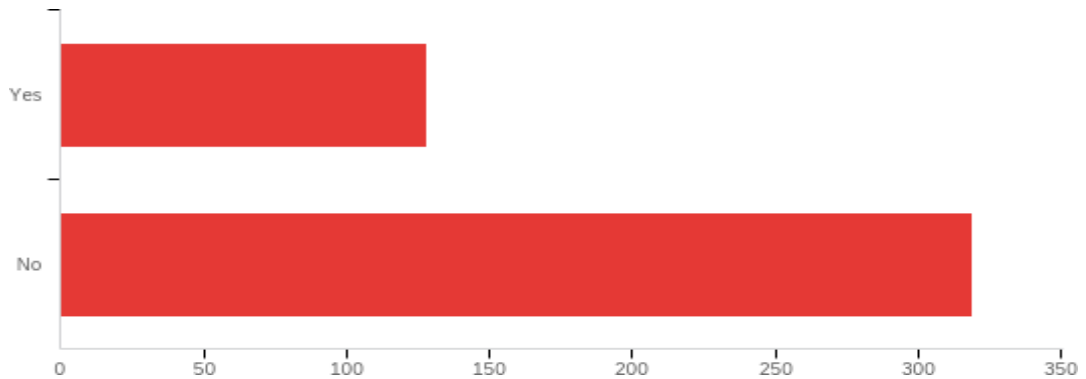
Did you attend the online public meeting for the D-11 Bookcliffs deer herd management plan held on August 25, 2020?



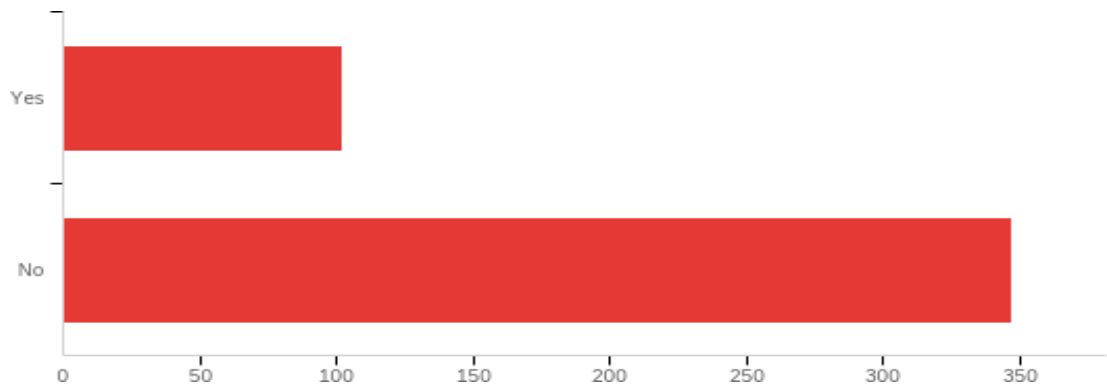
Q1. Are you a resident of Colorado? (Please choose one)



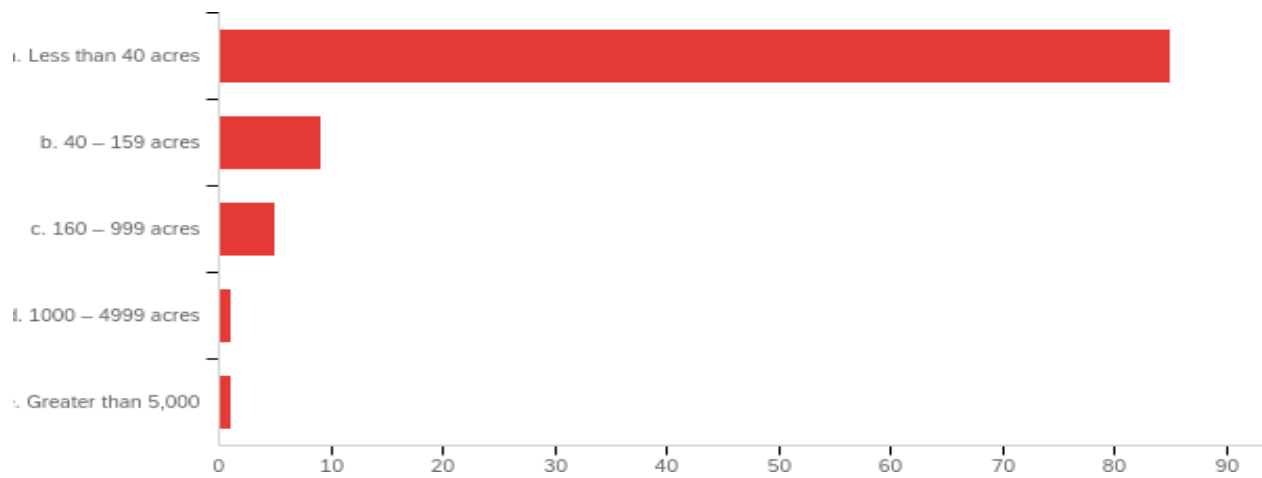
Q2. Do you currently live in D-11? (Please choose one)



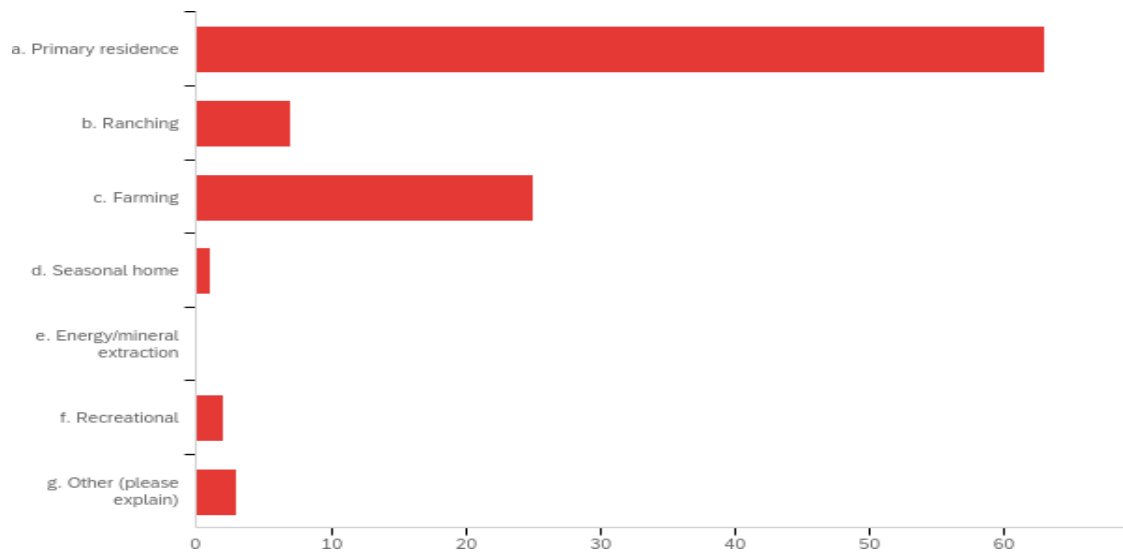
Q3. Do you own property in D-11? (Please choose one)



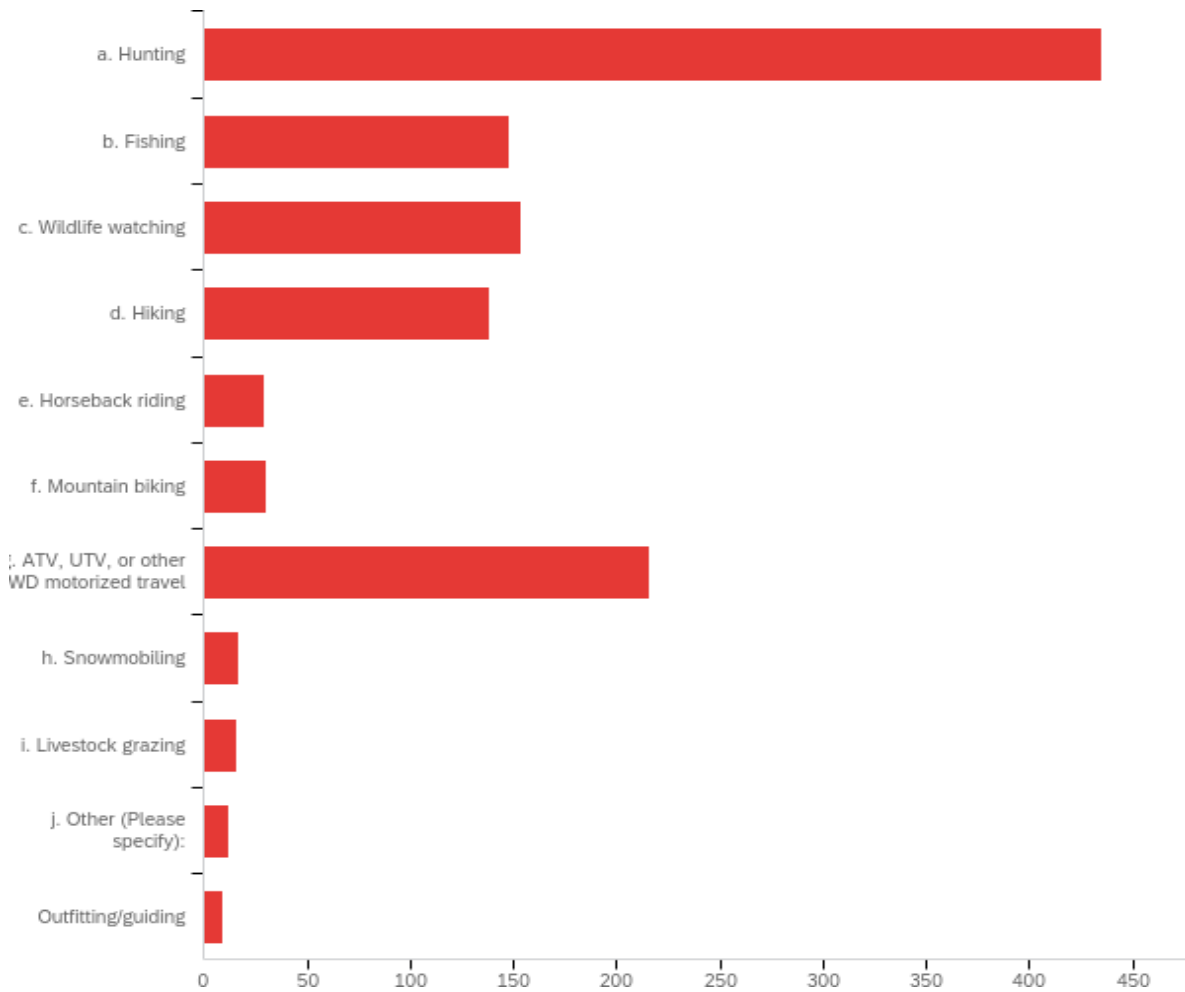
Q4. How many acres is your property? (Please choose one)



Q5. What is the primary land use of your property? (Please choose one)

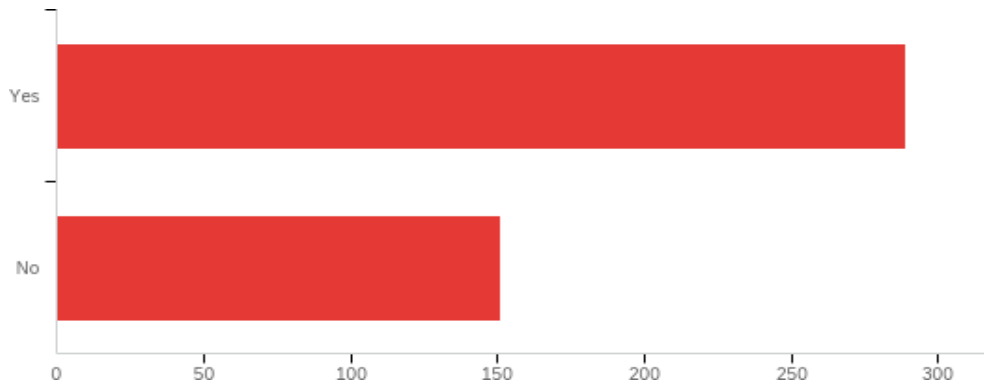


Q6. Which of the following outdoor activities do you participate in D-11? (Please choose all that apply)

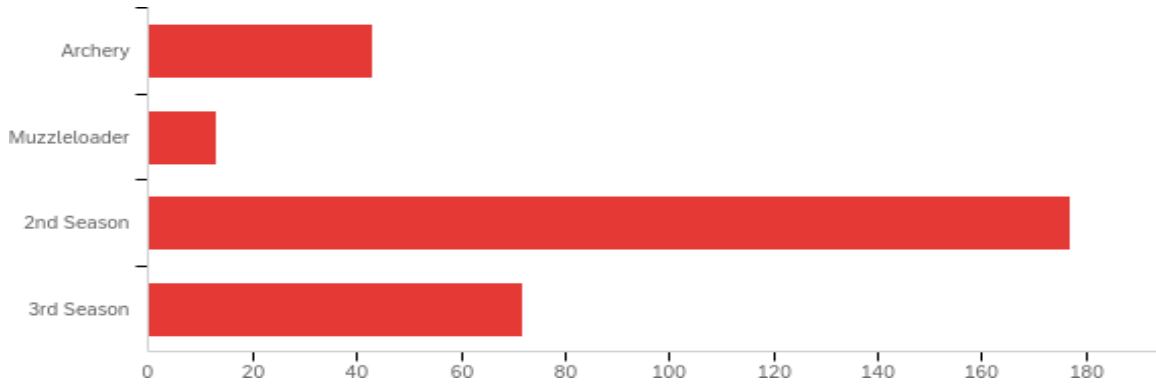


#	Answer	%	Count
1	a. Hunting	36.13%	435
2	b. Fishing	12.29%	148
3	c. Wildlife watching	12.79%	154
4	d. Hiking	11.46%	138
5	e. Horseback riding	2.41%	29
6	f. Mountain biking	2.49%	30
7	g. ATV, UTV, or other 4WD motorized travel	17.94%	216
8	h. Snowmobiling	1.41%	17
9	i. Livestock grazing	1.33%	16
10	j. Other (Please specify):	1.00%	12
11	Outfitting/guiding	0.75%	9
	Total	100%	1204

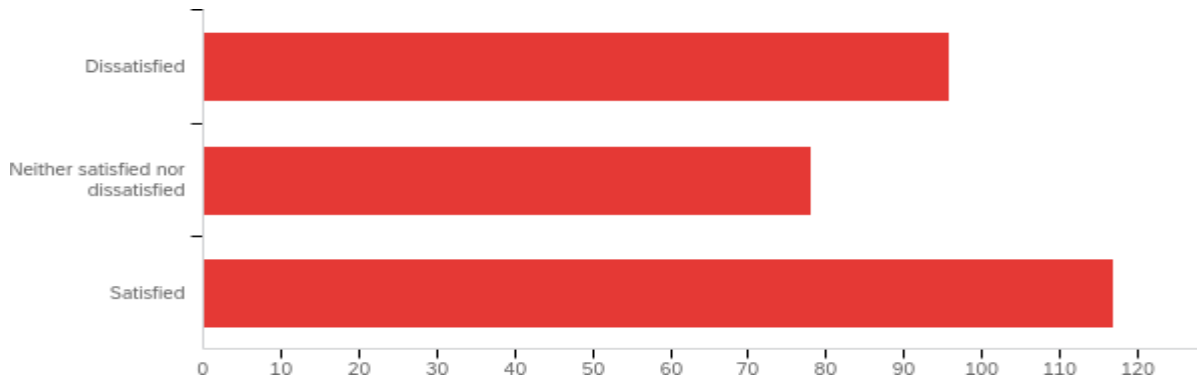
Q7. Did you hunt deer in D-11 during the previous three years? (Please choose one)



Q8. During which of the following seasons have you hunted deer in D-11 in the past three years? (Please choose all that apply)



Q9. Overall, how satisfied were you with your deer hunting experience(s) in D-11 during the previous three years? (Please choose one)



Q10. Which of the following are concerns you have about your future deer hunting experiences in D-11? (Please choose all that apply)

#	Answer	%	Count
1	a. Overcrowding	17.58%	190
2	b. Population size	20.91%	226
3	c. Male antler size	20.35%	220
4	d. The amount of public lands available to hunters	11.10%	120
5	e. Private lands access creating sanctuaries during hunting seasons	12.30%	133
6	f. Motorized access for hunting	6.66%	72
7	g. Non-motorized areas to provide for solitude and backcountry hunting opportunities	6.75%	73
8	h. Other (please specify):	4.35%	47
	Total	100%	1081

Q10_h. Other (please specify):

Drought and chronic wasting

hunters chasing trophies and not hunting for meat are killing off all the breeding bucks. And I have spoken to hunters that when they don't see that big buck after waiting for as long as they do to draw just shoot any legal buck. Our society has gotten way to obsessed with horn size attributing to a person being a good hunter and the you guy are not helping with the once in a lifetime draws. We should be teaching hunters that it is about being respectful to the game and harvest in responsible ways. We should not be hunting when the temperature is so hot outside the meat has a higher chance of spoiling. We should also teach hunters that if they wound a animal and can't find it they are done for the year not just go shoot another one. I think we need to shut down hunting in blocks of units for 3 years to see our herd size increase.

saw more wild horses than deer and elk

wild horse population

predator control

Too hard to draw permit

Quit closing off roads making everyone on public land go to the exact same spot

Too many seasons overlap. Bear, archery deer, archery elk, and muzzleloader. Keep all rifle options out of archery season.

Pushing hunting season back so 2 seasons are in the rut/ Decrease antler size.

Q10_h. Other (please specify) CONTINUED:

lockup of oil land w/o warning

amount of wild horses in area

Rising cost of living is squeezing out many past times and hobbies including hunting.

Doe to buck ratio was insane this year. I have hunted this area since 2013 for OTC elk (except 2019), and each year I have seen fewer and fewer bucks, but the doe population is booming.

access on public/county roads being locked off

None

Very difficult to access the public land available for elderly hunters. Tops are open but access through the lowlands pretty difficult. Also three years ago I shot a deer on public land and the deer died on private land and the young people watching the land would not let me enter to retrieve the animal. I asked permission and was denied. Ruined my hunt right then and there. I quit hunting that day!!!

The number of available licenses

Number of outfitters

Wild horse population & interaction with native species

Too many hunters, not enough deer

Split deer and elk seasons to limit hunters in the field

Bucks moved in to unit after the season was closed last year.

The amount of preference points required versus the quality of antlered maturity

To many tags

Aggressive Private Land Owners

Antler size is smaller and less populated deer heard. Started hunting in 21/30 back in 1990, wow what a difference now!

Too much public roads and not enough deer tags. The deer in the back country are hard to get to, however the amount of non-residents that ruin the area is hurtful. Non-residents don't respect the BLM land. Not saying they're all bad, don't get me wrong but I think the deer management and that territory should be respected and hunted. t

Private lands blocking access to public lands by putting gates up on county roads ! I think is Bullshit !

To many people along 30 and 21 line

restricted access to public land

Effects of pine mulch fire

Too many hunters-overcrowded

Over run with OHV's

CWD impacts on population

Q10_h. Other (please specify) CONTINUED:

Properly managing the area for quality of mature bucks, over an area that is a "fun hunt". This area is well known for having the genetics to have mature trophy animals, just like Gunnison. I think you guys should manage certain areas, like 21, to allow the deer to mature. Decrease tags, put minimum points per side of antlers in place, pick select areas to improve habitat for the deer to provide more solitude, and maybe look at coming up with management tags (ie 2x2 or 2x3 only) so that you give the animals a chance to mature and possibly cull the lesser gens and keep the population in check so they don't eat themselves into starvation.

I have been very upset that the deer licenses are so limited! I've been hunting the area around Rangely for 50 years and now can't get or am selected for a deer license. I've been forced to exclusively hunt for Elk. In 2018 & 2019 while hunting Elk in the area I observed numerous deer and numerous Mature Bucks! Finally, cars and trucks take more deer than we are allowed to by hunting. Appreciate the opportunity to voice my opinions. Rob Knaub

Antler size and all that cool. Too many wild horses. They hampered a spot and stalk strategy for my deer hunt numerous times. They were all over the place 2-3 years ago. Any management plan for wild horses? I know it is the Feds but it is part of the equation. Thanks.

Over use of joy riding of atv and ATV vehicles

overgrazing

Too many buck tags issued and too many hunters in the field at same time

ATV, utv usage is out of control

The fact you guys keep making everything about the size of the horns people should not be hunting for Horn size and greed

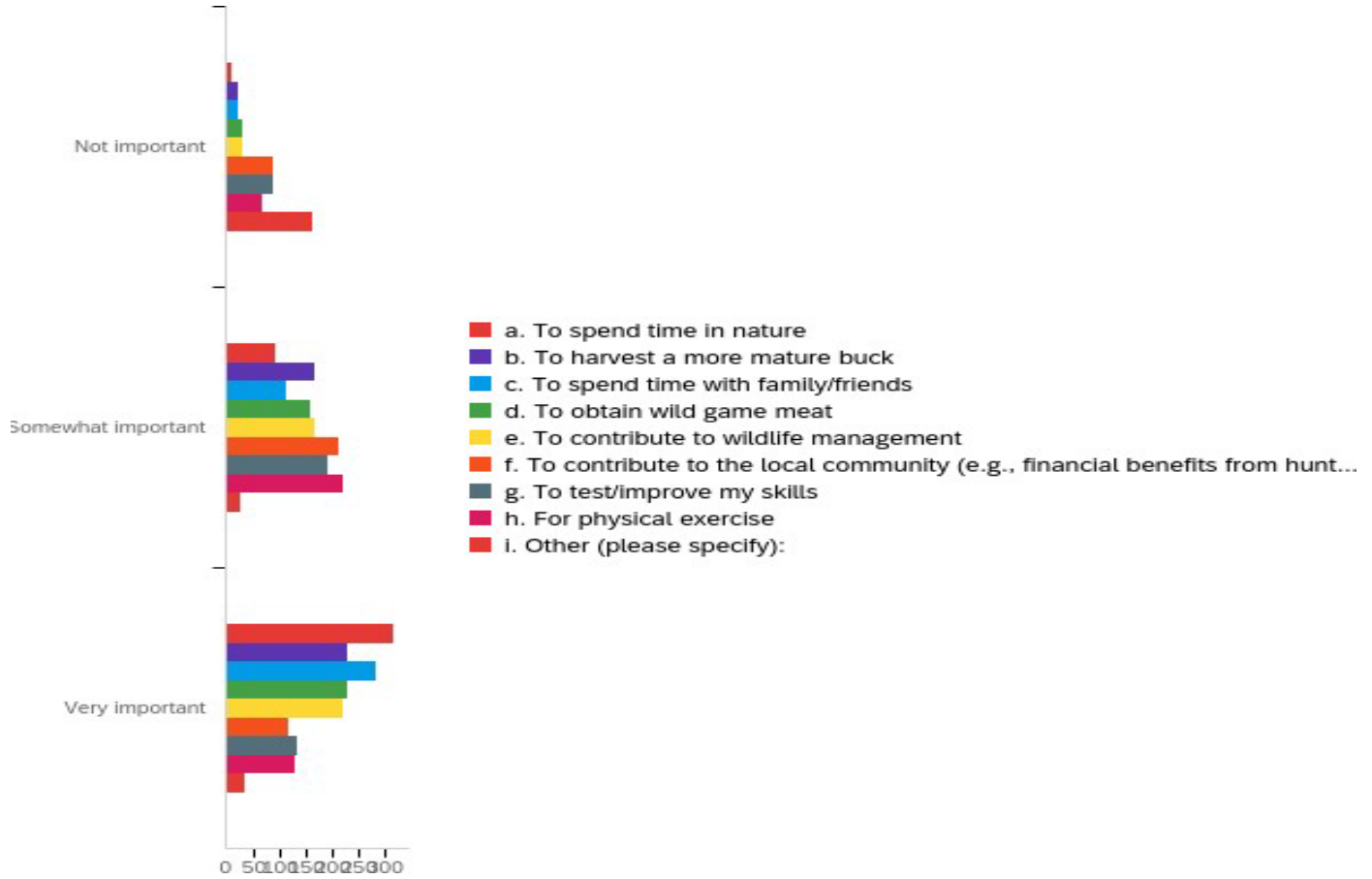
Predators. Lions, coyotes

The number of feral horses competing with native wildlife species

The thousands of wild horses eating and drinking all the resources. They are running the deer out of the unit

Non-native species overcrowding (Feral Horses)

Q11. How important to you is each of the following reasons to hunt deer in D-11? (Please choose one response for each statement)



#	Question	Not important		Somewhat important		Very important		Total
1	a. To spend time in nature	2.38%	10	21.90%	92	75.71%	318	420
2	b. To harvest a more mature buck	5.41%	23	40.00%	170	54.59%	232	425
3	c. To spend time with family/friends	4.98%	21	27.25%	115	67.77%	286	422
4	d. To obtain wild game meat	7.82%	33	37.91%	160	54.27%	229	422
5	e. To contribute to wildlife management	7.84%	33	39.67%	167	52.49%	221	421
6	f. To contribute to the local community (e.g., financial benefits from hunters)	21.09%	89	50.95%	215	27.96%	118	422
7	g. To test/improve my skills	21.24%	89	46.54%	195	32.22%	135	419
8	h. For physical exercise	16.39%	69	52.97%	223	30.64%	129	421
9	i. Other (please specify):	71.74%	165	12.61%	29	15.65%	36	230

Q12. How concerned are you about the following potential issues between deer and human activities/property in D-11? (Please choose one response for each potential issue)

#	Question #12	Not concerned		Somewhat concerned		Very concerned		Total
1	a. Vehicle collisions with deer/elk	38.77%	164	43.74%	185	17.49%	74	423
2	b. Loss of deer habitat due to human population growth and land development	15.06%	64	36.71%	156	48.24%	205	425
3	c. Loss of deer habitat due to energy development	36.41%	154	34.28%	145	29.31%	124	423
4	d. Decline in quality of deer habitat due to energy development	37.97%	161	31.84%	135	30.19%	128	424
5	e. Disturbance to deer from human outdoor recreation activities	26.89%	114	48.82%	207	24.29%	103	424
6	f. Economic losses to residents due to deer damaging gardens, trees, shrubs	76.47%	325	20.47%	87	3.06%	13	425
7	g. The potential for deer to spread disease to humans, pets, or livestock	72.24%	307	19.76%	84	8.00%	34	425
8	h. Impacts to deer habitat and populations from the recent Pine Gulch fire	21.28%	90	46.57%	197	32.15%	136	423
9	i. Other (please specify):	73.96%	142	8.85%	17	17.19%	33	192

Q13. Considering this information, which management approach to the buck-to-doe ratio objective and hunting frequency do you prefer? (Please choose one)

#	Answer	%	Count
1	a. Status quo for ratio / no change in hunting frequency	38.62%	151
2	b. Slight decrease in ratio / slight increase in hunting frequency	33.25%	130
3	c. Moderate decrease in ratio / moderate increase in hunting frequency	28.13%	110
	Total	100%	391

Q14. How concerned are you about each of the following potential issues involving chronic wasting disease (CWD) in the D-11 deer herd? (Please choose one response for each potential issue)

#	Question	Not concerned		Somewhat concerned		Very concerned		Total
1	a. You and your family’s health?	44.96%	183	36.12%	147	18.92%	77	407
2	b. Eating meat from a deer harvested in an area of high (>10%) CWD prevalence?	39.46%	161	42.16%	172	18.38%	75	408
3	c. Eating meat from a deer harvested in D-11?	59.61%	242	32.02%	130	8.37%	34	406
4	d. The disease status of the D-11 deer herd?	24.45%	100	50.37%	206	25.18%	103	409
5	e. The potential for CWD to reduce deer hunting opportunity in D-11?	13.27%	54	42.51%	173	44.23%	180	407
6	f. Future generations’ ability to enjoy hunting deer because of CWD in D-11?	9.80%	40	37.50%	153	52.70%	215	408

Q15. Considering this information, which population size objective do you prefer? (Please choose one)

#	Answer	%	Count
1	a. Status quo	29.22%	116
2	b. Slight decrease	31.99%	127
3	c. Moderate decrease	38.79%	154
	Total	100%	397

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important.

Too many predators in this area - Mountain Lion and Coyote need severely decreased. Bring back spring bear hunting. Do not allow any wolves to return!

I think the Dow should increase lion tags and allow longer time to hunt bears. To harvest more bears, lions, coyotes need to be trapped. The wild horses need to be managed for the winter range. They are also out of control. This was a good year for fawns seen during the archery season. Lots of bucks were also seen this year and only a few elk. I didn't see a bear this season. The deer hunting has changed because of all the new people hunting pressure has changed the way this family hunts them. Like Paul said it's not trophy unit. Wants to add doe tags. Why kill your breeding stock. 31 and 32 you guys harvest doe's. I believe more fawns are killed by predators than what Dow said on the video chat. When you go look for a lion track and see more coyote kills than lion kills. And I believe there is more poaching and hunters ethics is a bigger problem than you guys realize on Baxterpass and rathole over the years. We find more of that during the archery season while hunting. It's not big enough and just leave it. Most are found less than a 100 yards from the roads. This year called Paul and Terry instead waiting to see one of them again. Now there killing doe deer and leaving it. My best guess is people wanting to bait bears from it. This has been happening for years and could be a bigger problem.

I don't think your survey numbers are accurate because I am old enough to remember every time I would drive to Rangely I would see at least 100 deer and for the past several years I would consider myself lucky to see a deer and I drive that road at least once every two months.

need to decrease the wild horse herd

I live and hunt in unit 30 not 31 sorry

There needs to be more predator control !

I hunted the unit 21 in 2009 and again in 2019. The wild horse population has dramatically increased and they seemed to be everywhere. There were several close calls on the roads driving out in the morning and evening where a herd of horses were standing in the middle of the road. They were extremely hard to see, being dark brown and black. I can't imagine that many large animals around is helping the condition of the winter range for the native species.

Lack of mature bucks is something that is definitely noticeable.

I think getting rid of tons of wild horses in these units would definitely help the deer population come back start letting people shoot and eat them horses or do something else with them useful would help

do not increase antlerless permits

Your horse issue is a major problem. Also, the predators are out of control.

There are a lot of predators in this area it needs to be looked at

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

I've hunted unit 21 & 30 for almost 30 years now. And in my opinion it has been over hunted for both Deer and Elk. But as far as the deer population in unit 30 goes, I feel that there shouldn't be any hunting in the valley or farm fields unless it's for the disabled/handy capped or youth hunting. And land owner tags for farmers/land owners in the valley shouldn't be issued anymore do to the fact that it's not fair chase because the deer are pretty much tame and aren't afraid of humans and most or all of those tags are sold to other people (which you aren't getting any of that money which isn't right) and the deer aren't killed on the property that is was issued for which also makes it hard to manage the deer heard. Now for unit 21, which is where I've done all my deer hunting. In my opinion the major reason for the decrees in deer population in this unit was over hunting and to many predators, mostly mountain lions, but the dry summers have had some impact too. The wild horses are getting out of hand in unit 21, they are eating most or all of the deer's winter feed before they ever get there, so they need to be rounded up and taken else where!!! And I also feel that there needs to be a horn restriction for the bucks along with it staying a draw unit, because there are to many small bucks (spikes, 2 points and small 3 points) that are being taken and not reaching full horn growth and breeding potential. So I feel that there should be a 4 point or better horn restriction for both units 21 and 30. I hope my views and opinions will help in making our deer and elk herds bigger and stronger for future generations!!

I am VERY concerned that employees of the CPW have bought into the thought that Older Age class Bucks is the reason for Herd decline. As an avid outdoor enthusiast I can attest this is not the case. The CPW Must recognize that predator control is the Major contributing factor along with poor Winter Habitat brought on by sustained drought. Watching Bear, Cougar, and Coyotes in the Spring decimate fawns and the herd going into Winter not at full strength so they are easy prey for all Predators is what needs to be recognized. For the CPW to not even list predators in this survey is very troubling. The Predators are taking up to 20% of fawns in the Spring along with 10% of new born calves (cattle). The CPW should allow land owners more access to predator control. The CPW should also reward land owners who improve there land with more water resources and improve forage for winter.

If you were really concerned about the deer you were discontinue hunting of deer in area 21 and 30 Remove all the grazing permits from public lands and have the Rangers pay private landers to graze on their property put a bounty on coyotes because they have evolved and are killing numerous Fonz in the spring and summer open up spring bear hunting install water troughs collection units in dryer areas Allow more mountain lion hunting in the wintering grounds and don't let CSU experiment on our wild animals and give them see WDCWD then release them into the wild like they did

Hunting seasons to allow Mule deer buck maturity

overcrowding due to lease changes along calamity ridge, very sad to see generations of hunters displaced and angry. Those people and myself will never return to this area-very sad after 20 years of going there.

to many lions coyotes and bears also to many wild horses fighting for the same food supply

I am concerned about how many wild horses are in the area. I think that there is way to many horses for the area and they are part of the decline of the deer in the area.

Great job Mr. Terry Wygant. Full hunter support to bring up the deer heard health. How do we decrease the Cattle ranching negative impact to wildlife and remove a water source competitor? Special thanks to the cattle rancher blowing out all the game one week before hunting season.

Baxter Pass area - from my experience on Baxter Pass since 2013, drought has been an issue the last several years, and the doe to buck ratio is extremely high now as compared to years ago. Many of the water holes were dry or at extremely low levels this year, and bucks were not really observed until after the snowfall the day after Labor Day.

Offer bounty on coyotes, and make more mountain lion tags available.

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

I've been hunting (primarily elk) in this region for more than 10 years, in that time I've seen the numbers of buck and doe decline along with the trophy potential of the bucks in the Rathole ridge, Douglas, and Baxter pass areas.

stop pampering the ranchers and start managing wildlife. wildlife should come first

Private land access blocking roads is a real problem in these units!

During the 2019 season, large bucks appeared to be considerably less prevalent than in seasons over the past 20 years.

There should be more predator control.

If ur truly concerned about the population decrease why no mention of predation? Or is this just another feel good approach?

Far too many wild horses in Unit 21 - likely diminishing range conditions.

I would like to see a more hunter friendly atmosphere between hunters and landowners. Not necessarily the ability to hunt on private property but cooperation for access to public lands across private property. I cannot see any problem for landowners on that subject. Unless they not only want their land to use but the public land also. Many times their livestock uses public lands for grazing. Why not a trade-off? Public grazing rights for access to public lands. One more thing would be the right of hunters to recover wounded game that does on private property. Even if the hunter were not allowed vto take a weapon on the private property. Just the right to retrieve the downed game.

I grew up in Rangely but live out of state now. My hunting experience last year was great, the toughest thing is waiting 23 years to draw. The buck population did seem diminished a little from when I accompanied my dad on a hunt in 21 in 2013. I wish it just didn't take so long to draw because Rangely is still home:)

Area rehabilitation following the Pine Gulch Fire will take time but there are few variables and the process is well understood. It would be my hope that there are no knee-jerk or ill conceived management plans made during the interim.

It took me and my brother six rejection points to get drawn for a deer tag. We had to put in for muzzle loader to finally draw a tag. I think that is too long of a time so more licenses need to be issued.

Saw many bucks, but Unit 21 takes too many 2nd season points for puny deer.

Cut back on some licenses especially with the lower fires pushing the deer into D-11.

Doe and buck less than 4x4 should be off limits like it was years ago

I know you've heard it before, and your "studies" do not show it, predation is a huge problem, this is directly responsible for your low fawn doe ratio. CWD is present, has been for a long time, of course monitor it, but decreasing the herd in an already to small of herd is not the answer.

General consensus from hunters is there's a major predation problem also.

Predator control is helping in other states, why invent the wheel???

Thank you for all the work you do protecting our natural resources.

Wild horse population negatively effecting native game

Never have killed a buck in GMU 21 To many years to obtain buck tag for unit#21 I am 73 ears old may have only a trip or two left in me.

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

Very disappointed. I think your models are wrong. I don't think the deer population is as high as the models show. And need to take out the damn Wolves

The continued ability for CPW and BLM to communicate with landowners where public lands are landlocked needs to continue. There are too many acres of public land that is non accessible here and across the country.

I think predator control is more important than most other issues. The lion kills the deer, the bears and coyotes finish it off. The lion kills another deer. Too many coyotes so they kill too many fawns.

Thank you for the work that you all do for us hunters.

I'm no expert, so I trust the biologists who are intimately familiar with the herd

Deer are found in small pockets and the deer numbers appear to be dropping. Increased pressure and a lack of food and water are contributing factors.

I observed several bear and could find sign of them everywhere I hunting. A lot of coyote activity.

Eat more venison!

Don't agree with items 13 & 15. You failed to address the most prevalent problem with the reduced numbers and how to remedy this decline. Predator control. I have hunted these GMUs for 70 plus years and have witnessed the deer numbers decline while the predator numbers steadily increase. Just this week (09/13-17/2020) I spent time in Unit 30 scouting for deer. Walking up several canyons the only tracks I found were mountain lion, coyote and a few fox. Predator control is the main thing that would assist in bringing the herd back. Increase the number of lion tags, encourage more trapping for bobcats and coyote. Consult with the BLM and jointly form a trail program that places a moratorium on trail construction of mountain bikes and OHV trails until a complete inventory is completed and then only then allow the placement of a new trail if it meets all requirement of wildlife management. If these two objectives were met the only concern would be CWD and how liberal of a season do you need to have to address the herd size. Thanks for the opportunity to participate.

Until the fire. Area was very over grown. Hopefully there fire will establish new grasses higher in nutrients to better the herd.

unit 21 was agood deer hunt until they put out more tags a few years a go it really hurt the herd

Hunting unit 21 for deer for the first time this year.

Archery hunters wound and don't recover way too many bucks each year.

More available deer tags for residents. Like in the early 90's

I've studied Livestock Management for years and am an avid hunter. Through my research and studies, I have found a correlation between the health of wildlife after a "disaster" and livestock. At this time I know rancher and livestock owners who leased range land in that area will be hurting, however I do think that for a year-two that those range animals shouldn't be permitted to graze in that area for rehabilitation of the wildlife and land. Compaction to the soil and the amount of potential sick (due to smoke) animals in the area may need some separation from livestock. Please not I am not an expert, just personal experience. Thank you for listening.

Would like to see some type of water development for wildlife benefits.

A buddy an had Muzzleloader tags for 21 an 30 this year. We turned them back in because in 3 days all we saw were 6 dang does. We covered the Eastside from Calmity Ridge to Douglas Pass to Baxter Pass to west of Rangely no deer. Your biologists need to have a serious look at this zone for the future of it for right now whatever they are doing is not working !

I think predators are a major cause for low fawn survival

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

I think there is a larger predator problem than you think. The ongoing drought is a big impact on forage. to maintain habitat and reduce human interactions in the unit

Forage will improve after the pine gulch fire. The fire is a good thing for the long term deer population. once again I do not see anything regarding predators affecting numbers

Would like to see this unit, and others, managed for antler size and herd health even if it means a decrease in available antlered tags.

Hunting in this area is a family tradition. While harvesting higher caliber animals is always a goal, the overall health and safety of the herd is of utmost importance for us to continue this tradition for generations to come!

Keep ranchers and free range cattle out for more forage. And better hunting for out of state hunters.

Private property owners strategically closing off roads and trails through their property to limit public access to public land.

Stop giving out so many licenses until the herd can have time to recover. Hunting's seasons go on way too long.

I highly value road closures in the Texas Mountain area during deer season. If a person can't get off their ass and walk, they need to hunt another unit. I love that the oil and gas roads that are closed to motorized makes this a special place to hunt. I believe you should extend those road closures for deer season through the Missouri Creek, Baxter Pass, Rat Hole, Wild Rose, Texas Mountain in general. Also, I worked for BLM for years. CPW needs to loudly support BLM on removing horses from West Douglas.

Having hunted in the bookcliffs for the last 20 years I feel that the decline in deer population is due to predators. This year I watched a coyote trying to take a fawn and have also come across numerous lion and bear tracks. I also have not personally seen any deer that appear to be visibly sick with CWD.

All my years of hunting this 21 is one of the best

Traffic and over hunting in areas, some of these hunts look like the great land grab!

Screw off with this slanted survey. The buck To die ratio is so low in this unit for seeing 500+ doe's in the 10 days I was here I saw two small bucks.

The deer herd had dropped off dramatically due to lions and bears but I'd don't see any ting about that in your survey? Why? Deer where fine until it was to hard to manage the predators because of rules and regulations. Put out less deer tags and less doe tags and make it 3 points or less restriction and let the big deer breed stop killing off all of our wild game so you guys can sell more tags that's all you guys put in this survey was how to kill more deer.

I think there should be a significant decrease in number of licenses administrated. Parks and wildlife need to better manage funds , especially in upper management

Recent fires should increase habitat. Guzzlers might help the herd

More landowner tags for farmers with smaller farms to help cull herd

We need to limit the amount of tags given out in unit 21, along with decreasing the bear population.

Remove feral horses and limit cattle grazing on public lands

Currently do to increased hunter pressure and decreased access to public land due to road closures and private land blocking access the hunting experience has been greatly reduced. I have hunted this area since 1986 and have seen the changes brought about by both of the reasons mentioned above.

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

The fire should help deer numbers. Increasing antlerless harvest won't increase deer numbers. Anyone who says so isn't being realistic, but most likely has some other agenda.

I accompanied my son on his muzzleloader deer hunt in D11 this year and was pleased with the number and herd composition we observed.

More CWD studies. More studies on impact of energy and roads in area impacting migration and herd health will help solve more problems than adjusting just harvest numbers.

Older age class on bucks. Maybe management hunts for bucks with lesser genetics or antler growth would help. I have no issue with managing the number of bucks but fee there are effective ways to do so without killing of all the older age class bucks

This use to be one of the best deee units in Colorado and no longer is close. The quality of the buck needs to go back. Predator control especially on the winter range along with wild horse control needs to be more of a priority for the habitat

Overall herd health and quality mature buck management

It seems to me that the population of deer is already low so decreasing the herd further on purpose would result in lower hunting quality. This is concerning with a GMU like 21 which is supposedly a trophy unit for deer. Energy development is biggest issue in this area. There is not a ridgeline or mountain that doesn't have an oil rig and a road on it. Places like rabbit mountain that should be crawling with deer yielded minimal deer even seen while I was hunting there. It's really unfortunate that energy development has gotten this bad and I understand that it's mostly the BLM, not CPW which controls this but wildlife suffers as a result.

Get rid of the wild horses in the area and that should help the deer herds. Making it easier to hunt mountain lions and bears in this and other areas will also help improve fawn survival rates. Why are these issues nor even raised or discussed? Pretty ridiculous in my opinion.

The biggest threat to deer / elk in gmu 21/30 is wolves. CPW has completely ignored this for years. When will you take a stand??!! Wolves have been in that area for at least 10 years according to local ranchers. I have hunted 3rd season cow elk in unit 21/30 for ~20years and I have personally seen deer / elk populations decline drastically in that time. I have actually seen a wolf there and I have heard them screaming at night. Colorado will continue to see herd numbers decline because of wolves. YOU NEED TO REALIZE THAT WOLVES ARE A PROBLEM AND FIX THAT PROBLEM IMMEDIATELY - QUIT BEING BULLIED BY THE BOULDER TREE-HUGGERS. 2nd reason for declining population (in my opinion) is increasing numbers of people in colorado which means more people in the woods stressing pregnant, very young, and nursing animals. You cannot control the people population, you can control the wolf population.

I feel predator control need to be higher on list list of concern. CPW doesn't seem to make that as big of priority as they should. No antlerless tags should be issued for several years to try and get our deer population back up in addition to lowering the number of buck tags issued.

I hunted in GMU 30 last year during 2nd rifle season. I found many hunters and no deer. I do not plan on hunting GMU 30 again due to the lack of animals.

Improving the sage habitat will never hurt the deer!

Energy companies are ruining the area. They take up a huge amount of land without allowing access for hunters. I hope the energy companies don't get landowner tags. Only private persons owning land should get these tags. Not large companies.

I think there are too many tags given out for this area. I've lived in this area most of my life and the lack of quality animals is not related to anything other than too much nunting pressure. There are some years that drought or other singular events may cause a dip but, there is plenty of food for deer that is not being touched.

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

I have hunted East Douglas creek every time I could draw for 20 years. The land owners are out of control in that area. They stop hunters on a daily basis and tell them they're trespassing. I have for years shown the land owners my GPS and explained to hem where their property lines are. However, they continue to harass law abiding hunters. When will this be addressed and resolved. This has the ability to turn into a really bad situation.

I hunted unit 30 in 2016 and I thought more buck tags could have been been available. Not a bunch more, but tag allocation seemed a bit too conservative. Keep up the good work. Rick Bulloch

If you guys are truly worried about the carting capacity of this unit, and are looking to make a change to your management, I think the question you guys should really be asking us is do "we as hunters and you as Wildlife Managers" want a unit for quality bucks, or a unit that is managed for a fun hunt. Because these options are managed completely different. As you well know. If this area is loosing habitat to natural energy companies making roads, platforms, and putting in infrastructure, then a quality unit might not even be possible. Let's be honest here. We all know deer/elk/antelope/etc need food, water, solitude, and a safe passage to good winter grounds. If this is possible then please manage this are for quality. Figure out what the current overall state is for reoccurring food for the animals is, make your over all population adjustments slowly, come up with a great buck management plan (put point requirements on seasons. 2nd season has to be 3 point on each side or better, 3 season has to have one side with 4 points, 4 season has to be a 4x4. Allow for youth/management hunts for mature deer that are forkies or a crabbed 2x3. You keep your tag sales up with youth/management hunts and you can use this to adjust buck to die ratios, we as hunters still have opportunities to hunt while a so so unit returns to a better state of quality. Let the old timers say "boy I have not seen this area this great since I was a young man".

take revenue out of the equation and management from there. that is the challenge!

Stop letting outfitters sell wildlife!!dont let hunting turn into a sport just for elite rich Texas is a good example Not much left for the public. Have to buy into a club and pay outfitters. Sad this is what they are doing all over the place should stop!!!

I believe it is important, especially now when our deer herd is likely stressed and displaced from loss of habitat, to not take a blanket approach in population management. We DO NOT need to decrease antlerless numbers across the board. Does need managed in areas where vegetation is sparse and pregnancy numbers are low. I firmly believe that crop damage tags need to stop being issued in such high numbers in unit 30. I also believe that educating the hunting population on proper buck management would go a long way in increasing the quality of bucks available in both units. Keep CWD testing mandatory so we can get a good grasp on what exactly we are dealing with within these units and then manage accordingly. We cannot make management decisions at this time based off assumed CWD numbers withing the unit. Keep the public education pieces coming! Buck hunting in these two units is one of my favorite things and I would hate to see the herd size, quality, or health decrease any further.

Good hunting

I have hunted that area for 40 years and the last time I drew was 10 years ago. I do go for the Elk hunt just to get out in the woods. My time is now limited for deer and this year will more than likely be my last for deer. I encourage you to continue to let the deer population grow for future generation to come. I will still come for the Elk. I will be to the Bookcliffs in Utah next year after 18 years of drawing:)

Over all herd size and Quality buck size

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

In my opinion, this survey address symptoms. Not the underlying problems in 21. I will probably stop hunting 21 after my horse experiences. I do not know much for facts and stats on CWD so I really cannot comment. I do not think Parks and Wildlife knows that either. Just an opinion. I leave those questions to the scientists. If CWD gets out of control, then I guess that will be another reason I quit deer hunting. I do not enjoy eating them anyway. Give me a ribeye. The underlying problems I mention are with society today. Not your fault. I long for the good ol' days, if you are old enough to know what I mean.
Thanks

Would like to know how the bear Poland mountain lion populations are affecting the deer in that area as there is a large amount of bears in the area from my experience.

i HAVE HUNTER UNIT 30 FOR OVER 30 YEARS. THE NUMBER HAVE DEER HAVE DECLINED FOR SURE. I FEEL PREDATION IS ANOTHER FACTOR YOU NEED TO CONSIDER. INCREASE THE QUOTA ON MTN. LIONS AND RETURN THE SPRING BEAR HUNT TO SAVE FAWNS AND CALVES.

Do your research, the reason there is less and less food and water in 21 is because of those wild horses. Last season I hunted every day of the season and every day I saw more wild horses than deer. I saw them destroy deer and elk habitat and it's disgusting.

I feel that loss of Habitat is biggest culprit.

The number of natural predators of deer, fox/coyote.

I generally prefer a more conservative approach to changing things. While I am concerned about the deer population, I generally prefer more smaller changes than waiting longer and making larger changes. For CPW concerns, I prefer small changes and more testing. However, due to the Pine Gulch fire, it might make sense to add a late doe season this year to help manage the herd. CPW's current management system using hunters and an annual draw to manage herd size is slow because it would take more than a year to respond to a natural disaster (e.g., a wildfire or an unusually heavy, early snow). For example, CPW could add doe licenses to the 2021 area 21 hunt, but that is likely a late solution to effectively respond to the herd displacement caused by the Pine Gulch fire. As one possible future solution, CPW should look at Montana's Master Hunter program. CPW could build a cadre of experienced hunters that CPW could tap at a time like this. Imagine if CPW could open a limited draw to Master Hunters to take 50 or 100 doe due to the wildfire (and perhaps in limited regions not following the traditional 21, 31 GMU boundaries); or opening doe tags for Master Hunters with a bounty that if a Master Hunter harvests a doe with CWD in a specified GMU or region within a GUM that the hunter will get a preference for a buck tag in the unit the next year (that would give the Master Hunter an incentive to search for deer with CWD, harvest a deer with CWD, get the deer tested, and perhaps provide feedback to a biologist about observed field conditions). The annual draw has served Colorado well, but CPW might look at solutions that are more flexible for conservation management in response to natural disasters. BTW, I grew up in Rangely, and that is my tie to area 21. I enjoy hunting area 21 because it gives me a good excuse to get back to my old "stomping grounds."

The unit has sharply increased camping and off main roads OHV since I've hunted there beginning 15 years ago. During that time the numbers of deer seen by me and others in my group have sharply declined. I believe the DOW and various land management agencies have to halt the influx of this intrusion if hunter numbers and recruitment are to be sustained. I won't be returning to these units. The hunting is too poor. Thank you.

Comments - Please provide any additional feedback related to D-11 deer herd issues that you feel are important. CONTINUED

I hunted D-11 last year and had a very good experience. Weekends, especially opening weekend, the hunter numbers were pretty high, but during the week it wasn't bad. My fundamental issue with just about any hunting area is that the private land owners benefit from all the public management but don't allow public hunters. I don't know how to address that, but it irritates me when I see large areas of public land locked up because a private land owner controls the road into that land.

I appreciate the opportunity to participate in these surveys. I would like to see the use of these continued.

CPW should work more with private land owners to increase public access to public lands that are currently severely restricted by one locked gate in a valley bottom, which occurs throughout 30 and 21.

Hunter numbers should be reduced to allow male deer to reach maturity. making the area trophy caliber.

I believe there needs to be more range management in these areas controlled burns and the like the gas industry is the only ones improving the land I'm not sure were you get your buck to for ratio but I think your numbers are drastically off way to the heavy side there needs to be more predator control lions bears coyotes in both units 21-30 quite frankly I fill as a land owner the cpw spent way to much time on elk and not enough on deer and have screwed up both and the habitats for every animal involved

Deer numbers are way down it is hard to find a mature buck anymore. to many people in the field. deer don't do that much damage to the farmers crops stop giving crop damage tags.

Limit motorized access to midday hours for game retrieval purposes.

we need to stop shooting doe's and put an antler restriction back on the bucks. we also need to stop giving crop damage deer tags to the farmers in the valley.....

Overhaul the current Preference Point System so that all hunters will have a chance to hunt the D-11 deer herd at least once in their lifetime if so desired.

Dates need to be later by a week or more to catch the rut

I love that this is considered A trophy unit, but buck size has gone down, more people are shooting small deer. Use to see 180-200 in deer all the time now your lucky to see one or two that are 170-180

in my area rangely 21, doe fawn tags are needed to many hit on the road and people here would use the meat

APPENDIX D11-C: PUBLIC COMMENTS OF THE DRAFT PLAN

The following comments were received from the public during our 30-day public comment period (January 21 - February 21, 2022) for the draft plan. Note that some of these comments were submitted as feedback for the D-11 Herd Management Plan (HMP) as well as two other HMPs that were posted for comment simultaneously (D-42 and E-10).

All Draft Plans

Thank you for your team's research and effort regarding this matter. I have lived in Colorado since 1964 and have hunted for over 30 years in this state. The current habitat for our wildlife continues to degrade, and putting the massive wildfires on top of that is not good. Then the animals get crowded out due to the massive population growth in Colorado. Not to mention CWD. Tough conditions for our wildlife. Thanks for doing this and I support the these plans.

I don't agree with your proposal to reduce the herd population of elk and deer. With the reintroduction of wolf's, CWD and all the other negatives these animals are facing including roadways and human interactions. It's a wonder they still exist.

How does one expect a uneducated, unknowing public to understand herd management, let alone make decisions on the health and well-being of the animals? People barely pick up their dog waste on a trail. Why are we not asking experts?

Where do you get your population estimates? After spending many days afield and speaking to many hunters, I certainly do not agree with your premise. Deer and elk populations are a tiny fraction of the numbers you estimate. Please use realistic numbers!!

The current draft herd management plans for the Yellow Creek Elk, Bookcliffs Deer and Rifle Creek Deer herds are unacceptable because not even the current target herd levels were able to be maintained and there is no evidence the new targets can be maintained.

The constant drop in herd numbers should be alarming to everyone in Colorado, especially long-term residents that have watched herd numbers plummet across the board over the last 35 years. The data actually supports doing the opposite of the draft plan and raising management target numbers to help support long-term recovery. The draft plan continues mismanagement of Colorado's natural resources through consumptive approaches that never allows growth in herd sizes. You will continue to lower the herd numbers each plan period until there are no herds left with this approach.

This is a easy situation to solve. The herds are large or smaller than expected. All units in Colo (not just a few BUT ALL) that if any money a land owner receives either from the state or federal then all of their property is open to public hunting no matter what . This includes

outfitters going in and leasing all of a landowners property exclusively to stop it also. The money the landowner receives include for farming aid , crp , animals killed by bears mountain lion wolves.... , crops destroyed by deer elk The landowners complain about all this and they get subsidized by the state or federal government, but who is paying the bills to them the tax payers. Also take all away the landowners tags.

I have lived in Colorado all my life, my comments are for Big game species as a whole. what i see are adjustments made to herd size lowering there populations because previous goals can't be met. Those plans were put in place with confidence of obtaining them. Previous plans have higher population goals so why do they get lowered? Why lower the population goal instead of improving them to meet previous objectives and populations that once existed. could there be a predator influence here, Bears, Cats, Coyotes, over hunting pressure, and soon wolves. I believe the ways of managing have changed.

I see funding a problem that the wildlife itself is burdened for.

I have seen many changes good and bad for all species, I believe in balancing the populations but thru true game managing (what is best for the animals) not business managing or political managing You first represent the animals please do that

what I see is you guys are seeing dollar signs yet again. The numbers are already low and you wanna cut them even lower. Why are you trying your best to get rid of them???. Breeding predators, introducing more of them on top of that, trying to cut the cat hunting.. I know it's tree huggers that push this shit through but they aren't even part of having anything to do with the wildlife, they don't pay a dime into any of it, only stopping it .Hunting the elk six months out of the year.. Doesn't make much sense.. Here is an idea, cut out all the late season hunts, you're destroying the elk herds,, and as for the deer, they're just trying to make a little bit of a comeback, stop killing all the damn does... I myself am about tired of giving my money that supports this kinda bullshit. Why should I keep buying tags over and over when nothing is done to improve the herds.?

Leave them alone

My input is to NOT decrease populations, and NOT decrease buck/doe ratios. I would like to see CPW make efforts to increase populations and buck/doe ratios for a change.

The solution is simple. The state needs to move the deer crossing signs away from I-70 so the deer know that they can't cross there and instead put the deer crossing signs where deer hunters hunt. This keeps them off the interstate and keeps hunters happy.

E-10 (Yellow Creek) and D-11 (Bookcliffs)

I have spent a significant amount of time in units 30, 21, and 22 over the past two years. Winter range (sagebrush and mountain shrub) communities are in very poor condition due to lack of fire and domestic cattle/feral horse overgrazing. Commercial cattle grazing on these public lands should be greatly reduced or eliminated in order to restore habitat for native wildlife. Feral horse activity is completely out of control as well and it is extremely frustrating to see the damage these animals are having on the landscape and the impact they have on native animals. In units 21 and 22 feral horses are congregating at water sources and denying access to deer and elk. They erode the sides of water sources which cause them to become shallowed and evaporate more quickly. During times of drought must be causing many hundreds of native animals to die. Feral horses also have no predators and are multiplying at unsustainable levels. The number of horses should be greatly reduced or the entire population eliminated. If these feral animals are to be given status similar to native wildlife we need to manage them with a feral horse hunting season similar to the way all other species are managed. I love these desert units and it is extremely sad to see the destruction that feral horses are causing.

I currently live in Mesa county, De Beque, Colorado and I have a serious proposal for you about the I-70 area just west of the De Beque exit. This area is where the river comes close to I-70 going east bound and west bound where I-70 goes over the Colorado river. I would like to propose a natural cross over for the deer herds on the east bound side of I-70. I see deer being killed and struck by traffic here ALL the time, due to the fact of herd migration to and from their water source in the area. They have a path they travel across I-70 which we as humans put right in the path of their natural migration. I do understand that this is not the proposal that was technically asked about, but this is a very important issue that is responsible for numbers and counts of the deer herds. Please consider my proposal seriously, because not only are deer being affected but people's lives are as well. Thank you so much for your consideration and time to read this. I would love and appreciate a response in return to the regards of this proposal. Local awareness will save lives both in animals and humans, thank you,

D-11 (Bookcliffs)

I would give you my opinion on cutting the deer head in the bookcliff area. I have hunted in unit 21 and 30 for the last 30 years. You say you want to cut the deer numbers by killing more bucks wont solve the problem, and your reason behind it is do to the drought and fires?? I call BS on that one!!! Cutting the numbers is not a good idea considering that there aren't that many deer left in unit 21 and 30. And in my opinion the real problem is the predators, there is to many mountain lions, bears and coyotes, and it doesn't seen like you do anything to control the coyote population at all. So I totally disapprove of cutting the deer numbers in the bookcliff area.

I am writing in regards to your Draft Management Plan for the Bookcliffs Deer D-11 herd. After reading the 78 page document, I would be in favor of the "no change"

option as opposed to the "slight" and moderate" options. Here is why. The herd hasn't grown in the last 20 years, but a lot of that would have to do with the five severe droughts that have occurred in that time-2002, 2012, 2018, 2020, and 2021. That coupled with increase of the predator factor- lions, bear, coyote, have also increased in that time frame, and soon to be wolf, is why the herd is where it is. The Pine Gulch Fire will prove to be beneficial for all wildlife given a bit of time. This will work in the deer's favor going forward. I believe that the "no change" option coupled with patience, and active predator monitoring , will yield a deer herd increase toward the current herd objective. Consideration needs to be given to the fact that wolves will also be a factor in up coming years, and their effect on herd numbers in the future will be negative to the deer. My observation comes from the perspective of having lived in this area for over 50 years , and also from having ranched in the Bookcliff D-11 region for the last 33 years. In short , I know the country, the deer herd, and have witnessed the change in that time. Thank you for your time and consideration.

APPENDIX D12: Stakeholder Input

Appendix D12-A: HPP Letter



01/05/23

Genevieve Fuller
Colorado Parks and Wildlife
711 Independent Ave
Grand Junction, CO 81505

RE: Grand Mesa Habitat Partnership Program Comments - DAU D12

Dear Genevieve Fuller:

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 area. The diverse makeup of local HPP committees (3 livestock growers, Forest Service, BLM, CPW and sportsmen representatives) provide a 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 Grand Mesa HPP committee has discussed your presentation, reviewed the draft alternatives, and offer these comments for consideration.

The Grand Mesa 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 Grand Mesa committee supports the draft alternative to keep the current population objective. We believe this alternative responsibly balances local range and habitat conditions with sportsmen's desires and landowner concerns. We have not heard of any concerns about the current population or any desires to increase the local herd size and so we believe the current levels are where they should be. Any issues we have are more likely related to the distribution of the herds in the area and not the overall population size.

The Grand Mesa committee also discussed the proposed sex ratio alternative. In general, we believe the sex ratio that provides for maximum hunting opportunities is appropriate for this area. This accommodates sportsmen's desires and maintains local economic benefits.

As stated above, HPP is also directed by statute to assist the Division to meet game management objectives. The Grand Mesa committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat in DAU-D12. 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 due to:

- Residential growth continues to occur in the winter range, resulting not only in a loss of critical habitat but also habitat fragmentation and increased disturbances.
- Public land recreation demands continue to increase for both motorized and non-motorized users with similar effects.
- We have worked with numerous landowners who want to implement positive improvements for the 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.

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

Sincerely,

Kirk Oldham, Grand Mesa HPP Committee

APPENDIX D13: Stakeholder Input

APPENDIX D13-A: HPP Letter



August 17, 2022

Julie Mao
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

RE: Lower Colorado River Habitat Partnership Program Comments - HMP D-13

Dear Ms. Mao:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsman, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the Lower Colorado River HPP (LCRHPP) Committee has reviewed the D-13 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The LCRHPP Committee supports the draft alternatives for the population objective and the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsman desires and landowner concerns. While there are concerns about the current population and a desire to increase local herd sizes, we believe the preferred alternative is appropriate given the increase in year round recreation activity, habitat fragmentation, and decrease in winter range availability.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat across the committee area. The Lower Colorado River HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Scot Dodero, Chair
Lower Colorado River HPP Committee

APPENDIX D14: Stakeholder Input

Appendix D14-A. Results of online hunter questionnaire, Oct-Nov 2017.

To view the complete results of the D14 hunter survey, go to either of the following links:
https://drive.google.com/file/d/1WFdfuJusw8_e_dhE8MQ-w5qNfp_ZlVxx/view?usp=sharing

or <https://tinyurl.com/y8to544h>

Appendix D14-B. Results of public comment period questionnaire, Oct 2018.

To view the complete results of the D14 public comment period questionnaire, go to either of the following links:

https://drive.google.com/file/d/1BTJQLtnvZ7bsGer7VSMa2y_vxD8tcp3/view?usp=sharing

or <https://tinyurl.com/y8s7qkdl>

Appendix D14-C. Comment letters from other agencies and committees.



October 25, 2018

Julie Mao
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

RE: Lower Colorado River Habitat Partnership Program Comments - Deer DAU D-14

Dear Julie:

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

The Lower Colorado River HPP committee has discussed your presentation and reviewed the draft alternatives for this DAU plan update. The Lower Colorado River 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 LCRHPP committee supports the draft alternative 1, to decrease the proposed population range within this DAU and within our committee area. The LCRHPP has heard from landowners and land managers about poor range conditions on both public and private lands. While many factors play into these conditions, reducing the number of big game animals is one step that would help to improve range conditions and forage resources.

The LCRHPP committee also discussed the proposed sex ratio and agreed with alternative 2. We support lowering the current sex ratio objective to a range that, while still maintaining larger bucks, would ultimately increase the opportunity for more hunters in the field.

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

Sincerely,

Darren Chacon, Co-Chair
Lower Colorado River HPP Committee

APPENDIX D14-C: Comment from 30 Day Public Comment Period

I have spent a fair amount of time in D-14. I am generally very pleased with the number of deer I see. I agree with the "no change" proposal in the HMP.

APPENDIX D42: Stakeholder Input

APPENDIX D42-A: PUBLIC INVOLVEMENT SURVEYS

1. - Are you currently a resident of Colorado? (Please check one.)

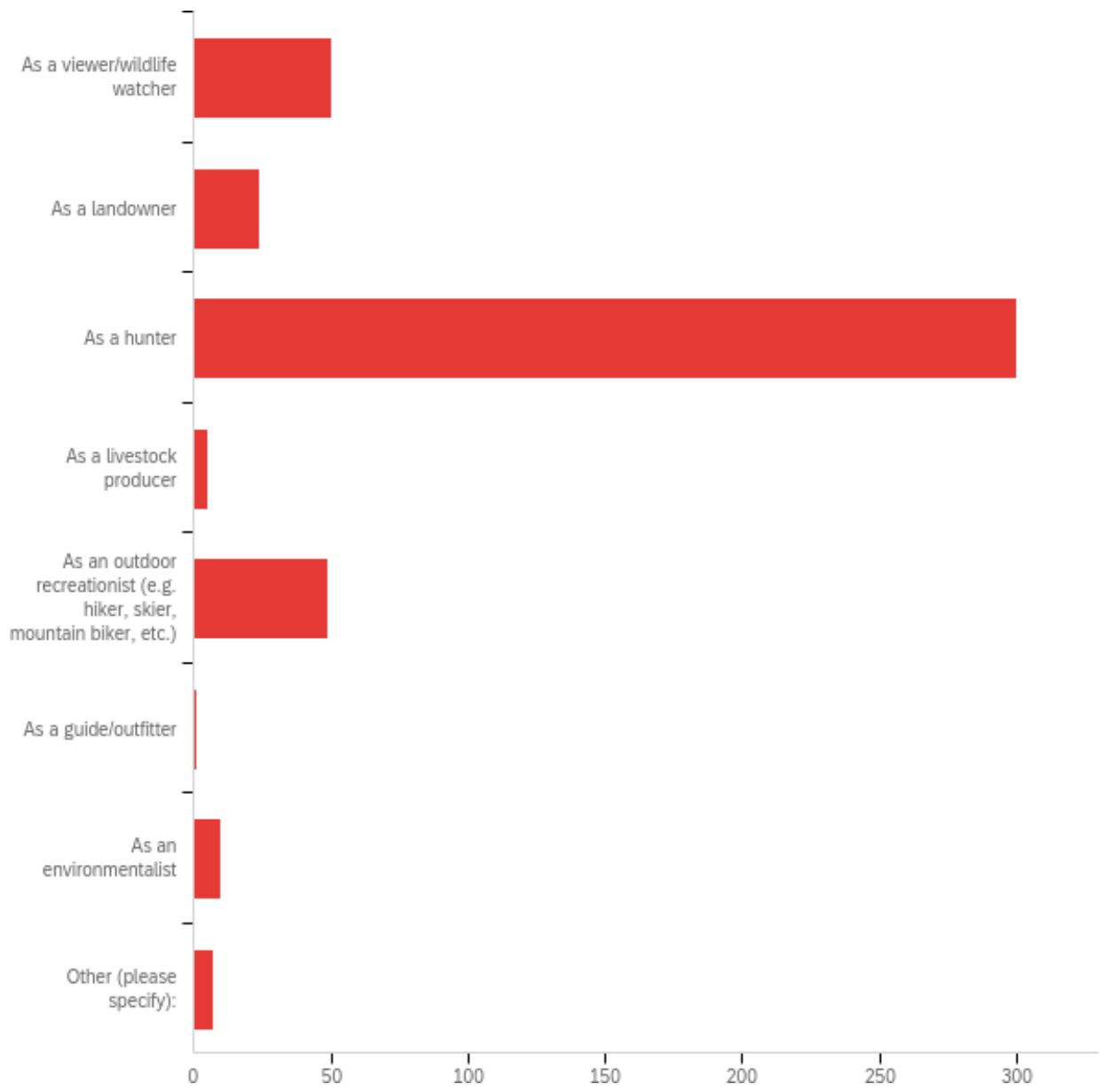
#	Answer	%	Count
1	Yes	63.67%	184
2	No	36.33%	105
	Total	100%	289

2. - Do you currently live within the Rifle Creek deer herd GMU? (see map below)

#	Answer	%	Count
1	Yes	18.27%	55
2	No	81.73%	246
	Total	100%	301

3. - Which of the following best describes how you interact with deer in the Rifle Creek deer herd? (Please check all that apply.)

#	Answer	%	Count
1	As a viewer/wildlife watcher	11.21%	50
2	As a landowner	5.38%	24
3	As a hunter	67.26%	300
4	As a livestock producer	1.12%	5
5	As an outdoor recreationist (e.g. hiker, skier, mountain biker, etc.)	10.99%	49
6	As a guide/outfitter	0.22%	1
7	As an environmentalist	2.24%	10
8	Other (please specify):	1.57%	7
	Total	100%	446



4. - Have you ever hunted deer in Colorado? (Please check one.)

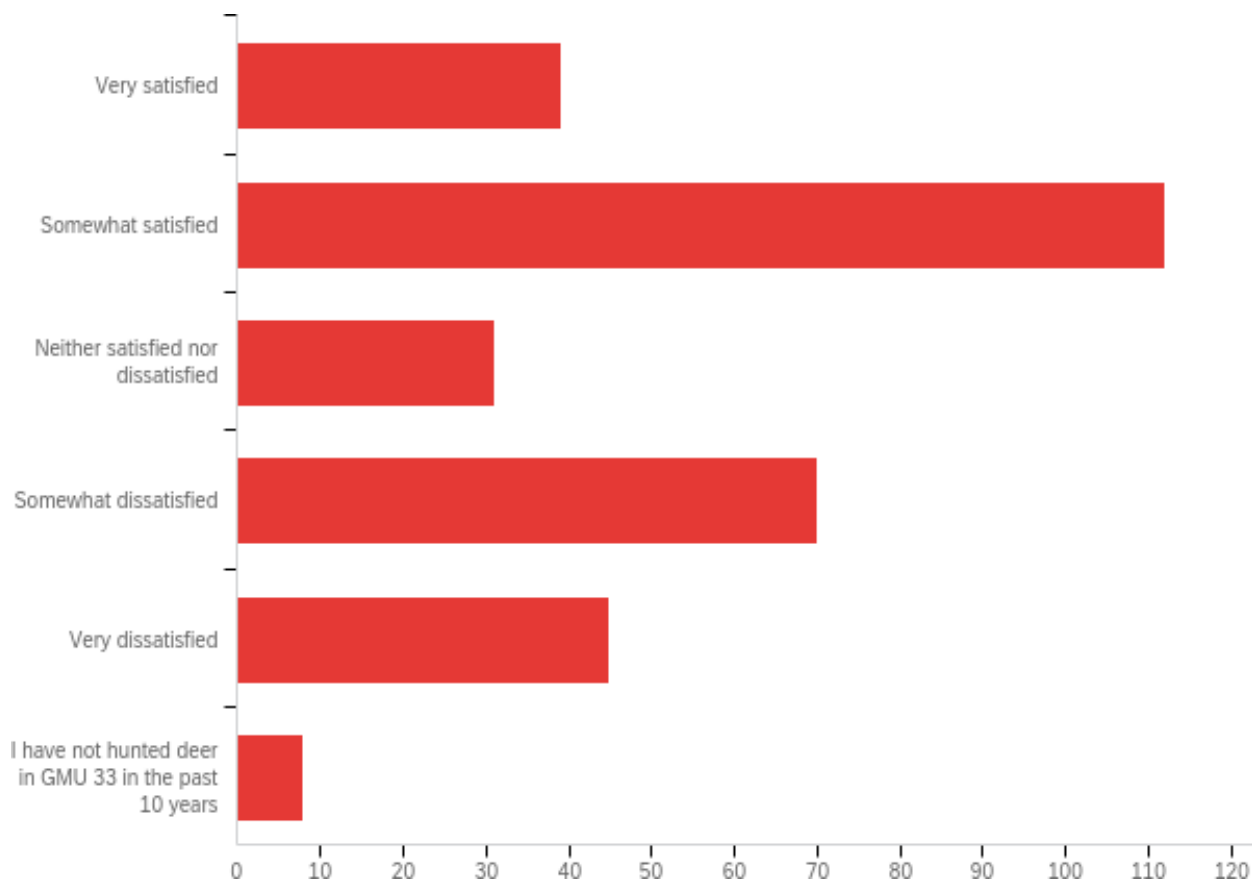
#	Answer	%	Count
1	Yes	99.36%	310
2	No	0.64%	2
3	I cannot recall	0.00%	0
	Total	100%	312

5. - Have you ever hunted deer in the Rifle Creek deer herd? (Please check one.)

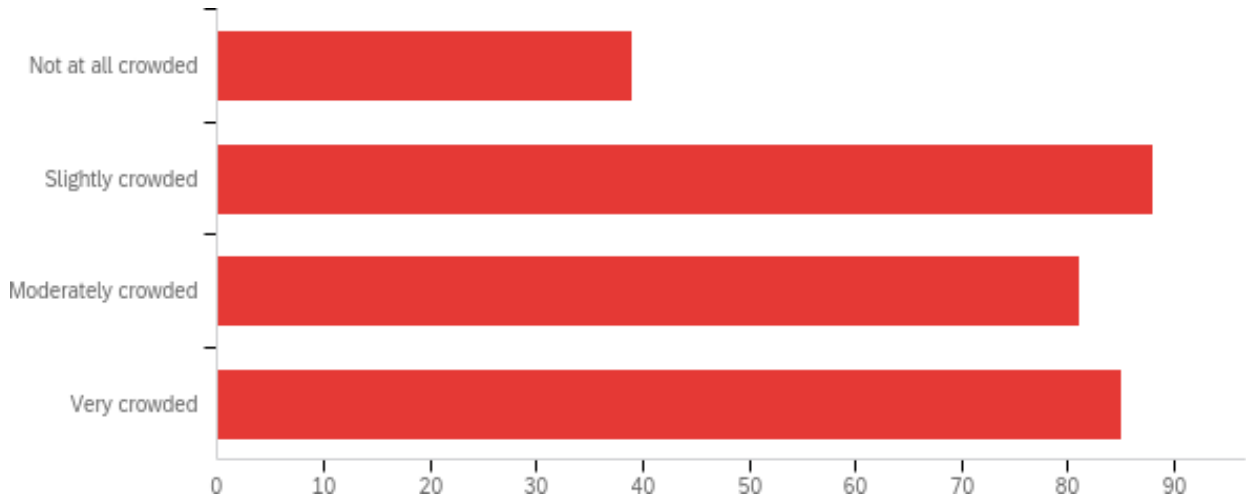
#	Answer	%	Count
1	Yes	96.31%	287
2	No	3.02%	9
3	I cannot recall	0.67%	2
	Total	100%	298

6. - Overall, how satisfied were you with your deer hunting experiences in the Rifle Creek deer herd during the previous 10 years? (Please check one.)

#	Answer	%	Count
1	Very satisfied	12.79%	39
2	Somewhat satisfied	36.72%	112
3	Neither satisfied nor dissatisfied	10.16%	31
4	Somewhat dissatisfied	22.95%	70
5	Very dissatisfied	14.75%	45
6	I have not hunted deer in GMU 33 in the past 10 years	2.62%	8
	Total	100%	305



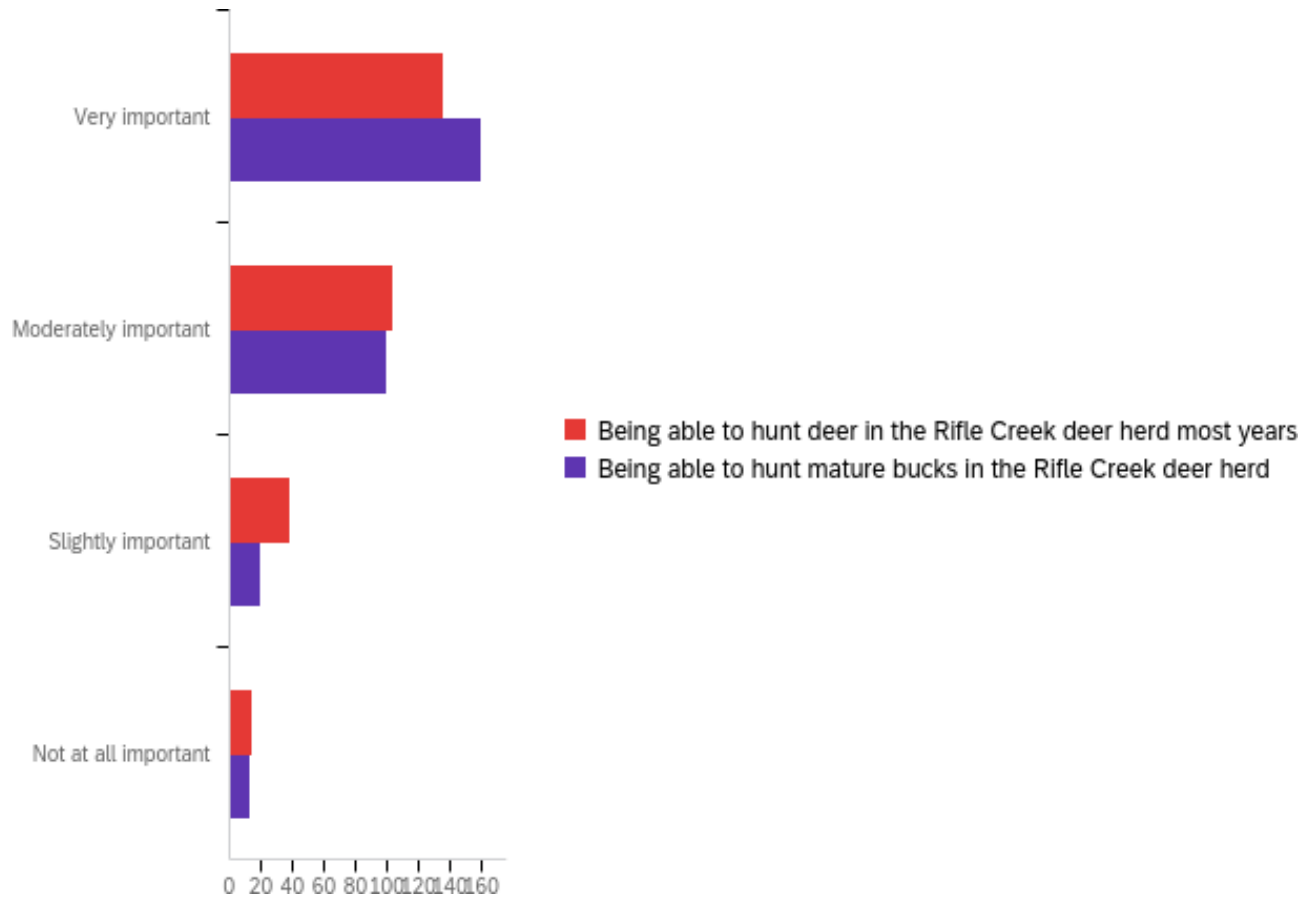
7. - To what extent have you felt crowded by other hunters while deer hunting in the Rifle Creek deer herd? (Please check one.)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	To what extent have you felt crowded by other hunters while deer hunting in the Rifle Creek deer herd? (Please check one.)	1.00	4.00	2.72	1.02	1.05	293

#	Answer	%	Count
1	Not at all crowded	13.31%	39
2	Slightly crowded	30.03%	88
3	Moderately crowded	27.65%	81
4	Very crowded	29.01%	85
	Total	100%	293

8. - How important to you are the following: (Please check one response for each item.)

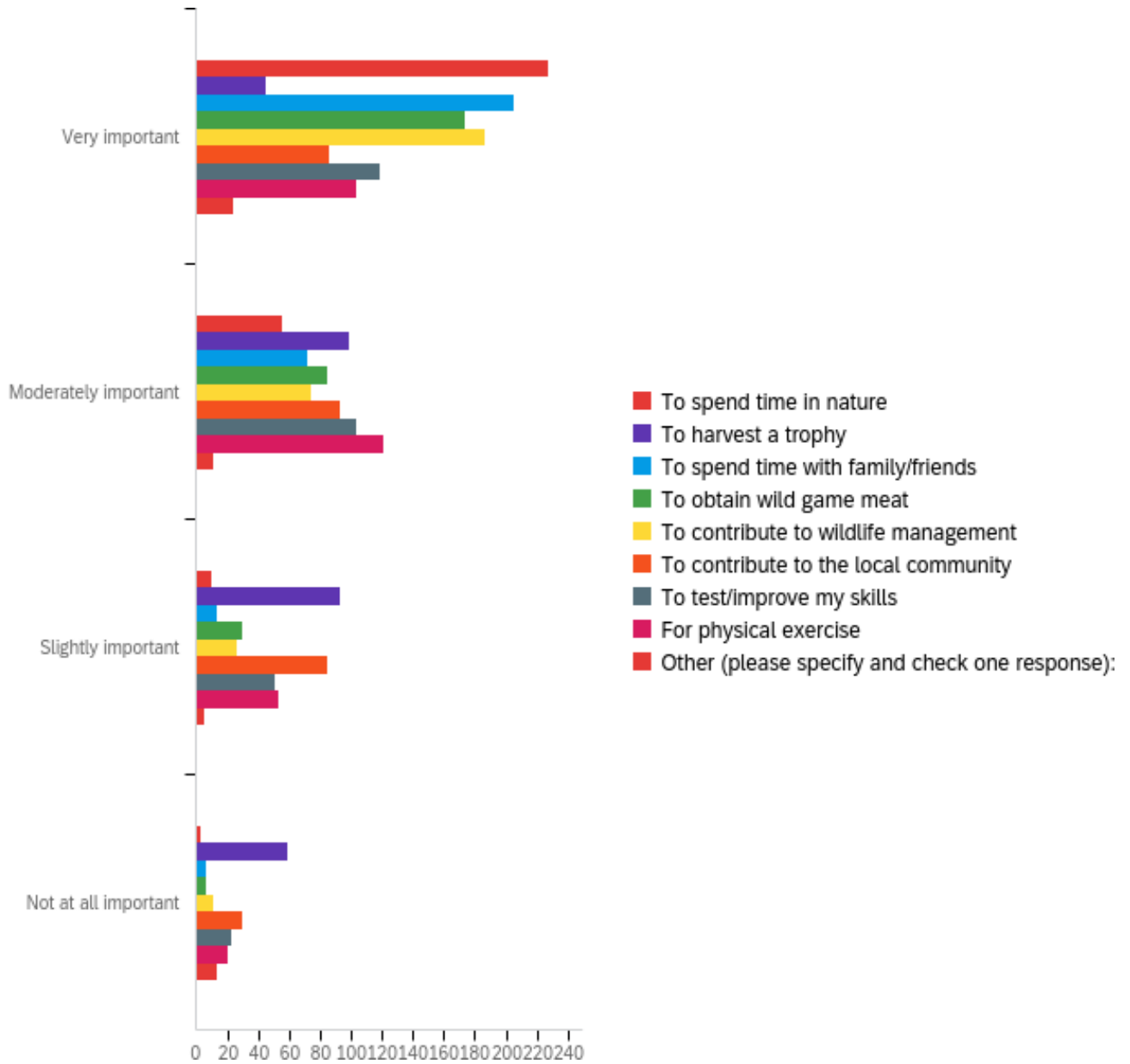


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Being able to hunt deer in the Rifle Creek deer herd most years	1.00	4.00	1.76	0.86	0.73	291
2	Being able to hunt mature bucks in the Rifle Creek deer herd	1.00	4.00	1.61	0.80	0.64	292

#	Question	Very important	Moderately important	Slightly important	Not at all important	Total
1	Being able to hunt deer in	46.74% 136	35.40% 103	13.06% 38	4.81% 14	291

	the Rifle Creek deer herd most years									
2	Being able to hunt mature bucks in the Rifle Creek deer herd	54.79%	160	33.90%	99	6.85%	20	4.45%	13	292

9. - How important to you is each of the following reasons to hunt deer in Colorado? (Please check one response for each statement.)

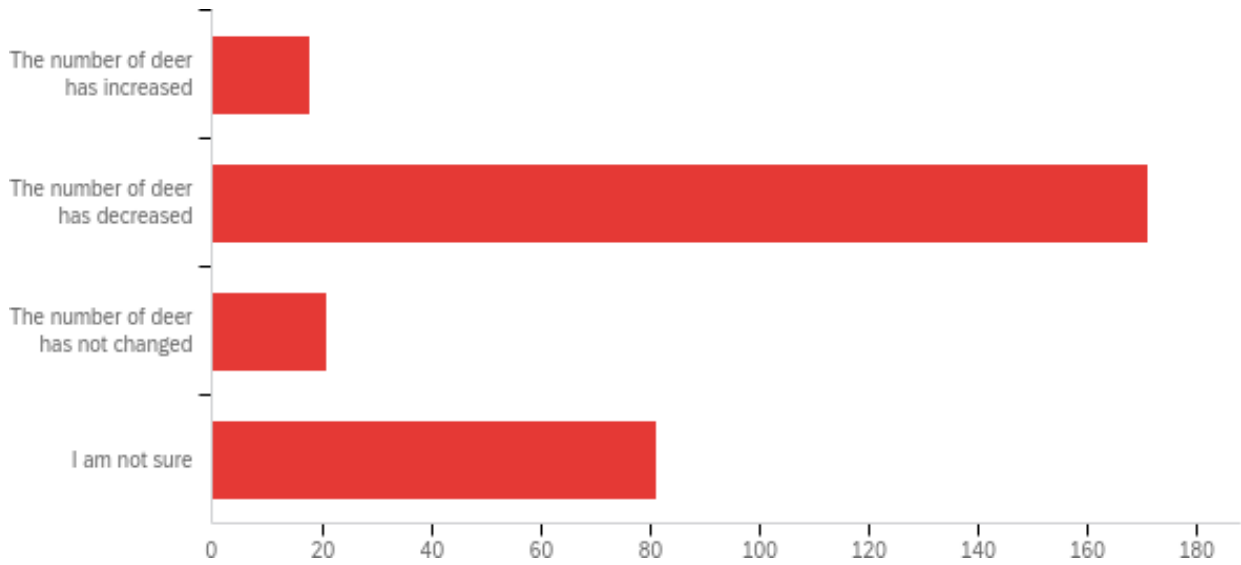


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	To spend time in nature	1.00	4.00	1.29	0.58	0.33	296
2	To harvest a trophy	1.00	4.00	2.56	0.97	0.95	296
3	To spend time with family/friends	1.00	4.00	1.40	0.67	0.45	297

4	To obtain wild game meat	1.00	4.00	1.56	0.77	0.59	296
5	To contribute to wildlife management	1.00	4.00	1.53	0.80	0.64	298
6	To contribute to the local community	1.00	4.00	2.20	0.97	0.95	294
7	To test/improve my skills	1.00	4.00	1.93	0.94	0.88	297
8	For physical exercise	1.00	4.00	1.97	0.89	0.79	297
9	Other (please specify and check one response):	1.00	4.00	2.13	1.23	1.51	53

#	Question	Very important		Moderately important		Slightly important		Not at all important		Total
1	To spend time in nature	76.69%	227	18.92%	56	3.38%	10	1.01%	3	296
2	To harvest a trophy	15.20%	45	33.45%	99	31.42%	93	19.93%	59	296
3	To spend time with family/friends	69.02%	205	24.24%	72	4.71%	14	2.02%	6	297
4	To obtain wild game meat	58.78%	174	28.72%	85	10.14%	30	2.36%	7	296
5	To contribute to wildlife management	62.75%	187	24.83%	74	8.72%	26	3.69%	11	298
6	To contribute to the local community	29.25%	86	31.63%	93	28.91%	85	10.20%	30	294
7	To test/improve my skills	40.07%	119	35.02%	104	17.17%	51	7.74%	23	297
8	For physical exercise	34.68%	103	40.74%	121	17.85%	53	6.73%	20	297
9	Other (please specify and check one response):	45.28%	24	20.75%	11	9.43%	5	24.53%	13	53

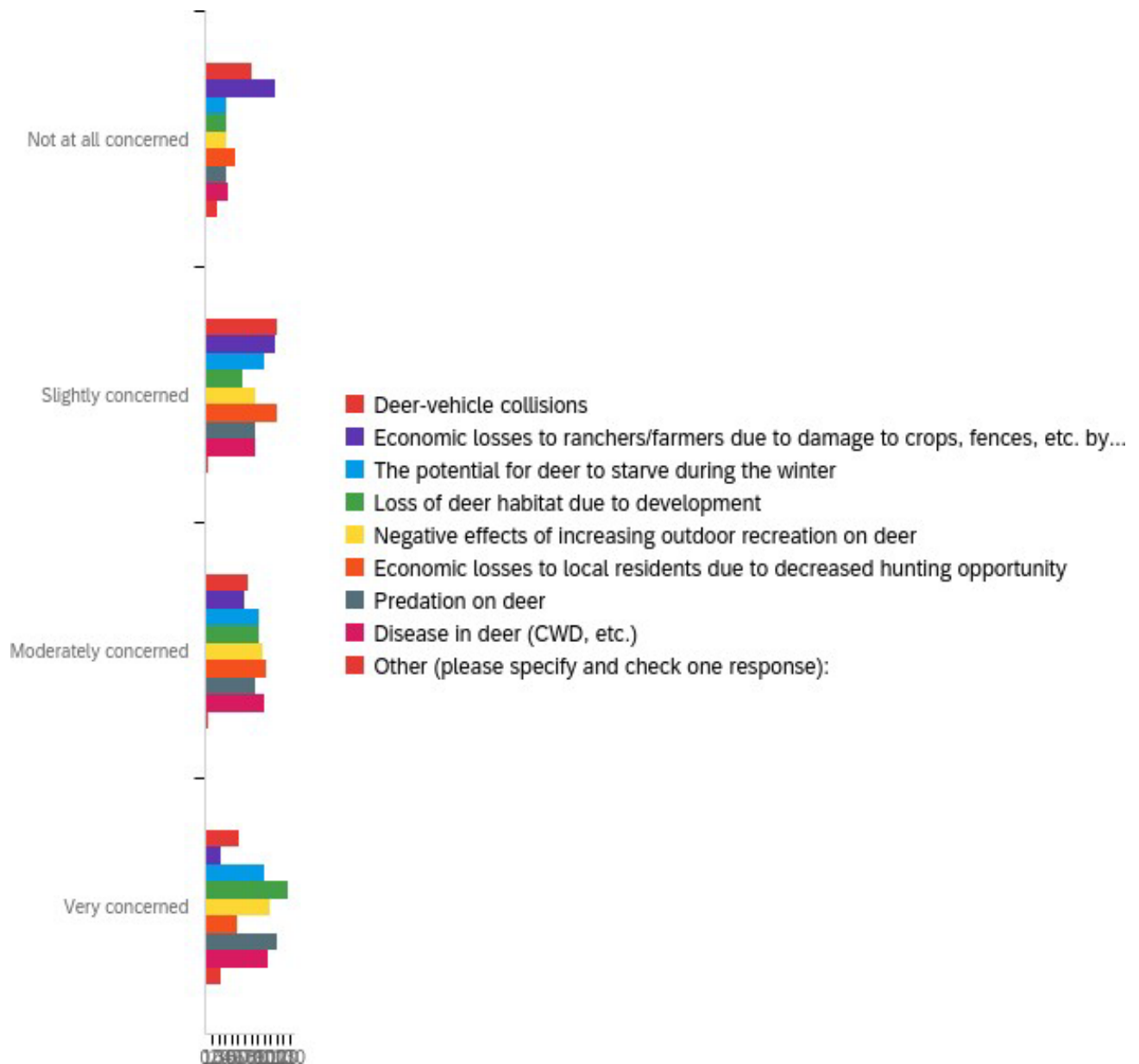
10. - How, if at all, has the Rifle Creek deer herd changed during the previous 10 years? (Please check one)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How, if at all, has the Rifle Creek deer herd changed during the previous 10 years? (Please check one)	1.00	4.00	2.57	0.96	0.93	291

#	Answer	%	Count
1	The number of deer has increased	6.19%	18
2	The number of deer has decreased	58.76%	171
3	The number of deer has not changed	7.22%	21
4	I am not sure	27.84%	81
	Total	100%	291

11. - Please indicate how concerned you are about each of the following in the Rifle Creek deer herd (Please check one response for each item.) How concerned are you about...



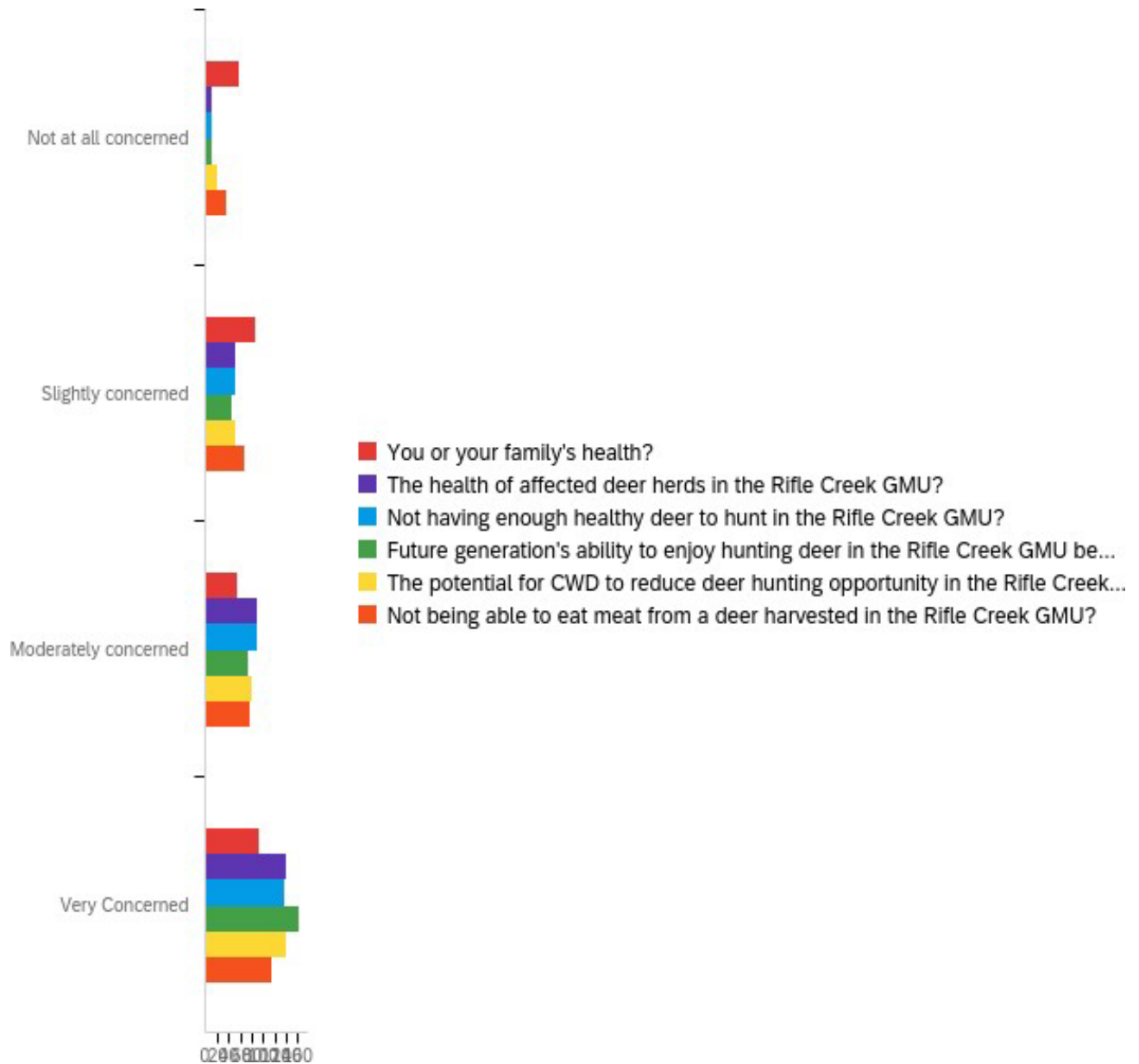
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Deer-vehicle collisions	1.00	4.00	2.34	1.03	1.06	298
2	Economic losses to ranchers/farmers due to	1.00	4.00	2.00	0.93	0.87	299

	damage to crops, fences, etc. by deer							
3	The potential for deer to starve during the winter	1.00	4.00	2.78	1.00	1.01	298	
4	Loss of deer habitat due to development	1.00	4.00	3.01	1.02	1.05	298	
5	Negative effects of increasing outdoor recreation on deer	1.00	4.00	2.86	1.00	1.00	298	
6	Economic losses to local residents due to decreased hunting opportunity	1.00	4.00	2.48	0.94	0.88	297	
7	Predation on deer	1.00	4.00	2.90	1.02	1.05	299	
8	Disease in deer (CWD, etc.)	1.00	4.00	2.84	1.01	1.02	298	
9	Other (please specify and check one response):	1.00	4.00	2.67	1.37	1.87	51	

#	Question	Not at all concerned		Slightly concerned		Moderately concerned		Very concerned		Total
1	Deer-vehicle collisions	23.83%	71	36.58%	109	21.81%	65	17.79%	53	298
2	Economic losses to ranchers/farmers due to damage to crops, fences, etc. by deer	36.12%	108	35.79%	107	20.40%	61	7.69%	23	299
3	The potential for deer to starve during the winter	11.07%	33	30.54%	91	27.52%	82	30.87%	92	298
4	Loss of deer habitat due to development	10.74%	32	19.46%	58	27.52%	82	42.28%	126	298
5	Negative effects of increasing outdoor recreation on deer	10.74%	32	26.17%	78	29.87%	89	33.22%	99	298

6	Economic losses to local residents due to decreased hunting opportunity	15.49%	46	37.04%	110	31.31%	93	16.16%	48	297
7	Predation on deer	10.70%	32	26.09%	78	26.09%	78	37.12%	111	299
8	Disease in deer (CWD, etc.)	11.74%	35	25.50%	76	30.20%	90	32.55%	97	298
9	Other (please specify and check one response):	35.29%	18	9.80%	5	7.84%	4	47.06%	24	51

12. - Because of CWD in deer, how concerned are you about each of the following in the Rifle Creek deer herd? (Please check one response for each statement.) How concerned are you about...



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	You or your family's health?	1.00	4.00	2.63	1.13	1.28	290

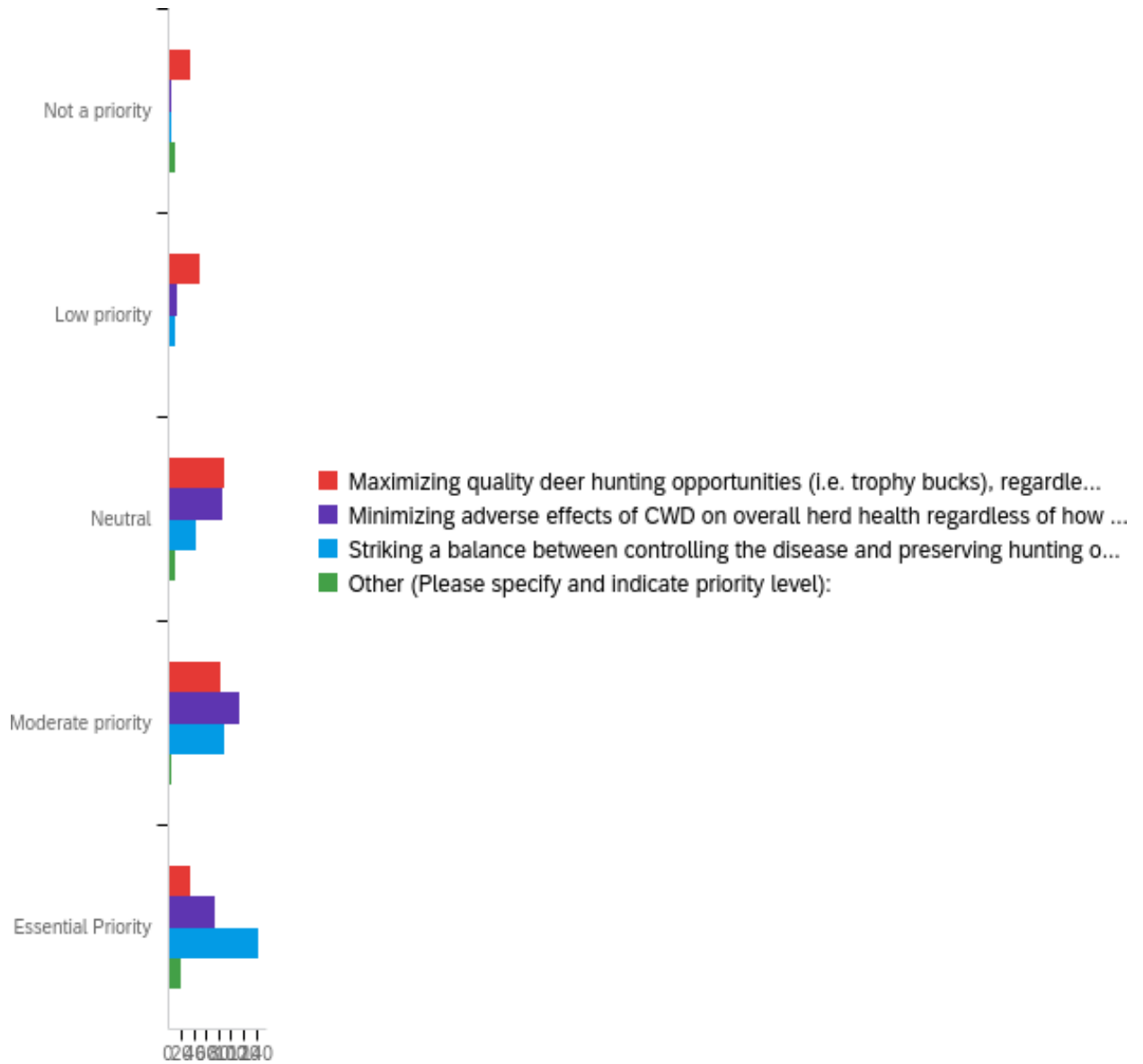
2	The health of affected deer herds in the Rifle Creek GMU?	1.00	4.00	3.23	0.88	0.77	292
---	---	------	------	------	------	------	-----

3	Not having enough healthy deer to hunt in the Rifle Creek GMU?	1.00	4.00	3.21	0.88	0.77	292
4	Future generation's ability to enjoy hunting deer in the Rifle Creek GMU because of CWD?	1.00	4.00	3.33	0.86	0.75	292
5	The potential for CWD to reduce deer hunting opportunity in the Rifle Creek GMU?	1.00	4.00	3.17	0.94	0.89	291
6	Not being able to eat meat from a deer harvested in the Rifle Creek GMU?	1.00	4.00	2.91	1.05	1.10	292

#	Question	Not at all concerned		Slightly concerned		Moderately concerned		Very Concerned		Total
1	You or your family's health?	20.00%	58	29.31%	85	18.62%	54	32.07%	93	290
2	The health of affected deer herds in the Rifle Creek GMU?	4.11%	12	17.47%	51	30.14%	88	48.29%	141	292
3	Not having enough healthy deer to hunt in the Rifle Creek GMU?	4.11%	12	17.81%	52	30.82%	90	47.26%	138	292
4	Future generation's ability to enjoy hunting deer in the Rifle Creek GMU because of CWD?	3.42%	10	16.10%	47	25.00%	73	55.48%	162	292
5	The potential for CWD to	6.53%	19	17.87%	52	27.49%	80	48.11%	140	291

	reduce deer hunting opportunity in the Rifle Creek GMU?									
6	Not being able to eat meat from a deer harvested in the Rifle Creek GMU?	12.33%	3 6	22.95%	6 7	26.03%	7 6	38.70%	11 3	292

13. - How much of a priority should Colorado Parks and Wildlife place on the following herd and harvest management decisions in light of CWD detection in the Rifle Creek deer herd? (Please check one response for each statement)



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Maximizing quality deer hunting opportunities (i.e. trophy bucks), regardless of how they affect CWD	1.00	5.00	3.13	1.18	1.40	292

	prevalence or overall herd health							
2	Minimizing adverse effects of CWD on overall herd health regardless of how they affect the quality of deer hunting opportunities.	1.00	5.00	3.83	0.91	0.83	293	
3	Striking a balance between controlling the disease and preserving hunting opportunity	1.00	5.00	4.22	0.94	0.88	293	
4	Other (Please specify and indicate priority level):	1.00	5.00	3.51	1.53	2.33	47	

#	Question	Not a priority		Low priority		Neutral		Moderate priority		Essential Priority		Total
1	Maximizing quality deer hunting opportunities (i.e. trophy bucks), regardless of how they affect CWD prevalence or overall herd health	11.64%	34	16.78%	49	30.48%	89	28.77%	84	12.33%	36	292
2	Minimizing adverse effects of CWD on overall herd health regardless of how they affect the quality of deer hunting opportunities.	1.37%	4	4.78%	14	29.01%	85	39.25%	115	25.60%	75	293

3	Striking a balance between	1.37%	4	4.10%	1 2	15.02 %	4 4	30.72%	90	48.81%	14 3	293
---	----------------------------	-------	---	-------	--------	------------	--------	--------	----	--------	---------	-----

	controlling the disease and preserving hunting opportunity											
4	Other (Please specify and indicate priority level):	21.28 %	1 0	0.00%	0	25.53 %	1 2	12.77%	6	40.43%	19	47

18. - Please share any additional opinions or comments you have about the Rifle Creek deer herd (GMU 33).

Please share any additional opinions or comments you have about the Rifle Creek deer herd (GMU 33).

I have hunted this unit for 20 years and have watched go from great to poor. There have been some positive changes like closing areas to ATVs which has helped. There are just too many tags for this unit and when you are lucky enough to draw a late season buck tag then you have to compete with all the elk hunters, I too am an elk hunter. It seems to me that when it takes 3-8 yrs to draw a late season tag that the area would be just for deer hunters?? Within our group we are discussing choosing another unit since this one has gone down hill over the past 10 years.

The deer seem to have become habituated to living in more urban portions of GMU 33, rather than the public land in the GMU. I guess there is less predation concern for them and more prevalent food sources

private land hold most of the animals, where public lands have a small percentage of the animals, due to more people using the area

I have lived in this unit my entire life and have seen a direct correlation between lower number of deer and higher number of predators, especially bears

What do the questions above have to do with GMU 33 deer hunting? Don't make GMU 33 another trophy unit. Turn the wolves loose in areas where the people that voted them in can enjoy them, such as in Boulder county. Not on the western slope, you will further destroy the hunting and wildlife opportunities. The mule deer are already stressed out in a lot of areas.

The overlapping of elk hunts and deer hunts, have a combo tag for hunters wanting elk, if not have elk hunts earlier, the mountains have constant pressure from hunts starting in august and not ending until late November, you can hunt a cow elk anytime and need to have a break for deer seasons, the recreation of human has increased hugely in the past few years, the mountains just don't get a break or wildlife to relax and b normal, deer could b 4point and better or 3 point or smaller meat tag, to many people just shoot any size last day bucks, make them pick and hunt different times, trophy hunters can hunt late and alone,

In my life time the deer numbers have been got down by large numbers.

I have been going to this area with my husband for the past 41 years (he has for 66 years). There used to be flowers all over, we saw deer and elk along with other animals when we come on vacation. Now the flowers are replaced with thistles and other weeds but most of the time the ground has been mowed over with grazing sheep and it stinks. By hunting season the ground is bare, last year there were added cows 1000 or more in this area, we did not see any wild animals and there was nothing for them to eat anyway. I hope they survive somewhere else. By the way the wilderness area is no better, the cows and sheep are there also, I though the plan was to protect this area?

Too many elk hunters creating too much pressure, driving deer to private property.

For the amount of area this units covers, there aren't as many deer as I believe there should be. I think we should remove a few of the elk and see if this will create a more positive deer situation.

Reduce hunter numbers

far too many predators

Should have a Senior License fee opposed to regular license fee.

The first question should always be "Do you hunt primarily public or private lands?" I don't believe simply increasing the number of buck tags will help control the CWD problem we have. The number of breeding aged deer harvested is not in my opinion proportionate to tag numbers. Far too many 2 and 3 year old deer are actually harvested. I do understand that we have to start somewhere and that something is better than nothing. We need to keep looking for ways to combat this disease.

The herd seems to be getting smaller and smaller and hunting pressure is getting bigger.

I have hunted Elk and Deer in unit 33 for years and have had to look for a new place to hunt due to the amount of hunters I see in that area. It is really bad.

Forest Service is closing down too many roads and crowding outdoorsman by limiting areas to access.

I find it interesting that I can get a deer tag most years for Muzzle loading but not an Elk tag?

None

lion predation has caused more harm to this deer herd than anything else!

Need to keep tag numbers low

For the 2021 season I did not fill my unit 33 deer tag due to the sheer volume of people, I was witness to several unethical land use/hunting behaviors that played into this decision. I hunted it second season in 2019. We hunted sunup to sundown all 9 days. I saw 6 deer, only because my hunting partner pushed them to me. \$ hunters with 4 deer tags and 2 cow tags and one bull tag. We kllled nothing. First time I hunted that GMU. VERY DISAPPOINTED..

Haven't seen the really big bucks in 10-12 years. Would like to see that area recover that.

Wolves would affect the health of the herd significantly

Less does tags issued north of the hogback. There seems to be piles of tags but we don't seem to have the numbers to support the tags

Lessen the tag allocation in unit 33 (and the whole state) for non residents. We are way to generous to non residents compared to surrounding western states. Also, please try to increase officer presence in the unit. Two years in a row I have seen people shooting from the roadway. I wasn't able to get plate numbers in either case, but it ticks me off. I really enjoy being able to get unit 33 buck tags as a second choice. Draw odds on second choice were significantly lower for 2021 compared to years prior which is a bummer. However, I have seen a decreased amount of deer over the past couple years so maybe the decreased amount of tags isn't a terrible idea.

Certainly the threat of development and over-development is always a concern. However, I think the large volume of ATV activity in the area does hamper what could otherwise be a less skidish herd of deer. We did see a few good size deer - roughly 10-12 on our trip in 2019 - but from a couple of long sits in times in the back country - the number of deer were definitely too low IMO. We also came across one carcass that was mostly unidentifiable appart from a rack. One morning while hunting deer, we broke into 2x2 groups. My group had zero contact. However the other group did see a good sized adolescent black bear back near the ranch & Aspen crossing. My team member & I had been through that same exact area at sunset roughly 12 hours prior. There we found bear markings but never saw the black bear. We also came across a large number of cattle who were grazing from the local ranch in the Aspen grove in that area. It's a challenge to find the right balance but for sure the deer popultion was low. We also spotted about 20+ Elk on an opposite mountain top in a fairly social enviornment - which was great to see. I think part of the challenge of the area is the terrain being expecially challenging in spots - we noticed a number of larger downed trees in multiple sections. Whatever can be done to help the populations now - more than likely should be done now in order to stop an even worse situation.

The herd in this unit has drastically decluned to a very concerning number. I appreciate that you are trying to get on top of it's management. We enjoy seeing the deer for recreation as well as harvestung.

Landowner blockage of access to deer & elk herds after 1st heavy snowfall is a real problem.

Insert a 3 point or better requirement. Too many hunters are taking smaller animals. It should be a trophy area.

Way to many does

If CWD is problematic in this herd, why are there no public land rifle doe hunts?

Stop letting all the motor vehicles in that unit

saw very limited mule deer and no elk in an entire week hunting the unit last time we went.

I really love having the oppportunity to hunt in unit 33 it is one of my favorite spots on this earth thank you for you're concern with my opinions

20 years ago I would see groups of 15 to 25 deer on my property in the Spring. Now I'm lucky if I see 5 to 10 in the spring. Be more proactive at clearing of non hunttable oakbrush covered hillsides.

I think there should be an antler restriction on deer harvest. I've seen too many small bucks being shot and it seems the population has decreased in the last 10-15 years

We have hunted 33 for the last 10-11 years. We do not hunt like 99% of the other hunters we see up there. We have several key spots we set up in and glass using super high end optics. Talking to a lot of people we encounter from camp or during our travels we see a massive amount of deer compared to them. I would say we see just as many mature bucks as we did 10 years ago. We did see a decline in the younger bucks when the tag numbers were increased from 450-650. And I was also told that several years ago there were a pretty good amount of doe tags given out and that would explain the decrease in does we have seen as well. Well at least in my head. The one thing I have seen a major decline in is the elk. We don't care to hunt them but do keep really exceptional tabs on what we see and where and their numbers I believe have suffered the most. I believe it should be a draw for bulls and not otc bull tags. I can also tell you I have never seen a deer that looked sick in the unit where we hunt. I'm down there from my home state of WA quite a bit scouting out more of the unit. I was there for three days just last week and saw several very mature bucks and all appeared to be healthy. The unit has very good genetics in it for very large mature bucks and I would like to see the unit continue to produce/provide hunters with the opportunity to harvest a deer of a lifetime. I have a 10 year old who has accompanied us on several of the hunts down there and he is itching to turn 12 so he too can have the opportunity to harvest some exceptional bucks as we have.

To many hunters. Especially out of state hunters. I also have seen a lot of lion tracks in the last few years during the 1st rifle season.

Possibly limiting more travel routes during hunting seasons and throughout winter like some of the other areas around Rifle and Harvey gap.

The CPW need to control predator population. Bring back the mule deer population. Bring back spring bear and trapping.

I spent about 20 days hunting in GMU 33 last year and only saw a dozen deer.

I see many people when I'm in GMU 33 not all are hunters, at times it seems overcrowded. I enjoy the taste and healthy aspects of venison and the natural wonders surrounding hunting.

Keep the opportunities & tag #s up for 33

We have not observed high buck to doe ratios in the past 5 years of hunting this unit. It is tough to find a buck on public land. My family has harvested 4 bucks in this unit over the past 5 years, but have not seen very many bucks.

I feel like there are too many roads. I think you can minimize hunting pressure on deer just by making it a little less 'accessible'. My opinion though.

They closed the ATV roads, so it is impossible to hunt deer or elk. They will not be able to manage the herds. What a shame, because it is a great hunting area. The bear hunting is also affected because you can't get to bear springs, Long draw, Hadley, Cotton Wood, and many other great areas. They will be competing for food, so the possibility for disease will be great.

I look forward each year to my hunting time in Colorado.

like other GMU,s I have hunted over the years there is a definite increase of people over recreating these areas that stresses out the deer & elk herd's. Area 33 also has too many cattle in areas around the Cline Tops

We need to limit development and mostly non hunting recreation to give the animals a break. Too many 4x4s, mountain bikes, and hikers. They also should pay an access fee to be in the woods

Every years i have seen less and less deer and its not like 10 plus years ago when you see deer everywhere.

Hunter numbers should be reduced and we need to go back to 3 points on one side for 4 years

Less tqgs given out for early rifle and muzzle loader seasons

Poaching is also a problem that should be addressed

In my 41 years in the same rural home, the deer herd around my house has decreased dramatically.

hope it isn't to late but due to over hunting, lions, bears, road kills, and now bring back the wolfs, and CWD it seems to be a lot of hard work for you for many years to come.I have hunted every year since 1961 only missing 2 years while I was in VN.even if it means closing deer season bring back baited spring bear hunting, put out more loin permits, and start a season on wolfs right now year round

I have been an avid archery hunter in area 33 for over 20 years. Through the years I have witnessed the decline in the deer and elk populations in area 33. It seems that there is an outrageous number of rifle hunters and rifle seasons to support healthy animal numbers.

too many buck tags and not doe tags at all

Need to bring the point restriction back

N/A

Minimal access points for public.

I hunted gmu in 2020 during the muzzle loader season and had one of the best hunts of my life. Please maintain or increase the deer herd and opportunities in unit 30.

I think it would help if it was 3 points or better.

Still can't quite connect the dots on how killing more bucks helps with cwd? Yes they travel more during the rut & interact with does but seems counterintuitive to kill more.maybe a paired unit research project with focus on killing bucks and the other unit less focus & compare (units with similar cwd prevalence) just a thought

I feel Colorado's Mature Bucks all units are at an all time low.

It's only going to get worse when more wolves are introduced in Colorado. You all should transplant the wolves to the city limits of Denver and Boulder and let the liberals deal with them since they are the ones who voted for them.

Keep domestic grazing off the Bookcliffs

N/A

Have seen deer in the above GUM for many years during hunting ,scout and recreation in the area.

I have been hunting in Colorado since 1972 and only missed one year. It means a lot to me to be able to make that trek each you.

Too much Hunters for a small zone?

Too many people, not a healthy deer herd due to too many small immature bucks being slaughtered every year.

Much of the left over tags for this unit are for Private Land. This tells me that hunting on private land is difficult to obtain. Also, after archery/muzzle loading seasons a substantial number of deer are found on private property.

Too many permits being issued while the herd continues to decrease over the last 15 years

Too many hunters crowded onto public areas. I used to enjoy hunting CO, but there are too many tags offered per season now.

appreciate all the work you guys do

Mandatory cwd testing

Over hunted and poor deer quality

Concerned about the dropping number of deer in the area

I do not get around on foot like I used to yet areas that I could take an ATV into in the past are being closed. It is my understanding that most of the out of state hunters are guys that are my age with the discretionary income to be able to afford to buy an out of state tag. Access is a problem for older guys with the money. I expect it will cause you folks to lose more customers like me in the future. Not much for driving around in a truck road hunting. May come a day that I soon quit hunting and just enjoy the outdoors in other ways. Did not draw a unit 33 deer tag this year so I bought a cow elk B tag to take my friend's kid hunting. That is one of the few things that keeps me hunting at this point. Taking kids into the outdoors but I can do that without a hunting license. I can hunt with a camera. Probably should hunt more now before wolves ruin it but whatever. That said, you ask my opinion but The CDOW will do whatever the politicians tell them to do, so I am pretty bland on my opinion with something that my voice as a sportsman is not heard. Or maybe you hear but you do not listen. There is a difference. Whatever. Thanks.

A lot less deer that see from past years.

I hunt all of GMU 33, top to bottom, side to side. I take pride in my hunting ethics and fair chase. As i hide in the shadows watching EVERYTHING unfold i find most people from california out here hunting don't give 2 shits about Colorado or our animals. Most of the time its obvious they have no idea how to hunt or much less get out of their vehicle except to pee. With this being said can you PULEEZE make out of state hunters take a COLORADO hunting and conservation class before issuing a licence of any type.

I had a non resident license for elk and mule deer but never saw one. Very crowded with hunters and vehicle traffic. Would never go back to the ranch where we hunted at end of road in Rifle gap. Would never return to that area.

With the drought in the pass few years the sheep have over grazed area 33 there has been a major reduction in food sources for all animals

access to good areas increasingly prevented ; excess of antlerless to antlered game increasing; all roads poorly mintained

The last two questions of the survey indicate that this survey is not considered seriously by colorado, as both are irrelevant to the health of the dear heard.

Too many out of state hunters attempting to trespass on or through private property.

Thanks for doing what you do! It seems the CPW is developing a strategy to target older age class deer in order to limit the spread of cwd for the future of our deer. I'm not sure if I agree that that is the best strategy, but if you guys have the evidence to back it up, I support you in that effort, although it is sad to see at times. But the future of deer in Colorado is what's most important. Thanks!

Sucks, the feds have taken the access away from the people in colo. At the age of 69 hunters cant walk miles a day to access the land. Unit 33 sucks and no help from the DOW.

Offering at least a youth tag for does would be beneficial as there are a lot of does.

Quit closing the trails down to motorized vehicles during deer season!! My father in law has hunted this unit his whole life but now can't because there is no vehicles allowed!!!

Lots of healthy deer, lots of hunting pressure focused on the limited number of access points.

Too many does - open season for does please

I've hunted 33 for several years now with people and for tags myself. I can't on one hand the number of bucks over two points on a side on one hand. I hunted almost every day during our seasons. I think it's being over hunted for deer and elk. It's an absolute joke up there on public land during the rifle seasons. We hike 2-4 miles into areas. We are some deer, but nothing like it was 10-15 years ago.

I feel like some of these questions were leading and cast guilt upon the person answering them. To say that I am not at all concerned about the health of my family makes me look like a jerk, especially when there is no link to CWD and human health. Likewise having to answer that I'm not at all concerned about the health of deer herd. I think the problem is that there has not been any control methods that have been demonstrated as effective against the spread and prevalence, so why drag a population down and kill all the older bucks when you cannot erase the fact that they have been traipsing around the country shedding prions for much of their life. My belief that there is little that can be done to change the trajectory of CWD prevalence and there is little risk to human health colors my answers to these questions.

I have seen a big decrease in the private land areas I have access to hunt in the southern part of the unit. I typically get a late season doe tag, they used to be very easy to fill and was a great way to put meat in the freezer. In the past few years (5ish) the number of deer I see during this late hunt is drastically lower. It is not an easy tag to fill anymore. I have been lucky enough to draw a 2nd or 3rd rifle Buck tag for the unit also several times. I usually hunt the northern part of the unit for this. I have not seen a decrease in the deer numbers up in the higher elevations.

Long-term health of the herd is most important. I think cattle grazing on USFS land has a big impact on deer and elk habitat availability in the unit as well. It's remarkable how clear the delineation is between where the cattle sign ends and the elk and deer sign re-appear.

Having hunted GMU many years it's been a long time since I've seen a true trophy buck.

I have hunted in unit 33 for 20 years, early on we saw and harvested mature deer. Then there was a period of time where we saw nothing but spikes and forked horns. I forget the exact year doe tags were no longer given out but we have started to see quite a few very mature bucks in recent years. We are not road hunters and we put on a lot of miles hiking, in recent years I would say I have seen 15-30 Does/Fawn a day in the area that we hunt.

I have hunted this unit several times. There's always opportunities to harvest mature bucks if you get away from the roads and other hunters. There seems to be more hunting pressure in the last few years, however many people don't venture far from the roads.

The area is rich in wildlife and has a great balance of access and roadless terrain. I really do believe if deer tag numbers would be backed off a bit the hunter experience would be better. The main negative to this hunt is amount of hunters on the landscape. There is not very many places where hunters can get away from each other.

Please don't let voters decide what's best for our natural resources. CO has many qualified wildlife biologists and CPW officers that are MUCH more knowledgable and qualified to make decisions than city people who live 200 miles away and have never walked off a paved path.

Love the unit and the opportunity CPW gives to dweebs like me

most deer hanging around town very few on public land

We reduced the number of hunters on our 900 acres for the past 3 years and have now seen a huge increase in the deer population.

Keep the wolves out. The quality of deer has improved. Keep up the work

less landowner tags; more public opportunities

disappointed i have not gotten my archery tag the last two seasons

I've been hunting GMU 33 for 40+ years. I have not seen any CWD on any game. Does this game unit have CWD and should I be worried???

Love to hunt that area. Moved to another unit to try and get more deer population

Too many non resident hunters.

APPENDIX D42-B: PUBLIC COMMENTS

The following are comments received from the public during our 30-day public comment period. Note that some of these comments were submitted as feedback for this Herd Management Plan (HMP) as well as two other HMPs that were posted for comment simultaneously (D11 and E10).

I would like to comment on your proposed plan management for the Rifle area. First your new objectives make it sound like you could not achieve your old objectives so you changed them to fit? It really sounds like you are not managing them at all and just monitoring.

I would like to suggest a somewhat different approach to deer management. It is kind of unusual, but a similar tactic has worked well on elk in Oregon in the blue mountains. I'm sure you are painfully aware that antler point restrictions have not worked on deer. I know it is because the current thought places all the hunting pressure on mature bucks before the breeding season reaches its peak. In Oregon they do the opposite of what you expect. They allow a general antlered tag to only harvest spike bulls. This allows for lots of tags to be sold but limits the harvest. Then they issue a limited number of any antlered elk tags. This allows for hunters to hunt any bull. I believe this would work well on deer, limiting the harvest to spikes and fork horns but genetically superior bucks and a few lucky ones to grow older. It would produce a better trophy potential and increase license sales. I believe it would be a win win for CPW.

Do not lower the buck:doe ratio of these units. This recent trend of lowering the buck:doe ratio as a means of "combating CWD" needs to stop. CPW needs to devise a different way to address CWD other than harvesting more mature bucks, which will devastate the quality of these hunts. There are significantly more 5+ year old does walking around than 5+ year old bucks; figure out a way to harvest them instead of killing all the quality bucks in the unit. As stated in the proposed plans, increasing the buck:doe ratio will "...significantly reduce the number of high quality individuals harvested." This is unacceptable. Figure out another way to address CWD.

Thank you for your team's research and effort regarding this matter.

I have lived in Colorado since 1964 and have hunted for over 30 years in this state. The current habitat for our wildlife continues to degrade, and putting the massive wildfires on top of that is not good. Then the animals get crowded out due to the massive population growth in Colorado. Not to mention CWD. Tough conditions for our wildlife. Thanks for doing this and I support the these plans.

I don't agree with your proposal to reduce the herd population of elk and deer. With the reintroduction of wolf's, CWD and all the other negatives these animals are facing including roadways and human interactions. It's a wonder they still exist.

How does one expect a uneducated, unknowing public to understand herd management, let alone make decisions on the health and well-being of the animals? People barely pick up their dog waste on a trail. Why are we not asking experts?

Where do you get your population estimates? After spending many days afield and speaking to many hunters, I certainly do not agree with your premise. Deer and elk populations are a tiny fraction of the numbers you estimate. Please use realistic numbers!!

The current draft herd management plans for the Yellow Creek Elk, Bookcliffs Deer and Rifle Creek Deer herds are unacceptable because not even the current target herd levels were able to be maintained and there is no evidence the new targets can be maintained.

The constant drop in herd numbers should be alarming to everyone in Colorado, especially long-term residents that have watched herd numbers plummet across the board over the last 35 years. The data actually supports doing the opposite of the draft plan and raising management target numbers to help support long-term recovery. The draft plan continues mismanagement of Colorado's natural resources through consumptive approaches that never allows growth in herd sizes. You will continue to lower the herd numbers each plan period until there are no herds left with this approach.

This is a easy situation to solve. The herds are large or smaller than expected. All units in Colo (not just a few BUT ALL) that if any money a land owner receives either from the state or federal then all of their property is open to public hunting no matter what . This includes outfitters going in and leasing all of a landowners property exclusively to stop it also. The money the landowner receives include for farming aid , crp , animals killed by bears mountain lion wolves.... , crops destroyed by deer elk The landowners complain about all this and they get subsidized by the state or federal government, but who is paying the bills to them the tax payers . Also take all away the landowners tags .

I have lived in Colorado all my life, my comments are for Big game species as a whole. what i see are adjustments made to herd size lowering there populations because previous goals can't be met. Those plans were put in place with confidence of obtaining them. Previous plans have higher population goals so why do they get lowered? Why lower the population goal instead of improving them to meet previous objectives and populations that once existed. could there be a predator influence here, Bears, Cats, Coyotes, over hunting pressure, and soon wolves.

I believe the ways of managing have changed. I see funding a problem that the wildlife itself is burdened for.

I have seen many changes good and bad for all species, I believe in balancing the populations but thru true game managing (what is best for the animals) not business managing or political managing

You first represent the animals please do that

what I see is you guys are seeing dollar signs yet again. The numbers are already low and you wanna cut them even lower. Why are you trying your best to get rid of them???. Breeding predators, introducing more of them on top of that, trying to cut the cat hunting.. I know it's tree huggers that push this shit through but they aren't even part of having anything to do with the wildlife, they don't pay a dime into any of it, only stopping it .Hunting the elk six months out of the year.. Doesn't make much sense.. Here is an idea, cut out all the late season hunts, you're destroying the elk herds,, and as for the deer, they're just trying to make a little bit of a comeback, stop killing all the damn does... I myself am about tired of giving my money that supports this kinda bullshit. Why should I keep buying tags over and over when nothing is done to improve the herds.?

Leave them alone

My input is to NOT decrease populations, and NOT decrease buck/doe ratios. I would like to see CPW make efforts to increase populations and buck/doe ratios for a change.

The solution is simple. The state needs to move the deer crossing signs away from I-70 so the deer know that they can't cross there and instead put the deer crossing signs where deer hunters hunt. This keeps them off the interstate and keeps hunters happy.

APPENDIX D42-C: HABITAT PARTNERSHIP PROGRAM COMMENT LETTER



February 7, 2022

Genevieve Fuller
Colorado Parks and Wildlife
711 Independent Ave.
Grand Junction, CO 81505

RE: Lower Colorado River Habitat Partnership Program Comments - D-42 HMP

Dear Ms. Fuller:

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, sportsperson, Forest Service, BLM, and CPW representatives) provide a good cross section of local interests to review Herd Management Plan (HMP) 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 Lower Colorado River HPP committee has discussed your presentation, reviewed the draft alternatives, and offers these comments for consideration.

The Lower Colorado River HPP committee discussed the HMP and shared a variety of thoughts and opinions on the proposed plan. After further discussion, the committee came to an agreement with the following comments pertaining to the proposals for the population range and sex ratio objectives. The 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. The committee area does not experience many deer conflicts and we believe we have the resources necessary to address conflicts should they occur. Additionally, we believe the current sex ratio is a good balance and provides ample hunting opportunity while also providing for a reasonable number of mature animals for hunters.

As stated above, HPP is also directed by statute to assist CPW to meet game management objectives. The Lower Colorado River HPP committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat throughout the committee area. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The committee expressed concern with the continued residential growth and increased year-round recreation that occurs, resulting in a loss of critical habitat, habitat fragmentation, and increased disturbances. With these ongoing issues, the committee is concerned with meeting future population objectives.

On behalf of the Lower Colorado River HPP Committee, thank you for the presentation and the opportunity to provide these comments.

Sincerely,

Scot Dodero, Chair
Lower Colorado River HPP Committee

APPENDIX D43: Stakeholder Input

APPENDIX D43-A: HPP Comment letter



August 17, 2022

Julie Mao
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

RE: Lower Colorado River Habitat Partnership Program Comments - HMP D-43

Dear Ms. Mao:

One of the initial reasons for creating the Habitat Partnership Program was to provide local landowners and other interests an opportunity to provide input on big game management in their area. The diverse makeup of local HPP committees consists of three livestock growers, a sportsperson, USFS, BLM, and CPW representative which provide a good cross section of local interests to review HMP proposals and respond accordingly for CPW consideration.

HPP exists to help reduce big game related agricultural conflicts, assist CPW in meeting big game management objectives, enhance big game migration corridors, and support conservation efforts on private lands as they relate to deer, elk, moose, and pronghorn. With this perspective in mind, the Lower Colorado River HPP (LCRHPP) Committee has reviewed the D-43 draft alternatives regarding population range and sex ratio objectives and offer these comments for consideration.

The LCRHPP Committee, with the exception of one committee member, supports the draft alternatives for the population objective and the sex ratio range. We believe this adequately reflects the current population estimate and responsibly balances local range and habitat conditions with sportsperson desires and landowner concerns. While there are concerns about the current population and a desire to increase local herd sizes, we believe the preferred alternative is appropriate given the increase in CWD prevalence and increase in recreation activity.

As stated above, HPP is directed by statute to assist CPW to meet game management objectives. The committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat within D-43. Adequate habitat is critical to meeting game management objectives and we remain committed to maintaining and improving habitat in this area. The Lower Colorado River HPP Committee will continue to support management efforts in partnership with the numerous local landowners and federal land management agencies that place a high priority on implementing valuable habitat improvement projects and have expressed the desire to continue this work. Thank you for the opportunity to provide these comments.

Sincerely,

Scot Dodero, Chair
Lower Colorado River HPP Committee

APPENDIX D43-B: Comment Letter from 30 Day comment period

Colorado Parks and Wildlife
Attn: Julie Mao
0088 Wildlife Way
Glenwood Springs, CO 81601

December 20, 2022

Subject: Northwest Colorado Mule Deer Herd Management Plans

Dear Ms. Mao:

The purpose of the Eagle County Community Wildlife Roundtable (ECCWR) is to gather a group of diverse stakeholders in the Eagle Valley to understand and address issues facing wildlife populations. Together the ECCWR will identify a shared vision and realistic actions that the community can rally around to support wildlife. Diverse values, creativity, and resources will be leveraged to move to positive action. The goals of the ECCWR focus on maintaining healthy populations of wildlife, species of local concern, protecting from fragmentation, and enhancing important habitats such as reproduction areas, movement corridors, seasonal feeding areas, and riparian wetland areas. We also emphasize conservation and coexistence with species involved in human/wildlife conflicts.

The purpose of this letter is to express comments on the proposed Northwest Colorado Mule Deer Herd Management Plans on behalf of the signing ECCWR members. The main objective of the proposed project is to integrate CPW's plan and the concerns and ideas of land management agencies and interested public entities in determining how the herd should be managed.

In light of declining herd numbers, we encourage CPW to look for ways to support mule deer populations by:

- Increasing connectivity by looking for opportunities for wildlife overpasses along I-70
- Utilizing habitat conservation methods including safe passages and habitat connectivity, conservation easements, and others
- Enforcing seasonal trail closures

The signing ECCWR members request CPW to maintain the current population objective of 5,000 to 6,000 in Sweetwater Creek (D-43) and to manage the herd toward the top end of the population range. Maintaining higher mule deer populations may provide a source of food for predators, thereby mitigating livestock losses.

The signing ECCWR members appreciate that CPW has incorporated a method for non-hunting and non-fishing users to access SWA lands. We encourage CPW to engage with a variety of constituent groups in addition to hunters and anglers, such as those who have an SWA pass, when determining annual license targets. A broad group of stakeholders would be beneficial to ensure varied interests are represented. As ECCWR members work with CPW to enhance wildlife habitat and mitigate species population decline, it may be possible to attain a higher deer population which would impact CPW's population objective and subsequent licenses issued.

Additionally, ECCWR members offer their assistance and resources in:

1. Habitat area prioritization and connectivity focused on preserving critical habitat and ensuring corridors for safe passage
2. Outreach and helping community groups advocate for land use regulations consistent with ECCWR wildlife objectives
3. Human-wildlife management support including education and outreach to mitigate conflicts
4. Identify potential funding streams to further support wildlife and healthy ecosystems

The signing ECCWR members are hopeful that our actions as a coalition will increase carrying capacity through improved habitat and decreased disturbances, thereby increasing sustainable population. We appreciate the opportunity to be involved in the planning process for the Northwest Colorado Mule Deer Herd Management Plans and thank CPW for their comprehensive report.

The following Eagle County Community Wildlife Roundtable members support this letter:

Mike Browning
Recreation-Outreach Seat
Eagle Summit Wilderness Alliance

Dan Lambert
Recreation – Winter Motorized Seat

Jacci McKenna
Citizen at Large Seat

Will Roush
Public Lands & Wilderness Seat
Wilderness Workshop

Blondie Vucich
Citizen at Large Seat

APPENDIX D53: Stakeholder Input

Appendix D53-A. Results of online hunter questionnaire, Oct-Nov 2017.

To view the complete results of the D53 hunter survey, go to the following website link:

<https://drive.google.com/file/d/1uKBBloJMgbkvjnt8dSa8tYjP17C3ORfa/view?usp=sharing>

or <https://tinyurl.com/y9w7ho6s>

To view the results of the hunter crowding question and comments based on geographic area, please see:

<https://drive.google.com/file/d/1Z744fl16e6yWPUviaKle68HbPgan5PyL/view?usp=sharing>

or <https://tinyurl.com/y96z8oo2>

Appendix D53-B. Results of public comment period questionnaire, Oct 2018.

To view the complete results of the D53 public comment period questionnaire, go to either of the following links:

<https://drive.google.com/file/d/1MiqcPPshT3x00gAwgH8RuKMIFy2seOWq/view?usp=sharing>

or <https://tinyurl.com/y9cs76lgy>

Appendix D53-C. Comment letters from other agencies and committees.

Tom Jankovsky
District 1

John Martin, Chair
District 2

Mike Samson, Chair Pro Tem
District 3



October 1, 2018

Julie Mao, Wildlife Biologist
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

RE: *Garfield County comments in Support of the Draft Mule Deer Herd Management Plan for the Basalt (DAU-53)*

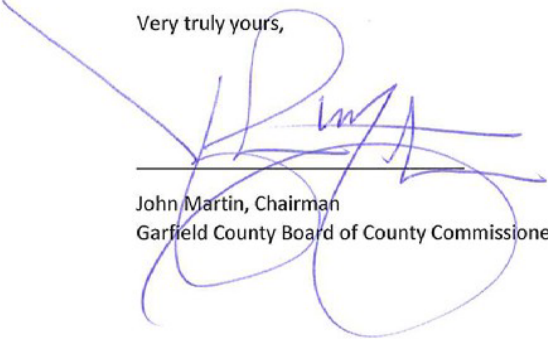
Dear Ms. Mao,

The Garfield County Board of County Commissioners would like to offer our support of the Draft Mule Deer Herd Management Plan currently proposed by the Colorado Department of Parks and Wildlife (CPW) for the Basalt (Data Analysis Unit - 53) also known as Game Management Unit 444. We wish to thank you for the informative and thoughtful presentation you gave to our Board on October 1, 2018 where you explained the purpose of the Herd Management Plan to set population objectives and sex ratio objectives for the Mule Deer herd in DAU-53 for the next 10 years.

As you know, the Garfield County Commissioners continue to support CPW's efforts to maintain and strengthen Mule Deer herds not only in Garfield County but in the State as well. We recognize the importance of maintaining healthy Mule Deer herds not only from a natural, biological and scenic standpoint but also from a long-time hunter harvest tradition. We applaud CPWS's work to address the many impacts to the herd's overall health with a 'management by objective' approach that strives to balance the biological capabilities of the herd and its habitat with the public's demand for wildlife recreational opportunities which is important to our community.

Garfield County supports the preferred alternatives as you outlined them in your presentation and draft Herd Management Plan specifically regarding population objectives and sex ratio objectives in DAU-53 for the next 10 years. Please do not hesitate to contact me if you have any questions regarding our support.

Very truly yours,



John Martin, Chairman
Garfield County Board of County Commissioners



October 25, 2018

Julie Mao
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601

RE: Lower Colorado River Habitat Partnership Program Comments - Deer DAU D-53

Dear Julie:

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

The Lower Colorado River HPP committee has discussed your presentation and reviewed the draft alternatives for this DAU plan update. The Lower Colorado 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 LCRHPP committee supports the draft alternative 2, to maintain or slightly increase the range of animals within this DAU and within our committee area. If achieved, the LCRHPP committee does not believe this increase would create more conflicts and we also believe we have the resources necessary to address conflicts should they occur. Increasing the population objective will ultimately lead to more hunting licenses and sportsmen opportunities.

HPP is also directed by statute to assist the Division to meet game management objectives. The LCRHPP committee has worked with both public land managers and private landowners to improve the quality and quantity of the habitat in D-53 and we remain committed to this.

As with most people in Colorado, our committee also desires to have more deer in this area. However, residential growth has occurred in winter range resulting not only in a loss of critical habitat but also habitat fragmentation and increased disturbance on the remaining landscape, affecting both wintering and reproducing deer. Additionally, public land recreation demands in DAU-53 continue to increase for both motorized and non-motorized users with similar effects. Given the increased demand to live and recreate in this area, we believe these trends will continue and will eventually affect CPW's ability to achieve their management objectives.

The LCRHPP committee also discussed the proposed sex ratio alternative. We support alternative 3; lowering the current sex ratio objective to a range that, while still maintaining larger bucks, would ultimately increase the opportunity for more hunters in the field.

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

Sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'D' followed by a horizontal line that extends to the right and then curves slightly upwards.

Darren Chacon, Co-Chair
Lower Colorado River HPP Committee