



# NEVADA

# BIG GAME STATUS



**MANAGEMENT AREA REPORTS**

**STATEWIDE SUMMARY**

**HARVEST DATA**

**2021-2022**



# STATE OF NEVADA

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# NEVADA DEPARTMENT OF WILDLIFE

## NEVADA BIG GAME STATUS 2021-2022



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# BIG GAME STATUS STATEWIDE SUMMARY



## MULE DEER

The Nevada Department of Wildlife (NDOW) issued approximately 16,530 mule deer tags for the 2021 hunting season. The number of tags has steadily decreased over the past 10 years and was the lowest number of tags issued since 2011. The overall success rate for Any Legal Weapon seasons was 40% statewide, which is slightly below the previous 3-year average success rate of 44%. Muzzleloader and archery hunt success rates were 36% and 17% respectively, which were both below the 3-year averages of 40% and 19% for those weapon categories. Junior hunters also realized a slightly lower success rate of 58%, compared to the previous year's hunt success rate of 61%. Overall, about 5,390 bucks and 750 does were harvested by all hunters and 39% of the bucks were 4-point or greater. The statewide percentage of 4-point or greater (39%) was below the 3-year average of 43% and slightly below the 10-year average of 40%.

During 2021, biologists classified approximately 10,762 mule deer during the fall survey. Statewide fawn production was 47 fawns per 100 does observed during post-season surveys, compared to 51 fawns per 100 does during the fall 2020. The observed post-season buck ratio was 29 bucks per 100 does for 2021 which is slightly below the 5-year average of 30 bucks per 100 does. The observed spring fawn ratio of 30 fawns per 100 adults was identical to the 5-year average of 30 fawns per 100 adults, indicating a stable to slightly declining growth rate.

The primary driver of mule deer populations is the numbers of fawns recruited into the population each year, in addition to the body condition and productivity of adult females. For the second year in a row the state of Nevada experienced below average precipitation throughout most regions and drought conditions persist throughout Nevada during late spring 2022. As of April 14, 2022, 100% of Nevada was in severe drought and over 50% of the state was in extreme or exceptional drought conditions according to the U.S. Drought Monitor.

Nevada's mule deer populations have continued to decline over the past decade largely due to lack of consistent precipitation, large-scale range fires, conversion of native shrubs to invasive grasses, and degraded range conditions from feral horses and burros. During 2021, the NDOW has formed a Mule Deer Enhancement Program (MDEP) to address declining herds throughout the state. The MDEP is a committee and stakeholder-based program led by teams of biologists from the NDOW and includes partners from state and local agencies and non-governmental organizations (NGO's). As of this report, there have been over 17 new habitat projects approved by the MDEP Oversight Committee for 2022 and 5 new radio-collar projects to investigate limiting factors for mule deer. The MDEP program will continue to identify projects and funding designed to improve habitat and gain better understanding of mule deer ecology including predator-prey dynamics, impacts from competition with feral equids, and migration corridors. **Figure 1 compares the number of all Nevada's native big game animal equivalents to horses and burros in Nevada, 2008-2022.**

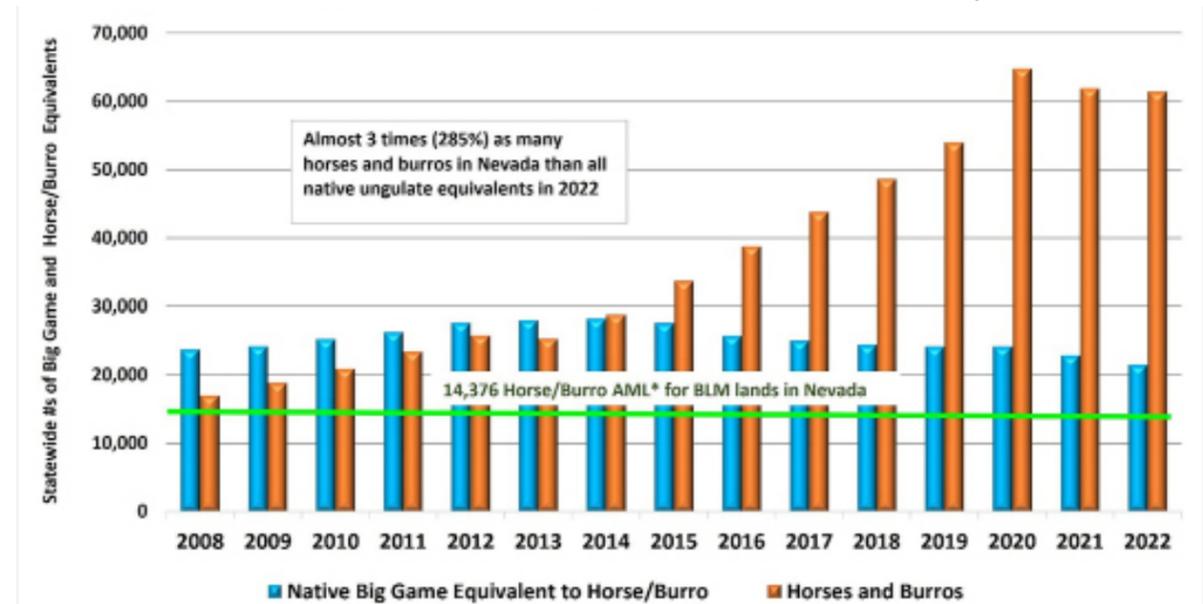


Figure 1. Statewide comparison 2008-2022 of estimated number of free-roaming horses and burros to the biomass equivalent of all native big game animals in Nevada. Feral equids are disproportionately larger than Nevada's native ungulates (elk, mule deer, bighorn sheep, and pronghorn antelope) because they never evolved in synchronicity with Nevada ecosystems that exist today. The graph uses the best available values and rates of body weight, forage consumption, and water intake among the 2 groups to compare "apples to apples" of the forage and water use of the equivalent number of native ungulates to that of a horse/burro. The green horizontal line is the BLM's statewide Appropriate Management Level (AML) if horses and burros were managed in a "thriving natural ecological balance with the habitat" as required by The Wild Free-Roaming Horses and Burros Act of 1971 (Public Law 92-195).

## ANTELOPE

The 2021 antelope season continued to provide excellent hunting opportunities for Nevada hunters. The Department issued approximately 3,415 antelope tags for the 2021 hunting season. Antelope hunters averaged about 3.7 days in the field during 2021, which was slightly higher than average hunting days of 3.5 experienced during 2020. About 2,250 antelope were harvested during 2021 for all seasons and weapon types. Hunt success for the Any Legal Weapon seasons was 74% for 2021, which was slightly below the 3-year average of 75%. The percentage of bucks with 15-inch or greater horn length was only 13% statewide for 2021, which was well below the 3-year average of 29%. Horn length data for all units and statewide should be interpreted with caution due to a data collection glitch in the 2021 on-line reporting system, that may have affected the number of antelope with 15-inch or greater horn lengths.

In 2021, biologists classified 12,410 antelope during post-season surveys with an observed buck and fawn ratio of 34 bucks:100 does:29 fawns. The fawn ratio is slightly lower than the previous year's ratio of 31 fawns per 100 does, and well below the recruitment ratio necessary for herd growth. Two consecutive years of lower-than-average fawn recruitment will result in declining population trends and a reduction in the older age class bucks available for harvest in future years. The NDOW uses a management objective of 25 bucks:100 does (for bucks 2 years old and older) when making quota recommendations. The 2022 statewide population estimate is about 28,000 antelope.

The NDOW continues to capture and radio collar antelope to monitor survival, movement rates, and disease status. The Department initiated a new antelope radio-collar study for 2022 in cooperation with Nevada Gold Mines to investigate and better understand movement patterns and migration corridors in the Boulder Valley region of Area 6 and Crescent Valley in Area 15 south of Interstate I-80. In addition, the NDOW recently completed antelope migration corridor mapping in the Sheldon-Hart Mountain region in northwestern Nevada.

These corridors have been known for many years, but fine-scale mapping was recently completed and published in the U.S. Geological Survey report titled "Ungulate Migrations of the Western United States: Volume 2" that includes maps and summaries of 65 big-game migration routes in Arizona, California, Idaho, Nevada, New Mexico, Utah, Washington, the Wind River Indian Reservation and Wyoming. **Figure 1 compares the number of all Nevada's native big game animal equivalents to horses and burros in Nevada, 2008-2022.**

## ROCKY MOUNTAIN ELK



NDOW issued 4,724 tags for elk hunts during the 2021-2022 season. The harvest of 1,076 bulls, including those taken during spike-only hunts, was 5% higher than 2020-2022. An additional 964 antlerless elk were harvested, representing a 2% decline from the previous year. Similar to 2021, reported success by elk hunters for all sex and weapon classes was 38%, while those pursuing antlerless

elk reported a success rate of 31%. Following the hunting season, biologists with the NDOW classified 8,351 elk during aerial surveys. Ratios representing the statewide sex and age composition were 41 bulls:100 cows:36 calves.

Current population estimates for individual elk herds indicate nearly 95% of herds comply with local population objectives. Harvest strategies for antlerless elk are intended to maintain elk herds at or slightly below their respective population objective. In many areas, tag recommendations for antlerless elk will be well below historic highs and intended to stabilize populations or, in other areas, allow for growth.

Statewide, 31% of hunters harvested a bull with a main beam equal to or exceeding 50 inches in length during the 2021-2022 season, which is equal to the 10-year average. On-going analysis of main beam lengths and known ages has

identified a predictable curve-linear relationship between bull age and main beam length until about 7 years of age when the main beam of many bulls has reached 50 inches. Using a predictive model estimating bull age based on reported antler length, the modeled age of bulls harvested during the 2021-2022 season was 5.8. The modeled age from the 2021-2022 season is equal to the previous hunting season (2020-2021), which was the highest average age since 2001 when the Department began collecting incisor teeth for aging purposes.

Elk herds in Nevada have seemingly been resistant to long-term effects of previous drought cycles. However, indicators of herd health are suggesting that current climatic conditions, punctuated by high temperature and low precipitation not experienced in recorded history, are negatively impacting elk recruitment in certain regions. The 10-year average calf ratio in Nevada is 40 calves:100 cows. Following the 2021-2022 survey season, biologists determined the statewide calf ratio to be 36 calves:100 cows. Further, calf ratios from three of the previous four years have been below the long-term average. Poor calf production reduces the current-year growth potential of populations, as well as the long-term outlook for future harvest. **Figure 1 compares the number of all Nevada's native big game animal equivalents to horses and burros in Nevada, 2008-2022.**

NDOW biologists continue to propose, coordinate, and implement various projects to improve understanding and conservation of elk across Nevada. In winter 2022, the NDOW continued efforts to investigate seasonal mortalities of elk in the Tuscarora Mountains. Monitoring of elk movement patterns near Spruce Mountain, Black Mountain, and throughout White Pine County is on-going. Large-scale habitat improvement projects, including reseeding, are increasing quantity and quality of herbaceous vegetation, and promoting establishment and vigor of mountain brush communities. While many threats exist on the Nevada landscape, the NDOW is well-equipped to provide responsive elk management during these uncertain times.

## DESERT BIGHORN SHEEP

The 2021 hunting season had 321 ram tags issued including 5 specialty tags and 9 tags for the first ever archery-only ram hunt. There were 20 tags returned by tagholders from 15 different units. They included 4 tags reissued to alternate hunters well before the season, 7 issued in the First Come First Serve online process just before or after the start of the ram season, and 9 not reissued due to Department of Defense concerns, tagholder death not disclosed until after the season, and severe drought impacts in the Desert and Las Vegas Ranges. There were 257 rams harvested in 2021 for 82% success, the lowest rate since 2002. Statewide average days hunted

was 5.5 which didn't reflect any more difficult hunt conditions than in past years, but several hunters spent 20 or more days afield. At the same time, almost 150 hunters harvested within their first 3 days of hunting. Other hunt metrics were relatively strong with average ram age of 6.9, the highest average age over the last 30 years, average B&C score only slightly down to 152 5/8 (10-year average of 153 2/8), and 18 rams 170 B&C score or greater (10-year average of 16 rams). Hunt metrics clearly showed that mature rams were abundant and available in 2021 but the immediate future will see a drastic decline in availability of total rams and mature.

The demand for desert bighorn ram hunting in 2021 involved almost 12,000 resident applicants compared to 11,200 in 2020 and just over 13,000 nonresidents in 2021, an increase of over 1,000 applicants from 2020. There were only 153 applicants for the first-ever ram archery-only hunts of 9 tags statewide. With archery-only success rate of 78%, it provided a tremendous opportunity to hunt desert bighorn sheep.

The 2021 desert bighorn ewe hunts harvested 80 ewes from Units 161, 213, and 268 with an overall success rate of 67% of hunters afield. Fifteen tag holders chose not to hunt. The desert bighorn ewe hunt applicants continue to increase from all previous years with 1,732 applicants in 2021.

The 2021 statewide aerial desert bighorn survey was the second year in a row of another record low lamb ratio dropping down to only 20 lambs:100 ewes observed. Under normal environmental conditions, a 30 lambs:100 ewes recruitment level is required to maintain a stable bighorn population that inhabits a desert ecosystem. This is third consecutive year of a population contraction in the statewide estimate. It is also the largest decline in a single year since the statewide bighorn population "bottomed out" in the early 1960s below 3,000. Nevada's desert bighorn numbers peaked in 2019 at 10,300 and now has drastically declined 20% to 8,200 in 2022. This alarming and serious decline has been attributable to many factors including: 1) the multi-year drought, 2) equally devastating is competition at and destruction of critical riparian/water sources from excessive numbers of feral horses and burros, and 3) continued high lamb mortality caused by pneumonia in several desert bighorn herds from recent disease events. **Figure 1 compares the number of all Nevada's native big game animal equivalents to horses and burros in Nevada, 2008-2022.**

As in 2020, several water developments that support desert bighorn sheep were nearly or completely dry in the summer 2021 located in the extreme or exceptional drought areas in Southern and South-central Nevada. The NDOW Game and Habitat Divisions conducted most of the emergency water hauls by using NDOW and private contractor (Air Shasta from northern California) helicopters. Approximately 72,000 gallons were delivered to guzzlers in 12 mountain ranges with majority of the water slung and dropped from the air onto

guzzler aprons. Other guzzlers accessible by 2-track roads had water trucks pump and pipe water to their storage tanks.

Polymicrobial pneumonia epizootics continue to plague desert bighorn herds. There are 60% of the 29 desert bighorn unit groups that are battling active infections of the deadly bacteria *Mycoplasma ovinpneumoniae* (*M. ovi*). The primary impact to the herds is upper respiratory disease that causes pneumonia and ultimate death of lambs for several years. Nearly 25% of these infected herds have 80+% of the lambs die annually lasting anywhere from 2 years to over 6 years and counting. A new management action is being initiated on some herds called Test and Remove. This involves capturing, sampling, and testing adult bighorn for *M. ovi*, and if animals are detected to be shedding the pathogen, they are removed from the herd. Typically, only 2-5% of the adults are chronic shedders and once they are removed from the herd, lamb survival typically returns to normal levels allowing for herd recovery.

## CALIFORNIA BIGHORN SHEEP

California bighorn ram season in 2021 saw a slight increase in hunter success to 86% from a long-term low level in 2020 at 83%, but still below the long-term average of 90%. Some hunters spent a great deal of time in the field hunting with the statewide average days hunted remaining high at 8.8 days compared to long-term average of 6.6 days hunted. Average age dropped slightly to 6.7 in 2021 from 7.0 in 2020. The B&C horn score average also dropped to 147 3/8, the lowest statewide average since 2002, likely due to extremely poor nutritional value in the limited forage available driven by the extreme drought conditions the last few years. Demand for California bighorn ram hunts continue to rise in 2021 with 9,165 residents and 11,392 nonresident applicants compared to 8,595 resident and 10,409 nonresident applicants in 2020.



Late summer 2021 aerial surveys classified 666 animals statewide with the lowest California bighorn lamb ratio ever recorded at 29 lambs:100 ewes ratio. This low lamb recruitment is tied to stress on adults and lambs from multi-year severe drought and limited impacts from pneumonia killing lambs in their first few months of life. Another mortality factor was evaluated from monitoring 162 GPS-collared bighorn across 7 California bighorn herds since mid-2020. Investigations of collared bighorn mortalities showed 15-20% of the collared bighorn died from mountain lion predation. It was most severe in 2 herds involving 31 collared bighorn that suffered 81% and 47% mortality by mountain lions. All these challenges resulted in an approximate 14% drop in the statewide California bighorn population from 2,100 to 1,800 in 2022.

**Figure 1 compares the number of all Nevada's native big game animal equivalents to horses and burros in Nevada, 2008-2022.**

Through extensive disease surveillance over several years in all the California bighorn herds, only in 3 of the 15 primary herds was the "trigger" pathogen, *M. ovi* detected. One herd was the Montana Mountains that unfortunately experienced an 85% die-off in 2015 with the remaining sick animals culled to protect adjacent herds in Nevada and Oregon. The other 2 herds are the Snowstorm Mountains and Santa Rosa Range, which both had well documented pathogen spillovers or disease events many years ago. They both also have landscape connectivity between them. Through extensive research and field trials west wide, the "Test and Remove" management tool was developed and has been successful in clearing a bighorn herd of *M. ovi* and restoring the herd's lamb recruitment to allow for herd recovery. The Snowstorms was the first herd that

Test and Remove was conducted on. After several years of captures, testing, intensive ground monitoring, the 2021 lamb recruitment data supports a high probability that *M. ovi* was eliminated from the entire herd. The NDOW then started Test and Remove in the Santa Rosa Range. A total of 58 adults have been captured, sampled, and tested. The effort started with a few animals in early 2021 and then larger captures in August 2021 and February 2022. Eight ewes and rams tested positive for active *M. ovi* infection in 3 of the 5 main sub-

herds. One ram died of pneumonia at capture, 2 were killed by lion predation, 1 was later captured and had cleared the *M. ovi* infection on her own, 3 were euthanized by capture crew, and 1 remains to be euthanized prior to this year's lambing season. Oregon Department of Fish and Wildlife has also joined forces with the NDOW beginning in early 2022 to conduct Test and Remove on Oregon's herds that have known interstate movement with Nevada's Santa Rosa Range bighorn population. These efforts along with ground monitoring will continue for the next several years.

## ROCKY MOUNTAIN BIGHORN SHEEP

Four of the 5 tagholders were successful in 2022. Though the average days hunted was still high at 17 days, all other hunt metrics were positive. The averages were 6.0 for age and 156 2/8 for B&C Score with the largest ram taken being 7 years old and 172 B&C.

The 2021-2022 aerial and ground surveys classified 145 bighorn with a reasonable statewide ratio of 40 lambs:100 ewes. One herd, the Leppy Hills continues to underperform with chronic low lamb survival. Based on survey results, there are likely still chronic shedders of *M. ovi* in the herd. Though the risk of continued contact with nearby domestic sheep trailing along the Nevada-Utah border still exists, a passive Test and Remove effort may once again be conducted summer 2022 in coordination with state of Utah. Limited number of GPS collars were deployed in early 2022 in the Badlands, East Humboldt and North Snake Ranges to assist in maintaining domestic sheep separation, identifying seasonal habitat use areas, and monitoring lamb survival.

The statewide population estimate of the 6 Rocky Mountain bighorn herds is stable at 320 adults. Optimism exists for the continued recovery of both the East Humboldt Range and Ruby Mountain herds. For the first year since the devastating die-off in both herds in 2010, the Department is hopeful to see a ram hunter in the field in 2022 in Unit 102. The likely single ram tag will be set aside to accommodate a military deferment for a tagholder that was unable to hunt in the last open season in 2009 because he was deployed for military duty overseas and has been patiently awaiting the ram season to reopen.

Lack of separation with domestic sheep operations continue to challenge existing Rocky Mountain bighorn herds and any potential for future introductions. A great working relationship and program exists with Southern Nevada Water Authority's domestic sheep operation along with Great Basin National Park staff that monitor and communicate well with local NDOW staff on maintaining separation of domestic sheep

grazing at the base of the South Snake Range and its Rocky Mountain bighorn herd.

## MOUNTAIN GOAT

Only 5 of 9 mountain goat tagholders were successful in 2021. Two tagholders did not hunt. All tagholders either attended the in-person Mountain Goat Seminar or viewed the seminar recording with the primary focus of educating on accurately determining the sex of mountain goats with the goal of not harvesting a nanny. One nanny was harvested in Unit 102. The average age of all harvested mountain goats was 4.8. Average right and left horn lengths of 2021 harvested goats of 8.7 and 8.8 was above the long-term average horn length for each unit. The largest B&C score goat was harvested from Unit 103 at 49 2/8 which has consistently produced the largest scoring mountain goat over the last decade. The average days hunted was only 4.9 even though the season is 2 months long. Having to climb several thousand feet each day from a hunter's basecamp in pursuit of mountain goats can take its toll and limit the total time a hunter spends on the mountain.

The January 2022 mountain goat aerial survey was very successful with 201 individuals classified with the best kid ratio since 2009 at 30 kids:100 adults. The Ruby Mountains herd continue to outperform the East Humboldt and Pearl Peak herds. The 2022 population estimate for all 3 herds is a combined 340, the highest estimate since 2015.

Summer ground surveys were again conducted in 2021 in the East Humboldt herd as part of an ongoing Test and Remove effort. Kid production was documented in June and compared to August surveys to evaluate if kids were still dying of pneumonia which normally would occur during the first 2 months of life. The June survey classified 6 nannies with 6 kids (a 12+ year old nanny did not have a kid, but another nanny had twins). The great news was that the August survey classified 9 nannies and 9 kids including the nanny that still had her twins alive. The results of these surveys are very promising, in that the East Humboldt Range mountain goat herd may have had the last remaining chronic shedder die of old age. Continued summer surveys will be conducted to confirm that hope.

## MOUNTAIN LION

In 2017 mountain lion harvest limits were changed from three regional to one statewide harvest limit of 245. A 2-mountain lion harvest limit for the interstate hunt with Utah in unit 091 remained in place.

In 2012, 6 unique genetic subpopulations were identified (Andreasen et al. 2012) and snapped to existing hunt units. These subpopulations consist of the following hunt units:

Central Population: 142,143, 144, 145, 155, 161, 162, 163, 171, 172, 183, 184, 251

East Population: 102, 103, 104, 105, 106, 108, 109, 111, 112, 113, 114, 115, 121, 231

North Population: 044, 045, 046, 051, 061, 062, 064, 065, 066, 067, 068, 071, 072, 073, 074, 075, 076, 077, 078, 079, 081, 091, 101, 107, 141, 151, 152, 153, 154, 156

West Population: 011, 012, 013, 014, 015, 021, 022, 032, 033, 034, 041, 192, 194, 195, 196, 201, 202, 203, 204, 206, 291

South Population: 131, 132, 133, 134, 164, 221, 222, 223, 241, 242, 243, 244, 245, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 271, 272, 280, 281, 282, 283, 284, 286

Transient Population: 031, 035, 042, 043, 181, 182, 205, 207, 208, 211, 212, 213, 252

The Department currently monitors to ensure hunter harvest does not exceed 35% adult female harvest (Anderson and Lindzey 2005) or 50% overall female harvest for any genetic subpopulation on a 3-year average.

No concerning trends were observed in the 3-year average adult female and overall female harvest.

Overall Female Harvest	Adult Female Harvest
East	38%
South	22%
North	34%
Central	36%
West	48%
Surplus	37%

A collaborator from Predator Project 42 completed the initial phase of a mountain lion statewide integrated population model, primarily using GPS collar data and hunter harvest information. The population was found to be stable and around approximately 3,200 lions.

## BLACK BEAR

Forty-five resident, 5 nonresident, and 1 dream tags were issued for the 2021 black bear season; 13 male and 1 female bears were harvested. Unique harvest limits and female harvest limits were set for Areas 19, 20, and Unit 291. No harvest limit or female harvest limits were met. Various bear sightings have been reported around the state, a good indicator that black bears are naturally recolonizing native black bear habitat.

## MOOSE

Presence and distribution of Shiras moose (*Alces alces shirasi*) in Nevada prior to European settlement is unknown. Historic sightings of moose in Nevada date back to the 1950s, likely coinciding with burgeoning moose populations in neighboring states. Since the early 2000s, frequency and distribution of moose sightings in Nevada have increased substantially. Indeed, over 95% of all moose observations have been documented in the last decade. While the increase in observations is undoubtedly due to a growing moose population, NDOW requests for sightings paired with increased public awareness, have likely contributed to the collection of repeated observations occurring throughout the year. Nonetheless, these observations continue to inform the NDOW's growing understanding of expansion and abundance of moose in Nevada.

Biologists recorded aerial moose observations during post-season deer, elk, and spring deer composition surveys in all units of Northern Elko County. Surveys resulted in the classification of 36 moose with observed sex and age ratios of 59 bulls:100 cows:53 calves. Because observations occurred throughout the winter, biologists reviewed distribution information to determine possible repeated observations and confirmed all observations were likely unique individuals.

During the NDOW's inaugural capture effort in 2020, four cow moose were captured and fit with GPS-enabled radio-collars. In 2021, two additional cows and the first bull were fit with radio-collars. This past winter an additional cow and two bulls were fit with radio-collars. A total of seven cows and three bulls are currently being tracked in Units 061, 071, 072, 075, and 081. Each summer since deployment, cows have been observed from the ground to determine calving status. Subsequent winter surveys are conducted to determine calf survival and recruitment. Since 2020, 10 calves are confirmed to have been recruited into the statewide moose population. Moose populations are strongly influenced by adult survival due to their long-life span. Given observed recruitment and high adult survival, the Nevada moose population appears to be stable to increasing with numerous and repeated observations of bulls, cows, and calves.

Moose have been documented in a variety of habitats in Elko County, primarily north of Interstate 80; however, observations have occurred as far south as the Ruby Mountains and the Spring Creek area. During the summer, they generally prefer intact riparian systems dominated by willows, as well as dense fir and aspen stands. In contrast, during winter, they can be found in patches of mahogany, aspen, and ceanothus. Nevada moose can occupy higher elevations than most other game species during the winter due to their long forelimbs and hind limbs, which are adapted to navigate through deep snow. Most observations reported to NDOW occur during the fall and winter coinciding with the rut and lower ambient temperatures.

NDOW recognizes moose as an important component of Nevada's diverse wildlife landscape and serves to protect, maintain, and, where applicable, increase the moose resources for current and future the enjoyment and use by Nevadans. To support moose conservation and management in Nevada, the Department has identified three goals guiding their management. Those goals (1) maintain and improve abundance and distribution of Nevada's resident moose population, (2) allow natural expansion of moose into suitable but unoccupied habitats, and (3) identify and encourage recreational opportunities for all user groups.



# BIG GAME MANAGEMENT AREA STATUS REPORTS



## MANAGEMENT AREA 1

Report by Jon Ewanyk

### HABITAT

Area 1 is classified by the U.S. Drought Monitor as experiencing severe drought conditions. Despite a few decent storms in December 2021, the annual precipitation levels for Area 1 were below average with little precipitation recorded for the months of January 2022 and February 2022. The northern portion of Area 1 is at 83% of the median water year to date, while higher elevation portions of the Granites were at median levels. According to the Nevada Water Supply Outlook Report, snowpack for the northern Great Basin is at 76% of the median, which emphasizes the need for a wet spring to help with water availability throughout northern Washoe County. Sagebrush and many other brush species important for wildlife forage rely on adequate snowpack for the penetration of water deep into the soil to reach their long taproots. The abnormally dry conditions of Area 1 have implications for producing invasive annual grasses, poor forage quality, limited water distribution, and high risk of wildfires throughout northern Washoe County. The Bureau of Land Management (BLM) conducted a horse gather in the northern part of Area 1 in fall 2021. In October 2021, the BLM removed 1,040 horses from 6 Herd Management Areas (HMA) located in Units 011, 012, 013, and the northern end of Unit 014. Although the horses were brought down to low Area Management Level (AML), there are still multiple HMA's within these units with horse numbers over AML. The removal of 1,040 horses from the landscape should provide the habitat some grazing relief, but horses from adjacent HMA's may move into these areas if forage is available.

For 2022, BLM has planned to gather horses from some of the HMA's within Unit 015. This should be beneficial to game populations in this unit, given how far in excess of AML these HMA's are and how little precipitation the area receives. For the upcoming year, there are multiple spring protection projects slated for Area 1 to help mitigate the impacts of heavy grazing around springs. These spring fencing projects are located in prime mule deer and antelope habitat and should benefit both species in future years. In 2021, the NDOW converted one of the guzzlers in Soldier Meadows to a big game guzzler for the benefit of bighorn sheep and plans to build another Soldier Meadows big game guzzler in 2022. The BLM has been conducting juniper treatments in both Units 013 and 015. This past year BLM cut and burned juniper along the Hays Bench, and those efforts are expected to continue into 2022. For the next few years, the BLM is planning to thin juniper stands in Unit 015 along Buckhorn Road and Duck Lake. Juniper treatments in Units 013 and 015 should benefit bighorn, deer, antelope, and sage grouse by improving the amount of water available for growing forage and reducing the amount of cover for predators. The NDOW and BLM have

coordinated to rehabilitate some of the recent and historic wildfires within Area 1. A portion of the Poodle Fire was chemically treated to remove invasive annual grasses, and then re-seeded with a plant mix that should provide forage for ungulates. Portions of this burn scar in Units 014 and 015 are regenerating well and look to be outcompeting invasive grasses. Following a chemical treatment in portions of the Parsnip Fire, which occurred during 2017, a seed mix was aerially applied to the treated area and appears to be establishing despite low precipitation conditions.

### ANTELOPE

#### Unit 011

##### Survey Data

Aerial surveys were conducted in Unit 011 during late September 2021. A total of 551 antelope were classified with a composition of 19 bucks:100 does:23 fawns. Of the 75 bucks located on survey, 17% were yearlings. The observed buck ratio was well below the 5-year average of 32 bucks:100 does. Fawn ratios in this unit were below the 5-year average, which is 29 fawns:100 does. Fawn ratios in this unit have been below maintenance level for 3 consecutive years and will result in a population decline.

##### Population Status and Trend

The 2022 population estimate for this herd is 650 antelope, which is down 10% from last year's estimate. This herd has been steadily declining for the past several years, which is likely due to the degraded habitat, lack of precipitation and low fawn recruitment. For the past 3 years, the fawn recruitment has been below maintenance levels and will continue to reduce the number of antelope in this unit.

#### Unit Group 012 – 014

##### Survey Data

In late September 2021, aerial surveys were conducted in Units 012-014. A total of 391 antelope were classified with a composition of 22 bucks:100 does:35 fawns. The buck ratio has been declining in this unit the past 3 years and is below the 3-year average of 30 bucks:100 does. Of the 56 bucks observed on survey, 24% were yearling bucks. The fawn ratio observed within these units was above maintenance levels, and slightly above the 3-year average of 32 fawns:100 does.

##### Population Status and Trend

The 2022 population estimate for the 012 – 014 herds is 1,900 antelope, which is 3% lower than last year's estimate. This herd has been on a slight decline for the past 5 years, which can likely be attributed to poor habitat quality, severe drought, and competition with feral horses. This population should respond favorably to the removal of horses from the range and juniper thinning projects, however it will take time for the habitat to recover from years of overgrazing.

## Unit 015

### Survey Data

Antelope surveys were conducted in Unit 015 during late September 2021. On survey, 224 antelope were classified with a composition of 27 bucks:100 does:38 fawns. The buck ratio in this unit dropped from last year and was below the 3-year average of 29 bucks:100 does. Of the 37 bucks classified on survey, 16% of the sample were yearling bucks. Fawn ratios in this unit remain strong and were once again above maintenance level. The 3-year average fawn ratio in this unit is 40 fawns:100 does.

### Population Status and Trend

The 2022 population estimate for the herd in Unit 015 is 900 antelope. This herd has seen a slight reduction from last year's population estimate, likely a result of the impact horse and burros have had on the already degraded habitat. This population has had consistently high fawn to doe ratios, but population growth is still limited by habitat quality.

## CALIFORNIA BIGHORN SHEEP

### Unit Group 011, 013

### Survey Data

Composition surveys were flown during late August 2021. Survey conditions were not favorable, and wind limited the amount of time flying in the area. On survey, 43 sheep were classified with a composition of 12 rams:100 ewes:18 lambs. The lamb ratio for this unit is down significantly from years past and is below the 5-year average ratio of 43 lambs:100 ewes. Sheep within this unit grouping exhibit interstate movement with Oregon and a possibility that more sheep were located on the Oregon side of the Massacre Rim during surveys.

### Population Status and Trend

The 2022 population estimate is approximately 60 California bighorn sheep. This herd has been on a slight decline recently, but the cause of this decline has yet to be identified. It is suspected that drought and lion predation of adults are preventing this herd from recovering to historic levels. To reach these population goals, predator Project 22-01 will be removing lions in this unit grouping in the coming years. Along with hunter harvest, the lion removal project should help facilitate the recovery of both the Hays Canyon and Massacre Rim herds.

## Unit 012

### Survey Data

Composition surveys were flown in Unit 012 during late August 2021. Survey conditions were poor for the survey, with smoke limiting visibility. On survey, 61 sheep were classified with a composition of 23 rams:100 ewes:19 lambs. The observed lamb ratio for this unit is down substantially from the

previous year and is lower than the 5-year average for this unit of 35 lambs:100 ewes.

### Population and Trend

The 2022 population estimate for Unit 012 is approximately 100 California bighorn sheep. This herd has been heavily impacted by low adult survival rates. Collared ewes had high mortality rates, with 4 of 6 collared sheep in the unit killed by lions. Predation, drought, horse numbers, and degraded habitat are all contributing to the decline of the sheep herd in Unit 012. Predator management in this unit, coupled with horse removal and the building of big game guzzlers should help the herd out in the coming years.

## Unit 014

### Survey Data

Composition surveys were not conducted for sheep in Unit 014 during 2021. However, in previous years the 5-year average for composition on surveys was 41 rams:100 ewes:50 lambs. Given that lamb ratios in surrounding units were lower than its 5-year average, the same trend for Unit 014 is expected.

### Population Status and Trend

The 2022 population estimate for Unit 014 is approximately 85 California bighorn sheep. This herd has been heavily impacted by low adult survival rates. Collared adults had high mortality rates, both in this unit and the neighboring unit. Lion predation was the main source of mortality for this population, with drought and degraded habitat also contributing to the decline of this herd. The herd is also challenged by high risk of disease exposure due to overlap with domestic sheep along the base of the Granites.

## MULE DEER

### Unit Group 011-013

### Survey Data

Aerial surveys for mule deer in this unit were flown in both the fall and spring. On fall surveys, 152 deer were classified with a composition of 58 bucks:100 does:37 fawns. Fall surveys were not conducted in this unit grouping the prior 2 years, but this year's buck ratio was higher than in previous surveys. The fall fawn ratio observed for this unit group was slightly below the 5-year average for the unit group. During spring surveys, 268 deer were classified with a composition of 23 fawns:100 adults.

### Population Status and Trend

This herd has decreased in size, as a result of poor fawn recruitment into the population. Two consecutive spring surveys with fawn ratios below maintenance levels will decrease the population estimate for this herd into the following years. The 011 – 013 population has been heavily impacted by horse numbers over the AML, drought, conifer encroachment, and poor forage quality. The Washoe Mule Deer Enhancement

Program Subcommittee supported a collaring project to be implemented by the NDOW to better understand which factors may be limiting the population's growth. Initial disease surveillance in this unit grouping revealed that the deer herd had previously been exposed to disease, potentially contributing to the decline of this herd.

## Unit 014

### Survey Data

Aerial surveys for mule deer in this unit were flown in both the fall and spring. On fall surveys, 88 deer were classified with a composition of 50 bucks:100 does:50 fawns. Fall surveys have not been conducted in this unit for the past 5 years, but given the downward trend in population, a better understanding of deer composition during the fall was needed. On the spring survey, 61 deer were classified with a composition of 20 fawns:100 adults. Spring fawn ratios were below maintenance levels and were below the 5-year average of 34 fawns:100 does. Although there were low sample sizes for surveys in this unit for the second consecutive year, the buck ratio remains high at 50 bucks:100 does. Deer were found dispersed throughout this unit, with groups of deer located on survey near Fox Mountain, Skull Meadows, Miller Basin, and Cottonwood Creek.

### Population Status and Trend

Mule deer in Unit 014 have continued to decline the past 10 years and occur at low densities. Some of the issues facing the deer herd are low fawn recruitment into the population, winter ranges on the east side that have been burned and converted to cheat grass, competition from horses, and exposure to disease. The Washoe Mule Deer Enhancement Program Subcommittee deployed GPS collars on deer in this unit to get a better understanding of which factors may be driving the decline in deer numbers. Collar data revealed that some of the deer in this unit migrate to winter range in neighboring units, highlighting the need to improve winter range within Unit 014 for this herd. Initial disease monitoring for this unit revealed that deer had previously been exposed to disease, potentially contributing to this population's decline.

## Unit 015

### Survey Data

Aerial surveys for mule deer in this unit were flown in late March 2022. On spring survey, 276 deer were classified with a composition of 28 fawns:100 adults. This year's observed fawn ratio was below maintenance level and below the 5-year average of 33 fawns:100 adults. Two consecutive years of low fawn recruitment for this population will have negative impacts for this herd's population estimate. The number of deer surveyed in this unit is highly dependent upon the severity of winter storms that promote migration from California. With less severe winters, it's likely that fewer deer migrate out of California into Unit 015.

### Population Status and Trend

Mule deer population estimates for this unit are reduced from previous years to accommodate for less deer migrating into this unit from California. Coupled with the lack of interstate movement, 2 years of low fawn ratios for this unit have reduced the population estimate for Unit 015.

## MANAGEMENT AREA 2

Report by Jon Ewanyk

## HABITAT

Similar to the rest of northwest Nevada, Area 2 is classified by the U.S. Drought Monitor as experiencing severe drought conditions. Although there are no SNOTEL sites located within Unit 021 or Unit 022, sites located just north and south of these units indicated snowpack is between 63-81% of the median amount. The heavy winter storms in December 2021 did not provide enough snow to overcome the driest January on record for the Reno area in 2022. According to a Remote Automatic Weather Station (RAWS) located within Area 2, the area received 6.8" of precipitation this past year, with 4.53 inches coming in the months of October 2021 and December 2021. Low precipitation totals throughout the growing season and during the hot summer months did not provide favorable conditions for wildlife. To mitigate the effects of drought, the NDOW and the BLM have coordinated on several habitat projects within Area 2. Area 2 has issues with the same ranges burning frequently, which does not allow sufficient time for the brush community to re-establish between wildfires. Many of these fires are started along U.S. Route 395, and travel east into the Petersen, Dogskin, and Virginia Mountains. To reduce the number of fires that reach the Virginia Mountains, the BLM has been removing fuels, and seeding the treated areas to create a green strip for slowing the spread of wildfires. In conjunction with the green stripping projects, the BLM is conducting juniper removal projects in Units 021 and 022. The NDOW and the BLM seeded 4,762 acres of the Baccarat and North Fire which had previously been treated with herbicide. This area should see new growth and good forage opportunities for deer and antelope. The BLM is also working to fence springs in the northern end of the Virginia Mountains to ensure they are not overutilized. All these habitat projects should benefit the wildlife of Area 2 in the coming years. Multiple BLM Herd Management Areas (HMA's) within this unit group have feral horse numbers over Appropriate Management Level (AML), and the effects are apparent on the forage and water sources in the northern Virginia Mountains and Fort Sage.

## ANTELOPE

### Unit Group 021,022

#### Survey Data

Aerial surveys were conducted in Units 021 and 022 during late September 2021. On survey, 148 antelope were classified with a composition of 26 bucks:100 does:22 fawns. Of the 26 bucks located on survey, 19% were yearlings. This year's buck ratio was below the 5-year average of 30 bucks:100 does. This year's fawn ratio for 021,022 was below maintenance level and is also below the 5-year average, which is 33 fawns:100 does.

#### Population Status and Trend

The 2022 population estimate for the herd is 600 antelope, which is down 8% from the previous estimate. This herd has been slowly decreasing in size, which is likely due to the numerous wildfires, invasive grasses, urban expansion, and lack of precipitation. Although this herd faces many challenges in the form of competition from horses, high frequency of wildfires, and the encroaching development from Reno, hunter success for the unit remains high.

## CALIFORNIA BIGHORN SHEEP

### Unit Group 021,022

#### Survey Data

Composition surveys were flown during late August 2021. On survey, 58 sheep were classified with a composition of 56 rams:100 ewes:15 lambs. The ram ratio for this unit remains high with multiple mature rams classified on survey. The lamb ratio is down significantly from years past and is below the 5-year average of 38 lambs:100 ewes. Most of the sheep remain concentrated in the northern end of the Virginia Mountains, with reports of one group heading south into the Pah Rah's.

#### Population Status and Trend

The 2022 population estimate is approximately 80 California bighorn sheep. Poor lamb recruitment resulted in the population estimate having a slight reduction. Unit grouping 021, 022 continues to produce mature rams, with the age of harvested rams averaging 7.7 across the last 3 years. Adult survival rates remain high in this unit grouping, although this herd has high risk of contact with domestic sheep as there were multiple sightings of domestic sheep in areas where bighorn sheep frequent that the NDOW is working diligently to minimize.

## MULE DEER

### Unit 021

#### Survey Data

Aerial surveys for mule deer in this unit were flown in both fall 2021 and spring 2022. Fall surveys were conducted in

mid-November 2021, prior to the hunt season and spring surveys were conducted in late March 2022. On fall survey, 160 deer were classified with a composition of 40 bucks:100 does:68 fawns. Deer were spread out in the fall, with groups located in the Petersen, Dogskin, Fort Sage, and Seven Lakes Mountains. On spring survey, 876 deer were classified with a composition of 35 fawns:100 does. Fawn ratios for this unit are in line with the 5-year average for the unit of 35 fawns:100 does.

#### Population Status and Trend

The mule deer population in this unit is slightly declining. The herd has had fawn ratios above maintenance levels the past several years, however the amount of habitat that has been scorched by wildfires continues to impact this interstate herd. Large quantities of winter range in Nevada have been heavily impacted by the high frequency and intensity of wildfires. Much of the summer range for this interstate herd burned in California megafires this past year, which will likely have a negative impact on the population into the future. The timing of this herd's migration is heavily tied to the amount of snowfall in early winter and influences the quantity of deer in Nevada for this late season hunt.

### Unit 022

#### Survey Data

Aerial surveys were conducted in both fall 2021 and spring 2022 for Unit 022, although both surveys had reduced flight time due to weather. Fall surveys occurred in mid-November 2021 where 61 deer were classified with a composition of 50 bucks:100 does:60 fawns. Of the 14 bucks surveyed in this unit, 8 had antlers with 4 points or greater. On spring survey, 40 deer were classified with a composition of 33 fawns:100 adults. Although both surveys had small sample sizes, the spring fawn ratio was on par with the 5-year average of 32 fawns:100 adults.

#### Population Status and Trend

The 2022 population estimate for Unit 022 is 500 mule deer. Mule deer in this unit have continued to decline since the peak of the population in 2015. The past few years of poor fawn recruitment have contributed to the downward trend of this population. Frequent wildfires in this unit have converted prime mule deer habitat to areas with poor forage quality. This year the Washoe Mule Deer Enhancement Program Subcommittee started a GPS collaring project to identify factors that may be limiting this population's rebound and identify crucial areas of habitat to improve.

## MANAGEMENT AREA 3

Report by Ed ParTEE and Jon Ewanyk

## HABITAT

As of March 1, 2021, the snowpack for these units is below normal at 74% compared to last year's 107%. Snowpack was very lacking this year with only one major storm that happened in December 2021. The BLM, the NDOW, and non-governmental organizations have continued to do habitat work on past fires within these units. These areas have been drilled, hand planted, treated with herbicide and aerial seeding has taken place. There has been a lack of precipitation for the water year and current measurements are 42% of normal. Many of the springs and streams may be impacted by the lack of moisture and the overuse by feral horses in some of these areas. The higher elevation mountain ranges, above 6,000 feet, are in good condition. However, with the lack of current snow conditions, spring and summer moisture will be needed to carry current conditions throughout the summer months and into next winter. Vegetation will cure much faster this year which may impact body condition of wildlife going into the winter months. Although most of the feral horses have been removed from the Sheldon in Unit 033, habitat may still be limiting the rebound of mule deer and antelope populations. The forage on the Sheldon appears to be slowly bouncing back from the years of overgrazing by feral horses, but it would benefit from a year with normal to above average precipitation.

## ANTELOPE

### Unit Group 031 - 035

#### Survey Data

Post-season aerial composition surveys were conducted in mid-September 2021. Fawn surveys are much lower than what has been seen in the past during these surveys. Water and forage were very limited in most areas with the antelope scattered and in small groups. See Table 16 in the Appendix for specific survey results.

#### Population Status and Trend

Over the last several years these units have continued to have a slight drop in the population. The population levels for Area 3 have not been this low since the early 2000's. All the units within Area 3 are expected to have a slight decrease in population numbers which reflect the drop in the tags allocated. Success rates remain good in all these units within the any legal weapon class. With the decrease in the populations within these units, the horns-shorter-than-ears hunts have been removed for management practices.

### Unit 033

#### Survey Data

Composition surveys in this unit were conducted via helicopter in late September 2021, after antelope hunting seasons had closed. A total of 418 antelope was classified on the Sheldon NWR, with a composition of 28 bucks:100 does:32 fawns. Of the 74 bucks classified, 32% were yearlings. For the Sheldon, fawn ratios have been above maintenance the past 2 years, and this year's fawn ratio was above the 5-year average of 29 fawns:100 does.

#### Population Status and Trend

The 2022 population estimate for antelope on the Sheldon is 1,000 animals, which is similar to the previous year's population estimate. This herd has been on a slight downward trajectory for the past 10 years but seems to have stabilized with the last few years of above average fawn recruitment.

## CALIFORNIA BIGHORN SHEEP

### Unit 031

#### Survey Data

Helicopter composition flights were conducted on August 10, 2021. The Montana Mountains were not checked this year during this flight; however, subsequent flights have indicated that the area is still void of sheep. Survey flights in this unit were only conducted in the Double H Mountains. Sheep are well distributed, and the sheep observed included a good representation of age classes. A total of 82 sheep were observed with a ratio of 23 rams:100 ewes:32 lambs.

#### Population Status and Trend

The population in the Double H Mountains continues to do well and has not been affected by the disease event that took place in the Montana Mountains. Aerial surveys have indicated that there is a good age representation with this unit's ram segment that should sustain this herd in the coming years. This year marked one of the lowest lamb rates which may be due to the lower survey number. This herd has remained relatively constant the last couple of years with slight increases.

### Unit 032

#### Survey Data

No surveys were conducted in Unit 032 during 2021.

#### Population Status and Trend

The population in this unit has remained relatively constant the last couple of years. Modeled age classes remain strong across the board with this herd, and ram harvest should be expected to good this year. There is a slight decline in the quality of rams harvested; however, the age class of harvested rams remain strong. Animals appear to remain healthy in this population and continue to distribute throughout the range.

## Unit Group 033, 032

### Survey Data

Composition surveys in this unit were conducted via helicopter in late August 2021. Conditions for this survey were less than ideal, with rain the week prior dispersing sheep and making them less reliant on the guzzlers. On survey, a total of 36 sheep were classified, with a composition of 15 rams:100 ewes:23 lambs. Although the sample size was low, this below average lamb recruitment appears consistent with surrounding units in northern Washoe County. This year's lamb ratio was well below the 5-year lamb ratio of 35:100 ewes. On survey, multiple mature rams were classified, as well as a 4- and 5-year-old ram. Although survey conditions were tough in this unit, the low sample size is likely indicative of a downward trend in the sheep population on the Sheldon NWR.

### Population Status and Trend

The 2022 population estimate for California bighorn Sheep is 105 sheep, which is down 8% from last year's estimate. Despite previous year's strong lamb recruitment, this population has low adult survival rates. Collar data from adult ewes revealed high predation rates by lions on the McGee Mountain sub herd. The population model's downward population trend is supported by low hunter success this year, low survival rates of collared bighorn, and low sample size of sheep found on survey. Monitoring of collared sheep will continue in this unit for habitat selection, disease exposure, and causes of mortality.

## Unit 034

### Survey Data

No surveys were conducted in Unit 034 for 2021.

### Population Status and Trend

The modeled population is showing a slight increase this year, continuing to show good age distribution for both males and females. Harvest over the last couple of years have shown a good age structure with the quality of the rams slightly decreasing. The previous year's surveys have shown a strong lamb recruitment into the population which is seen with the slight increase in the population. Quality harvest is expected to continue with the ram age classes that are available.

## Unit 035

### Survey Data

Surveys in this unit took place on August 10, 2021. During this survey 113 sheep were classified which is the same that was observed in 2020. Lamb ratios are down slightly from last year's survey with a much stronger ram ratio when compared to last year. Of the 133 animals observed, there were considerably more rams observed yielding a ratio of 59 rams:100 ewes: 32 lambs.

### Population Status and Trend

This herd has been performing extremely well over the last few years, with a substantial increase in the number of animals surveyed. With the new release in the Bloody Runs, it is expected this sub-herd will do very well. Ram ratios were up from last year while lamb ratios stayed relatively the same. Animals are starting to distribute themselves in areas not previously been observed. This population is doing very well with continued growth in both populations. Multiple releases have taken place within this unit which has included both the Jackson Mountains and now the Bloody Runs. With the lack of mature rams present in the Bloody Runs at this time, this portion of the unit has been excluded from the hunt unit. In a few years once the mature segment is present a limited harvest will be allowed in this portion. The bulk of the sheep observed naturally came from the Jackson Mountains, with only one third of the total coming from the Bloody Runs. The Bloody Runs at this time are showing a strong lamb ratio which should allow for future growth. The BLM and the NDOW conducted a collaring project in January 2020 for the purpose of monitoring separation of the wild sheep with a domestic trailing route that is located on east side of the Jackson Mountains which continues at this time. The population estimate for this unit has once again increased for 2022.

Hunter access has been influenced by the designation of the Black Rock-High Rock Immigrant Trail National Conservation Area and Wilderness Areas (NCA). The NCA boundaries embrace bighorn concentration areas of King Lear Peak and Parrot Peak. The BLM has marked most of the restricted access points and hunters who apply for this area need to understand these restrictions.

## MULE DEER

### Unit Group 031, 032, 034, 035

### Survey Data

Post season surveys for Area 3 took place over the course of 3 days in mid-November 2021. During these flights, 464 deer were surveyed which is up about 120 animals from what was observed during the previous year. Ratios obtained from these surveys were 27 bucks:100 does:44 fawns. Spring aerial surveys were conducted over a 3-day period at the end of February 2022 and the beginning of March 2022. Conditions during this survey were good with slight breeze and sunny skies. During this survey, 1,288 deer were observed yielding a ratio of 25 fawns:100 adults. The number of deer surveyed on this flight is similar to the 2021 survey.

### Population Status and Trend

All the units in Area 3 have seen a slight drop in the population estimate. Fawn and buck ratios are mostly stable with only minor fluctuations due to an overwinter fawn loss. There may be a continued drop in population numbers but on a very small scale. The lack of winter snow and hot dry summers that have been experienced the last few years may continue to

hurt these populations. Vegetation is in poor condition which contributes to overwinter fawn loss. Population levels at this time are expected to remain relatively constant with existing habitat conditions.

## Unit 033

### Survey Data

Mule deer composition surveys in this unit were conducted both in fall 2021 and spring 2022. In the fall, flights occurred in November 2021 following the hunt season. On fall surveys, 108 deer were classified with a composition of 77 bucks:100 does:68 fawns. With the low sample size of deer located on the Sheldon, it is likely that the fawn ratios across the unit were lower than what was observed on survey. This population is modeled with surrounding Unit Group 011 - 013, which had a lower fawn ratio of 24 fawns:100 does in the fall. With the heavy winter storm in December 2021, a majority of the deer in this unit migrated off the Sheldon prior to spring flights. On spring flights, a total of 48 deer were classified with a composition of 37 fawns:100 adults. Deer in this unit continue to occur at a low density, but it is encouraging to see fawn ratios above maintenance levels on both the fall and spring survey, even with the low sample sizes.

### Population Status and Trend

The population estimate for this unit's deer herd is just over 300 animals and appears to be slightly declining. This population has yet to fully rebound to historic levels but is showing signs of potential with quality fawn recruitment ratios. With the removal of horses from the Sheldon, the habitat is in dire need of precipitation to bounce back and help facilitate the rebound of this population.

## MANAGEMENT AREA 4

Report by Kyle Neill

## HABITAT

In Units 041, 042, 3 new game guzzlers are scheduled to be constructed in 2022. One was built in March 2022 in the southern portion of the Kamma Mountains and the remaining 2 are to be developed in the North Valley area, Truckee Range, Unit 041 in April 2022 and May 2022. Emphasis of antelope use is associated with these new guzzler builds. Feral horse and burro numbers continue to remain excessively over the BLM's AML. Units 041, 042 consists of 5 BLM HMA's) managed for AML of feral horses and burros. These are Saw-wave, Bluewing, Seven Trough, Lava Beds and Kamma. The remainder of the mountain ranges in Unit 041, 042 are BLM Herd Areas (HA's) managed for zero feral horse and burro use. In 2022, the BLM estimated the feral horse population in HMA's and HA's to be 1,521 (264% over the high AML

objective). The burro estimates for these HMA's and HA's are 1,322 (1,369% over the AML high objective). The BLM has scheduled for a gather in the Bluewing HMA of 200 feral horses, and 800 burros to occur in late August 2022.

In Units 043 – 046, current habitat conditions are very favorable for antelope productivity, while these conditions continue to remain unfavorable to mule deer. Past wildfires that converted shrub dominated landscapes into annual grasslands. Additionally, re-seeding efforts have been mostly unsuccessful. Habitat conditions throughout the unit group favor antelope propagation, including numerous water sources. Antelope have been able to take advantage of past wildfires that converted shrub dominated landscapes into annual grasslands. The Humboldt and Pershing Mule Deer Enhancement Program Subcommittee submitted a habitat project for a treatment and re-seeding effort in Unit 046 in the Enda Mountains. This area was previously burned in 2018 and is considered important winter range for mule deer. Unit Group 043 – 046 hosts a single BLM HMA (Tobin HMA) for feral horses. The remainder of the mountain ranges in Units 043 – 046 are BLM Herd Areas managed for zero feral horse and burro use. The BLM estimates the 2022 feral horse population for HMA's and HAs in Units 043 – 046 to be 1,012 with a low to high BLM AML objective at 25 to 42 feral horses.

## ANTELOPE

### Unit Group 041, 042

### Survey Data

A ground survey was conducted within the unit group during September 2021 over a 6-day period. A total of 262 antelope were classified as 30 bucks:100 does:28 fawns. The 2021 ratios are below their respective 5-year and long-term averages of 35 bucks:100 does:32 fawns and 39 bucks:100 does:42 fawns. Fawn ratios have continued to be below maintenance level for the last 3 years along with a declining sample size during this timeframe.

### Population Status and Trend

The 2022 population estimate is 1,300 and is a 7% decline from last year. This herd has been on a sharp decline since 2019 when the population was estimated at 2,000 animals. Plausible explanations of this reduction include fawn recruitment rates that have been below maintenance level over the last 3 years, prolonged drought leading to limited water sources and forage availability, continued high feral horse and burro numbers over AML leading to increased competition for water and forage resources.

### Unit Group 043 – 046

### Survey Data

Ground surveys were accomplished for 5 days in early February 2022. This timeframe remains conducive to conducting this survey due to wintering antelope being near valley floors.

All roads were considered accessible this year as opposed to previous years. A record 1,364 antelope were encountered, resulting in ratios of 37 bucks:100 does:37 fawns. Five-year averages are 43 bucks:100 does:38 fawns. Increased buck quotas appear to have been successful in lowering the buck ratio.

#### Population Status and Trend

This herd's population has increased by 36% over last year and is now estimated at 1,900 antelope. A strong increasing population trend has been demonstrated since 2014. It is believed that immigration from Area 15 and 18 has mainly fueled this rapid growth as observed average fawn ratios have only been slightly higher than maintenance level since 2009. Given favorable habitat for antelope, it is thought that this herd can continue to grow and expand while the horns shorter than ears hunt provides additional hunting opportunity while allowing for controlled growth.

## CALIFORNIA BIGHORN SHEEP

### Unit 041

#### Survey Data

Composition surveys in the Sahwave Mountains were accomplished using trail cameras strategically placed on water sources from August to November 2021. Photos revealed a total of 22 California bighorns that calculated into ratios of 64 rams:100 ewes:36 lambs. The 2021 lamb ratio has greatly improved over last year's ratio of 23 lambs:100 ewes. The hunting season was closed in 2021 and is closed for the 2022 season due to lack of mature rams.

#### Population Status and Trend

The 2022 population estimate is approximately 30 California bighorn sheep. This herd has been on a declining trend since 2016 when the population estimate was 50 animals. The main cause of this decline is considered to be mountain lion predation. Numerous mountain lion-killed bighorns have been found since 2016. Targeted mountain lion removal has been conducted since 2018 with 5 being removed through 2021. Elevated mountain lion use within the Sahwave Mountains is thought to be due to the populations of feral horses and burros greatly exceeding AML's, that provide mountain lions with a consistent prey base. According to the BLM, the high AML feral horse figure for the Sahwave Mountains is 148 individuals. The BLM's 2022 feral horse estimate for the Sahwave Mountains is 374, or 174% over the high AML figure. Burros within the Sahwave Mountains are to be managed at zero, while the BLM's 2022 burro estimate is 71. In 2021 and early 2022, sightings of California bighorns other than in the Sahwave Mountains have been reported in the Selenite Range, Trinity Range, and Razorback Mountains near Trego Hot Springs off Jungo Road.

## DESERT BIGHORN SHEEP

### Unit Group 045, 153

#### Survey Data

Approximately 2 hours were utilized on a helicopter survey in the Tobin Range of Unit 045, during mid-August 2021. Surveyors found a total of 46 desert bighorns that provided ratios of 36 rams:100 ewes:24 lambs. Observations offered encouraging results for the 2021 lamb ratio albeit extremely low after the 2020 die-off. No survey in Unit 153 was performed during this reporting period.

#### Population Status and Trend

This herd experienced a die-off in late 2020 from *Mycoplasma ovipneumoniae* (M.ovi) transmitted from Unit 182 Stillwater Range herd. Follow-up field observations and survey data from 2021 suggests the die-off was more severe than first thought. Biologists now estimate that M.ovi resulted in approximately a 65% die-off. The 2022 Tobin Range desert bighorn herd is now estimated at 90 animals. The population trend of this herd is unknown during this timeframe. The recommended ram harvest quota will remain conservative.

### Unit 153

#### Survey Data

This stable population of 20 to 30 bighorns was established from bighorns that exited Unit 045 from the 2003 and 2008 augmentations. GPS collar data from ewes and rams reveal movements between Unit 183, south of the Home Station Gap Road into the Augusta Mountains.

## MULE DEER

### Unit Group 041, 042

#### Survey Data

This population is not modeled or surveyed. The NDOW management objectives state that this unit group is managed conservatively to achieve a Resident Any Legal Weapon Hunt success rate of greater or equal to 45%. Last year's success rate was 15%, with the 3-year average of 32%. Recommended Any Legal Weapon quotas for 2022 will be reduced to improve success rates.

#### Population Status and Trend

This herd appears to be declining based on Resident Any Legal Weapon harvest rates. The harvest rate objective of  $\geq 45\%$  has only been obtained during one hunting season since 2018, despite a continued reduction in quotas. The 2018 to 2021 Resident Any Legal Weapon hunt success rate has averaged 35%. Extremely high feral horse and burro numbers over AML in the unit group has led to increased competition for water and forage resources and is thought to have increased mountain lion numbers by providing mountain lions with a consistent prey base. Trail camera photos, field

sightings, and information from sportsmen all suggest an increase in mountain lion presence.

### Unit Group 043-046

#### Survey Data

Aerial fall surveys were accomplished during a 2-day period in late November 2021 in Units 043-045. Unit 046 was not surveyed due to high winds, rendering this survey incomplete. Survey results were 354 mule deer observed that provided ratios of 32 bucks:100 does:50 fawns. The 2021 fall fawn ratio is near its long-term mean of 53 fawns:100 does and the 2021 fall buck ratio mirrors the long-term mean value. However, fall buck ratios were highly variable in each unit (043, 044 and 045). No spring surveys were performed in the unit group this reporting period. Long-term average winter fawn loss (25%) was used in modeling this herd.

#### Population Status and Trend

The 2022 population estimate is 1,500 mule deer. Mule deer in this unit group have continued to decline since 2013. This herd has diminished by 57% from 2013 to 2022 (3,500 to 1,500 mule deer). Fawn ratios from 2013 to 2021 (average 29 fawns:100 adults) have largely contributed to this steady decline. Periodic wildfires from 2000 to current have converted much of the unit group that was once shrub dominated into annual grasslands. Re-seeding efforts have been mostly unsuccessful. Summer range has also suffered from prolonged drought conditions. Predation could also be affecting herd fecundity.

## MANAGEMENT AREA 5

Report by Ed Partee

## HABITAT

As of March 1, 2022, the snowpack for the area is below normal at 74%, compared to 107% in March 2021. Snowpack is below-average this year with only one major storm occurring in December 2021. The BLM, the NDOW, and non-governmental organizations have continued habitat work on past fires within these units. These fire-affected areas have been drilled, hand planted, treated with herbicide, and aerial seeding has taken place. There has been a lack of precipitation for the water year, which is 42% of normal at the time of this report. Many of the springs and streams continue to be impacted by the lack of moisture and the overuse by feral horses in some areas. Higher elevations, above 6,000 feet in most of the mountain ranges, are in good condition. However, with the reduced snowpack, additional spring and summer moisture will be needed to maintain current conditions through the summer months and into next winter. Vegetation will likely cure more rapidly, which may impact body condition of wildlife going into the winter months. Rehabilitation efforts in

this unit will continue for years to try to reestablish the habitat that was lost. Much of this unit over the past years has lost a majority of the winter habitat for mule deer. The next few years will determine if mule deer can maintain the numbers it has experienced in the past with the amount of winter range that has been lost. Snow conditions were poor which allowed deer to be anywhere from 7000+ feet to the valley floor, not heavily using their typical winter range. At this point, the limiting factor for this herd is the winter range. Summer range still seems to be intact; however, with past fires the winter range has suffered catastrophic losses. With the lack of moisture this year, some of the range conditions will suffer on these burned areas.

## ANTELOPE

### Unit 051

#### Survey Data

Post-season aerial composition surveys were conducted on September 13, 2021. Fawn surveys were much lower than what has been seen in the past during these surveys. A total of 169 antelope were surveyed with a ratio of 39 bucks:100 does:43 fawns. Water and forage were limited in most areas with the antelope scattered and in small groups. The number of animals surveyed in 2021 was up slightly from last year's survey but lower than the 5-year average.

#### Population Status and Trend

Area 5 antelope populations have remained consistent over the last 5 years. During the 2021 survey, animals were scattered, and all units had a drastic drop in the number of animals surveyed. Both fawn and buck ratios have declined from last year; however with the small sample sizes this information is slightly skewed. Conditions during this survey period were extremely hot and dry with few and small group sizes. Similar to other management areas in Humboldt County, Area 5 is expected to have a slight decrease in tag numbers which coincide with the drop in the populations. Success rates remain stable within the Any Legal Weapon hunt categories.

## CALIFORNIA BIGHORN SHEEP

### Unit 051

#### Survey Data

Surveys were conducted this year on August 11, 2021. During this survey, a total of 93 animals were classified with a ratio of 27 rams:100 ewes:23 lambs. These numbers are significantly lower than the 134 animals observed on last year's surveys. This unit continues to struggle with disease issues which is diminishing the lamb recruitment every year. This is the lowest number of animals surveyed since 2011.

#### Population Status and Trend

Unit 051 continues to struggle with disease issues. This year marks the first year of implementing a test and remove project

in the Santa Rosa Range to hopefully target those animals that are actively shedding the bacterial pathogens. This project will most likely take place every year for the next several years in hopes of removing or slowing the spread of M.Ovi so that this population may eventually increase. In August 2021, a total of 31 California bighorn were captured from August 23 – 25 in the Peterman-Andorno, Eight-Mile-Three-Mile, and Martin Creek areas with 3 M.Ovi positive animals detected. Those animals have since been lethally removed. It was the first summer helicopter capture to be conducted and it was a huge success due to the animals having short and thin summer coat that allowed them to dissipate heat very well. In February 2022, another round of testing took place in the Santa Rosa Range. During this operation a total of 19 more sheep were captured and tested February 11 - 13 in Peterman-Andorno, Sawtooth, Martin Creek, Eight-Mile-Three-Mile, and the Calico's. These 19 sheep were unmarked sheep that have never been tested to this point. Preliminary results are showing that only one individual tested positive for M.Ovi. The 2022 modeled population estimate for this unit continues to show a downward trend. With the lack of lamb survival and low overall numbers, this herd continues to struggle. A test and cull program will work towards eliminating disease issues and hopefully in the future restore these herds to carrying capacities. Despite the drops and other issues there will still be an opportunity for harvest in the upcoming season due to a good age distribution of rams.

## ROCKY MOUNTAIN ELK

### Unit 051

#### Survey Data

Post-season helicopter surveys were conducted in February 2022 in conjunction with mule deer flights. Elk were not located during the February survey. Both the east and west side of the Santa Rosa Range, where elk are typically found, were surveyed. A follow-up survey occurred in April 2022 in conjunction with sage grouse flights. A group of 40 elk were encountered yielding a ratio of 7 bulls:100 cows:36 calves. This ratio may be biased since many bulls have shed their antlers by this time of year.

#### Population Status and Trend

The population estimate has remained stable over the last 5 years. Winter conditions were poor with only one major storm occurring in December 2021. Earlier in the year, elk stayed in the upper elevations. Upon arrival of the December 2021 storm, however, elk moved to winter range in lower elevations. With the lack of snow after December, elk returned to upper elevations by February 2022. Since the Martin Fire occurred, continued rehabilitation efforts have continued in this area, which will help this population in the future. This population is expected to see fluctuations in numbers depending on annual winter conditions. The objective is to maintain this herd below 200 animals. Currently, population growth is not occurring.

## MULE DEER

### Unit 051

#### Survey Data

Post season helicopter surveys were conducted in mid-November 2021. A total of 308 animals were classified during this survey which is slightly up from last year and just below the 5-year average. During this survey period there was a lack of snow which dispersed the animals from the top of the range to the valley floor. Very few large groups of deer were located during this flight. Surveys resulted in a ratio of 37 bucks:100 does:39 fawns.

During the last part of March 2022 and first part of April 2022 surveys were conducted in this unit. A total of 717 animals were classified yielding a ratio of 34 young:100 adults. These surveys were combined with elk flights this year. The number of deer surveyed during these flights is less than observed last year, but much better than the 5-year average. The Osgood Mountains and the Hot Springs Range also contribute to the survey numbers in this unit along with the Santa Rosa Range.

#### Population Status and Trend

This year saw a slight decrease in the population estimate. Very few large groups were observed during these flights. In this unit, there is continued rehabilitation work being done on 2018 Martin Fire. This population should remain relatively constant over the next few years with no major losses predicted.

## MANAGEMENT AREA 6

Report by Travis Allen, Sarah Hale, and Matthew Jeffress

## HABITAT

Northwestern Elko County, Area 6, has fared better through the current drought than many other areas of the State. According to the U.S. Drought Monitor, during 2021, the vast majority of Nevada was experiencing extreme or exceptional drought conditions, the 2 most severe drought rankings possible. Fortunately, drought conditions were rated as less severe, and, in some cases, only moderate in much of Area 6. While these severity ratings are relatively lower, the effects these conditions can have on habitat productivity are in not favorable for wildlife. Hot, dry summers and falls experienced since late 2019 have been accompanied by mild winters with low snowpack, resulting in lower-than-average soil moisture, impacting plant vigor. Without high elevation snowpack lasting well into the year, the region lacks water reserves, creating drier landscapes overall. While mild winters have increased overwinter survival for most ungulate species in the unit group, the long-term negative impacts of decreased

forage quality may diminish any gains realized from higher overwinter survival.

In addition to the impacts of drought, wildfire has greatly altered many critical, seasonal ranges ungulates need to survive. Since 2010, over one-million acres has burned in important wildlife habitats across Area 6. The majority of these impacts have been in critical lower elevation winter ranges and have impacted 73% of winter and transition habitats for southern Area 6 mule deer herds. Once these lower elevation winter habitats burn, the plant community is frequently changed from a shrub-dominated ecosystem to perennial and annual grasslands, often dominated by annual invasive species such as cheatgrass. Throughout much of Area 6, winter ranges are void of vegetation that extends above even shallow snow depths, forcing animals to dig through snow for low-quality forage and providing no thermal cover during winter weather events. These habitat impacts are of significant concern when many of these animals are migrating long distances from summer ranges, burning fat stores along the way, only to arrive on compromised winter habitats.

In response to catastrophic wildfires, habitat restoration projects have been implemented for decades in Area 6 and are a large contributor to maintaining the relatively high carrying capacity of the landscape. Partnerships between the NDOW, federal agencies, non-governmental organizations, industry, private landowners, and other stakeholders pursue habitat enhancement projects on an annual basis. These efforts include, but are not limited to, the use of herbicide to combat invasive plant communities, re-seeding of favorable plant species into critical habitats, brush seedling plantings, and creating fuel-breaks (green-strips) to stop or slow wildfire in its path, all to create a more resilient and resistant landscape. While historically winter ranges were most susceptible to fire, as drought conditions have become more severe in recent years, summer ranges, once thought to be relatively resistant to large scale fires, have also succumbed to wildfire. Most recent example of this being the 233,500-acre South Sugarloaf Fire of 2018 in the northern portion of Unit 062. While this fire has created a flush of perennial grasses and forbs which are beneficial to species such as elk and antelope, those species were not limited by summer range prior to the fire and the benefits that elk and antelope may experience from habitat conversion do not outweigh the negative effects these fires have had on deer, which rely heavily on brush communities lost in the fire. Fortunately, no significant fires have impacted seasonal habitats in Area 6 since 2019, and the reprieve from the financial burden of new fires has allowed for those resources to be directed at restoration on previous ones. The success of habitat rehabilitation efforts, and more sustainable rangeland management practices will determine the long-term outlook for all big game populations in this management area.

While drought and wildfire are the major impacts affecting habitats, other influences also continue to challenge deer, elk, and antelope herds. Historic, and in some cases ongoing, im-

proper livestock management can have negative influences on existing plant communities. Tied to, but not limited to livestock management, is the impact created by the sheer number of fences on the landscape. Each fence is one more barrier to movement animals must navigate when moving throughout, or between, habitats. When animals are coming out of winter in poor body condition, a fence configuration not considered wildlife friendly can at worst be a direct source or mortality, or at least a small energetic expenditure, however these impacts can be cumulative. While several projects are planned in 2022 for herbicide treatments, seeding and seedling plantings, and the removal or modification of fences, the NDOW will continue to seek additional opportunities to create a positive impact on wildlife habitats.

With drought conditions continuing into 2022 and the effect this may have on forage and habitat for antelope and mule deer, the recent trend of animals maintaining good overwinter body condition may eventually come to an end. A harsh winter, or wildfire, following several drought years could have an elevated negative impact on this population. It remains imperative to maintain antelope populations within the habitat's capacity to prevent catastrophic winter die-offs, to alleviate excessive competition with mule deer on shared winter ranges, and to minimize human-wildlife conflicts along the Interstate 80 corridor. To proactively address the situation, the NDOW plans to continue managing populations through male and female harvest strategies.

The Area 6 mule deer herd is well known for its strong reproductive output, largely due to highly productive summer ranges, averaging 70 fawns:100 does on fall (post-season) surveys over a 40+ year period, which is well above the state average. Conversely, also well documented is the rapid loss and compromised status of mule deer winter and transition habitats, largely due to wildfire and/or improper livestock management. On years with deep or long-lasting snowpack conditions, this can result in significant overwinter fawn loss, often greater than 50%, in addition to elevated adult mortality. This imbalance of high reproductive output and lack of suitable winter habitats has resulted in the longstanding need to manage this population within the carrying capacity of compromised winter ranges to prevent catastrophic die-offs. To reach this goal, 2 winter range concerns must be addressed through population management. When resources (forage and cover) are limited on winter habitats, having an excessive proportion of bucks can create increased competition between adult males and juveniles, with males generally outcompeting the latter, reducing fawn body condition and survival. Hence the importance of managing buck ratios near the objective of 30 bucks:100 does, which this herd is currently well above. Secondly, when resources are limited, female harvest reduces the overall number of mouths on the landscape, allowing the remaining animals better access to limited resources, generally increasing body condition and overwinter survival for the herd overall. Both management strategies are imperative to the long-term success of this herd and only as winter ranges

become more suitable, increasing the carrying capacity of the landscape, should the deer population be managed for growth.

## ANTELOPE

### Unit Group 061, 062, 064, 071, 073

#### Survey Data

A ground survey was conducted in the unit group in early October 2021, resulting in a record sample size of 1,414 antelope. Survey was conducted during the traditional timeframe and animals were distributed throughout summer ranges as expected. Survey yielded ratios of 36 bucks:100 does:49 fawns. The observed fawn ratio is 3 fawns:100 does higher than the previous 10-year average. The observed buck to doe ratio is 6 bucks:100 does below the previous 10-year average but is still above the management objective for the post-hunt adult buck ratio (>2 years of age). Harvest management strategies will be designed to continue progress towards the post season buck ratio objective.

#### Population Status and Trend

While winter 2018-2019 had a negative impact on overwinter survival for both fawns and adults, prolonged moisture the following spring produced favorable range conditions across much of the unit group. The 3 winters since have all been mild, allowing for antelope to utilize summer and transition ranges much later into the year, and limiting the amount of time spent on winter habitats, many of which are compromised from catastrophic wildfires and/or unsustainable rangeland management practices. Based on the high female productivity rates during the past 3 years, the benefits of sustained body condition through mild winters appears to have outweighed the effects of drought on forage conditions. It is important to recognize that drought conditions in north central and western Elko County have been less severe when compared to neighboring regions. The culmination of recent environmental conditions following the 2018-2019 winter has allowed for 3 years of herd growth and the population has rebounded to pre-2018 estimates, approaching its largest historic size (2016-2017). The record sample size obtained during the 2021 survey was nearly equal to the previously published population estimate, which prompted an increase for 2022.

### Unit Group 065, 142, and a portion of 144

#### Survey Data

A ground survey was conducted in December 2021 resulting in the classification of 574 antelope yielding age and sex ratios of 31 bucks:100 does:31 fawns. The observed fawn ratio was 5 points higher than observed last year, but still 9 points below the previous 10-year average of 40:100. The low fawn ratio is likely attributed to prolonged drought.

Since August 2021, 18 adult female antelope have been fitted with GPS collars in this unit group. Most of the collared

animals were captured along the upper elevations of the Piñon Range. The objective of the collaring is to gain a better understanding of movement corridors and habitat selection of antelope as those data relate to proposed large scale mining operations in Unit 065. Most of the collared antelope remained in Unit 065 for the winter however 3 collared animals moved to Units 103 and 108 in late December 2021 and early January 2022. Collars greatly helped in locating wintering concentrations of antelope for the annual survey.

#### Population Status and Trend

The population estimate represents a slight increase over last year's estimate, however last year was the lowest population estimate for the previous 10 years. It is going to take several years of good recruitment to rebuild this herd.

### Unit 066

#### Survey Data

Formal, annual, antelope surveys in Unit 066 have been discontinued due to the difficulty of obtaining statistically reliable samples during past surveys.

#### Population Status and Trend

Due to the difficulty of obtaining useable survey data in this unit, a computer-based population model is not maintained for this herd. Tag quota recommendations for Unit 066 are based on harvest metrics such as success rates and percentage of bucks harvested with 15-inch horns or greater.

With environmental conditions in Unit 066 similar to that of surrounding units, it is reasonable to compare this herd to adjacent Area 6 antelope herds and infer that overwinter mortality was higher than normal in 2018-2019, and that the past 3 years have seen closer to average fawn production and recruitment rates. In addition to reported harvest metrics, the 2021 quotas were influenced by 2 additional factors: the reduced cohort of young animals entering adulthood after winter 2018-2019 depressed the 2021 ratio of bucks 2-years-old and older (horns-longer-than-ears), and the effect of drought on habitat conditions in terms of forage quality and availability. Currently, the population estimate remains stable for 2022. The plan is to continue with current management and harvest strategies moving forward.

### Unit Group 067, 068

#### Survey Data

A ground survey was conducted in Unit Group 067, 068 in January 2022, which was consistent with traditional survey timing. A total of 935 antelope was observed. This is the largest sample size in 3 years and is approximately 200 individuals above the previous 10-year average. Despite relatively open conditions, animals were concentrated on winter ranges along the Sheep Creek Range and in Boulder Valley. The survey yielded observed ratios of 33 bucks:100 does:36 fawns. The observed fawn to doe ratio is consistent with the previous

10-year average, while the observed buck to doe ratio is equal to that of last year. This marks the second consecutive year of strong production following 2019.

#### Population Status and Trend

The 2022 population estimate for Unit Group 067, 068 has remained stable since 2020. Active harvest management has been successful in maintaining this population within the carrying capacity of compromised winter ranges. Consistent with much of the region, the harshness of winter 2018-2019 resulted in high overwinter fawn loss for this herd. Consequently, this reduced cohort of young animals entering adulthood depressed the 2021 ratio of bucks 2-years-old and older (horns-longer-than-ears). While this impact was not nearly as severe as in other populations throughout the state, it resulted in a drop to the lower end of the management objective for post-hunt adult bucks (>2 years of age). The reduced recruitment of animals born in 2018 will affect herd age structure for some time. However, with 2 years of strong fawn recruitment since, strong cohorts of young animals will fill the gap shortly, barring any environmental setbacks.

## ROCKY MOUNTAIN ELK

### Unit Group 061, 071

#### Survey Data

Two thousand three hundred and twenty-nine elk were classified during an aerial survey in late January 2022, yielding observed sex and age ratios of 43 bulls:100 cows:46 calves. After a below-average year in 2021 for both sex and age ratios, the latest observed calf ratio was 2 points above the previous 10-year average and the bull ratio was 7 points above the 10-year average. The swing in bull ratio is not indicative of a change in the herd sex demographics. Observed bull elk ratios in some areas can be unreliable since bulls are often solo or in small groups and are not always located with large wintering cow-calf groups. In 2022, along with added survey time, two other factors contributed to increased male detectability: 1) snowpack in some areas forced bulls to winter in lower elevation habitats adjacent to cow-calf groups, and 2) more effort was spent surveying for bull elk where snow depths did not limit their access to high elevation habitats. In January 2022, elk were observed throughout their traditional winter ranges north of the Nevada border, along the Bruneau and Sheep Rivers, and as far as 30 miles into Idaho. Approximately 1,350 elk were observed utilizing the Diamond A Desert and 950 wintering on the JP Desert.

#### Population Status and Trend

Elk movement dynamics in this population are complex. While the unit group is modeled as one large population, several sub-herds utilize different geographic regions throughout the year. A substantial portion of the herd resides exclusively on the Duck Valley Indian Reservation and in Idaho. Additionally, a portion of elk wintering in the Bruneau River drainage and on the Diamond A Desert, also summer in Units 072 and 073.

Due to the temporal and spatial distribution across multiple administrative boundaries, the published population estimate of the elk herd in Units 061, 071 represents only a portion of the total combined estimate of the larger population. Ongoing collaboration among Idaho Department of Fish and Game, the NDOW, and the Duck Valley Indian Reservation continues to improve both the understanding of elk distribution and elk management among tribal and state agencies. In 2022, the population continues to see a stable and slow growing trend. The current management objective, based on the 2017 resource modeling report, is to maintain the population near current levels.

### Unit Group 062, 064, 066 – 068

#### Hunt Results

The antlerless hunt structure for the unit group has been altered for the 2022-2023 hunting seasons. The new structure only allows antlerless elk harvest in Unit 062 from September 17 – October 4 and the hunt no longer includes Units 064,066-068. No changes were made to antlered or spike hunts.

#### Survey Data

Aerial surveys were conducted in late January 2022 resulting in the classification of 764 elk, yielding ratios of 36 bulls:100 cows:36 calves. Additional survey time was allotted for this herd which resulted in the largest sample since 2016. Most of the 656 elk observed on survey were classified in the northern sub-herds wintering on the YP Desert, Idaho. Only 108 elk were observed in the southern sub-herd which winters along the southern border of the Owyhee Desert; favorable survey conditions lend confidence that this sample comprises most of the southern sub-herd. An observed sample size above the current population estimate can be attributed to the mixing of Idaho and Nevada elk herds on winter range near the border. The elk population in Units 062, 064, 066-068 is modeled to represent elk residing primarily in Nevada that are available for harvest by Nevada hunters and does not include animals considered resident to Idaho.

#### Population Status and Trend

The population in this unit group consists of 2 main sub-herds with different winter migration strategies. While the 2 sub-herds have summer ranges that overlap in both the Bull Run and Independence Mountains, one sub-herd migrates northwest into the YP Desert and the other migrates west along the southern border of the Owyhee Desert during the winter. These 2 sub-herds comprise the bulk of the overall population while many previously used southern ranges are currently unoccupied, except by small, localized groups. The entire elk population within Units 062, 064, 066-068 is mandated to remain at or below a population objective of 500 elk by the Western Elko County Elk Management Sub-Plan of 2003. The above-mentioned change in the hunt structure for antlerless elk is in response to the inequity in density and distribution between the 2 main sub-herds, along with their availability for

hunter harvest. Currently, the northern sub-herd (YP Desert) spends spring through fall in Unit 062 on private lands and on the Duck Valley Indian Reservation and is growing faster and makes up most of the allowable population objective of 500 elk. Unfortunately, this sub-herd is not always available for harvest during hunting seasons. The southern sub-herd (Owyhee Desert) resides year-round in Units 062, 064, 066-068, making up a disproportionately smaller segment of the 500 elk objective. This new hunt structure aims to reduce the size of the northern YP Desert sub-herd, while allowing growth in all other year-round Nevada sub-herds in Units 064, 066-068. Currently the modeled population estimate is about 50 individuals below population objective and the herd is being managed for a population reduction in the north and growth in the south.

Adding management complexity to the density and distribution issues of this population, the Owyhee sub-herd of elk has been annually subjected to a currently unidentified source of seasonal spring mortality, which is likely affecting population productivity. The NDOW has contributed a significant amount of time and resources attempting to diagnose the casual factors of death and has ruled out several potential sources of mortality, but the investigation remains ongoing. Bolstering efforts undertaken in previous years, in 2022 6 radio collars were deployed on cow elk, each with a paired rumen bolus device. This technology will deliver, via satellite, live body temperature readings and rumen movement data allowing for biologists to recognize acute conditions leading up to mortality, possibly gain visual contact with the impacted animal and provide near-instant mortality signals for quicker necropsy and sample collection for analysis. While there may not be an immediate solution to minimize seasonal deaths, understanding the cause and implications of the chronic issue will better inform herd management into the future.

## CALIFORNIA BIGHORN SHEEP

### Unit 066

#### Survey Data

As of spring 2022, 20 ewes, 12 lambs and about 12 rams occupy the Snowstorms. 2021 lamb recruitment represents a marginal improvement over 2020. A combination of information from marked animals well distributed across all 3 sub-herds with several summer and winter ground surveys has resulted in a reliable estimate of the current population.

#### Population Status and Trend

Spring and summer lamb surveys conducted on the Snowstorms 2017-2019 indicated the removal of super-shedder ewes, which are ewes that have active infection of virulent pathogens, had improved lamb recruitment. While the increased lamb ratios between 2017-2019 were favorable, additional collaring and sampling of adult ewes and rams during winter 2019-2020 indicated the original strain of *M. ovi* was still being circulated in 2 of the 3 sub-herds of ewes.

Mature rams also tested positive for *M. ovi* during the 2019-2020 sampling effort. This was a significant find as biologists had geared most previous testing efforts towards the adult ewe segment of the population. In addition to documenting *M. ovi* during the 2019-2020 sampling effort, a dead lamb was recovered from the Owyhee Bluffs in May 2020. That lamb tested positive for the Snowstorm strain of *M. ovi* as well. Lamb production was very low in 2020. In fact, it was one of the lowest production years on record with only 8 lambs observed in early summer. Along with documenting greatly reduced lamb production the previous summer, several bighorn ewes vanished from the Kelly Creek and Owyhee Bluffs sub-herds. These animals are presumed dead.

In response to the setback of finding *M. ovi* still circulating among Snowstorm bighorn, the NDOW captured and sampled 21 bighorn in early 2021. The sampling represented all age and sex classes. Animals captured in early 2021 included newly caught animals as well as those previously marked and sampled. Most animals were fitted with new collars. The main objective of the sampling effort was to resample 5 bighorn from various portions of the Snowstorms that had tested positive for *M. ovi* in winter 2019-2020. Of those 5 highest priority bighorns to retest, 2 tested positive for *M. ovi* again in early 2021. Both chronic shedders were removed from the population; one young ewe from Kelly Creek and a mature ram from the north end of the range. These findings are significant as biologists sampled a high percentage of the adult population in 2021 and the only *M. ovi* positive animals detected had also been identified as potential carriers following the 2019-2020 sampling effort. These data are extremely encouraging especially when coupled with the greatly improved lamb recruitment documented in lambs born spring 2021. Of the 12 lambs documented across 3 sub-herds in May 2021, 10 were observed in March 2022. These recruitment values are even more encouraging considering a ewe with a dead radio collar and an unmarked ewe that both had lambs in September 2021 were not located in March 2022. It is very likely both ewes are alive and probable that their lambs are alive as well. Results indicate a high possibility *M. ovi* may have finally been removed from the Snowstorm bighorn herd. While the NDOW staff remain optimistic, summer lamb survival will be one of the key metrics used moving forward to measure the success of these efforts in addition to another capture and sampling effort.

### Unit 068

#### Survey Data

A summer aerial survey of California bighorn sheep took place in 2021, during which a total of 115 California bighorn sheep was classified as 45 rams, 47 ewes, and 23 lambs. The observed lamb ratio of 49 lambs:100 ewes is average for this area but is a decrease from the above average 2020 lamb ratio of 74 lambs:100 ewes.

#### Population Status and Trend

Since 2012, the NDOW has actively managed this herd through relocation efforts and ewe harvest so that the population remains at sustainable levels. Most recently, in February 2021, 20 sheep were removed from the population and translocated to McGee Mountain in Unit 032. As the Sheep Creek herd has grown, California bighorn sheep have shown an increased propensity to wander, drifting north towards a domestic sheep trailing route and another California bighorn sheep herd that has recently experienced a disease event (*M. ovi*). Maintaining this herd at current levels is important to reduce the risk associated with these movements. Additionally, the area this herd inhabits serves as crucial winter range for hundreds of deer, and provides important seasonal habitat for antelope, elk, and livestock, so maintaining the sheep herd at or below its current level will ensure that conditions remain favorable for the various species that share the range.

## MULE DEER

### Unit Group 061 – 062, 064, 066 – 068

#### Survey Data

A fall helicopter survey was conducted in late November and early December 2021. A post-season sample of 2,050 deer was observed with sex and age ratios of 38 bucks:100 does:67 fawns. This was the fourth consecutive fall survey with a lower-than-average sample size. Fall surveys conducted during this period have been hampered by poor weather conditions. Similar to hunting seasons, hot and dry days are not conducive to locating deer and the lack of any snow across all summer, transition, and winter ranges has led to deer being scattered across the landscape in smaller groups. A spring helicopter survey was conducted mid-March 2022, resulting in a sample size of 4,660 deer with an observed ratio of 37 fawns:100 adults, 2 fawns above the previous 5-year average. This is the second largest spring sample size obtained since 2005. The large sample was somewhat unexpected due to less than favorable survey conditions resulting from a very open winter which allowed deer to be distributed widely across seasonal ranges, reducing detectability. The combination of 3 consecutive years of high fawn recruitment and the large spring sample size in 2022 contradicts the notion that this herd is still in decline post 2018-2019 winter. The large spring sample also indicates that the last 2 fall survey sample sizes were indicative of poor environmental survey conditions and not a decline in population size.

#### Population Status and Trend

The modeled population estimate for the Area 6 deer herd in 2022 is about 8,600 deer, an increase from the last published estimate. In 2021, based on data from aerial surveys, hunter harvest, and radio collars, the estimate was reduced from 2020 to account for the heavy winters of 2016-2017 and 2018-2019, both of which had greater than normal impact on adult and juvenile overwinter survival. In addition, due to the COVID-19 pandemic, no spring survey was conducted in

2020 which prohibiting a true measure of fawn recruitment. Presently, based on the latest surveys, it is clear that both the population size and growth rate were slightly underestimated in 2019-2021. Adjustments have been made based on more recent [survey data](#) and the 2022 population estimate accounts for these changes.

Environmental conditions the past 6 years have altered the age structure of the herd. Two difficult winters, 2016-2017 and 2018-2019, resulted in total estimated population declines of approximately 10% and 20% respectively. Because of these winters, the size of the cohorts of animals born 4 and 6 years ago are noticeably underrepresented (>50% overwinter fawn loss both years) and older aged does and bucks also likely experienced elevated mortality rates. Outside of those winters, fawn recruitment has been high, introducing many young deer into the population during 4 of the past 6 years. As time passes, barring any catastrophic wildfires or harsh winters, these large cohorts of younger deer will reach maturity and the smaller cohorts will be replaced, rebalancing the age structure of the herd. (See above Habitat section for Management Area 6 for specific aspects of habitat that may affect population growth rates and management objectives.)

### Unit 065

#### Survey Data

Mineral exploration is taking place at an accelerated rate along the entirety of the Piñon Range. Opportunities to monitor mule deer in summer on the Piñon Range have been pursued to gain a better understanding of movement corridors and habitat selection. In August 2021, 15 adult doe mule deer were fitted with GPS collars to monitor movements. Collars were well distributed along the entirety of the Piñon Range from Spring Canyon Mountain south to Baily Mountain. Between October 2021 and January 2022, all but 3 of the collared mule deer migrated to various portions of Area 14. In addition to the 15 collars deployed in August 2021, 4 bucks and 1 doe were fitted with GPS collars on the south end of Unit 065 in February 2022. Location data obtained from GPS collared deer will allow managers to better direct habitat restoration projects in both Unit 065 and Area 14 as well as to better define migration routes between the different management areas.

#### Population Status and Trend

The deer herd in this unit has been relatively static over the past decade. Recommended quota reductions the last 2 years were directed at improving the declining percentage of bucks harvested supporting 4-points or better. While the percentage of harvested bucks supporting 4-points or better improved last year, it is still several points below the 10-year average. Coupling the lower-than-average percentage of 4-point bucks in the harvest with new knowledge that a segment of deer are leaving Unit 065 prior to the end of the rifle season, it may be necessary to reduce quotas or shift a few tags from the rifle season to the primitive weapon hunts moving forward.

## MANAGEMENT AREA 7

Report by Kari Huebner

### HABITAT

Although northeast Nevada fared better than many other parts of the state, snowpack and precipitation indicate that drought is persisting. The low snowpack during winter 2020 led to low soil moisture throughout spring 2021. The summer following was also extremely dry. Despite these conditions, animals that sought out higher elevations with increased forage quality and quantity seemed to put on reasonable fat reserves. This was indicated by inspection of hunter harvested animals and body condition checks during capture operations. Northeast Nevada also benefitted this past winter from a few decent storms that enhanced the snowpack at higher elevations. Although basin SNOTEL sites are still showing below average snowpack, there are still quite a few snow reserves in the high mountain basins. If temperatures rise slowly, the soil and vegetation should be able to take advantage during the growing season, however if temperatures are unseasonably high this spring the moisture will be gone before much of the important summer forage can benefit. Wildlife in northeast Nevada is being challenged by unprecedented low precipitation receipts exacerbated by record high average temperatures. Only time will tell if Nevada's wildlife will be able to adapt to changing conditions in such a short time frame.

Northeast Nevada has also been affected by wildfire regularly throughout the last 20 years, with nearly one million total acres burned. All seasonal habitats on which wildlife depend have been impacted. On summer range, some the effects of these fires have been beneficial with perennial grasses and forbs dominating the recovering burned areas. On winter range, the shrub species wildlife depends on for winter survival has been negatively affected. In some areas sagebrush is beginning to recover and provide forage and cover during the critical winter months, but in others the brush component shows no sign of recovering. These are the areas that are the focus of future recovery efforts.

Most of the fires that have occurred in the area over the last 20 years have received some level of restoration efforts. The 2016 Wally Fire, the 2019 Shafter Fire, the 2020 Shafter and Lost Fires, and the 2021 Elbow Fire, through partnership with the BLM, have all received some level of restoration in the last 3 years. Various treatments include imazapic treatment to combat cheatgrass establishment, aerial and drill seeding, smooth chaining burned conifers and hand planting sagebrush seedlings. The success of these treatments has been variable due to the impact of drought conditions on establishing seedlings.

Other recent habitat improvement projects in the area have included juniper removal and fence modification. In 2020,

the Natural Resources Conservation Services facilitated the removal of several thousand acres of juniper occurring on private land on the west side of Pilot Mountain. Also in 2020, approximately 3,300 acres of Phase 1 and 2 conifers were removed in important winter range in the Toano Mountains. Additional private acreage, on the east side of the range, is slated for this coming year. Native grasses and the mountain brush communities should respond favorably to the increase in space, sunlight, and water.

Fences continue to cause harm to wildlife. Over the last decade, the NDOW has partnered with the BLM and landowners to reduce the negative impact fences have on migrating wildlife. Often fences are 5 or 6 strand with high top wires and low bottom wires that inhibit ease of movement. The modified fences are 3 or 4 strand, with smooth bottom wires, and heights less than 42 inches tall. In some cases, fences that are no longer needed have been removed completely. The NDOW will continue to look for opportunity to remove or modify fences to enhance wildlife movement and energy expenditures.

A long-awaited environmental assessment (EA) is currently being analyzed by the BLM Wells Field Office for numerous vegetation treatments within this unit group. Once the assessment is completed, possible treatments may include removal of encroaching juniper, herbicide application, and creating fuel breaks with the intent of reducing large acreage fires. Once signed this EA should provide enough acreage on public land to identify and implement projects for years. Each of the treatments should increase the health of the sagebrush ecosystem and benefit the wildlife that depend on it.

Over the last 15 years the Nevada Department of Transportation and the NDOW have partnered to increase highway safety and expand habitat connectivity for migrating wildlife in northeast Elko County. There are 6 wildlife safety crossings on U.S. Route 93 designed to facilitate movement across the highway. Three crossings over Interstate 80 were completed on Silverzone Pass in 2012 and 4 additional crossings on Pequop Summit were completed in 2017. Wildlife-vehicle collisions have decreased each year since the crossings have been in place, making the road safer for motorists and facilitating wildlife getting to critical seasonal habitats.

More than one million acres of northeast Nevada include private lands and allotments managed by the Winecup Gamble Ranch. The ranch is currently working through an outcome-based permit renewal with the BLM. If the permit renewal is approved as proposed, the revised timing and season of grazing should improve habitat in this unit group. The proposed permit will also include increased water distribution and spring protection that will benefit a multitude of wildlife species across the units.

The NDOW initiated the Mule Deer Enhancement Program (MDEP) in 2021. The Area 7,8, and 9 MDEP Subcommit-

tee met 5 times last year, including a field trip to look at fire recovery and conifer removal projects in winter range. The MDEP Subcommittee had 4 projects approved by its Oversight Committee for the 2022 season. The main project will be a conifer removal project to benefit wintering mule deer on Murdock Mountain. The MDEP Subcommittee will meet later in the spring to discuss progress on approved projects as well as schedule another field trip.

### ANTELOPE

#### Unit Group 072, 074, 075

##### Survey Data

Ground surveys conducted in mid-August 2021 resulted in the classification of 410 antelope. The observed sex and age ratios were 26 bucks:100 does:38 fawns. The observed buck ratio was higher than the 2020 ratio of 23 bucks:100 does, and the fawn ratio was lower than the 2019 observed ratio of 45 fawns:100 does. Surveys in this unit group are typically conducted between the archery and any legal weapon seasons due to the migration of antelope out of the northern end of Unit 072 and into Idaho during and after the any legal weapon season.

##### Population Status and Trend

During winter 2018-2019, approximately 25 antelope were killed on the train tracks near Deeth, Nevada. Because of the reduction of antelope observed around the Tabor pivots during summer and fall 2019, it is likely these were antelope that had migrated south from there. These animals were taken out of the model, and this reduced the overall population estimate that year.

The antelope population in this unit group is benefitting from the natural recovery of perennial grasses and forbs, as well as extensive seeding efforts in both Nevada and Idaho, in previously burned areas. Because of adequate forage conditions during the summer followed by back-to-back mild winters, the overwinter survival of antelope is expected to be above average, and similar to last year. This is also contributing to above average fawn ratios observed on survey resulting in a stable to slightly increasing population.

#### Unit Group 076, 077, 079, 081, 091

##### Survey Data

Ground surveys conducted in September 2021 resulted in the classification of 311 antelope. The observed sex and age ratios were 48 bucks:100 does:30 fawns. The observed buck ratio was lower than the 2020 ratio of 61 bucks:100 does, and the observed fawn ratio was also lower than the 2020 ratio of 35 fawns:100 does.

##### Population Status and Trend

This antelope herd currently appears stable to slightly increasing. Fawn ratios have been above average for this population

for the past 2 years. Despite above average fawn production, it continues to be lower than in surrounding units, which is likely a result of much of the unit group, for example Pilot Valley, experiencing comparatively low precipitation and having lower forage quality. This herd has been using the northern portions of Units 076 and 081 more than in previous years. This is a result of the recovering burns as well as increased precipitation and better forage quality. If the area receives favorable precipitation, these burned areas will likely facilitate increases in the antelope herd in coming years.

### ROCKY MOUNTAIN ELK

#### Unit Group 072, 073, 074, 075

##### Survey Data

An abbreviated aerial survey was conducted in this unit group. A more complete, comprehensive survey is planned for the 2022-2023 survey season. Surveys conducted in February 2022 resulted in the classification of 271 elk with observed sex and age ratios of 73 bulls:100 cows:51 calves. The observed bull ratio was higher than the 2021 bull ratio of 66 bulls:100 cows and the observed calf ratio was lower than the 2020 ratio of 61 calves:100 cows.

##### Population Status and Trend

The population objective in the Jarbidge Mountains Elk Herd Management Plan is 1,000 adult elk ( $\pm 10\%$ ) on the U.S. Forest Service portion of Unit 072. The Wells Resource Area Elk Plan allows for an additional 220 elk in portions of Unit 072, 074, and the east side of 073, on lands managed by the BLM. The Western Elko County Elk Plan identifies an objective of 200 elk for the west side of Unit 073 and 100 elk ( $\pm 10\%$ ) in Unit 075. Cumulatively, the population objective for elk in Units 072, 073, 074, 075 is 1,520 adult elk. The herd is currently below population objective and tag quotas are expected to allow for growth of this elk population.

In recent years, data from elk fitted with radio collars have been used to differentiate elk from the Jarbidge and Bruneau herds which share a wintering area on the Diamond A Desert. Additional radio telemetry data from winter range on the Inside Desert have indicated some elk reside solely in Idaho. Movement data is incorporated into the population model to more accurately estimate time spent in Units 072, 073, 074. Results indicate about 600 elk from this metapopulation reside either outside of Nevada, or in surrounding unit groups, and are not included in the population estimate for Units 072, 073, 074, and 075.

Due to the large amount of private land in Unit 075, comprising about 50% of the total area, the herd continues to be a management challenge. The Winecup Gamble ranch allows access to private lands on Loomis Mountain but restricts the use of motorized vehicles. While some landowners permit access to hunters, elk seek refuge on private lands that do

not permit access. The NDOW continues to work with these landowners to increase access for hunters.

Because there are frequent elk movements between Unit 075 and surrounding units, Units 072,073,074 and Unit 075 are modeled as a single, large population. It is important to continue to manage harvest in Unit 075 independently to maintain the population at the objective of 100 adult elk ( $\pm 10\%$ ). To accomplish this management goal, the antlered and antlerless hunts will continue to separately target elk in Unit 075 and Units 072,073,074.

#### **Unit Group 076, 077, 079, 081**

##### Survey Data

Surveys conducted in February 2022 resulted in the classification of 1,264 elk with observed sex and age ratios of 46 bulls:100 cows:49 calves. Surveys were not conducted in this unit group during the 2020-2021 survey period.

##### Population Status and Trend

Elk spend a substantial amount of time on private lands in this unit group due to the number and distribution of private parcels. Fourteen landowners qualified for 38 elk incentive tags by allowing elk use on their private rangeland during 2021. This is down slightly from 39 incentive tags issued in 2020. The reduction in elk incentive tags issued in this unit group does not directly reflect the amount of time elk spend on private lands. Instead, it is reflective of fewer elk in the unit group and the resulting decrease of antlered elk tags.

Since 2017, radio collars have been deployed on elk wintering near Deadline Ridge in Unit 081. Movement data indicate these migratory elk spend summers in Idaho and are not available to Nevada hunters during the August through October antlerless elk seasons. Ongoing analysis and understanding of movements help to estimate elk numbers related to the population management objective and to ensure tag quotas reflect elk that are available for harvest in Nevada during open seasons.

The depredation hunts in Unit 081 were developed in response to low hunting pressure and increasing elk numbers. The goal of these hunts is to reduce elk numbers and alleviate pressure on private land. The depredation hunts have proven successful and are offered, again, in 2022.

## **ROCKY MOUNTAIN BIGHORN SHEEP**

### **Unit 074**

##### Survey Data

In November 2021, 23 Rocky Mountain bighorn were classified as 7 rams, 11 ewes, and 5 lambs. This was a ground survey and likely did not include a comprehensive sample of the rams.

##### Population Status and Trend

This herd experienced an all-age die-off during fall 2014. Necropsies found bighorn sheep to be suffering from severe chronic pneumonia. One ewe tested positive for *M. ovi* for both blood antibodies and presence of the bacteria on Polymerase Chain Reaction (PCR).

Targeted mountain lion removal is ongoing in this area. Five bighorn sheep were collared in October 2017 to aid in bighorn sheep distribution mapping and to identify areas for mountain lion removal. An additional 5 bighorn were collared in January 2020. One collared ewe died during summer 2020. The cause of death was undetermined; however, it did not appear to be a predation related mortality. In January 2021, the collar from the ewe mortality was used to replace one of the collars deployed in 2017. During the same capture event, 2 additional ewes were collared. In spring 2021, a collared ewe and a yearling ram were found comingling with a nearby domestic sheep herd. These 2 sheep were removed to reduce the risk of disease transmission to the rest of the bighorn herd. Another collared ewe died during summer 2021. She was a ewe that was suspected of being a chronic shedder of *M. ovi* and appeared to have been preyed upon by a mountain lion. Due to the mortality event occurring in a Wilderness Study Area, the lion was not able to be removed by Wildlife Services. Three male lions have been removed since the initiation of the predator project. There are 7 active collars on bighorn (6 ewes, 1 ram). These sheep will be closely monitored for any additional predation events.

Four additional bighorn were collared in January 2022 and all samples were negative for *M. ovi* using PCR testing. This is an encouraging sign that this herd may be clear of the virus and will be able to recover going forward.

## **MULE DEER**

### **Unit Group 071 – 079, 091**

##### Survey Data

Post-season aerial composition surveys using stratified polygons were conducted in December 2021. A total of 1,685 mule deer was classified yielding ratios of 25 bucks:100 does:49 fawns. A spring aerial composition survey was conducted in March 2022. A total of 3,101 mule deer was classified with an observed ratio of 34 fawns:100 adults.

##### Population Status and Trend

A combination of fires, drought conditions, and possible plant senescence, may have made deer habitat in Area 7 incapable of supporting the numbers of deer documented in past decades. Fall fawn ratios in 2016-2018 were the lowest on record for the Area 7 deer herd, however 2019 and 2021 showed increases towards average ratios. This indicates that the herd may be showing early signs of an increase. In addition to habitat loss from fires, drought on summer range can play a significant role in the ability of deer to put on adequate

fat reserves to survive the winter. The past 2 mild winters have aided survival on winter range and contributed towards higher fawn recruitment in the spring.

Since 2008, 250 deer have been radio collared in a collaborative effort between the NDOW, Nevada Gold Mines, and University of Nevada, Reno, on the Pequop and Toano winter ranges. As of spring 2021, 43 collars remain active. Deer collaring efforts have been instrumental in gaining a better understanding of migration triggers, timing, pathways, length of migrations (some deer are moving more than 100 miles to winter range), important stopovers and seasonal habitat use patterns. The information garnered through the monitoring of radio collars may also help identify potential habitat projects to address limiting factors for this deer herd.

## **MANAGEMENT AREA 8**

Report by Kari Huebner

## **HABITAT**

Although northeast Nevada fared better than many other parts of the state, snowpack and precipitation indicate that moderate drought is persisting. The low snowpack during winter 2020 led to low soil moisture throughout spring 2021. The summer following was also extremely dry. Northeast Nevada also benefitted this past winter from a few decent storms that enhanced the snowpack at higher elevations. Although basin SNOTEL sites are still showing below average snowpack, there are still quite a few snow reserves in the high mountain basins. If temperatures rise slowly, the soil and vegetation should be able to take advantage during the growing season, however if temperatures are unseasonably high this spring the moisture will be gone before much of the important summer forage can benefit.

Area 8 has been significantly affected by wildfire over the last 20 years, with very little acreage that has not burned at some point. All seasonal habitats in which wildlife depend on have been impacted. On summer range, some the effects of these fires have been beneficial with perennial grasses and forbs dominating the recovering burned areas. On winter range, the shrub species wildlife depend on for winter survival has been negatively affected. In some areas sagebrush is beginning to recover and provide forage and cover during the critical winter months, but in others the brush component shows no sign of recovering. These are the areas that are the focus of future recovery efforts.

Most of the fires that have occurred in the area over the last 20 years have received some level of restoration efforts. The Goose (2019), Goose Creek (2018), Delano and Dry Gulch (2017) fire, through partnership with the BLM and the Winecup Gamble Ranch LLC have all received some level

of restoration in the last 5 years. Many game animals that use Unit 081 in the winter, spend the summer in Idaho. This includes antelope, elk, moose, and deer. In 2020, there was a 90,000-acre fire (Badger) in Idaho that burned excellent summer range. Various fire rehabilitation treatments have included imazapic treatment to combat cheatgrass establishment and aerial as well as drill seeding efforts. The success of these treatments has been good, but it will take a long time for the sagebrush, bitterbrush, and mahogany to recover.

A long-awaited EA is currently being analyzed by the BLM's Wells Field Office for numerous vegetation treatments within this unit group. Once the assessment is completed, possible treatments may include removal of encroaching juniper, herbicide application, and creating fuel breaks with the intent of reducing large acreage fires. Once signed this EA should provide enough acreage on public land to identify and implement projects for years. Each of the treatments should increase the health of the sagebrush ecosystem and benefit the wildlife that depend on it.

More than one million acres of northeast Nevada include private lands and public allotments managed by the Winecup Gamble Ranch. The ranch is currently working through an Outcome Based permit renewal with the BLM. If the permit renewal is approved as proposed, the revised timing and season of grazing should improve habitat in this unit group. The proposed permit will also include increased water distribution and spring protection that will benefit a multitude of wildlife species across the units.

## **MULE DEER**

### **Unit 081**

##### Survey Data

Surveys were not conducted during the reporting period in Unit 081. Unit 081 has been identified as one of 8 "alternative" deer herds in the state to be managed more conservatively based on hunter success and antler point data. Hunter success dropped noticeably this past year during the Any Legal Weapon season (38% success in 2021 compared to 82% success in 2020). The percentage of 4-points harvested dropped from 78% in 2020 to 44% in 2021. Quota recommendations will be reduced to reflect the lower success and percentage of 4-points.

##### Population Status and Monitoring

Unit 081 supports a relatively small resident deer herd. There are migrations into the unit from Idaho, Utah, and Unit 076 late in the year. The magnitude of migration from surrounding states is dependent on weather conditions during the hunting season and timing of the hunt. The objective is to take advantage of the migratory segment of the herd and reduce hunting pressure on the small resident deer populations in the area.

The large fires in the past 5 years on both summer and winter ranges are expected to negatively impact this deer herd until the range has time to recover. Success of seeding efforts and the amount and timing of precipitation will determine how long the recovery will take.

Two projects approved by the MDEP Oversight Committee in the unit include tooth analysis from harvested deer and a collaring project to assess deer use on previously burned areas.

## MANAGEMENT AREA 9

Report by Kari Huebner

### HABITAT

Pilot Mountain can be a very dry mountain. It often gets missed by snowstorms that hit the rest of the northeast corner of Nevada. Although basin SNOTEL sites are still showing below average snowpack, there are a few snow reserves in the high mountain basins. If temperatures rise slowly, the soil and vegetation should be able to take advantage during the growing season, however if temperatures are unseasonably high this spring the moisture will be gone before much of the important summer forage can benefit. Wildlife in northeast Nevada is being challenged by unprecedented low precipitation receipts exacerbated by record high average temperatures. Only time will tell if Nevada's wildlife will be able to adapt to changing conditions in such a short time frame. Pilot Mountain has also been affected by wildfire during the past 10 years. The Rhyolite and Pilot Valley fires being the most notable. All seasonal habitats in which wildlife depend on have been impacted. The Rhyolite fire received restoration efforts initiated by Utah, whereas the Pilot Valley Fire was smaller and just the dozer lines were treated.

Other recent habitat improvement projects in the area have included juniper removal. In 2020, the Natural Resources Conservation Services facilitated the removal of several thousand acres of juniper occurring on private land on the west side of Pilot Mountain. Native grasses and the mountain brush communities should respond favorably to the increase in space, sunlight, and water.

## ROCKY MOUNTAIN ELK

### Unit 091

#### Survey Data

Surveys conducted in August 2021 resulted in the classification of 124 elk with observed sex and age ratios of 58 bulls:100 cows:30 calves. Surveys were not conducted in this unit group during the 2020-2021 survey period.

#### Population Status and Trend

The long-term trend for this elk herd is stable to slightly increasing. Calf ratios are usually lower than in surrounding units; however, herds associated with private meadows exhibit considerably higher production and recruitment.

An archery season was approved for antlered elk in Unit 091 beginning for the 2021 hunting season. Antlered elk tags will be allocated between the archery and the any legal weapon hunts. Two elk incentive tags will be allocated in the unit again this year. An early and late antlerless season will again be offered during the 2022-2023 hunting season.

A population objective of 250 elk was established in the Wells Resource Area Elk Plan. The objective was based on the previous Unit 079 boundary which was changed to divide the area into separate units, 079 and 091. The population objective now applies solely to Unit 091, which includes only the Nevada portion of Pilot Mountain. The Unit 091 herd is predominately found on the Utah side of Pilot Mountain and remains below population objective in Nevada.

## ROCKY MOUNTAIN BIGHORN SHEEP

### Unit 091

#### Survey Data

Surveys conducted in August 2021 resulted in the classification of 28 bighorn with observed sex and age ratios of 20 rams:100 ewes:20 lambs.

#### Population Status and Trend

In 2010, the presence of bacterial pneumonia was documented in the population. The disease event severely affected lamb survival. There are currently an estimated 40 Rocky Mountain bighorn sheep in the population.

In 2012, 3 Rocky Mountain bighorn sheep, 2 ewes and 1 ram, were radio collared with the objective of learning more about movement patterns and potential contact with domestic sheep. The 2 ewes moved little from the first capture sight. One of the ewes spent her time exclusively in the Silver Islands which is where an active winter allotment of domestic sheep is located. Two satellite collars were deployed on a young ram, but both failed, so little information was obtained from that animal. Rocky Mountain bighorn sheep tested during the collaring operation were all positive for antibodies for *M. ovi* and one was still actively shedding the bacteria.

In August 2020, another capture event was conducted. Six bighorn were sampled and collared, 2 rams and 4 ewes. Of the 6 bighorn sampled, 3 were positive for *M. ovi* on Polymerase Chain Reaction test. One of the collared rams that tested positive was killed by a mountain lion shortly after capture. In January 2021, the remaining 2 bighorn that were positive in August were resampled and one of the ewes was still actively shedding the virus. She has since been removed from the

population. The other ram's sample came back inconclusive. Even though lamb recruitment is stable to slightly increasing, this herd is continuously at risk.

## MANAGEMENT AREA 10

Report by Scott Roberts

### HABITAT

The 2021-2022 winter has been mild in temperature and snowpack. As of April 4, 2022, the water basins within this unit group range between 89%-96% of average precipitation for water year to date but the existing snowpack is only 48%-75% of average (<https://www.nrcs.usda.gov/wps/portal/wcc/home>). The average winter, coupled with the preceding dry summers has led U.S. Drought Monitor as of March 31, 2022, to classify the entirety of this unit group as exhibiting severe to extreme drought conditions (<https://drought-monitor.unl.edu/>). In the absence of exceptional spring and summer precipitation, summer range conditions as well as the productivity potential of the Area 10 are positioned to be in a compromised state.

Populations of feral horse beyond AML, continue to affect rangeland health and diversity. The relative aridness of this much of this unit group makes the limited perennial springs and fragile riparian vegetation very susceptible to overuse by horses. This unit group covers all or part of 5 Herd Management Areas (HMA), and according to the 2021 population estimates published by the BLM, these 5 HMA's ranged from 199% - 2,557% of AML ([www.blm.gov/programs/wild-horse-and-burro/](http://www.blm.gov/programs/wild-horse-and-burro/)).

In July 2019, the Corta Fire burned the west side of Harrison Pass on the boundary of Units 102 and 103. The fire burned approximately 16,500 acres of exceptionally productive summer, transition, and crucial winter range. The burn scar lies directly in the path of where the eastside migration and the westside mule deer migration routes converge and is used to some degree by most of the Area 10 deer herd on an annual basis. The significance of this area cannot be overstated and, for that reason, the NDOW, along with several partners, aerially seeded 8,108 acres with a number of native shrubs and grasses. In September 2019, the Cherry Fire burned approximately 3,500 acres on the westside of the South Ruby Mountains in Unit 103. The fire burned important transition and winter range and was located only 9.5 miles south of the Corta Fire. The short-term loss of seasonal range was amplified by having both fires in such close proximity to each other within the westside migration corridor. The NDOW and partners aerially seeded 1,900 acres of the burn scar with several native shrubs and grasses. Collar data has shown limited use within both burns. Fire rehabilitation efforts continue to be monitored, to date initial seeding success of desired shrub

species seems to be limited. The planting of shrub seedlings will be pursued in the coming year. Monitoring and treatment of invasive winter annual grass species within the burn scars and on adjacent land continues to be an annual process.

The NDOW continues to work on habitat projects to improve mule deer winter and transitional range by creating a more browse-dominated landscape. These efforts should increase wildlife diversity and reduce the potential for catastrophic wildfires by reducing the overall fuel load. The Overland-Big Wash Project has been in an implementation stage for the past 7 years. The wildlife habitat improvement project is a collaborative effort between the BLM, the NDOW, and the U.S. Forest Service, designed to treat 18,500 acres within a 45,200-acre project area over a 10-year period in Units 103 and 108. Treatments have included a combination of hand-thinning, mastication, chaining, weed abatement, and seeding. The Overland project is adjacent to the treatments identified in the Newark and Huntington Watershed Restoration Project that the BLM has been implementing since 2017. The objective of the project is to increase watershed health through vegetation restoration, riparian restoration, and range improvements. The Newark and Huntington Project is focused on the west side of the south Ruby Mountains, and it abuts Long and Ruby Valley Project that is focused on the east side. The Long and Ruby Valley Watershed Restoration Project is a holistic effort to conduct vegetation treatments in units covering 136,000 acres within a combined project area of 509,252 acres, while managing noxious weeds, maintaining water sources, and protecting cultural resources. The Long and Ruby Valley Project has been in the implementation phase since 2020, with much of the work being focused on or near mule deer winter range in Unit 108. The combination of these 3 projects will improve the available seasonal habitat for a large percentage of the Area 10 deer herd, with the potential to benefit all game species.

### ANTELOPE

#### Unit Group 101 – 104, 108, 109 and a portion of 144

#### Survey Data

A ground survey was conducted in November and December 2021 during which 768 individuals were classified yielding sex and age ratios of 36 bucks:100 does:23 fawns. The observed fawn ratio was significantly lower than the previous 10-year mean of 30 fawns:100 does.

#### Population Status and Trend

One factor that is limiting hunter opportunity in this unit group is that some animals are not available for harvest due to hunting restrictions at the Ruby Lake National Wildlife Refuge. Preliminary conversations have taken place to initiate limited hunting on the refuge, but the specific planning actions have been stagnant since restrictions were put in place.

The buck ratio has gradually been lowered over the past 5 seasons through above-average harvest rates and below-average fawn ratios. The past 5 surveys have yielded the lowest 5-year average recruitment rate since surveys were initiated in this unit group in 1982. The lower buck ratio coupled with the poor fawn recruitment will translate into lower quotas and a continued population contraction.

## ROCKY MOUNTAIN ELK

### Unit Group 078, 105 – 107, 109

#### Hunt Results

The 2021 hunting season was the first to offer a late season antlerless hunt in this unit group to target elk that typically leave private land sanctuaries during the winter months. The inaugural late season hunt was very successful in that 67% of those hunters that went afield harvested an antlerless elk. A record number of tags were issued for this unit group during the 2021 hunting season, which resulted in a record total harvest of 89 elk. Please see the appendix for more detailed harvest results.

#### Survey Data

An aerial survey was conducted in January 2022, where 532 elk were classified, yielding sex and age ratios of 29 bulls:100 cows:39 calves. The calf ratio is very near the previous 10-year average of 40 calves:100 cows.

#### Population Status and Trend

In February 2021, a monitoring effort was initiated with 8 radio collars deployed on adult cow elk within this unit group. Monitoring objectives of the project include delineating seasonal use of the elk herd, documenting private land use, and informing future hunt strategies to manage this herd at its designated population objective. A secondary objective is to document elk use within areas of recent rehabilitation treatments and compare current use to movement data gathered prior to the Spruce Mountain Restoration Project. During the 2021 hunting season one of the collared cows was legally harvested. That collar was retrieved and redeployed in January 2022, so all 8 collars continue to collect data.

The current population estimate is higher than the previous year, which is a direct result of the decreased harvest success and above average recruitment. Elk use in this unit group continues to be high on private property, specifically the Big Springs Ranch in Unit 078 and private properties in Unit 107. Management of this elk herd at population objective is becoming increasingly difficult as more elk seek refuge on private land during the hunting season.

### Unit Group 101 – 103

#### Hunt Results

The NDOW remains committed to limiting the elk population in Units 101 - 103. Since 1999, 812 elk have been harvested

from the elk restricted zone in the Ruby Mountains. In 2014, the NDOW implemented its most aggressive hunt strategy since the inception of the first depredation hunts in 1999.

For the 2021 hunting season, antlered quotas remained at 100 tags split between 2 seasons with a cumulative hunt success rate of 46% for those hunters that went afield. Though this hunt is a strategic management action, it still resulted in 66% of the harvested bulls being 6 points. The antlerless quota was 150 tags for the single 5-month season, which had an 16% hunt success rate for those hunters that went afield.

#### Survey Data

Elk specific surveys are not conducted for this unit group. Landowner reports of elk damage have been minimal the last 10 years. The one property with heavy documented use had an exclusionary fence installed in summer 2019. The low number of recent elk issues affirms that hunt strategies have been successful at achieving management goals.

#### Population Status and Trend

The current hunt strategy is to keep elk numbers low and to prevent or reduce depredation on agricultural lands. This aggressive harvest strategy of liberal tag quotas will continue to be used and will be bolstered by actively working with landowners should any elk issues arise.

## ROCKY MOUNTAIN BIGHORN SHEEP

### Unit 101

#### Hunt Results

Winter 2009-2010, a pneumonia outbreak occurred in the Unit 101 Rocky Mountain bighorn sheep herd resulting in an estimated 90% mortality. No tags have been issued for Unit 101 since the 2009 season.

#### Survey Data

Following the 2009-2010 pneumonia outbreak, comprehensive aerial and ground surveys have been conducted annually. In January 2021, 20 Rocky Mountain bighorn sheep were classified yielding age and sex ratios of 40 rams:100 ewes:60 lambs.

#### Population Status and Trend

Since the most recent pneumonic disease event involving of *M. ovi* during late-fall 2014 and early winter 2015, the Rocky Mountain bighorn herd has been slowly growing. Lamb recruitment had been improving from 2017 through 2019, with lamb ratios of 30, 55, and 50 lambs:100 ewes, respectively. The 2021 survey observed a dismal recruitment rate, but this most recent survey is promising.

In March 2019, 8 satellite collars were deployed on adult ewes found utilizing the historic winter range on the north end of Unit 101. The objective of the project is to sample the pathogens present in the individual sheep and potentially

remove any individuals that are chronically shedding harmful pathogens. This project is designed to work in tandem with the continued sampling and collaring effort of the Unit 101 mountain goats. To date, there is still 1 collar that is fully functioning and on a live sheep. In January 2022, 2 more collars were deployed on adult ewes to continue surveillance on this population.

### Unit 102

#### Hunt Results

Winter 2009-2010, a pneumonia outbreak occurred in Unit 102 bighorn sheep resulting in an estimated 90% mortality. No tags have been issued for Unit 102 since the 2009 season.

#### Survey Data

Following the 2009-2010 pneumonia event, comprehensive aerial and ground surveys have been conducted annually. In concert with the unit's aerial mountain goat survey in January 2021, 39 Rocky Mountain bighorn sheep were classified yielding age and sex ratios of 121 rams:100 ewes:57 lambs. This is the largest sample obtained since the die-off.

#### Population Status and Trend

Initially after the all-age die-off in winter 2009-2010, this herd struggled with little to no annual lamb recruitment. Between 2013 and 2015, the sheep herd remained stable to declining and lamb recruitment varied from low to maintenance levels. Starting in 2015, this herd began exhibiting high lamb recruitment (>50 lambs:100 ewes). The strong lamb ratios are encouraging, but herd growth had been limited as many of the older-aged ewes that made it through the initial die-off were dying of old age. The high recruitment values have caused the average age of this population to drop, and meaningful growth is being realized. The 2022 season will be the first to offer a tag since 2009. The tag will not be offered in the public draw process, as the lucky recipient has been waiting all these years for the tag that was drawn but deferred in 2009.

In January 2020, 5 collars were deployed on 2 rams and 3 ewes that winter in Lamoille Canyon. The intent of the collaring effort is to document sheep use as this herd continues to grow and begins recolonizing large portions of their historical range. Small sheep groups have been documented moving both north and south from the core area associated with Lamoille Canyon. To date, 2 of the ewe collars have dropped off, and the other marked sheep have survived with fully functioning collars.

## MOUNTAIN GOAT

### Unit 101, Unit 102, Unit 103

#### Hunt Results

Between 2010 and 2013, a conservative mountain goat quota

was recommended due to the uncertainty of pneumonia-related mountain goat mortalities in Units 101 and 102 that share summer range and partial winter range with bighorn sheep. More recently, after further assessing survey and harvest data post-die-off, there is greater confidence in adult survival rates for Unit 102 to support a slight increase in tags. In contrast, the Unit 101 mountain goat herd has continued to struggle with pathogens, high kid mortality, and subsequent decreases in annual survival rates. Only 7 of the 9 tag holders hunted during the 2021 season, of which 2 of the Unit 102 hunters were unsuccessful. Of the 5 mountain goats harvested, only one was a nanny. The average age of all harvested mountain goats was 4.8 years old. Nanny harvest continues to be closely monitored due to the naturally low productivity potential of mountain goats. To curtail nanny harvest, the Game Division sent Mountain Goat Sex Identification material to all tagholders as a voluntary approach to reduce nanny harvest. In 2019, the NDOW implemented a mandatory online Mountain Goat Sex Identification Orientation via the NDOW's license sales and tag application contractor. Nanny harvest continued at a high rate and in 2021 a mandatory virtual and in-person indoctrination class was instituted to review literature, videos, numerous mountain goat specimens, and to answer questions specific to the hunt.

#### Survey Data

In June 2021, an effort to follow up on collared nannies in Unit 101 was employed to document a production value for known goats. The rationale for the timing was to observe kids prior to the mid-summer mortality threshold that has been documented in the last decade. The summer mortality typically takes place 6-8 weeks after birth and coincides with the weaning of the kids. The June survey yielded very exciting results, with 6 marked nannies being observed with a total of 6 kids. Of note one old nanny (12+ years old) did not have a kid but another nanny did have twins. Other observations included 2 unmarked nannies, 2 kids, and 1 yearling.

In August 2021, a follow up survey was employed to document if the kids that were present in June had made it through the post-weaning stage that is critical in the disease cycle. The August survey was very exciting in that all 9 marked nannies were observed with a total of 9 kids being present. Again, the old, marked nanny was observed without a kid, but the set of twins was still alive. Other observations included 2 yearlings, 1 billy, and 1 unmarked adult nanny. The objective was to compare the summer production value to the recruitment rate gathered from the mid-winter helicopter survey to document loss of kids in the 5 months in between.

Aerial mountain goat surveys were conducted in Units 101 - 103 in January 2022. Survey results were as follows: Unit 101 - 20 mountain goats with ratio of 11 kids:100 adults; Unit 102 - 171 mountain goats with ratio of 34 kids:100 adults; and Unit 103 - 10 mountain goats with ratio of 11 kids:100 adults. The Unit 101 survey was hindered by windy conditions and concluded with dismal results. Of the 9 collared adults,

only 2 were observed on the survey. The Unit 102 survey conditions were fantastic and resulted in a record sample size with another year of exceptional kid recruitment. The Unit 103 survey had marginal flight conditions and resulted in a very small sample size.

#### Population Status and Trend

To document the pathogen profile of individual mountain goats and potentially remove those individuals that are chronic shedders of harmful pathogens, a collaring and sampling project was initiated in the 2018-2019 winter. Twelve collars were purchased for the project but logistical constraints with capture crews and numerous weather events led to only one of the collars being deployed. In January 2020, the effort to deploy the remaining collars was resumed. The collaring was hampered by multiple storms and high winds but concluded with 7 mountain goats being sampled with 6 fitted with collars. In January and February 2021, the monitoring effort was resumed with 7 more individuals being collared. The disease samples from all the goats have been processed, yielding promising results as none of the individuals sampled appeared to be chronically shedding the previously identified pathogens. To date, 9 collars are still deployed and fully functioning. The fate of the other 3 collars were as follows; one 12-year-old nanny was unable to make the winter, one 8-year old nanny was killed by a mountain lion, and the battery on a billy collar died. The 2021 summer surveys represented the most exciting and promising indication that the Unit 101 mountain goat herd may have naturally cleared the chronic shedders that had plaguing it for the last decade. The poor sample size from the winter flight was incredibly disappointing, but 2022 summertime surveys documenting yearlings present may be able to salvage the recruitment comparison that was desired. More years of elevated recruitment are needed to curtail the long-term population contraction and to maintain the minimal tag quota for Unit 101. The Unit 102 population has been recruiting at a high enough rate to realize modest growth, and the Unit 103 herd continues to recruit at an adequate level to maintain a relatively stable herd. In fall 2021, there were multiple sightings of a mountain goat in the Cherry Creek Range in Unit 121. The goat is a potential disease risk to itself and to any other goats it comes into contact with as it was observed in the middle of an existing domestic sheep allotment. In an attempt to use hunters to remove the disease risk, Unit 121 will be added to the Unit 102 hunt for the 2022 season.

## **MULE DEER**

### **Unit Group 101 – 109**

#### Hunt Results

The 2021 harvest of 889 deer (733 antlered and 156 antlerless) is significantly lower than the previous 10-year mean of 1273 deer. The 4 lowest annual antlered harvests, since going to a tag system in 1976, have all occurred in the last 5 hunting seasons.

#### Survey Data

A spring helicopter survey was conducted in March 2022, resulting in 6,212 deer being classified in a ratio of 35 fawns:100 adults. The observed fawn ratio is significantly higher than the previous 10-year average of 28 fawns:100 adults.

#### Population Status and Trend

In 2016, as part of an expansion plan of the Bald Mountain Mine in Unit 108, the NDOW, the BLM, and the mine operator signed a Memorandum of Understanding (MOU) to maintain 30 collars on adult does annually for at least 5 years. The intent of the project is to monitor seasonal migrations of the Ruby Mountain deer herd, with particular attention on the biannual navigation of the expansive mine site that partially bisects the migration corridor. The migration corridor is vital in connecting a majority of the deer that summer in the Ruby Mountains to the crucial winter ranges south of the mine site. Maintenance of a minimum migration corridor width through the mine site is critical to the long-term health of the Area 10 deer herd. The last 20 collars covered under the 2016 MOU were deployed in January 2022. With an expansion plan currently moving through the public scoping process that proposes to further constrict the migration corridor, continued monitoring and responsible project design will be crucial in curtailing the negative effects to migrating deer.

In February 2021, a radio collaring project was initiated focused on deer that summer in Unit 101 and winter in Units 105, 107, and 109. Collaring will aid in highlighting areas of greatest conservation concern and will provide information for updates to the efforts of implementing the U.S. Department of the Interior's Secretarial Order 3362, which seeks to improve habitat quality of winter ranges and protect migration corridors of mule deer, antelope, and elk throughout the western states. Collaring will also document use patterns of the deer that winter in Unit 105 with respect to habitat treatment activities that have been completed on Spruce Mountain since 2013. The sites selected by the wintering deer will aid wildlife and habitat managers in designing and proposing future projects to maximize the benefit to local wildlife. Five of the original collars were retrieved from mortalities and redeployed in January 2022.

The Area 10 deer herd experienced population contractions due to severe conditions in the winters of 2015-2016, 2016-2017, and 2018-2019. The effects of these winters are still being realized as there are less prime age does on the landscape to take advantage of the mild conditions experienced from 2020-2022, resulting in above-average recruitment and population growth. The maturation and increased productivity of the numerous habitat enhancement projects and fire rehabilitation actions taken have the potential to expand the capacity of the various transitional and winter ranges used by the deer herd.

## **MANAGEMENT AREA 11**

Report by Kody Menghini

## **HABITAT**

National Weather Service precipitation data measured at the Ely Airport for the 2021 calendar year was 100% of normal. Though much of 2021 was warm and dry, with 77% of normal precipitation measured at the Ely Airport from January to November. December 2021 measured 391% of normal precipitation, which resulted in the calendar year receiving 100% of normal precipitation. Winter 2021-22 was 139% of normal, with December 2021 being exceptional and January and February 2022 being 29% and 42% of normal, respectively. The Berry Creek SNOTEL site recorded 84% of the long-term average snowpack during the 2020-2021 winter (accessed 30 March 2022; www.nrcs.usda.gov). According to the U.S. Drought Monitor, the majority of White Pine County has been in Extreme or Exceptional Drought since August 25, 2020. At the time of this writing, spring conditions have continued to be warm and dry. If precipitation patterns do not improve, prolonged drought is expected to further deteriorate habitat conditions.

The long-term habitat potential for big game is slowly declining due to the encroachment of pinyon and juniper into productive shrubland habitats, range degradation due to excessive numbers of feral horses in some areas, and subdivision and sale of private parcels in quality habitat. Grazing by feral horses and livestock during continued drought conditions has resulted in severe reduction of forage available to big game. Thousands of acres of native vegetation in valley bottoms have been converted to halogeton, resulting in a complete loss of habitat. The expansion of cheatgrass continues at most low and mid elevations. The carrying capacity for big game has drastically been reduced and will continue to deteriorate under current conditions.

To combat the decline of habitat quality and quantity, over the last decade, the BLM, U.S. Forest Service, National Park Service, private landowners, and the NDOW have been active in conducting habitat enhancement projects. Past habitat enhancement projects have included new wildlife water developments, pinyon and juniper chainings and thinning, aerial seeding of wildfires, aspen treatments and regeneration, and shrub planting. Many other projects with potential benefits to big game are in planning stages.

During summer 2021, repeat photography was conducted at sites that past department biologists had taken photos from between the 1960's and 1980's. Many of these photos show significant vegetative changes that have occurred in the last 30 to 60 years. One site in Antelope Valley showed a change from mixed native and nonnative vegetation in the 1980's to almost complete bare soil in 2021. Many sites showed conifer

encroachment into shrublands, aspen, and riparian areas. One positive observation was the expansion of aspen in Big Canyon in Unit 114 since the 1970's. This work will continue in future years and sites to document the vegetative changes that continue to occur on the landscape.

## **ANTELOPE**

### **Unit Group 111 – 114**

#### Survey Data

A post-season ground survey was conducted from December 2021 to February 2022. A total of 678 antelope was classified, resulting in observed sex and age ratios of 29 bucks:100 does:9 fawns. In comparison, observed ratios of 28 bucks:100 does:20 fawns were obtained during the 2020-2021 survey. The observed fawn ratio of 9 fawns:100 does is lowest on record since 1990 and below the 5-year mean of 25 fawns:100 does. This is the fourth consecutive year of below-average fawn recruitment in this unit group.

#### Population Status and Trend

The 3 lowest fawn ratios on record have occurred in the last 4 years. The current year's fawn ratio is the lowest on record, resulting in continued population decline. The effects of the last 4 years' poor recruitment rates will continue to manifest in future years with reduced age cohorts.

## **ROCKY MOUNTAIN ELK**

### **Unit Group 111 – 115**

#### Survey Data

The annual post-season composition survey for elk in Area 11 was combined with spring deer surveys in February and March 2022. A sample of 1,252 elk was collected yielding sex and age ratios of 49 bulls:100 cows:27 calves. Sex and age ratios have averaged 39 bulls:100 cows:35 calves over the previous 5 years. Survey effort in Unit 113 was reduced due to lack of military clearance.

#### Population Status and Trend

In February 2021, 13 radio collars were deployed on elk in Area 11. Five cows and 3 bulls were radio collared in Unit 113 to better understand elk use and movements among Nevada, Utah, and the Goshute Indian Reservation. In Unit 111, 5 cow elk were captured in Duck Creek Basin to better understand elk use and movements around urban development, potential energy developments, and habitat improvement projects.

Between February 2021 and February 2022, the collared cow elk in Unit 113 spent 40% of their time in Nevada. The remainder of time was spent in Utah or the Goshute Indian Reservation. These 5 collared cow elk represent 150-250 elk. Additional years of movement data will help inform management decisions. Two of the 3 bulls in Unit 113 moved to Unit 114 at separate times and have not returned to Unit 113.

Two of the previous 3 years have experienced poor calf recruitment. The current population estimate is showing a slight decrease due to low calf recruitment and harvest prescriptions. The Area 11 elk herd is within population objective.

## ROCKY MOUNTAIN BIGHORN SHEEP Unit 114

### Survey Data

A ground survey was conducted in December 2021 and resulted in the classification of 27 bighorn sheep. The observed sex and age ratios were 47 rams:100 ewes:33 lambs.

### Population Status and Trend

In March 2021, 3 bighorn ewes were radio collared in this unit. An additional bighorn ewe was collared in February 2022. This project, and future collaring projects, will help to better understand seasonal movements, habitat use, and bighorn distribution. This hunt continues to be physically and mentally demanding. Access to the Mount Moriah Wilderness area is challenging and rams are difficult to locate due to extensive tree cover. This population is showing a decrease in 2022.

### Unit 115

### Survey Data

Aerial herd composition surveys were conducted in February 2022 and resulted in the classification of 8 bighorn sheep. The observed sex and age ratios were 20 rams:100 ewes:40 lambs.

### Population Status and Trend

This hunt continues to be physically and mentally demanding. Access to the area is challenging depending on snow conditions. The mountains are steep with little road access and higher elevations are closed to hunting in Great Basin National Park. Sheep density is low, and rams are difficult to locate due to extensive tree cover. This Rocky Mountain bighorn sheep population is increasing with a population estimate of 70 adult Rocky Mountain bighorn sheep.

## MULE DEER Unit Group 111 – 113

### Survey Data

Post-season surveys were not conducted in 2021. Spring mule deer surveys were conducted in conjunction with post-season elk surveys in late February and early March 2022. A composition survey sample of 1,833 mule deer yielded a ratio of 19 fawns:100 adults. The previous 5-year average (2017-2021) fawn recruitment is 27 fawns:100 adults for this herd.

### Population Status and Trend

This population is continuing to decline as indicated by multiple surveys with depressed sample sizes, a declining post-season buck ratio, poor fawn recruitment in 2019, 2020, and 2022 and declining harvest metrics. The observed fawn ratio of 19 fawns:100 adults is the lowest on record in this unit group.

### Unit Group 114 – 115

### Survey Data

Spring mule deer surveys were conducted in conjunction with post-season elk and bighorn surveys in late February 2021. A composition survey sample of 539 mule deer yielded a ratio of 16 fawns:100 adults. The previous 5-year average (2017-2021) fawn recruitment is 28 fawns:100 adults for this herd.

### Population Status and Trend

A conservative management strategy has been employed in this unit to maintain a robust male age structure. This area continues to produce quality mature bucks, with the 10-year (2012-2021) average percent 4-point or greater buck harvest at 52% compared to the statewide average of 40%, indicating an older age structure in the population. Despite the positive harvest metrics in this unit group the population continues to decline. The observed fawn ratio of 16 fawns:100 adults is the lowest on record in this unit group.

## MANAGEMENT AREA 12

Report by Kody Menghini, Matthew Jeffress, and Scott Roberts

## HABITAT

National Weather Service precipitation data measured at the Ely Airport for the 2021 calendar year was 100% of normal. Though, much of 2021 was warm and dry, with 77% of normal precipitation measured at the Ely Airport from January to November. December 2021 measured 391% of normal precipitation, which resulted in the calendar year receiving 100% of normal precipitation. Winter 2021-22 was 139% of normal, with December 2021 being exceptional and January and February 2022 being 29% and 42% of normal, respectively. The Berry Creek SNOTEL site in Unit 111 recorded 84% of the long-term average snowpack during the 2021-2022 winter (accessed 30 March 2022, [www.nrcs.usda.gov](http://www.nrcs.usda.gov)). At the time of this writing, spring conditions have continued to be warm and dry. According to the U.S. Drought Monitor, the majority of White Pine County has been in Extreme or Exceptional Drought since August 25, 2020. Habitat conditions are expected to further deteriorate in 2022 unless precipitation patterns improve.

Pinyon and juniper encroachment occurs across a substantial portion of this unit. Several large-scale habitat enhancement projects are proposed in the unit. The Egan and Johnson Basin Restoration Project started in 2019 and several thousand acres of pinyon and juniper woodlands have been treated. In 2020, the NDOW retreated 1,135 acres in the 9-mile chaining. The BLM and the NDOW have plans to treat additional acres in 2022, including the Smith Valley area that contains crucial mule deer winter and summer habitat.

The Goshute Cave Fire of 2018 burned roughly 31,000 acres of prime mule deer habitat in Unit 121. Vegetation response to reseeding efforts and natural regeneration have been mixed. Most north facing slopes and upper elevations are having positive response and south facing slopes and lower elevations are dominated by cheatgrass and bare soil. Although this fire may negatively affect mule deer in the short-term, a net positive benefit for mule deer is expected in the long-term.

Grazing by feral horses and livestock during continued drought conditions has resulted in severe reduction of forage available to big game. Thousands of acres of native vegetation in valley bottoms have been converted to Halogeton, resulting in a complete loss of habitat.

## ANTELOPE Unit Group 078, 105 – 107, 121

### Hunt Results

Due to low fawn recruitment the past 3 years, horns shorter than ears tags were drastically reduced in 2021 and the hunt was eliminated for the 2022 hunting season. Please see the appendix for more detailed harvest results.

### Survey Data

A total of 432 antelope was classified from the ground in early 2022. The sample yielded sex and age ratios of 34 bucks:100 does:11 fawns. The observed fawn ratio was the lowest on record. The low fawn ratio is likely attributed to prolonged drought conditions and a lack of forbs last spring in addition to competition with feral horses for limited resources. Observations in early June last year indicate an extremely low fawn ratio soon after the birth pulse. These observations are troubling as biologists do not know if female antelope are not becoming pregnant, if fawns are being lost in utero or if fawns are dying soon after parturition.

### Population Status and Trend

The February 2022 antelope survey resulted in the lowest observed fawn ratio on record for the third year in a row. Many antelope within this unit group reside in less productive basin and range habitats. Range habitat improvements associated with many wildlife water development sites within this unit group should be explored to improve antelope production and recruitment values. Also given the troubling low fawn recruitment observed in early summer, the NDOW staff are

exploring opportunities to obtain health profiles for antelope in this area and to answer questions about fawn production and recruitment. Specifically, are the majority of does in the unit group pregnant following the rut each year, are fawns being lost in utero, what is the health of fawns that are born and what is the cause specific mortality of fawns their first year of life.

## ROCKY MOUNTAIN ELK Unit Group 121, 104, and a portion of Unit 108A

### Hunt Results

The 2021 hunting season was the first to offer a spike-only bull hunt in this unit group to manage the bull ratio while maintaining quality during antlered bull hunts.

Three depredation hunts are offered the Steptoe Valley portion of Unit 121. These hunts are designed to limit damage to private agricultural fields by maintaining constant hunting pressure from August through the end of the year. These hunts have been effective in reaching their desired goal while allowing limited hunting opportunities. Please see the appendix for more detailed harvest results.

### Survey Data

An aerial survey was conducted in January 2022, where 309 elk were classified yielding sex and age ratios of 36 bulls:100 cows:44 calves. The calf ratio is slightly higher than the previous 10-year average of 40 calves:100 cows.

### Population Status and Trend

The 2022 population estimate is very similar to the previous estimate. Population growth was limited by targeting a maintenance level of harvest for the 2021-2022 hunting season. The NDOW is committed to maintaining this elk herd within the population objective identified in the Wells Resource Area and White Pine County Elk Plans. As a result, an aggressive approach to cow harvest will continue to limit population growth.

The NDOW is committed to limiting private land damage in Steptoe Valley while still providing opportunity to sportsmen to hunt elk. Future depredation tag quota recommendations will be designed to minimize elk presence on private lands in the valley.

## MULE DEER Unit 121

### Survey Data

Post-season surveys were conducted in November 2021. A composition survey sample of 660 mule deer yielded sex and age ratios of 18 bucks:100 does:38 fawns. Spring mule deer surveys were conducted in February 2021. A composition survey sample of 1,007 mule deer yielded a ratio of 25

fawns:100 adults. The previous 5-year average (2017-2021) fawn recruitment is 30 fawns:100 adults for this herd.

#### Population Status and Trend

Multiple surveys with depressed samples size, declining post-season buck ratios, poor fawn recruitment in 2019, 2020, and 2022 and declining harvest metrics all indicate that this population is decreasing.

## MANAGEMENT AREA 13

Report by Samantha Fino and Hunter Burkett

### HABITAT

The northern portion of this unit group lies within the central basin and range ecoregion and transitions into the Mojave ecoregion on the southern end. Pinyon and juniper, sagebrush valleys and basins in the northern and central portions turn into Mohave Desert habitats dominated by desert shrub and cactus to the south. In the northern portion of this management area, snowpack is below normal at 81% of median, precipitation in February 2022 was well below normal at 34%, seasonal accumulation (October-February) was 102% of median, and soil moisture was at 27% saturation (March 2022, Nevada Water Supply Outlook Report, NRCS). The southern portion of this management area is likely suffering from worse conditions. All months, except for July and December, received <0.5" of precipitation in 2021. The U.S. Drought Monitor currently shows that units in this group are experiencing extreme or exceptional drought. There is minimal to no green up across the greater landscape; animals are experiencing additive pressures of limited food resource quality and availability resulting from harsh environmental conditions. In 2022, continuation of dry conditions may lead to even further decreases in grass and forb abundance on the landscape.

Pinyon and juniper removal projects and riparian fencing projects conducted by the U.S. Forest Service and the BLM promote the production of grasses and forbs benefiting a variety of wildlife species. Several big game water developments, primarily targeting antelope, have been constructed in Jake's Valley, Coal Valley, Garden Valley, and the Cove, increasing water availability for wildlife. More pinyon and juniper thinning projects and big game water developments (i.e., guzzler construction) in new areas would benefit wildlife populations. Feral horses above AML's in the Pancake HMA in the northern portion of these units compete with wildlife for forage and water, limiting the carrying capacity for many species. Increases in feral horse numbers are also degrading habitat in the Mount Hamilton and Green Springs areas of Unit 131 and the Cove area in the White River Valley of Unit 132. The BLM concluded a wild horse gather in February 2022, projected to remove up to 2,030 excess wild horses in these units. Mineral production of the Centennial-Seligman mine, Fiore Mine, and

the exploratory drilling in the Green Springs area for fluid or mineral development may negatively affect sage-grouse, mule deer, and elk habitat in Unit 131. Burns in the mid to upper elevations (e.g., Troy Mountain) would be favorable to desert bighorn sheep due to its flush of grasses and forbs with available water nearby; tree removal along with spring enhancement or water development in this unit would be beneficial. There are 5 wilderness areas in Unit 131, 2 wilderness areas in Unit 132, and 3 wilderness areas in Unit 133, limiting some management options. The Basin and Range National Monument encompasses a small portion of Unit 132 and most of Unit 133, totaling 704,000 acres.

### ANTELOPE

#### Unit Group 131, 145, 163, 164

#### Survey Data

The 2021 post-season antelope ground survey was conducted in February 2022 due to a change of personnel in the fall. Five days were spent classifying 220 antelope, yielding sex and age ratios of 17 bucks:100 does:4 fawns. This season's survey saw a continuation of a noticeable decrease in the observed fawn to doe ratio and fewer total antelope observed when compared to the 5-year average (461). The 2021 observed buck and fawn ratios are significantly below the 5-year average (29 bucks:100 does:24 fawns). Concentrations of antelope were found in Newark, Jake's, Duckwater, Little Smoky, Antelope, and Fish Creek Valleys. No antelope were observed in Unit 163. Notably, the observed fawn ratio represents one of the lowest on record in both this hunting unit, as well as in the Eastern Region.

#### Population Status and Trend

Multiple and consecutive years of low fawn production and recruitment have caused declines of this population due to ongoing drought in the central part of the state, as well as rising feral horse numbers which has increased competition for limited resources on the rangeland. The current estimated population of this hunting unit group is approximately 400 adult animals, and the annual rate of increase from 2021 is an estimated -24%.

#### Unit Group 132-134, 245

#### Survey Data

The 2021 post-season antelope ground survey was conducted in February 2022 due to a change of personnel in the fall. Five days were spent classifying 145 antelope, yielding sex and age ratios of 44 bucks:100 does:1 fawn. This season's survey saw a continuation of a noticeable decrease in the observed fawn to doe ratio and fewer total antelope observed when compared to the 5-year average (297). The 2021 observed fawn ratios are significantly below the 5-year average (34 bucks:100 does:25 fawns). The observed buck:doe ratio may have been skewed from a herd observed in 245 surrounding pivots and is potentially lower for the greater unit

group. Concentrations of antelope were found in Upper and Lower Cove, Murphy Meadows, Coal Valley, Lunar Lake, and Rachel Fields. Unlike past years, no antelope were observed in Sand Springs Valley nor Railroad Valley. Notably, the observed fawn ratio represents one of the lowest on record in both this hunting unit, as well as in the Eastern Region.

#### Population Status and Trend

Multiple and consecutive years of low fawn production and recruitment have caused declines of this population, probably due to ongoing drought in the central part of the state, as well as rising feral horse numbers which has increased competition for limited resources on the rangeland. The current estimated population of this unit group is approximately 360 adult animals, and the annual rate of increase from 2021 is an estimated -27%.

### ROCKY MOUNTAIN ELK

#### Unit Group 131, 132, and portion of Unit 108B

#### Survey Data

An aerial survey was conducted in February 2022. During this survey, 173 elk were classified yielding ratios of 36 bulls:100 cows:19 calves. Across the entire survey area, the 2022 counts of bulls, calves, and total number of individuals were within the 5-yr average (49, 27, 150, respectively), while the number of cows and adults were above the 5-yr average (74 and 123, respectively). However, the observed calf and bull ratios were noticeably below the 5-yr average (37, 65, respectively). Elk were primarily found along the gulches and washes at the southern portion of Jake's Valley, as well as the benches that surround the Cove. Elk were not observed on Moorman ridge, nor on the east side of the Grant Range. Other areas where elk detections are typical were not surveyed due to helicopter mechanical issues and lack of safe flying conditions.

#### Population Status and Trend

The current population estimate shows a decline due to below average calf recruitment observed the previous 5 years. The White Pine County Elk Management Plan established a population objective of 300 adult elk ( $\pm 20\%$ ) for Units 131 and 132. The elk herd is within objectives and will be maintained at current levels, with an estimated population of about 310 adults.

### DESERT BIGHORN SHEEP

#### Unit Group 131 and 164

#### Survey Data

The 2021 aerial survey conducted in late August classified only 19 desert bighorn sheep with sex and age ratios of 86 rams:100 ewes:86 lambs. While no ewes or lambs were observed in unit 164 during this survey, a handful of ewes and lambs were observed in the Duckwater Hills on the spring ae-

rial deer survey. Desert bighorn sheep were concentrated on Currant Mountain. Desert sheep occupying the southern portion of Unit 164 have been known to occasionally cross U.S. Route 6 into Unit 134. Anecdotal information indicates that in 2021 a large number of animals likely made that movement in response to drought conditions. The previous 5-year average sex and age ratios are 28 rams:100 ewes:23 lambs, with sample sizes almost three times what was observed in this year's survey.

#### Population Status and Trend

There have been 3 Rocky Mountain bighorn rams harvested in Unit 131, the last of which was in 2010, and one ram confirmed to be a Rocky Mountain-desert bighorn hybrid harvested in 2011. All 3 sub-populations in this unit group, Currant Mountain, Duckwater Hills, and the North Pancakes have been exposed to the bacterial pathogen *M. ovi*. All 3 sub-populations have a high risk of further exposure and interaction with domestic sheep. Stray domestic sheep have been seen in 2011, 2014, 2016, 2017, 2018, and 2022. Reduced lamb survival starting in 2012 is likely due to the bacterial infection which has resulted in a fluctuating population. The 2021 survey showed an increase in lamb survival for unit 131 and suggests some relief from the 2012 *M. ovi* event, however, the population is still declining 9% annually. The population is currently estimated at 84 adults. The population was once estimated at a high of 180 adults in 2012.

#### Unit 132

#### Survey Data

The 2021 aerial survey sample in late August was 46 desert bighorn sheep with sex and age ratios of 50 rams:100 ewes:42 lambs. Desert bighorn sheep were concentrated from Irwin Canyon to Little Meadows Creek, and this survey was abbreviated (minimal surveillance of the Red Bluff Spring area) due to wind conditions making it unsafe to fly. The previous 5-year average ratios of 52 rams:100 ewes:43 lambs were nearly identical.

#### Population Status and Trend

The desert bighorn sheep in the Grant Range have been exposed to and have tested positive for the bacterial pathogen *M. ovi*. In 2015 a sick lamb was reported in the Troy Canyon area and lab testing determined it had died from bacterial pneumonia. Since then, no other desert bighorn sheep have been reported or observed with signs of pneumonia, although active disease testing has been minimal. Origins of the Quinn Canyon Range desert bighorn sheep are unclear. The first aerial survey in the Quinn Canyon Range was conducted in February 2014, during which 10 adults and 5 newborn lambs were classified. The Quinn Canyon population appears to have little or no connectivity with the Grant Range herd as suggested by genetic sampling. Disease testing was also conducted in January 2014 with *M. ovi* not detected in the 4 adults sampled. The 2021 population estimate for the entire unit is 160 adults, which is above the previous 5-year average

of 110. Currently, data and population modeling indicate this population is stable.

### Unit Group 134 and 251

#### Survey Data

The 2021 aerial composition survey was conducted in September yielded a sample size of 112 bighorn sheep classified as 23 rams, 63 ewes, and 26 lambs. In comparison, the 2019 aerial survey for Units 134 and 251 classified 101 bighorn sheep as 19 rams, 67 ewes, and 15 lambs. Areas surveyed include Palisade Mesa, Lunar Cuesta, Little Lunar Cuesta, Black Beauty Mesa, Citadel Mountain, Twin Springs, Echo Reservoir, and Big Fault Mesa.

#### Population Status and Trend

After many years of poor lamb recruitment due to M. ovi, a lamb:ewe ratio of 41 was observed on aerial survey. This is a hopeful for the future of this population and surrounding herds. Feral equids continue to pressure water sources and drought conditions have diminished forage quantity and quality. Even with these impacts, a slight increase in population trend is predicted.

## MULE DEER

### Unit Group 131 – 134

#### Survey Data

In November 2021, a post season aerial survey was conducted with 247 deer classified, yielding ratios of 20 bucks:100 does:38 fawns. Bald Mountain, Shellback Ridge, Tom Plain Spring, Corduroy Basin, upper Ellison Creek, upper White River, upper Currant Creek, and the Ellison Creek Knobs were surveyed, but fewer than a dozen deer were detected throughout Unit 131. Additionally, the Douglas Hills, Currant Creek burn, the Cove, Lower Cove, Perish Spring, the Horse Hills, Scofield Bench, Bear Trap burn, Tank Springs, Bald Mountain, the lower canyons on the west side of the Grant Range, and Currant Hills were surveyed. Units 133 and 134 were not surveyed during the post season flight. Although a post season survey hadn't been conducted since 2018, the number of deer and the buck:doe:fawn ratio were considerably below the 5-year average (912 and 37 bucks:100 does:53 fawns, respectively). The lack of 2019 and 2020 post season surveys likely resulted in a failure to capture potential reasonings behind the population decline. In February 2022, an aerial spring survey was conducted with 469 deer classified, yielding ratios of 26 fawns:100 adults. The majority of deer were detected in the Ellison Knobs, Douglas Hills, Horse Range, The Cove, Lower Cove, Golden Gates Range, and W. Grant Range. The number of deer and the fawn:adult ratio were well below the 5-year average (801 and 31 fawns:100 adults, respectively).

#### Population Status and Trend

Multiple and consecutive years of low fawn production and

recruitment have caused declines of this population, probably due to ongoing drought in the central part of the state, as well as rising feral horse numbers which has increased competition for limited resources on the rangeland. The estimated population of this unit group is approximately 2200 individuals, and the current annual rate of increase has been calculated at -11%.

## MANAGEMENT AREA 14

Report by Samantha Fino

### HABITAT

This unit group lies within the central basin and range ecoregion which is typified by pinyon and juniper woodland, sagebrush valleys, and basins mixed with some cool season grasses and saltbush-greasewood vegetation. At the time of this report, in the northern portion of the management area, snowpack is below normal at 74% of median, precipitation in February was well below normal at 42%, seasonal accumulation (October-February) was 108% of median, and soil moisture was at 50% saturation. In the southern portion of this management area, snowpack is below normal at 81% of median, precipitation in February was well below normal at 34%, seasonal accumulation (October-February) was 102% of median, and soil moisture was at 27% saturation (March 2022, Nevada Water Supply Outlook Report, NRCS). Less than 1" of precipitation was recorded in January, February, April, June, August, September, and November, and no month accrued >2" of precipitation in 2021. The U.S. Drought Monitor currently shows most of the units in this group in severe drought. Cold snaps in December and March may have impacted survival of individuals for some populations. While conditions have slightly improved from 2020, conditions are still less than ideal in 2021. There is a fair amount of green up in the mountains and on benches. In 2022, continuation of dry conditions may lead to even further decreases in grass and forb abundance on the landscape.

Past projects that have been completed include fencing to protect Robinson Spring in the Diamond Range, extensive pinyon and juniper removal in units 142 and 143, and big game water developments (i.e., guzzler construction) in Antelope Valley. Exploration for oil, gas, and minerals continues throughout Area 14, negatively impacting wildlife habitat and movement corridors. Despite a 2020 feral horse gather in the Diamond and Cortez Ranges, large concentrations of feral horses remain above Appropriate Management Level within the Roberts – Whistler Mountain and Fish Creek Herd Management Areas. These concentrations are negatively affecting resources and wildlife in those areas.

## ROCKY MOUNTAIN ELK

### Unit Group 144, 145

#### Hunt Results

Depredation hunts for antlered and antlerless elk in Units 144 and 145 were initiated in 2012 to prevent the establishment of a viable elk population in accordance with the Central Nevada Elk Plan. Due to thick tree cover, low elk densities, and dispersed movement patterns, elk hunting conditions are difficult. Since 2012 there have been 61 bulls and 40 cows harvested. In 2019, the NDOW changed the season structure and quotas to offer 6 hunts with a combined quota of 30 tags.

#### Survey Data

Elk numbers are extremely low in this unit group and composition surveys were not conducted during the reporting period.

#### Population Status and Trend

A formal population model is not maintained for this population due to the lack of an established herd and limited availability of data. Units 144 and 145 are transition zones and are seasonally used by elk. Current harvest management practices have been successful as elk numbers remain low.

## MULE DEER

### Unit Group 141 – 145

#### Survey Data

In November 2021, a post season aerial survey was conducted with 1,242 deer classified, yielding ratios of 31 bucks:100 does:52 fawns. The Cortez, Diamond, Roberts Creek, and Fish Creek Ranges were surveyed. The sample size and observed buck ratio were near the 5-year average (1544 and 33 bucks:100 does:53 fawns, respectively). In February 2022, an aerial spring survey was conducted with 943 deer classified, yielding ratios of 23 fawns:100 adults. The majority of deer were detected in the Diamond and Sulphur Springs Ranges. Both the total sample and the fawn to adult ratio were below the 5-year average (1,778 and 32 fawns:100 adults, respectively).

#### Population Status and Trend

Deer were radio collared in 2017 through 2019 in Area 14 to gain a better understanding of seasonal movement patterns, potential effects of mining related development, pinyon and juniper encroachment, and oil and gas exploration. This collaring effort has helped identify movement corridors for the Roberts Mountain segment of this deer herd. Current and potential habitat impacts from increased mining activity within Units 141 and 143 are being recognized and crucial mule deer habitat has been developed. Multiple and consecutive years of low fawn production and recruitment have caused recent declines of this population, probably due to ongoing drought in the central part of the state, as well as rising feral horse numbers which has increased competition for limited resources on the rangeland. Currently, due to an improvement

in fawn recruitment, the population is considered stable at an estimate population of 4,400 adult individuals.

## MANAGEMENT AREA 15

Report by Sarah Hale

### HABITAT

Dry conditions, ranging from moderate to severe drought, persisted throughout 2021 in Area 15. Prolonged dry conditions have reduced the quantity and quality of forage available to native ungulates and have created a greater potential for catastrophic wildfires. Since 1999, over 450,000 acres have been burned by wildfire in this area. Post-fire rehabilitation efforts have taken place; however, responses have been varied. In some locations, a mixture of brush, native grasses, and forbs have reestablished, but other locations have become dominated by exotic annuals such as cheatgrass and mustard. Additionally, feral horses are rapidly increasing throughout Lander and Eureka counties. Within Area 15, several BLM Horse Management Areas are significantly above established Appropriate Management Levels (most notably, BLM's South Shoshone Herd Management Area was estimated at over 1400% of Appropriate Management Level in 2021) and feral horses are frequently observed in designated "horse free" areas.

The interaction of drought, wildfire, exotic annual invasion, and feral horse overpopulation has resulted in widespread degradation of native ungulate habitat throughout Area 15. In the hardest hit areas, habitat restoration efforts will have little to no effect until horse numbers are effectively reduced.

## ANTELOPE

### Unit Group 141, 143, 151 – 156

#### Survey Data

Post-season ground surveys for antelope were conducted in October and December 2021. Areas surveyed included Antelope Valley, Argenta Rim, Crescent Valley, the north bench of the Simpson Park Mountains, and the south-east benches of the Cortez Range. A total of 1,482 antelope was classified, yielding age and sex ratios of 52 bucks:100 does:38 fawns. The observed fawn ratio was lower than both last year's ratio of 67 fawns:100 does and the previous 5-year average of 46 fawns:100 does; however, it was well above the 2020 statewide average of 31 fawns:100 does.

#### Population Status and Trend

The timing and amount of precipitation appears to influence the Area 14 and 15 antelope herd's growth and range expansion. The lower observed fawn ratio this year was likely a result of prolonged drought across the area.

The Area 14 and 15 antelope herd has steadily increased over time from a population of approximately 100 individuals in the early 1980s to a population of approximately 4,200 in 2022. Female harvest has been an effective method for maintaining the population's growth at a sustainable level as well as addressing private land depredation issues and should continue to be used.

## MULE DEER

### Unit Group 141, 143, 151 – 156

#### Survey Data

Post-season aerial surveys were conducted in Area 15 during November 2021 and were supplemented with simultaneous ground surveys on agricultural fields. A total of 673 mule deer was classified, with observed ratios of 34 bucks:100 does:61 fawns. Buck and fawn ratios were similar for deer found on and off agricultural fields. An aerial spring survey was conducted during March 2022. High winds and low clouds presented challenging survey conditions, but an adequate sample size of 606 deer was classified with an observed ratio of 43 fawns:100 adults, which is higher than the previous 5-year average of 31 fawns:100 adults. The estimated 2021-2022 overwinter fawn loss was 13%, which is noticeably lower than the previous 5-year average of 30%.

#### Population Status and Trend

This population has continued to be influenced by the varying amount and timing of precipitation received in Area 15, resulting in "boom or bust" population cycles. Reduced fawn recruitment due to extended periods of drought, degraded range conditions, and above average snow depths on winter range have contributed to a general population decline over the past several years; however, mild 2021-2022 winter conditions likely contributed to the slight increase in population size that was observed this year.

## MANAGEMENT AREA 16

Report by Hunter Burkett

## HABITAT

According to Community Environmental Monitoring and Planning precipitation data from February 2021 to February 2022, central Nevada received 64% of the 30-year average. Fall and winter precipitation (October - December) resulted in 34% of the 2021-2022 precipitation total. Snowfall during these months was historically high. Area 16 then received historically low measurable precipitation in January and February. The single SNOTEL site located in central Nevada measured snowpack levels at 82% of median as of March 2022. The U.S. Drought Monitor has designated most of the

area as Exceptional Drought conditions during 2021. Drought conditions began in mid-2020 and have continued through early 2022. This lack moisture will diminish forage quality throughout Area 16.

In 2021, an emergency feral horse gather was conducted within the Stone Cabin HMA. The BLM gathered 322 horses (below the planned 450). Although this gather will provide short-term benefits for the antelope, mule deer, and wintering elk that reside in the valley, feral horses continue to expand and compete directly with native wildlife.

In February 2022, an additional feral horse gather occurred within the Pancake and Sand Springs West HMA's. 2,054 feral horses were gathered. The current BLM population estimate still well above Appropriate Management Level after the gather. The antelope, mule deer, and bighorn sheep populations will benefit from these gathers.

Limited precipitation, along with feral equid competition, will result in degraded habitat conditions. The snowpack received in early winter was inadequate to counter drought affects. Adult fitness and recruitment rates for ungulates will continue to be impacted unless spring moisture in central Nevada is significant.

Multiple U.S. Forest Service pinyon and juniper removal projects have been conducted in Little Fish Lake Valley, in Unit 162. In 2017, about 700 acres of pinyon and juniper were removed near Clear Creek. In 2018, 500 acres of pinyon and juniper were removed near Horse Canyon and approximately 2,000 acres south of Danville Canyon by lop and scatter techniques. Another 217 acres of pinyon and juniper was removed near Pasco Canyon with the help of local resource conservation programs. The removal of these trees will allow the herbaceous understory to regenerate providing improved forage and habitat for ungulates at certain times of the year.

## ANTELOPE

### Unit Group 161 – 164

#### Survey Data

Antelope ground surveys were conducted in Units 161 and 162 over 3 days during September and October 2021. Surveys classified 138 antelope comprised of 28 bucks, 102 does, and 8 fawns. In comparison, the 2020 survey sample 116 antelope classified as 24 bucks, 71 does, and 21 fawns. Antelope within these units are known to immigrate and emigrate from adjacent units. These movements are known and are reflected in the population modeling and quota setting process.

#### Population Status and Trend

With 2 consecutive years of depressed fawn recruitment, this population has moderately declined. The 2021 survey presented the lowest observed fawn ratio on record. During

ground surveys, fawns were nearly absent from the southern reaches of Units 161 and 162. Drought conditions, expanding feral equid populations, and encroaching pinyon and juniper are compounding these challenges on this herd.

## ROCKY MOUNTAIN ELK

### Unit Group 161 – 164

#### Survey Data

An aerial survey was conducted in February 2022. The survey yielded a sample size of 461 elk which were classified as 81 bulls, 338 cows, and 42 calves. All elk were observed in Unit 162. Due to weather and scheduling conflicts, aerial surveys were not conducted for elk in 2021. In comparison, the survey in 2020 yielded a sample size of 424 elk comprising of 93 bulls, 260 cows, and 71 calves.

#### Population Status and Trend

In January 2004, the Board of Wildlife Commissioners approved the revised Central Nevada Elk Plan. The plan included updated population objectives, which allowed for modest increases in elk numbers in Area 16. The population estimate in 2022 is approximately 640 adult elk, which is well below the population objective of 850. Drought, along with feral equid competition, imposes threats to the adult fitness of this herd, which is reflected in the record low calf ratio. New harvest strategies and habitat enhancement projects will be implemented to promote growth of this herd. The Area 16 elk herd is moderately declining.

## DESERT BIGHORN SHEEP

### Unit Group 161 – 164

#### Survey Data

An aerial survey in Unit 161 in September 2021 sampled 281 bighorn sheep classified as 66 rams, 166 ewes, and 49 lambs. In comparison, the 2019 aerial survey yielded a sample size of 464 bighorn sheep classified as 115 rams, 258 ewes, and 91 lambs. The survey area where bighorn sheep are encountered encompasses Mount Jefferson exclusively during this time frame.

No formal surveys were conducted in Units 162,163 in 2021. The most recent aerial survey was conducted in September 2020 yielding 169 bighorn sheep which were classified as 43 rams, 102 ewes, and 24 lambs. The survey covered the southern and central portions of Units 162 and 163.

#### Population Status and Trend

The bighorn sheep population in Unit 161 has increased exponentially in recent years. However, with the inception of a new ewe hunt and unprecedented drought conditions over the last 2 years, the population is showing a static trend. Collaring efforts in 2017 indicated this population was exposed to M. ovi but there was no evidence of active infection. A ewe hunt

was approved by the Nevada Board of Wildlife Commissioners and the initiatory season occurred in 2021. This hunt will continue to serve as a tool in regulating this population below the vegetative carrying capacity. I

The Units 162,163 population remains stable through modeling exercises. There is some concern that the pathogen that resulted in an epizootic pneumonia outbreak in adjacent Unit 134 in 2011 could spread to Unit 163. Lamb recruitment in 2016 and 2018 is not indicative of a population that is being drastically affected by bacterial pneumonia. A population model for Unit 162 has yet to be developed, but data indicates the population remains stable.

## MULE DEER

### Unit Group 161 – 164

#### Survey Data

The post-season composition survey for Area 16 was conducted in December 2021. The survey yielded a sample size of 317 deer which were classified as 31 bucks, 223 does and 63 fawns. In comparison, the 2019 survey yielded a sample size of 345 deer, which were classified as 58 bucks, 202 does and 85 fawns. The 2021 and 2020 surveys were conducted in a randomized aerial survey design. With the randomized aerial survey strategy, lower sample sizes are expected. Only portions of each hunt unit are being surveyed. Observed fawn and buck ratios stabilize at lower sample sizes, larger samples are not necessary to obtain statistically reliable ratios.

A spring composition survey was conducted in March 2022. The survey yielded a sample size of 191 deer classified as 160 adults and 31 fawns. In comparison, the 2021 spring aerial composition survey yielded a sample size of 279 deer classified as 227 adults and 52 fawns. The survey was drawn from portions of Units 161, 162, 163, and 164 to include a well-distributed sample.

#### Population Status and Trend

The Area 16 mule deer population has remained relatively stable for much of the past decade. Regularly occurring periods of drought, excessive feral equids, senescent browse species, and increasing pinyon and juniper densities have collectively managed to keep mule deer populations in central Nevada from experiencing significant growth.

The Area 16 mule deer population is currently experiencing a decreasing trend due to depressed fawn recruitment and adult survival. Unprecedented drought conditions, competition with feral equids, pinyon and juniper encroachment are all contributing factors to the current trend.

## MANAGEMENT AREA 17

Report by Hunter Burkett

### HABITAT

According to Community Environmental Monitoring and Planning precipitation data from February 2021 to February 2022, central Nevada received 64% of the 30-year average. Fall and winter precipitation (October - December) resulted in 34% of the 2021-2022 precipitation total. Snowfall during those months was historically high. Area 17 then received historically low measurable precipitation in January and February. The single SNOTEL site located in central Nevada measured snowpack levels at approximately 82% of median as of March 2022. Drought conditions continue to persist in central Nevada. These precipitation regimes will diminish forage quality throughout Area 17. Some high elevations in this area will provide reprieve for ungulates.

Periods of drought have plagued central Nevada over the past decade. This has resulted in little overall growth of mule deer populations and a relatively stable trend. Drought conditions coupled with senescent browse and pinyon and juniper encroachment prevent this herd from expanding.

Due to lack of water sources in the San Antonio Mountains, the NDOW, coupled with the BLM, completed the National Environmental Policy Act approval to build a big game water development east of Liberty Spring in 2021. The guzzler is functioning and bighorn sheep, along with other native wildlife, have been observed using the guzzler.

In 2018, a pinyon and juniper removal project was implemented on Carvers Bench in Unit 173. Two thousand six hundred acres of pinyon and juniper was removed. The removal of pinyon and juniper should enhance habitat conditions by allowing preferred plant species that are important to wildlife more resources and less competition.

### ANTELOPE

Unit Group 171 - 173

#### Survey Data

Antelope composition surveys were conducted over a 3-day period in Area 17 in late September and early October 2021. The survey yielded a sample of 173 antelope which were classified as 40 bucks, 114 does, and 19 fawns. In comparison, the 2020 survey yielded a sample of 306 antelope, which were classified as 50 bucks, 205 does, and 51 fawns.

#### Population Status and Trend

Central Nevada has experienced extreme drought conditions in recent years. As a result, an increase in antelope using

agricultural lands is being seen in Area 17. Extended drought has influenced adult fitness, therefore reducing fawn ratios. The antelope population in this area have large immigration and emigration between adjacent unit groups. The population modeling and quota recommendation process reflects these movements. Recruitment data predicts a declining trend for this population.

### ROCKY MOUNTAIN ELK

Unit Group 171 - 173

#### Survey Data

No formal surveys were conducted in 2022.

#### Population Status and Trend

Small groups of elk have been observed in Area 17 throughout the years. Elk in Area 17 were believed to seasonal disperse from Area 16 and were not permanent residents. By the early 2000s, reports became more frequent, and a small resident herd had permanently established itself in the southern portion of Unit 173.

In 2007, several cow elk were fitted with radio collars in Units 172 and 173 to aid in understanding seasonal use patterns and estimation of herd size. Telemetry data collected from the radio collars indicated the core elk population was inhabiting the southern portions of the Toiyabe and Shoshone Ranges during summer and fall and transitioning to Units 171 and 184, in lone and Smith Creek Valleys, during winter and spring. These movements have remained consistent.

The Area 17 elk are estimated to be static at low population levels.

### DESERT BIGHORN SHEEP

Unit Group 171 - 173

#### Survey Data

Aerial survey of Unit 173 N in September 2021 classified 36 sheep, as 3 rams, 23 ewes, and 10 lambs. In comparison, the 2020 aerial survey conducted in 173 S yielded a sample size of 51 sheep classified as 17 rams, 28 ewes, and 6 lambs. The 2021 survey covered the Toiyabe Range exclusively from Peavine to Ophir Canyon.

#### Population Status and Trend

During Fall 2018, the NDOW, in conjunction with the U.S. Forest Service, received approval to capture and collar 15 bighorn sheep in the Arc Dome Wilderness and adjacent areas and conduct disease surveillance. Data from this capture showed no active infection of *M. ovi* based on Polymerase Chain Reaction (PCR) tests. In addition, ELISA tests for antibodies to past exposure of *M. ovi*. were extremely low at only 13% prevalence indicating the population is not being affected by pneumonia. Data obtained from these collaring efforts

will generate movement, resource selection, and home range data that will be essential to the management of this population. The 173 N hunt continues to be challenging for hunters. The precipitous terrain and limber pine cover that the bighorn sheep inhabit makes this a difficult hunt. The hunt season was extended to give hunters the ability to access these bighorn sheep in late fall.

A capture, sampling, and collaring effort took place in January 2022 in the San Antonio Mountains. Seven bighorn sheep were collared and sampled for disease testing. Four animals tested negative for *M. ovi* by PCR and 3 were indeterminate. Antibodies for *M. ovi*. were present in all bighorn sheep tested, indicating recent exposure to the pathogen. The collars in the San Antonios will assist biologists in understanding the movements and habitat selection for central Nevada bighorn sheep. Lamb ratios observed on survey have this population on a slight upward trend.

### MULE DEER

Unit Group 171 - 173

#### Survey Data

In 2021, a post-season aerial composition survey was conducted in Area 17, yielding a sample of 500 deer which were classified as 86 bucks, 278 does, and 136 fawns. In comparison, the 2020 post-season aerial survey yielded a sample of 618 deer which were classified as 120 bucks, 360 does, and 138 fawns. Since 2017, a random-stratified survey design was implemented in Area 17. With this aerial survey strategy, lower sample sizes are expected since only portions of each hunt unit are being surveyed. Since fawn and buck ratios stabilize at a lower sample size, larger samples are not necessary to obtain statistically reliable ratios.

A spring composition survey was conducted in March 2022. The survey yielded a sample size of 519 deer, classified as 408 adults and 111 fawns. In comparison, the 2021 survey yielded a sample of 347 deer, classified as 271 adults and 76 fawns.

#### Population Status and Trend

In 2018, a radio collaring and habitat enhancement project (pinyon and juniper removal) was implemented on Carver's Bench, on the east side of the Toiyabe Range from Broad Canyon to Summit Canyon, in Unit 173. Two thousand six hundred acres of pinyon and juniper were treated on the bench, and 30 adult female mule deer were collared to study response to the removal. The collaring effort occurred over 2 years with 20 deer collared in April 2018 and an additional 10 collared in March 2019. This data will help the NDOW better understand mule deer movements, distribution, and critical use areas at a more refined scale in Unit 173. The habitat component on this project will enhance winter forage conditions. Presently, collaring data has validated expected seasonal habitat use and movements. One interesting aspect that the

collaring data has depicted is that this population only moves on an elevational gradient based off seasonality, meaning movement is from the top of the mountain to the bottom of the mountain and there are no large-scale migrations along the mountain range. Fawn recruitment in Area 17 was slightly depressed in 2021-2022. This results in a modest decrease in population size.

## MANAGEMENT AREA 18

Report by Jason Salisbury

### HABITAT

Range conditions going into spring 2022 were average in the mountainous terrain, and extremely poor in the valley bottoms. Increased precipitation receipts are needed to keep green-up conditions going into the early summer months. Decent snowpack exists in the higher elevational slopes of the Desatoya and Clan Alpine Mountain Ranges which should allow for sustained perennial green-up going into the summer months.

Two herbicide projects were initiated in the Clan Alpines and New Pass Mountain Ranges in fall 2021. The Draw Fire herbicide treatment encompassed 4,600 acres of mule deer winter range along with occupied antelope habitat. The New Pass Water Canyon project controlled 2,000 acres of cheat grass growth on the eastern slope of the New Pass Mountain Range. The plan on both projects was to control the growth of annual grasses and weeds going into the spring, summer, and fall months. A follow-up reseeding will commence in fall 2022 on the decadent ground.

Feral horse populations continue to pose challenges to all native wildlife in Churchill County. Currently, the most impacted areas for Unit 181 - 184 include the following mountain ranges: Clan Alpines, Stillwaters, Mount Augusta, and New Pass. Efforts have been made to lower overall numbers in the Desatoya Mountain Ranges. Future plans to reduce numbers have been expressed by the BLM Winnemucca District for the Augusta Mountains as well as the northern end of the Stillwater Mountain Ranges for 2023.

### ANTELOPE

Unit Group 181 - 184

#### Survey Data

A ground survey was conducted in the unit group in late September 2021 over a 4-day period. A total of 249 antelope was classified as 31 bucks:100 does:23 fawns. The 2021 fawn ratio is well below the long-term average of 34 fawns:100 does.

#### Population Status and Trend

The 2022 population estimate of 900 antelope is a slight increase from last year. Adjustments were made to the population model for this herd, which is reflected in the increase in population size. This year's fawn ratio is below maintenance level for recruitment. Possible explanations of the reduced fawn recruitment rates over the past 2 years include prolonged drought leading to declined water sources and forage availability. Other contributing factors to overall population decline in the adult segment include higher populations of feral horses over Appropriate Management Level and the presence of epizootic hemorrhagic disease (EHD). It is not currently understood what effect the disease has had on antelope.

## DESERT BIGHORN SHEEP

### Unit 181

#### Survey Data

An aerial composition survey was conducted in September 2021 yielding a sample of 379 individuals. The observed sex and age ratios were 49 rams:100 ewes:7 lambs.

#### Population and Trend

The Unit 181 bighorn sheep herd is showing a significant decline in new recruitment for 2021 with the lowest ever recorded lamb ratio of 7 lambs:100 ewes. The current population estimate is 570 animals and is a decrease of 30 animals from last year. This population continues to have a strong cohort of mature rams which will provide ample opportunities into the future. The most probable cause of the decline is drought coupled with disease impacts on lamb survival rates.

### Unit Group 182, 044

#### Survey Data

In September 2021, a 3-hour aerial survey was conducted in the Stillwater Mountain Range. This survey resulted in the classification of 153 individuals. The observed sex and age ratios were 28 rams:100 ewes:19 lambs.

#### Population Status and Trend

The bighorn sheep herd in the Stillwater Mountain Range is still recovering from the 2019 disease event. This year's lamb ratio of 18 lambs:100 ewes suggest limited recruitment but is noticeably better than single digit recruitment that usually follows a disease event. The current population estimate is 540 animals and is a 6% decrease compared to last year.

### Unit 183

#### Survey Data

Aerial surveys were conducted during September 2021 and resulted in the classification of 138 bighorn sheep. These consisted of 40 rams, 72 ewes, and 26 lambs for a ratio of 56 rams:100 ewes:36 lambs.

#### Population Status and Trend

The 2021 bighorn sheep population estimate is 270 animals and approximates the estimate derived from last year. The average lamb ratio for the past 3 years is 14 lambs:100 ewes. The 2021 lamb ratio of 36 lambs:100 ewes is the highest recorded since the 2018 M. ovi die off. Hopefully this herd continues to experience increased lamb production going into 2022.

### Unit 184

#### Survey Data

In September 2021, a 2-hour aerial survey was conducted in the Desatoya Mountain Range. This survey resulted in the classification of 69 sheep. The sample was comprised of 11 rams, 49 ewes, and 9 lambs. The lamb to ewe ratio was markedly lower than the 27 lambs observed last year.

#### Population Status and Trend

The bighorn sheep herd in this unit is showing a significant decline in new recruitment for 2021 with the lowest ever recorded lamb ratio of 18 lambs:100 ewes. The current population estimate is 140 animals and is a decrease of about 20 animals from the year before.

## MULE DEER

### Unit Group 181 – 184

#### Survey Data

A ground survey was conducted in the spring 2021. In total 142 deer were classified as 33 fawns:100 adults.

#### Population Status and Trend

The Area 18 deer herd has remained at low population levels for many years. This year's fawn recruitment was low due to poor survival during the drought. The Area 18 deer herd population is expected to remain at about the same level compared to last year. The overall hunter success rate is within the 10-year average of 32%.

## MANAGEMENT AREA 19

Report by Carl Lackey

## HABITAT

Urban sprawl and the accompanying human recreation associated with it are the biggest challenges facing the Carson Front deer herds. Additionally, the continued drought has taken a toll on Area 19. Habitat conditions in Unit 195 are marginal to poor, primarily due to the feral horse population, estimated at 3,000+ by the Nevada Department of Agriculture which has management responsibilities for this horse

population. Roughly 1,000 of these are in the vicinity of USA Parkway, occupying the same habitat as the bighorn sheep. Management actions to remove most of these feral horses would be necessary to improve habitat conditions.

The Tamarack Fire in the southern part of Unit 192 burned about 15,000 acres in Nevada and nearly 70,000 in total. Close to 17,000 acres of mule deer habitat was burned, consisting of winter range and movement corridors. The NDOW provided funding for seeding efforts and roughly 8,000 acres were seeded in fall 2021.

## DESERT BIGHORN SHEEP

### Unit 195

#### Survey Data

No aerial surveys were conducted in 2021 but a ground survey in April 2021 yielded a sample of 95 sheep with a ratio of 22 rams:100 ewes:25 lambs. Sheep are frequenting the greater Clark Mountain area, the cliffs east of Derby Dam and throughout the Eagle-Picher Mine.

#### Population Status and Trend

Desert bighorn sheep are found in Unit 195, primarily in the northern part of this unit, east and west of USA Parkway. This population appears to have stopped growing and has leveled off since 2018 with poor lamb survival the last 4 years and is currently estimated at 130. This population is not hunted. The NDOW is attempting to reach an agreement with private landowners to allow management actions such as disease surveillance, capture and collaring, and an outreach program to view bighorn sheep.

## MULE DEER

### Unit 192

#### Survey Data

Post-season survey flights were flown in early November 2021 for the Carson River Interstate herd. The survey resulted in a classification of 130 deer with a ratio of 19 bucks:100 does:33 fawns. Survey conditions were not favorable; warm temperatures with little to no snow cover, and the results reflected the conditions. These ratios are far below the previous 5-year average of 30 bucks:100 does:43 fawns. Most deer were found between 6200-6500 feet, which is very typical for the Carson Range. For the past few years, the NDOW has tried to conduct surveys for the Carson Range herds earlier in the fall and later in the spring to survey prior to the fall migration from California and then after the spring migration when most deer leave Nevada winter ranges.

#### Population Status and Trend

The 2022 modeled population estimate is 1,300 deer. For the last several years the Unit 192 herd has fluctuated between 1100 and 1500 deer, yet it is still a stable population.

The resident portion of this population does not migrate into California and is estimated at around 500 deer. The majority of this herd uses the eastern slopes of the Carson Range as crucial winter range, migrating from the Tahoe Basin and Hope Valley summer ranges.

### Unit Group 194 – 196

#### Survey Data

The survey in Unit Group 194 – 196 resulted in a classification of 107 deer with a ratio of 20 bucks:100 does:21 fawns. As with Unit 192, the timing of this flight was likely prior to the fall interstate migration, meaning primarily resident deer were surveyed. This was one of the lowest recorded sample sizes on record and was likely due to the very poor survey conditions rather than reflecting population status. However, the ratios were also very low compared to the previous 5-year averages of 32 bucks:100 does:43 fawns.

#### Population Status and Trend

The modeled population estimate is 1,400 deer. The 194 – 196 herd was stable for several years but poor recruitment the last couple years has resulted in a decline in the population. With continued urban development on and near Peavine Mountain, the long-term trend in abundance is downward, mostly due to habitat loss and fragmentation. The majority of this herd uses the eastern slopes of the Carson Range as winter range, migrating from their summer range in the Tahoe Basin or near Truckee, California. The resident portion of this population is estimated at around 750 deer.

### Unit 195

#### Survey Data

This population is not modeled or surveyed.

#### Population Status and Trend

The 2022 population estimate of 500 adult deer is derived from harvest statistics and is based upon total buck harvest. Deer are common along the Truckee River corridor on private lands and well distributed in the southern part of the unit near Jumbo Grade.

## MANAGEMENT AREA 20

Report by Jason Salisbury

## HABITAT

Overall, range conditions going into spring 2022 are decent in the mountainous terrain and are poor in the valley bottoms. Increased precipitation will be necessary to keep green-up conditions going into the early summer months. Decent snowpack exists in the higher elevational north facing slope mountain ranges which should allow for sustained perennial

green-up going into the summer months. The Baldwin Canyon and JS antelope guzzlers were replaced in 2021. These water development projects were complete rebuilds and will provide 10,000 gallons of water each to the antelope herd. Four thousand acres of pinyon and juniper were removed along the western slope of the Wassuk Mountains in 2019. Spring enhancement projects will be evaluated in summer 2022 on the small private withholdings controlled by the Walker River State Park. Spring improvement projects have shown to be beneficial to deer abundance. Feral horse populations continue to pose challenges to all native wildlife in Mineral County. Currently the most impacted areas for Area 20 include the following mountain ranges: Wassuk, Mount Montgomery, and the Marrietta Burro Range.

## ANTELOPE

### Unit Group 202,204

#### Survey Data

A survey was conducted in February 2022 with no antelope observed. The last survey was conducted in February 2021 and resulted in the classification of 74 antelope. The resulting sex and age ratios for the sample were 44 bucks:100 does:28 fawns.

#### Population Status and Trend

The 2022 population estimate approximates last year's estimate of 100 animals. This population of antelope has remained stable over the last 10 years.

### Unit Group 203,291

#### Survey Data

Ground surveys were conducted in September 2021 yielding a sample of 128 antelope. The resulting age and ratios for the sample were 47 bucks:100 does:34 fawns.

#### Population Status and Trend

This population of antelope is slowly starting to occupy new habitat types within the Pinetnut Mountain Range that have been affected by fires. The long-term effects of fires have been beneficial to antelope with the establishment of forbs and grasses in a pinyon and juniper woodland. Overall, the herd is considered stable in population trend.

### Unit Group 205 – 208

#### Survey Data

Antelope composition surveys were conducted over a 2-day period in Unit Group 205 – 208 in early October 2021. The survey yielded a sample of 40 antelope, which were classified as 12 bucks, 22 does, and 6 fawns.

#### Population Status and Trend

The lower fawn ratio observed in 2021 is indicative of this Mineral County population of antelope. Continued drought

conditions in 2021 forced some antelope in Mineral County to increase use on agricultural areas in the Whiskey and Gabbs Valley Wash. This population of antelope is currently stable only decreasing slightly because of a lower fawn ratio.

## DESERT BIGHORN SHEEP

### Unit 202

#### Survey Data

An aerial composition survey was conducted in September 2021 yielding a sample of 37 individuals. The observed sex and age ratios were 24 rams:100 ewes:24 lambs.

#### Population Status and Trend

The Unit 202 lamb ratio of 24 lambs:100 ewes will not afford any population growth in the Wassuk bighorn sheep herd. The current modeled population of bighorn occupying Unit 202 is 140 animals. This population over the past 2 years has experienced lower recruitment rates coupled by increased lion and highway mortality. All these increased hazards have contributed to a decreasing population trend.

### Unit 204

#### Survey Data

An aerial composition survey occurred in 2020 yielding a sample of 30 sheep. The sample provided a sex and age ratio of 42 rams:100 ewes:16 lambs.

#### Population Status and Trend

The bighorn sheep herd on the East Walker River corridor is estimated around 50 individuals. Increased survey effort needs to be conducted in fall 2022 to fully understand the dynamics of this population.

### Unit Group 205,207

#### Survey Data

Aerial surveys were conducted during September 2021 and resulted in the classification of 283 bighorn sheep. These consisted of 84 rams, 182 ewes, and 17 lambs for a ratio of 46 rams:100 ewes:9 lambs.

#### Population Status and Trend

The 2022 bighorn sheep population estimate is 330 animals and is a slight decrease in the estimate derived last year. The average lamb ratio for the past 2 years is 7 lambs:100 ewes. The 2021 lamb ratio of 9 lambs:100 ewes is the second lowest recorded since the 2019 M. ovi die-off. Ample rams that survived the die-off are still available for harvest. The next subsequent years of lamb production will dictate if the population will be recovering from the die off.

### Unit Group 206, 208

#### Survey Data

In September 2021, a 2.5-hour aerial survey was conducted in Units 206 and 208. This survey resulted in the classification of 98 sheep. The sample was comprised of 17 rams, 67 ewes, and 14 lambs. The lamb to ewe ratio was calculated at 21 lambs:100 ewes.

#### Population Status and Trend

The sheep population in Units 206, 208 has experienced a slight decline in the past 2 years. This year's lamb ratio is the lowest recorded in the past 10 years. Factors that can influence lamb survival include drought related conditions coupled with disease transmission between the adult segment and the offspring. Increased lion predation has also been noted in the Excelsior Mountain Range.

## MULE DEER

### Unit Group 201,202,204 – 206

#### Survey Data

A spring ground survey will be conducted in April 2022 by California Fish and Wildlife. Data from the survey will be incorporated into the model when received.

#### Population Status and Trend

Currently the Area 20 herd is managed by harvest metrics such as overall hunter success and the percentage of 4-points in the harvest. Tag numbers on the Nevada side have always been relatively low for an interstate herd that migrates into Nevada during the winter months. In the last few years deer have not migrated from California into Nevada during the hunt because climatic conditions have not forced the deer to do so. Therefore, harvest is usually limited to resident bucks and a few migrant deer.

### Unit 203

#### Survey Data

This unit is not surveyed for population status metrics. This unit is managed by harvest metrics such as overall success and the percentage of 4-points harvested.

#### Population Status and Trend

The 2021 overall hunter success any legal weapon hunt was 62% with 56% of the bucks being 4-point or better. This population is believed to be stable with the potential to increase under favorable habitat conditions.

## MANAGEMENT AREA 21

Report by Hunter Burkett

## HABITAT

According to Community Environmental Monitoring and

Planning precipitation data from February 2021 to February 2022, central Nevada received 64% of the 30-year average. Fall and winter precipitation (October, November, December) resulted in 34% of the 2021-2022 precipitation total. Snowfall during those months was historically high. Area 21 then received historically low measurable precipitation in January and February. The drought continues to persist in central Nevada. The U.S. Drought Monitor has designated most of the area as extreme drought conditions during 2021. Drought conditions began in mid-2020 and have continued through early 2022. These precipitation regimes will diminish forage quality throughout Area 21.

The NDOW rebuilt the Robb and Beko Guzzlers in June 2019. Increased storage capacity was added to both units. During fall 2019, the NDOW worked in conjunction with private landowners and the mineral ridge mine to enhance tarantula spring. The spring now has a more reliable water storage and collection area. To alleviate the need for future water hauls, the NDOW, coupled with the BLM, completed appropriate National Environmental Policy ACT documentation to rebuild and expanded the Monte Cristo number one guzzler.

Area 21 has limited habitat availability for antelope and mule deer. Most of the area resides in a transitional habitat from the Great Basin to the Mojave Desert. During periods of favorable climatic conditions, antelope and mule deer distribution tends to expand in Area 21, while during dry periods, these areas contract. Drought years within the last decade, coupled with competition from feral equids in many areas, continue to effect habitat conditions throughout Area 21.

## ANTELOPE

### Unit Group 211, 212, 213

#### Survey Data

A 2021 post-season ground survey was conducted in December for Area 21. The survey yielded a sample size of 26 antelope classified as 8 bucks, 17 does and 1 fawn. In comparison, the 2019 fall survey yielded a sample of 57 antelope, which were classified as 9 bucks, 38 does, and 10 fawns.

#### Population Status and Trend

As antelope populations in surrounding areas increased in number and expanded in distribution over the past 15 years, antelope moved into the Great Basin-Mojave transition zone in Esmeralda County in greater numbers than have previously been observed. While many animals continue to move in and out of the area based on season and prevailing climatic conditions, more animals have become permanent residents of the county. Most of the Esmeralda County antelope population is made up of 2 core herds. One herd currently resides in the Monte Cristo Range in northern Esmeralda County, while the other typically inhabits the region between the towns of Goldfield and Silver Peak, Nevada. Antelope are distributed in smaller numbers throughout other areas of the county. Due

to depressed fawn recruitment in 2021, this population is considered slightly decreasing.

## DESERT BIGHORN SHEEP

### Unit Group 211, 212, 213

#### Survey Data

An aerial in September 2021 for Unit 211 classified 241 bighorn sheep as 68 rams, 140 ewes and 33 lambs. In comparison, the 2019 aerial survey classified 315 bighorn sheep as 90 rams, 166 ewes, and 59 lambs. Areas surveyed included Nivloc Mine, Argentine Canyon, Rhyolite Ride, Mineral Ridge, Emigrant Pass, and the Volcanic Hills.

An aerial survey was conducted in Unit 212 in September 2021. The survey yielded a sample size of 249 bighorn sheep classified as 106 rams, 136 ewes, and 7 lambs. In comparison, the 2019 aerial survey for Unit 212 classified 230 bighorn sheep as 98 rams, 105 ewes, and 27 lambs. Survey areas included Lone Mountain and the Weepah Hills.

No surveys were conducted in Unit 213 during 2021. The most recent aerial survey was in 2020. The survey yielded a sample size of 112 rams, 154 ewes, and 31 lambs.

#### Population Status and Trend

The Area 21 bighorn populations are some of the only remnant herds in west-central Nevada. Historically, bighorn sheep movement occurred regularly between the Silver Peak Range (Unit 211), the Monte Cristo Range (Unit 213), and Lone Mountain (Unit 212).

Active infection of *M. ovi*, was detected via Polymerase Chain Reaction (PCR) testing in Area 21 bighorn sheep populations. Bighorn sheep from Units 211, 208, and 213 were captured, fitted with GPS collars, and sampled in January 2022. From the sampling effort, the "NTTR" and "Fairview-Slate" strain have been detected in Area 21. It is unknown how these new strains will impact Area 21 bighorn sheep. Lamb surveys, along with further testing, will aid biologists in understanding the effects of *M. ovi* in Units 211, 212, and 213.

Unit 211 had slightly depressed lamb ratios observed on aerial survey in September 2021. Drought conditions can explain the lower lamb ratios. These ratios indicate a slightly decreasing trend in the population.

Unit 212 aerial surveys produced record low lamb ratios. Although the low observed lamb ratios are highly concerning, many mature rams are still present in this population. Drought and disease are the 2 major factors influencing Lone Mountain bighorn sheep. This population is showing a decreasing trend because of drought and poor lamb recruitment.

Unit 213 targeted population objective of 400 was reached in 2021, and therefore, its ewe hunt was removed. This popu-

lation is currently on a declining trend because of drought conditions and disease.

## MULE DEER

### Unit Group 211, 212, 213

#### Survey Data

Currently, no formal surveys are conducted in Area 21. Past survey efforts have not resulted in sufficient sample sizes for use in monitoring population dynamics. Harvest metrics, coupled with annual precipitation data, help derive quota recommendations by the Department.

#### Population Status and Trend

Based on annual harvest data and ground survey data, the Area 21 mule deer population appears to have remained stable at comparatively low levels for quite some time. Drought conditions will impact the available forage for mule deer in this unit. Reduced disturbance in the area has created an aging browse community and enabled pinyon and juniper to expand in many areas.

Post-season aerial surveys and spring aerial surveys in adjacent units have seen slightly depressed fawn to doe ratios. Area 21's impacts will be elevated due to the reduced quality mule deer habitat. Currently, the Area 21 mule deer population is moderately decreasing.

## MANAGEMENT AREA 22

Report by Daniel Sallee and Kody Menghini

## HABITAT

Habitat conditions in this area have suffered from severe drought conditions over the past 2 years. In 2021, Community Environmental Monitoring Program weather stations in Pioche and Alamo, near the southern portion of the area, registered 55% and 40% of average precipitation, respectively. A weather station in Ely at the northern extent of the range registered 54% of normal precipitation during 2021. In addition, nearly 100% of the area was classified as Exceptional Drought conditions by the U.S. Drought Monitor during 2021. Drought conditions first developed during summer 2020 when weather stations indicated the area received 38% of normal precipitation beginning in July 2020. These conditions have persisted through early 2022. Precipitation received during 2021 mainly occurred as monsoonal rains in July and winter precipitation in December. Persistent drought conditions and the lack of spring precipitation likely led to poor forage availability across the entire area.

In addition to drought conditions, habitat conditions in the area are affected by pinyon and juniper encroachment and

feral horse use. Large portions of mid- and lower-elevation areas have high densities of pinyon and juniper trees, which reduce understory vegetation and palatable forage. The BLM and the NDOW have treated several thousand acres of land to reduce pinyon and juniper density to increase productive wildlife habitat. Several more projects are scheduled to further improve habitat conditions for wildlife in the area. Feral horse use in the area has been over the Appropriate Management Level in the past few years. To reduce the number of feral horses, the BLM has removed 1,257 feral horses and treated 25 mares with fertility control. Despite the removal of these animals, habitat degradation from overuse will continue and have lasting impacts on the range. In addition, feral horses currently on the landscape can cause localized degradation at and around water sources. Protection of water sources and continued removal of excess feral horses is necessary to preserve and improve wildlife habitat within the area.

Wildfires can also impact wildlife habitat within the area. In 2020, 2 fires affected the area. The Brown fire consumed approximately 8,300 acres near Lund which are important for wintering mule deer. The Comet fire was approximately 750 acres in the higher elevation of the Highland Range. In 2021 the Big Rocks fire consumed approximately 5,400 acres in the Pahroc Range, which was used by mule deer and elk year-round. The Brown fire and Big Rocks fire underwent seeding to restore beneficial wildlife habitat.

## ANTELOPE

### Unit Group 221 - 223

#### Survey Data

Ground surveys conducted in late September 2021 resulted in the classification of 81 antelope. The observed sex and age ratios were 41 bucks:100 does:18 fawns. The buck ratio was slightly lower than the previous 5-year average of 44 buck:100 does, however the fawn ratio was far below the previous 5-year average of 40 fawns:100 does.

#### Population Status and Trend

This population has undergone a decline over the past couple years due to low recruitment of fawns into the adult population. In 2021, fawn recruitment was at one of the lowest levels this population has experienced. Severe drought conditions, which has caused poor forage and limited water availability, has likely led to poor recruitment.

## ROCKY MOUNTAIN ELK

### Unit Group 221 - 223

#### Survey Data

The most recent composition survey for elk was conducted in January 2022. A sample of 659 elk was obtained yielding sex and age ratios of 33 bulls:100 cows:21 calves. Sex and

age ratios have averaged 48 bulls:100 cows:35 calves over the previous 5 years.

#### Population Status and Trend

Two of the last 3 years have experienced below average calf recruitment. The Area 22 elk herd is within population objective and the current population estimate is showing a decrease, compared to 2021, due to poor calf recruitment

## DESERT BIGHORN SHEEP

### Unit Group 221 - 223

#### Survey Data

No formal surveys were conducted for bighorn sheep in 2021. A herd of 2 rams, 5 ewes, and one lamb was observed in Unit 221 near Sunnyside during the post-hunt mule deer aerial survey in December 2021. No inferences can be made based on this small group, however the presence of young rams and lambs in Unit 221 is encouraging. The 5-year average ratios for these Units are 45 rams:100 ewes:48 lambs.

#### Population Status and Trend

Drought conditions likely contributed to lower lamb survival. Observed lamb recruitment was high during the last survey in 2020, but poor recruitment in adjacent population was used to inform the population model of a slight decrease in overall population during 2021. Disease is still a concern in this area due to proximity to domestic sheep and the detection of *M. ovi* within the herd in 2015. Monitoring efforts will continue to track disease presence and possible spillover events.

## MULE DEER

### Unit Group 221 - 223

#### Survey Data

A post-season aerial survey was conducted in early December 2021. During this survey, a total of 579 mule deer was observed, yielding ratios of 23 bucks:100 does:28 fawns. These ratios are below the previous 5-year average ratios of 31 bucks:100 does:37 fawns. A spring aerial survey was conducted during early March 2022. A composition sample of 960 mule deer yielded a ratio of 21 fawns:100 adults. The previous 5-year average fawn recruitment is 27 fawns:100 adults.

#### Population Status and Trend

This population has been affected by severe drought conditions over the past several years. Drought conditions have reduced recruitment of fawns and contributed to population decline. The Department has coordinated with biologists in adjacent areas with GPS collared adult deer for estimates of how drought conditions have affected survival of adult deer. It is evident that survival of adult deer has been lower than average over the last 2 years due to poor body condition resulting from the severe drought. Reduced survival of both

adult and fawn deer has led to a significant decline in the mule deer population in this area.

## MANAGEMENT AREA 23

Report by Daniel Sallee

### HABITAT

Habitat conditions in this area have suffered from severe drought conditions over the past 2 years. In 2021, Community Environmental Monitoring Program weather stations in Pioche, near the southwestern portion of the area, registered 55% of average precipitation. During most of 2021, the entire area was classified as Exceptional Drought conditions by the U.S. Drought Monitor. Drought conditions first developed during summer 2020 when the Pioche weather station registered the area received 38% of normal precipitation. These conditions have persisted through early 2022. Precipitation during 2021 mainly occurred as monsoonal rains in July and snow in December. Persistent drought conditions and the lack of spring precipitation likely led to poor forage availability across the entire area.

In addition to drought conditions, habitat conditions in the area are affected by pinyon and juniper encroachment and feral horse use. Large portions of mid- and lower-elevation areas have high densities of pinyon and juniper trees, which reduce understory vegetation and palatable forage. Several thousand acres of pinyon and juniper stands have been treated by the BLM and the NDOW to improve habitat for wildlife. Feral horse use in the area has been over the appropriate management level. To reduce the number of feral horses in the area, the BLM has removed 2,996 feral horses and treated 97 mares with fertility control treatment since 2018. A large number of feral horses remain within the unit and continue use important wildlife areas.

Wildfires have also impacted wildlife habitat in the area. In 2020 the Miller Canyon Fire burned approximately 5,400 acres on the northeast side of the Wilson Creek Range in both high and low elevation areas. Also in 2020, the Big Summit Fire burned approximately 8,406 acres in the White Rock Range, mainly in higher elevation habitat in Utah. In 2021, the Wilson Creek Fire burned approximately 1,500 acres of high elevation habitat near Wilson Peak. The Miller Canyon Fire was seeded in fall 2020, however a field visit to the fire in late 2021 revealed it was a failure.

### ANTELOPE

#### Unit 231

##### Survey Data

Ground surveys conducted in late September 2021 resulted in

the classification of 272 antelope. The observed sex and age ratios were 27 bucks:100 does:13 fawns. The ratios were far below the previous 5-year averages of 44 bucks:100 does:37 fawns.

##### Population Status and Trend

This antelope population has continued the general decline that began last year. The decline has been driven by poor recruitment of fawns into the adult population. In 2021, the observed fawn ratio during surveys was at one of the lowest levels ever observed in this unit. Fawn recruitment has been low likely due to limited forage and water availability caused by severe drought conditions that have affected the area for the last 2 years.

### ROCKY MOUNTAIN ELK

#### Unit 231

##### Survey Data:

An aerial survey was conducted in February 2022. During this survey, 143 elk were classified yielding sex and age ratios of 79 bulls:100 cows:19 calves. In comparison, the 5-year average ratios are 64 bulls:100 cows:42 calves. Elk were distributed throughout the lower elevations of the White Rock and Wilson Creek Mountain Ranges.

##### Population Status and Trend

This elk population remains difficult to model due to large movements of elk into the unit from both adjacent units in Nevada and across the state border from Utah. During the summer, several elk move from Area 22 to agricultural land in Lake Valley. Many of these elk return to Area 22 prior to open hunting seasons, however a portion are likely harvested in Unit 231 during early season hunts. In addition, GPS collar data from both Nevada and Utah in the White Rock Mountains on the state line indicates many elk spend time in both states throughout the year. Hunting pressure tends to be higher in Utah, so many elk in the White Rock Mountains may be in Nevada during the hunting season but return to Utah during winter surveys. The NDOW has coordinated survey efforts with the Utah Division of Wildlife to better understand movements of elk in the White Rock Mountains.

The elk population that resides in this unit year-round has experienced a slight decline driven by poor recruitment of calves. Widespread and persistent drought conditions have reduced forage productivity and water availability for elk in the region, likely resulting in reduced calf recruitment in Unit 231 and adjacent units.

### MULE DEER

#### Unit 231

##### Survey Data

A post-season aerial survey was conducted in early Decem-

ber 2021. During this survey a total of 996 mule deer was observed, yielding ratios of 20 bucks:100 does:27 fawns. These ratios are below the 5-year average ratios of 24 bucks:100 does:44 fawns. A spring aerial survey was also conducted in early March 2022. A composition sample of 1,144 mule deer yielded a ratio of 22 fawns:100 adults. The previous 5-year average fawn recruitment is 29 fawns:100 adults.

##### Population Status and Trend

Severe drought conditions have continued to plague mule deer in this area. Drought conditions have reduced forage quality and water availability across the area, leading to relatively poor adult survival and low recruitment of fawns. The NDOW has coordinated with the Utah Division of Wildlife Resources to obtain data on adult mule deer survival from GPS collared animal adjacent to this unit. Survival of the GPS collared deer has been low relative to previous years due to poor body condition. Reduced survival of both adult and fawn deer has led to a significant decline in the mule deer population in this area.

## MANAGEMENT AREA 24

Report by Daniel Sallee and Joe Bennett

### HABITAT

Habitat conditions in this area have been impacted by severe droughts over the past 2 years. In 2021, Community Environmental Monitoring Program (CEMP) weather stations in Pioche and Caliente, near the northern extent of the area, registered 55% and 73% of normal precipitation, respectively. A weather station in Alamo, which is more central in the unit, recorded 40% of normal precipitation during 2021. In addition, the U.S. Drought Monitor classified most of the area as Exceptional Drought conditions for most of 2021 and the end of 2020. Drought conditions first developed in summer 2020 when the CEMP weather stations registered 38% of normal precipitation. These conditions have persisted through early 2022. Most precipitation received in 2021 occurred as monsoonal rains in July and winter precipitation in December. Very little precipitation was received during the spring growing period, which likely led to poor forage availability across the entire area. Multiple big game guzzlers in the unit were low or dry in the spring. The NDOW conducted emergency water hauls to 5 guzzlers in 4 different mountain ranges (Arrows, Pahrnagat's, Meadow Valleys, and Delamare's) involving 15,395 gallons in 2021 primarily to bighorn sheep guzzlers.

In addition to drought conditions, the area has been affected by wildfires. Several large wildfires burned important wildlife habitat in 2020. The Twin Fire burned approximately 25,800 acres in the South Pahroc Range in areas used by desert bighorn sheep, mule deer, and occasionally elk. The Stewart

Canyon fire burned approximately 5,400 acres in the Delmar Mountain Range in areas used by mule deer and elk. The Bishop fire also burned in the Delmar Mountain Range, consuming approximately 13,000 acres of mule deer habitat. The Meadow Valley fire burned approximately 59,000 acres of the Meadow Valley Mountains in an area used by mule deer and occasionally desert bighorn sheep. Many of these fires received restoration seeding to improve habitat conditions for wildlife, however these efforts largely failed due severe drought conditions.

Feral horses have also degraded habitat conditions within this area. Most of the area is managed as a "horse free zone" by the BLM (there was no Appropriate Management Level set at the time that the WFRHB Act of 1971 was passed by Congress due to lack of resources to support such a large feral animal), however the latest population estimate indicates over 2,000 feral horses are currently using the landscape. A gather in the Meadow Valley Mountains in 2020 removed 455 animals, however many other portions of the area still have excessive numbers of feral horses. Many riparian areas and recent burn scars have a disproportionate amount of feral horse use and are being degraded. Protecting high-use areas and reducing the number of feral horses in the area is important for improving and protecting wildlife habitat within the area.

### ROCKY MOUNTAIN ELK

#### Unit Group 241 – 245

##### Survey Data

A brief aerial survey was conducted in February 2022 resulting in the classification of 30 elk yielding a ratio of 4 bulls:100 cows:21 calves. The sample consisted of one group of elk using agricultural fields in Barclay. Due to small sample size, no population-level inferences can be made, and bulls are underrepresented.

##### Population Status and Trend

This elk population does not have a population model due to low abundance within the unit group. Tags are allocated based on the success rate and quality of bulls harvested the previous year. Last year harvest success for bulls and cows was similar to previous years. Bull quality was slightly lower than last year; however, it is similar to long-term averages. The elk population within this unit group appears stable and current harvest levels are sustainable.

### DESERT BIGHORN SHEEP

#### Unit Group 241 – 245

##### Survey Data

An aerial survey was conducted in Unit 243 in September 2021. A record survey of 168 sheep was classified with ratios of 30 rams:100 ewes:15 lambs. In comparison, an aerial sur-

vey in 2019 yielded a sample size of 158 sheep with ratios of 55 rams:100 ewes:25 lambs. No aerial surveys were conducted in Unit 241, 244 or Unit 245 in 2021.

#### Population Status and Trend

The bighorn sheep population in Unit 241 underwent a modest decline driven by lower lamb recruitment. Severe drought conditions likely contributed to lower lamb recruitment, however carry-over of a past *M. ovi* spillover event may also be contributing to the decline. Monitoring efforts will continue to track disease events throughout the herd.

Unit 243 had a record high survey this year, however lamb recruitment was very low. The population experienced a modest decline from 180 animals to 170, which was driven by poor lamb recruitment. Severe drought conditions have affected the herd and likely drove the decline. Disease is still a major concern in the unit due to proximity to domestic goats. Monitoring efforts will continue to detect pathogen spillover events.

The bighorn sheep population in Unit 244 underwent a modest population level decline driven by unprecedented drought conditions and disease. Sampling efforts in 2015 indicated the presence of *M. ovi* infection in the bighorn herd. Although surveys were not conducted in this unit in 2021, data inferred from adjacent units indicate population level contractions. Modeling exercises have this population decreasing from 120 to 100 bighorn sheep.

The bighorn sheep population in Unit 245 decreased slightly from 140 to 135 sheep during 2021. This modest decline was likely driven by reduced lamb recruitment due to severe drought conditions. Disease monitoring efforts in 2012 and 2015 indicated the herd had been exposed *M. ovi* as evident by antibodies, however all sheep tested negative any active infection. Disease monitoring will continue.

## MULE DEER

### Unit Group 241 – 245

#### Survey Data

No aerial surveys were conducted in this area due to prioritization of sampling effort and multiple weather events that prevented surveys.

#### Population Status and Trend

This population has continued to be affected by severe drought conditions. Drought conditions have affected the deer population through reduced forage quality and water availability across the area. Poor habitat conditions have caused low recruitment of fawns into the adult population. In addition to lower fawn recruitment, the adult population has also experienced negative effects of drought. The NDOW has coordinated with the Utah Division of Wildlife Resources to obtain data on adult mule deer survival from GPS collared animal adjacent to this unit. Survival of the GPS collared deer

has been low relative to previous years due to poor body condition. Reduced survival of both adult and fawn deer has led to a significant decline in the mule deer population in this area.

## MANAGEMENT AREA 25

Report by Hunter Burkett and Joe Bennett

## HABITAT

Habitat condition in this area have been impacted by severe drought conditions over the past 2 years. According to Community Environmental Monitoring and Planning precipitation data from February 2021 to February 2022, central Nevada received 64% of the 30-year average. Fall and winter precipitation (October - December) resulted in 34% of the 2021-2022 precipitation total. The U.S. Drought Monitor has designated most of the area as Exceptional Drought conditions during 2021. Drought conditions began in mid-2020 and have continued through early 2022. Persistent drought conditions and a lack of spring precipitation have led to poor forage availability across the entire area. In 2021, the Department hauled 3,500 gallons of water aerially to the Eagle Basin guzzler in the Spector Range.

Bighorn sheep have coped with not only the environmental effects brought about by excess equids in much of Area 25, but also the aggressive nature and dominance of burros at water sources. Antelope habitats in Unit 251 have been affected by competition with feral equids. Natural water sources are over-utilized by feral species. These natural water sources are vital for antelope during long periods of drought.

In September 2019, the BLM gathered and removed 690 burros from within and outside the Bullfrog HMA which overlaps most of the Bare Mountains. This included approximately 250 burros from the immediate area of the Coeur Stirling Mine. The BLM had grossly underestimated the herd in March 2019 at only 400. The pre-gather survey in May 2019 showed 828 burros. A year earlier, in July 2018, 404 burros were removed from the Bullfrog HMA further supporting an even higher burro population had existed. Burro gathering efforts were focused on the U.S. Route 95 corridor, Sterling Mine area, mouth of Fluorspar Canyon and Bullfrog Hills.

In 2021, an emergency feral horse gather was conducted within the Stone Cabin HMA that includes both Area 16 and 25. The BLM gathered 322 horses (below the planned 450). Native ungulates may only see short-term benefits from this gather, while feral horse herds will continue to grow, which is the reality and total inefficiency of the entire program as directed by Congress.

## ANTELOPE

### Unit Group 251 – 254

#### Survey Data

A post-season antelope survey was conducted in Unit 251 during September 2021. The survey yielded a sample of 284 antelope, which were classified as 65 bucks, 206 does, and 13 fawns. In comparison, the 2020 survey yielded a sample of 255 antelope which were classified as 71 bucks, 152 does, and 32 fawns.

#### Population Status and Trend

The Unit 251 antelope population is relatively stable to slightly decreasing due to low fawn recruitment. These antelope use agricultural lands during dry periods. This has helped ease the decrease in fawn to doe ratios until recently. This year's observed fawn to doe ratio tied a record low. The appeal of agricultural lands is drawing more animals to the area from the Nevada Test and Training Range. These animals are, at times, not available for harvest due to access restrictions. These movements are considered in the population modeling and quota recommendation process. Extreme drought conditions are likely the cause of low fawn ratios.

## ROCKY MOUNTAIN ELK

### Unit Group 251 – 254

#### Population Status and Trend

Elk sightings have increased in Unit 251 in recent years. The revised 2004 Central Nevada Elk Plan designated this unit as a non-establishment area for elk. Formal surveys are not conducted in the unit because of low elk densities. Trail camera data, along with ancillary sightings, indicate that elk are year-round residents of Unit 251. To comply with the Central Nevada Elk Plan, an elk hunt was established. The Kawich Range is mainly comprised of pinyon and juniper woodlands at low- to mid-elevations and open mountain sagebrush and mahogany communities at higher elevations. High densities of pinyon and juniper trees make it difficult to hunt elk in the unit. To date, elk densities in the Kawich Range are low. Elk and deer hunters continue to observe elk in Unit 251. Based off these ancillary observations, 20-30 bulls and 30-40 cows and calves are estimated to reside in this unit. Bull elk tag holders have experienced high success during the season, while cow hunters continue to struggle to find elk.

## DESERT BIGHORN SHEEP

### Unit Group 251 – 254

#### Survey Data

An aerial survey in Unit 253 in October 2021 classified 117 sheep as 44 rams, 71 ewes, and 2 lambs. In comparison, an aerial survey in 2018 yielded a sample size of 148 sheep classified as 76 rams, 69 ewes, and 3 lambs.

No aerial surveys were conducted in Unit 252 or 254.

#### Population Status and Trend

Modeling of the Stonewall Mountain (Unit 252) population is challenging due to the continual movement of bighorn sheep between Stonewall Mountain and the adjacent Nevada Test and Training Range (NTTR). Currently, the NDOW and NTTR personnel are coordinating a Test and Remove project to combat the spread of *M. ovi* "Super shedders" are believed to persist in the population, spreading the disease to newborn lambs in nursery groups causing poor recruitment rates. By collaring and testing these animals, biologists can find and remove these super shedders from the population. Based on the disease, past predation and almost no recruitment into the population, Unit 252 is experiencing a sharp, declining trend.

The bighorn sheep population in Unit 253 underwent a modest decline driven by low lamb recruitment and disease. Severe drought conditions likely contributed to lower lamb recruitment; however, carry-over effects of pneumonia killing lambs is also contributing to the decline. The Bare Mountains will be included in the NTTR Test and Remove project in the near future.

The bighorn population in Unit 254 is declining due to unprecedented drought conditions and disease exposure. Fall 2015 sampling efforts confirmed active disease infection in this herd. Although 2021 surveys were not conducted, data inferred from adjacent units indicate population level contraction. Modeling exercises have this population decreasing from 140 to 120 adult bighorn

## MULE DEER

### Unit Group 251 – 254

#### Survey Data

Currently, neither post-season nor spring surveys are conducted in these units. The last survey conducted was in 1998 and failed to yield a sufficient sample for analysis. The aerial survey data from 2021-2022 gathered in adjacent units indicate that fawn production and recruitment rates in much of central Nevada are well below average.

#### Population Status and Trend

Area 25 has limited amounts of quality mule deer habitat. Much of the mule deer population occurs in Unit 251 due to the higher amount of habitat available. The mule deer population in Unit 251 has experienced sharp reductions likely due to drought conditions, impacts from feral equids, pinyon and juniper expansion, and senescent browse species. Drought will continue to impact this deer herd. With limited browse and available habitat, deer will concentrate in higher elevations and near available water sources.

## MANAGEMENT AREA 26

Report by Joe Bennett

### HABITAT

Habitat conditions in Area 26 have been impacted by severe drought conditions since 2019. Community Environmental Monitoring Program weather stations in Overton, Henderson, and Pahrump, received only 61%, 47%, and 74% of average precipitation respectively during 2021. The U.S. Drought Monitor has designated most of the area as Exceptional Drought during 2021. Persistent drought conditions and a lack of spring precipitation have led to poor forage availability across the entire area. In 2021, the Department hauled 44,036 gallons of water aurally to 10 guzzlers in 4 different mountain ranges, including the Last Chance, Spring Mountains, McCullough's, and Muddy Mountain Ranges.

In May 2018, in the absence of a comprehensive herd management plan, the BLM and U.S. Forest Service officials conducted an emergency roundup of feral horses in and near Cold Creek. In total, 148 horses were captured and removed. Due to depleted forage resources, 17 of the horses were deemed too emaciated to be nursed back to health and were euthanized. Likewise, in 2015, by the end of an emergency gather in the Cold Creek area, BLM removed 234 horses and euthanized 28 horses. The Appropriate Management Levels for horses and burros in the Wheeler Pass Joint Area for U.S. Forest Service and BLM are 47-66 and 20-35, respectively.

In July 2013 the Carpenter 1 Fire was ignited by lightning. The fire burned vegetation across 27,869 acres. The 43.5-mi<sup>2</sup> fire burned along a 5,560-ft elevation gradient. In addition to fire impacts, recreational use of off-highway vehicles in the Cold Creek area and on the McFarland Burn has increased substantially, which likely influences elk and mule deer distribution and productivity in the area.

Area 26 is near Las Vegas and other growing cities. Recreational pursuits that include off-highway vehicles and mountain bike use and the resultant proliferation of roads and trails coupled with suburban sprawl, serve to degrade mule deer, elk and bighorn sheep habitat. In the Spring Mountains, mule deer, elk and bighorn sheep habitat are also affected by feral horses and burros.

### DESERT BIGHORN SHEEP

Unit Group 261 – 269

#### Survey Data

No formal aerial surveys were conducted in Unit 261 in 2021. In comparison, September 2020 aerial surveys classified 117 bighorn sheep. The sample was comprised of 36 rams, 53 ewes, and 28 lambs.

An aerial survey in Unit 262 in Early October 2021 was one of the lowest sample size since 2000 at only 83 bighorn sheep. The sample was comprised of 17 rams, 47 ewes, and 19 lambs. In comparison, September 2018 surveys yielded a sample size of 152 bighorn sheep comprised of 35 rams, 89 ewes and 28 lambs.

An aerial survey was conducted in Unit 263 in Early October 2021. The survey yielded a sample size of 165 bighorn sheep. The sample was comprised of 51 rams, 105 ewes, and 9 lambs. In comparison, 2018 surveys classified 226 bighorn sheep comprised of 53 rams, 157 ewes and 16 lambs.

No formal aerial surveys were conducted in Units 264-266 in 2021. In comparison, the 2018 aerial survey classified only 69 bighorn sheep classified as 8 rams 51 ewes and 10 lambs. Low sample size, adjacent unit priorities and other challenges prevented the 2021 survey with a strong commitment to conduct a 2022 aerial survey.

An aerial survey was conducted Units 267 and 268 in October 2021. The survey yielded a sample size of 676 bighorn sheep. The sample was comprised of 251 rams, 341 ewes and 84 lambs.

No formal aerial surveys were conducted in Unit 269 in 2021. In comparison, 2020 aerial surveys yielded a sample size 198 desert bighorn sheep classified as 56 rams 134 ewes and 8 lambs.

#### Population Status and Trend

The 2022 bighorn sheep population estimates in Units 261, 262, 263, 264-266, 267-268 and 269 all reflect contractions relative to the estimates reported last year. The declines are driven by unprecedented drought conditions experienced over the last 2 years and disease issues. Bighorn sheep inhabiting most of the Units in Area 26 are coping with respiratory disease except for Units 267 and 268. Increased recreation, competition with feral equids, infrastructure, and urban sprawl are all additional stressors on these bighorn sheep populations.

### ROCKY MOUNTAIN ELK

Unit Group 261 – 269

#### Survey Data

No formal aerial surveys were conducted in Unit 262 during the reporting period. The most recent aerial survey was completed in February of 2021 and yielded a sample of 18 elk. The sample was comprised of 1 bull, 16 cows and 1 calf. The few elk encountered within 6.5 miles of Cold Creek were in and below the sagebrush and pinyon and juniper ecotone. Further south, there were observations of a lone bull and a lone cow in the Lovell Canyon area. Aerial survey samples in 2020 and 2021 were small and well below expectation. Since 2015, the number of elk encountered during surveys ranged

from 16 in 2020 to 163 in 2015. Thus, the recent winter distribution of elk in the Spring Mountains is not well understood.

#### Population Status and Trend

The aerial elk surveys completed in 2020 and 2021 resulted in few encounters. The population estimate for elk inhabiting the Spring Mountains reflects a minor reduction compared to the 2021 estimate. The minor population contraction was deemed reasonable due to unfavorable environmental conditions brought about by prolonged drought.

### MULE DEER

Unit Group 261 – 269

#### Survey Data

No aerial surveys were conducted in Area 26 during 2021. Mule deer densities are low enough in this area that standard surveys will not result in sufficient sample sizes for data analysis. The harvest strategy is based on hunter demand and success.

#### Population Status and Trend

This mule deer population does not have a population model due to low numbers of deer within the unit. Tags are allocated based on the success rate and quality of the previous year. Last year the harvest rate was significantly lower than the previous year. The quality of harvest, based on the percentage of bucks with 4 points or greater, was significantly lower than the previous year as well. Hunter effort was similar between years. The deer population within this area appears depressed based off harvest statistics. Unprecedented drought conditions have undoubtedly caused degraded forage conditions contributing to similar body conditions and fawn recruitment that is being observed in adjacent areas.

## MANAGEMENT AREA 27

Report by Daniel Sallee

### HABITAT

Habitat conditions in this area are not healthy due to severe drought conditions since 2020. A Community Environmental Monitoring Program weather station in Mesquite, in the central part of the area, received only 47% of average precipitation during 2021. During 2020, the area received only 38% of the long-term average precipitation. The U.S. Drought Monitor has designated most of the area as Exceptional Drought conditions during 2021. Persistent drought conditions and a lack of spring precipitation have led to poor forage availability across the entire area. Only 2 small wildfires have affected the area since 2020. The Virgin Mountain fire burned approximately 1,500 acres in the Virgin Mountains in an area utilized by mule deer and occasionally bighorn sheep. The Vigo fire in the Mormon Mountains burned only 100 acres

and should not have a significant impact on wildlife habitat.

### DESERT BIGHORN SHEEP

Unit Group 271 – 272

#### Survey Data

A September 2021 aerial survey was conducted in Unit 271 that classified 77 sheep with a ratio of 23 rams:100 ewes:17 lambs. In comparison, the 2019 aerial survey classified 144 sheep with ratios of 35 rams:100 ewes:38 lambs. No aerial surveys were conducted in Unit 272 in 2021.

#### Population Status and Trend

The bighorn sheep population in Unit 271 underwent a slight decline in 2021 from 310 animals to 300. The decline was likely driven by poor lamb recruitment caused by severe drought conditions. Disease risk is high due to close proximity to domestic goats; however, no pathogen spillovers have been detected recently.

The Unit 272 bighorn population in Unit 272 is declining due to unprecedented drought conditions and disease exposure. Modeling exercises have this population decreasing from 140 to 120 bighorn sheep.

### MULE DEER

Unit Group 271 – 272

#### Survey Data

No aerial surveys were conducted in this area during 2021. Mule deer densities are low enough in this area that standard surveys will not result in sufficient sample sizes for data analysis. The harvest strategy is based on hunter demand and success.

#### Population Status and Trend

This mule deer population does not have a population model due to low numbers of deer within the unit. Tags are allocated based on the success rate and quality of the previous year. Last year the harvest rate was slightly higher than the previous year. The quality of harvest, based on the percentage of bucks with 4 points or greater, was slightly lower than the previous year but above the statewide average. The deer population within this area appears stable and harvest at the current level is sustainable.

## MANAGEMENT AREA 28

Report by Joe Bennett

### HABITAT

Habitat conditions in Area 28 have been impacted by severe drought conditions since 2020. Community Environmental

Monitoring Program weather stations in Alamo, and Las Vegas, received only 40% and 28% of average precipitation, respectively during 2021. The U.S. Drought Monitor has designated most of the area as Exceptional Drought conditions during 2021. Persistent drought conditions and a lack of spring precipitation have led to poor forage availability across the entire area. In 2021, the Department hauled 2,115 gallons of water aerially to the Maynard Hills guzzler.

In Fall 2021, the new Blacktop water development was constructed in Unit 282. In January 2022, the new Desert Six water development project was constructed. These additional water sources will facilitate distribution of bighorn sheep and provide additional water on the landscape for the Desert Range. In addition, the Woody project in Unit 283 will have a new metal apron installed in early May 2022.

## DESERT BIGHORN SHEEP

### Unit Group 280 – 286

#### Survey Data

The 2021 aerial survey in Unit 280 was attempted but ended quickly due to inclement weather. The abbreviated survey only classified 17 bighorn sheep as 8 rams, 8 ewes and 1 lamb. In comparison, September 2020 survey classified 117 bighorn sheep comprised of 36 rams, 53 ewes, and 28 lambs. An aerial survey was conducted in Unit 281 in early October 2021. The survey yielded a sample size of 72 bighorn sheep. The sample was comprised of 17 rams, 40 ewes, and 15 lambs. In comparison, the 2020 survey classified 109 bighorn comprised of 38 rams, 47 ewes and 24 lambs. A September 2021 aerial survey in Unit 282 resulted in approximately 50% sample size of what was expected based off intensity. The survey classified 52 bighorn sheep comprised of 15 rams, 30 ewes, and 7 lambs. In comparison, 2020 surveys yielded a sample size of 97 bighorn sheep comprised of 40 rams, 41 ewes and 16 lambs. An aerial survey was conducted in Units 283 and 284 in September 2021. The survey yielded a sample size of 88 bighorn sheep. The sample was comprised of 30 rams, 41 ewes, and 17 lambs. In comparison, 2019 surveys yielded a sample size of 77 bighorn sheep comprised of 24 rams, 42 ewes and 11 lambs.

Two aerial surveys were completed in Unit 286: one in September and another in early October 2021 due to very low sample size. The sample sizes between the 2 flights were 53 and 55, respectively. The larger sample size was comprised of 20 rams, 30 ewes, and 5 lambs. In comparison, 2019 survey classified 148 bighorn sheep comprised of 32 rams, 80 ewes and 36 lambs.

#### Population Status and Trend

Area 28 overall was disproportionately more severely impacted by drought conditions compared to other Areas in 2021. Aerial survey efforts during Fall 2021 indicated lower than expected samples in all Units. These less than desired sam-

ple sizes led to the NDOW sending letters to all tagholders in Units 282 and 286 prior to the season opener. The letter indicated that based on recent aerial surveys, the NDOW was unsure if there was adequate number of mature rams to sustain harvest by all tagholders during the 2021 season. Based off [survey data](#), harvest data, hunt effort, habitat conditions, and water availability, a significant contractions among these units is occurring.

## MANAGEMENT AREA 29

Report by Carl Lackey

### HABITAT

Significant portions of the unit contain dense stands of pinyon and juniper trees, much of which is dead. The loss of shrub communities over the long-term in this unit continues to hold the deer population at low levels. The NDOW and the BLM have conducted habitat treatments in several areas under the Pine Nut Health Project to increase browse and decrease the pinyon and juniper. It has been 9 years since the Bison Fire (2013) and anecdotal reports indicate an increase in deer; however, this may simply indicate the deer are more visible.

### MULE DEER

#### Unit 291

#### Population and Trend

There is no modeled population estimate for this herd. This population is believed to be stable but has the potential to increase under better habitat conditions. Many of the deer, particularly in the northern part of the area, are resident deer. The population of mule deer in Area 29 is estimated at 600, well below the historic levels recorded for the Pine Nut Mountains.

### BLACK BEAR

Report by Carl Lackey

#### MANAGEMENT AREAS 19, 20, and 29

The cumulative number of black bears captured or handled from 1997 through the end of 2021 is 1,949, including 1,215 individual bears. All bears are marked with permanently identifying individual ear tags, tattoos, and PIT tags prior to release. Since 1997 the Nevada Department of Wildlife has permanently marked and released 687 individual bears.

#### Harvest Analysis

Since the inception of the hunt, season structure has varied little with minor changes in season length. The 2021 season was

open from September 15 to December 1 (78 days). The harvest limit established by the Wildlife Commission has remained at 20 bears each year. Harvest limits have been apportioned to subsets of open units, and female harvest limits have been added. In 2017 the Commission increased the number of tags for resident and non-resident hunters to 45 and 5, respectively. One auction tag (Dream Tag) became available each year beginning in 2018. Applications for these tags have increased each year (see appendix).

The Nevada Department of Wildlife's Black Bear Management Plan specifies harvest data will be analyzed both annually and by the most recent 3 years. Several harvest criteria indicators are used to infer harvest pressure, with three of these indicators having more emphasis on triggering possible changes in season structure. These are percent females in the harvest, and mean ages of both sex cohorts (Table 1). Additionally, the Nevada Department of Wildlife considers harvest rate (percent harvest of total estimated population). NDOW continues to use mark-recapture analyses to determine population size and trend, evaluate various demographics of the bear population, and to detect substantive changes in vital rates that may warrant a change in the bear hunt strategy. All successful hunters are required to personally check-in the hide and skull of harvested bears with a Department representative.

The overall harvest of 14 bears in 2021 represents about two percent of the total estimated population and is far below reported estimates of sustainable harvest rates found in the literature (12%-21%). The average harvest rate (2012-2021) for males and females (total harvest/total population of each cohort) is 2.3% and 1.7% respectively. The hunter success rate was 27% in 2021, compared to the long-term rate of 29%. Of the 153 successful hunters to date; 91% saved the meat for consumption, 25% used professional guides, 5% were nonresident hunters, and 74%(113) used hounds as their hunt method. Of the 113 that used hounds, 73% killed male bears and 27% killed females. To date, bears have been pursued/treed and selectively not harvested on 186 occasions.

Fifty-two percent (79 of 153) of the bears killed during the 11 years of the hunt have been harvested in Unit 291. In 2017, open units were classified into three unit groups with the goal of distributing harvest. Each unit group has a separate female harvest and total harvest limit. Unit groups are: 192, 194, 196 and 195; 201, 202, 204 and 206; and 291 with 203. Area 19 (Units 192, 194, 195, and 196) had a total harvest limit of 6 with a female harvest limit of 3. The harvest limits for Areas 20 (Units 201, 202, 204, and 206) and 29 (Units 291 and 203) were set at 6 total and 2 females and 8 total and 3 females, respectively. Considering the harvest rates noted above, these are very conservative harvest limits.

See next page for black bear tables.



Table 1: Hunter harvest data 2015-2021.

Data from all successful hunters	2015	2016	2017	2018	2019	2020	2021	Last 3 years	3 yr Harvest criteria indicator	All Years 2015-2021
Male bears killed	8	5	9	11	14	6	13	33		107
Male harvest rate	2.2%	1.3%	2.2%	2.6%	3.4%	1.4%	2.8%	NA		2.3%
Female bears killed	6	6	4	3	3	7	1	11		46
Female harvest rate	2.2%	2.1%	1.4%	1.0%	1.0%	2.3%	0.5%	NA		1.8%
Total harvest	14	11	13	14	17	13	14	44		153
Total harvest rate	2.2%	1.6%	1.8%	1.9%	2.4%	1.8%	2.1%	NA		2.1%
% females in harvest	43%	55%	31%	21%	18%	54%	7%	25%	<i>Light harvest</i>	30%
Mean age males (years)	6.8	9.4	3.9	5.9	8.6	9.3	5.8	7.2	<i>Light harvest</i>	6.3
Mean age females (years)	4.8	7.0	6.3	4.0	4.7	5.9	13.0	6.0	<i>Stable Harvest</i>	6.4
Mean age all (years)	5.9	8.1	5.8	6.1	7.9	7.5	6.3	6.9		6.3
Male: female ratio	1.3	0.8	2.3	3.7	4.7	0.9	13.0	3.0		2.3
Hunter success rate	31%	24%	26%	28%	33%	25%	27%	29%		29%
Average days hunted	6.7	8.8	5.2	8.8	5.4	4.8	5.0	5.1		6.7
Average days scouted	2.5	4.3	7.5	4.6	4.9	1.5	2.6	3.2		4.0
Hunt Method:										
Dogs	9	8	9	11	12	10	14	NA		113
Other	5	3	4	3	5	3	0			40



# HARVEST, SURVEY, AND POPULATION TABLES



TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon	Unit Group	Season	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
						Quota	Tags Issued									
Antelope Horns Longer Than Ears	Res	Antelope	ALW	011	Aug 22 - Sep 07	527	45	41	9%	93%	76%	17%	3.0	4.4	4.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	012 - 014	Aug 22 - Sep 07	1,326	150	139	11%	98%	63%	8%	3.5	4.6	3.7	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	015	Aug 22 - Sep 07	523	75	64	14%	99%	52%	3%	3.7	5.2	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	021, 022	Aug 22 - Sep 07	1,689	35	34	2%	97%	88%	17%	3.3	6.6	4.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	031	Aug 22 - Sep 07	587	110	100	19%	97%	62%	3%	3.8	4.7	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	032, 034	Aug 22 - Sep 07	314	50	42	16%	100%	55%	0%	3.6	4.9	3.7	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	033	Aug 22 - Aug 28	397	30	29	8%	100%	59%	12%	3.0	4.3	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	033	Aug 29 - Sep 07	140	30	28	21%	100%	61%	12%	3.9	4.5	3.6	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	035	Aug 29 - Sep 07	297	20	19	7%	100%	84%	6%	3.2	5.5	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	041, 042	Aug 22 - Aug 28	903	30	27	3%	100%	93%	4%	2.1	3.3	4.6	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	041, 042	Aug 29 - Sep 07	295	30	28	10%	100%	86%	0%	2.2	3.5	4.3	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	043 - 046	Aug 22 - Sep 07	742	110	103	15%	98%	91%	14%	2.2	4.3	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	051	Aug 22 - Sep 07	423	50	46	12%	100%	78%	6%	3.2	5.1	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	061, 062, 064, 071, 073	Aug 22 - Sep 07	1,508	80	73	5%	96%	84%	8%	2.5	4.0	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	065, 142, 144	Aug 22 - Sep 07	542	20	20	4%	100%	80%	19%	3.6	5.8	4.1	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	066	Aug 22 - Sep 07	175	25	25	14%	100%	72%	17%	3.0	4.2	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	067, 068	Aug 22 - Sep 07	688	60	58	9%	98%	81%	18%	3.1	4.6	4.0	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	072, 074 - 075	Aug 22 - Sep 07	518	45	45	9%	91%	74%	11%	3.0	3.8	4.3	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	076, 077, 079, 081, 091	Aug 22 - Sep 07	918	30	29	3%	97%	93%	26%	2.5	4.3	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	078, 105 - 107, 121	Aug 22 - Sep 07	565	20	19	4%	95%	74%	23%	2.6	4.1	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	101 - 104, 108 - 109, 144	Aug 22 - Sep 07	673	70	66	10%	97%	88%	25%	2.9	4.9	4.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	111 - 114	Aug 22 - Sep 07	1,114	30	27	3%	100%	74%	10%	3.4	4.7	4.3	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	115, 231, 242	Aug 22 - Sep 07	600	45	41	8%	98%	78%	23%	3.5	5.2	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	131, 145, 163 - 164	Aug 22 - Sep 07	523	25	20	5%	88%	80%	13%	3.1	5.6	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	132 - 134, 245	Aug 22 - Sep 07	659	30	29	5%	100%	90%	19%	2.4	3.5	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	141, 143, 151 - 156	Aug 22 - Sep 07	1,778	170	149	10%	95%	86%	6%	2.9	4.5	4.3	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	161 - 162	Aug 22 - Sep 07	569	40	40	7%	95%	86%	23%	2.2	2.6	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	171 - 173	Aug 22 - Sep 07	293	30	28	10%	100%	96%	0%	1.8	3.4	4.6	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	181 - 184	Aug 22 - Sep 07	687	45	40	7%	93%	88%	20%	2.2	3.9	4.5	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	202, 204	Oct 15 - Oct 30	115	10	10	9%	100%	80%	0%	3.3	5.8	4.6	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	203, 291	Aug 22 - Sep 07	127	15	12	8%	100%	67%	13%	2.9	5.3	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	205 - 208	Aug 22 - Sep 07	166	20	19	12%	95%	84%	0%	2.9	5.5	4.1	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	211 - 213	Aug 22 - Sep 07	73	10	10	14%	100%	90%	11%	3.5	6.0	4.8	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	221 - 223, 241	Aug 22 - Sep 07	730	45	45	6%	96%	78%	3%	3.5	5.4	4.0	
Antelope Horns Longer Than Ears	Res	Antelope	ALW	251	Aug 22 - Sep 07	492	25	24	5%	100%	100%	8%	2.1	3.1	4.9	
Antelope Horns Longer Than Ears	Res	Antelope	AR	011	Aug 01 - Aug 21	36	8	7	1%	22%	14%	0%	4.1	5.9	3.6	
Antelope Horns Longer Than Ears	Res	Antelope	AR	012 - 014	Aug 01 - Aug 21	49	25	24	51%	96%	33%	20%	5.1	9.4	3.9	
Antelope Horns Longer Than Ears	Res	Antelope	AR	015	Aug 01 - Aug 21	41	25	23	61%	100%	22%	0%	5.7	7.3	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	AR	021, 022	Aug 01 - Aug 21	58	5	4	9%	100%	75%	67%	4.5	11.5	4.5	
Antelope Horns Longer Than Ears	Res	Antelope	AR	031	Aug 01 - Aug 21	24	20	16	4%	83%	25%	0%	4.7	6.8	3.1	
Antelope Horns Longer Than Ears	Res	Antelope	AR	032, 034	Aug 01 - Aug 21	38	30	25	4%	79%	16%	0%	5.0	6.6	3.1	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021			Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Apps	Quota	Tags Issued										
Antelope Horns Longer Than Ears	Res	Antelope	AR 033	Aug 01 - Aug 21	21	7	7	6	33%	100%	33%	0%	5.0	7.7	3.0	
Antelope Horns Longer Than Ears	Res	Antelope	AR 035	Aug 01 - Aug 21	8	2	2	2	25%	100%	0%	14%	12.5	14.5	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	AR 041, 042	Aug 01 - Aug 21	41	10	10	9	24%	100%	78%	0%	4.4	10.6	3.7	
Antelope Horns Longer Than Ears	Res	Antelope	AR 043 - 046	Aug 01 - Aug 21	55	50	51	43	91%	98%	40%	0%	5.2	8.8	3.8	
Antelope Horns Longer Than Ears	Res	Antelope	AR 051	Aug 01 - Aug 21	50	35	35	22	70%	94%	32%	29%	6.4	9.3	3.8	
Antelope Horns Longer Than Ears	Res	Antelope	AR 061, 062, 064, 071, 073	Aug 01 - Aug 21	62	35	35	30	56%	94%	30%	22%	5.7	6.8	4.2	
Antelope Horns Longer Than Ears	Res	Antelope	AR 065, 142, 144	Aug 01 - Aug 21	18	5	5	5	28%	100%	40%	50%	9.4	15.2	3.2	
Antelope Horns Longer Than Ears	Res	Antelope	AR 066	Aug 01 - Aug 21	8	5	5	5	63%	100%	60%	33%	3.0	9.8	3.8	
Antelope Horns Longer Than Ears	Res	Antelope	AR 067, 068	Aug 01 - Aug 21	46	35	35	29	76%	100%	28%	25%	4.4	7.9	3.9	
Antelope Horns Longer Than Ears	Res	Antelope	AR 072, 074 - 075	Aug 01 - Aug 21	30	25	25	17	83%	88%	24%	25%	5.9	8.3	4.5	
Antelope Horns Longer Than Ears	Res	Antelope	AR 076, 077, 079, 081, 091	Aug 01 - Aug 21	23	10	10	8	43%	90%	50%	25%	7.9	12.9	4.1	
Antelope Horns Longer Than Ears	Res	Antelope	AR 078, 105 - 107, 121	Aug 01 - Aug 21	13	2	2	2	15%	100%	50%	0%	6.5	15.0	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	AR 101 - 104, 108 - 109, 144	Aug 01 - Aug 21	41	15	15	12	37%	93%	42%	20%	5.3	8.0	3.9	
Antelope Horns Longer Than Ears	Res	Antelope	AR 111 - 114	Aug 01 - Aug 21	37	5	5	5	14%	100%	0%	0%	4.8	7.6	2.8	
Antelope Horns Longer Than Ears	Res	Antelope	AR 115, 231, 242	Aug 01 - Aug 14	41	10	10	10	24%	100%	60%	0%	4.5	9.1	3.6	
Antelope Horns Longer Than Ears	Res	Antelope	AR 131, 145, 163 - 164	Aug 01 - Aug 14	16	5	5	5	31%	100%	40%	0%	3.6	7.0	3.8	
Antelope Horns Longer Than Ears	Res	Antelope	AR 132 - 134, 245	Aug 01 - Aug 14	34	5	5	5	15%	100%	40%	0%	3.0	5.0	2.8	
Antelope Horns Longer Than Ears	Res	Antelope	AR 141, 143, 151 - 156	Aug 01 - Aug 21	87	60	60	48	69%	98%	19%	0%	5.0	7.5	3.6	
Antelope Horns Longer Than Ears	Res	Antelope	AR 161 - 162	Aug 01 - Aug 21	13	10	10	9	77%	100%	11%	0%	4.7	7.5	3.4	
Antelope Horns Longer Than Ears	Res	Antelope	AR 171 - 173	Aug 01 - Aug 21	16	5	5	4	31%	100%	75%	67%	2.5	5.5	4.3	
Antelope Horns Longer Than Ears	Res	Antelope	AR 181 - 184	Aug 01 - Aug 21	36	8	8	5	22%	88%	80%	0%	5.2	9.6	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	AR 203, 291	Aug 01 - Aug 21	3	2	2	1	67%	100%	0%	0%	3.0	5.0	1.0	
Antelope Horns Longer Than Ears	Res	Antelope	AR 205 - 208	Aug 01 - Aug 21	14	10	10	8	71%	100%	38%	0%	2.6	6.6	3.9	
Antelope Horns Longer Than Ears	Res	Antelope	AR 211 - 213	Aug 01 - Aug 21	7	1	1	1	14%	100%	100%	0%	2.0	2.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	AR 221 - 223, 241	Aug 01 - Aug 14	42	10	10	7	24%	100%	14%	0%	3.3	5.3	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	AR 251	Aug 01 - Aug 21	21	5	5	5	24%	100%	80%	25%	1.8	4.0	4.7	
Antelope Horns Longer Than Ears	Res	Antelope	M 011	Sep 25 - Oct 04	6	2	2	2	33%	100%	0%	0%	7.0	7.0	2.5	
Antelope Horns Longer Than Ears	Res	Antelope	M 012 - 014	Sep 25 - Oct 04	16	8	8	8	50%	100%	63%	0%	3.3	5.0	4.1	
Antelope Horns Longer Than Ears	Res	Antelope	M 015	Sep 25 - Oct 04	16	10	10	7	63%	100%	14%	0%	3.0	3.0	3.4	
Antelope Horns Longer Than Ears	Res	Antelope	M 021, 022	Sep 25 - Oct 04	17	2	2	2	12%	100%	50%	0%	5.0	5.0	4.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 031	Sep 25 - Oct 04	4	3	3	3	75%	100%	0%	0%	4.3	5.3	3.7	
Antelope Horns Longer Than Ears	Res	Antelope	M 032, 034	Sep 25 - Oct 04	3	2	2	2	67%	100%	50%	0%	4.5	5.5	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	M 033	Sep 25 - Oct 04	8	3	3	2	38%	100%	0%	0%	5.0	7.5	1.5	
Antelope Horns Longer Than Ears	Res	Antelope	M 035	Sep 25 - Oct 04	1	1	1	1	100%	100%	100%	100%	4.0	14.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 041, 042	Sep 25 - Oct 04	6	3	3	3	50%	100%	67%	0%	3.3	6.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 043 - 046	Sep 25 - Oct 04	8	5	5	5	63%	100%	80%	0%	4.2	7.2	4.4	
Antelope Horns Longer Than Ears	Res	Antelope	M 051	Sep 25 - Oct 04	3	2	1	1	67%	100%	0%	0%	8.0	8.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 061, 062, 064, 071, 073	Sep 25 - Oct 04	9	3	3	1	33%	67%	100%	0%	1.0	3.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 065, 142, 144	Sep 25 - Oct 04	12	1	1	1	8%	100%	100%	0%	7.0	11.0	2.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 066	Sep 25 - Oct 04	6	3	3	2	50%	100%	50%	100%	4.0	3.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 067, 068	Sep 25 - Oct 04	7	3	3	2	43%	100%	50%	100%	3.5	16.5	4.0	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021			Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Apps	Quota	Tags Issued										
Antelope Horns Longer Than Ears	Res	Antelope	M 072, 074 - 075	Sep 25 - Oct 04	3	2	2	2	67%	100%	100%	0%	1.5	1.5	3.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 076, 077, 079, 081, 091	Sep 25 - Oct 04	6	1	1	1	17%	100%	100%	0%	3.0	3.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 078, 105 - 107, 121	Sep 25 - Oct 04	11	1	1	1	9%	100%	0%	0%	8.0	8.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 101 - 104, 108 - 109, 144	Sep 25 - Oct 04	13	5	5	3	38%	100%	67%	0%	2.0	10.0	4.3	
Antelope Horns Longer Than Ears	Res	Antelope	M 111 - 114	Sep 25 - Oct 04	16	5	5	3	31%	100%	33%	0%	2.7	3.8	3.7	
Antelope Horns Longer Than Ears	Res	Antelope	M 115, 231, 242	Aug 15 - Aug 21	11	5	5	5	45%	100%	100%	0%	2.2	3.4	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 131, 145, 163 - 164	Aug 15 - Aug 21	10	1	1	1	10%	100%	0%	0%	4.0	6.0	3.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 132 - 134, 245	Aug 15 - Aug 21	7	1	1	1	14%	100%	100%	0%	1.0	2.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 141, 143, 151 - 156	Sep 25 - Oct 04	14	7	7	7	50%	100%	57%	25%	2.7	3.4	3.4	
Antelope Horns Longer Than Ears	Res	Antelope	M 161 - 162	Sep 25 - Oct 04	3	2	2	2	67%	100%	0%	0%	7.5	7.5	4.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 171 - 173	Sep 25 - Oct 04	6	5	5	5	83%	100%	80%	0%	1.6	4.4	4.8	
Antelope Horns Longer Than Ears	Res	Antelope	M 181 - 184	Sep 25 - Oct 04	6	2	2	2	33%	100%	50%	0%	3.5	3.5	3.5	
Antelope Horns Longer Than Ears	Res	Antelope	M 202, 204	Sep 25 - Oct 04	1	1	1	1	100%	100%	0%	0%	4.0	4.0	1.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 203, 291	Sep 25 - Oct 04	1	1	1	1	100%	100%	100%	0%	4.0	4.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 205 - 208	Sep 25 - Oct 04	5	2	2	2	40%	100%	0%	0%	5.0	8.0	3.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 211 - 213	Sep 25 - Oct 04	2	1	1	1	50%	100%	100%	0%	2.0	14.0	5.0	
Antelope Horns Longer Than Ears	Res	Antelope	M 221 - 223, 241	Aug 15 - Aug 21	11	5	5	5	45%	100%	60%	0%	4.2	5.8	3.4	
Antelope Horns Longer Than Ears	Res	Antelope	M 251	Sep 25 - Oct 04	7	5	5	5	71%	100%	80%	0%	2.8	4.4	4.0	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 031	Sep 08 - Sep 24	464	10	10	8	2%	100%	63%	0%	2.0	2.4	3.3	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 032, 034	Sep 08 - Sep 24	271	15	15	11	6%	93%	55%	0%	2.3	3.5	2.8	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 035	Sep 08 - Sep 24	216	9	9	7	4%	100%	86%	0%	1.6	2.0	4.4	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 041, 042	Sep 08 - Sep 24	962	10	10	10	1%	100%	80%	0%	2.1	2.6	5.0	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 043 - 046	Sep 08 - Sep 24	273	35	35	31	13%	100%	77%	0%	1.9	2.8	4.0	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 061, 062, 064, 071, 073	Sep 08 - Sep 24	1,145	160	160	144	14%	97%	85%	0%	2.1	2.9	4.5	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 065, 142, 144	Sep 08 - Sep 24	216	5	5	4	2%	80%	100%	0%	1.8	1.8	4.8	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 066	Sep 08 - Sep 24	99	10	10	10	10%	100%	70%	0%	2.5	3.0	3.7	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 067, 068	Sep 08 - Sep 24	461	85	85	71	18%	100%	75%	0%	2.2	3.3	4.0	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 072, 074 - 075	Sep 08 - Sep 24	216	55	55	50	25%	98%	84%	0%	2.2	2.9	4.7	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 076, 077, 079, 081, 091	Sep 08 - Sep 24	148	20	20	18	14%	95%	72%	0%	1.8	2.6	4.6	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 078, 105 - 107, 121	Sep 08 - Sep 24	330	5	5	3	2%	100%	100%	0%	1.0	1.3	5.0	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 101 - 104, 108 - 109, 144	Sep 08 - Sep 24	278	25	25	22	9%	100%	55%	0%	2.3	3.1	4.2	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 111 - 114	Sep 08 - Sep 24	654	10	10	9	2%	100%	89%	0%	1.8	2.8	4.9	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 131, 145	Sep 08 - Sep 24	275	30	30	27	11%	100%	59%	0%	2.3	3.1	3.9	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 141, 143, 152, 154 - 155	Sep 08 - Sep 24	1,428	280	279	222	20%	99%	68%	0%	2.5	3.4	4.2	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 151, 153, 156	Sep 08 - Sep 24	653	190	190	165	29%	98%	73%	0%	2.1	3.0	4.4	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 181 - 184	Sep 08 - Sep 24	475	20	20	18	4%	100%	89%	0%	1.8	2.2	4.7	
Antelope Horns Shorter Than Ears	Res	Antelope	ALW 114 - 115 (Baker Ranch)	Sep 10 - Sep 16	71	10	10	9	14%	100%	78%	0%	2.0	2.4	4.2	
Damage Compensation Antelope	Res	Antelope	SWR 012	See Regulations			2	2	1	100%	50%	0%	2.5	4.0	4.0	
Damage Compensation Antelope	Res	Antelope	SWR 031	See Regulations			1	1	1	100%	100%	0%	2.0	2.0	3.0	
Damage Compensation Antelope	Res	Antelope	SWR 035	See Regulations			1	1	1	100%	100%	0%	1.0	2.0	2.0	
Damage Compensation Antelope	Res	Antelope	SWR 044	See Regulations			6	5	5	100%	100%	25%	4.0	6.0	4.6	

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Hunt	RES /NR	Species	Weapon Unit Group	2021			Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued	Afield									
Damage Compensation Antelope	Res	Antelope	SWR 068	See Regulations		2	2	2	100%	100%	0%	7.0	9.5	4.5	
Damage Compensation Antelope	Res	Antelope	SWR 075	See Regulations		2	2	2	100%	100%	50%	1.5	1.5	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 102	See Regulations		1	1	1	100%	100%	0%	1.0	3.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 132	See Regulations		1	1	1	100%	100%	0%	1.0	3.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 132, 164	See Regulations		2	2	2	100%	100%	50%	7.0	9.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 141	See Regulations		2	2	1	100%	50%	0%	3.0	7.0	4.0	
Damage Compensation Antelope	Res	Antelope	SWR 144	See Regulations		4	3	3	75%	100%	0%	1.7	2.3	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 152	See Regulations		1	1	1	100%	100%	100%	1.0	1.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 155	See Regulations		1	1	1	100%	100%	100%	2.0	4.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 161, 173	See Regulations		2	2	2	100%	100%	0%	1.0	2.0	4.0	
Damage Compensation Antelope	Res	Antelope	SWR 172	See Regulations		1	1	1	100%	100%	0%	1.0	2.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 172, 184	See Regulations		4	4	4	100%	100%	0%	1.0	1.8	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 183	See Regulations		1	1	1	100%	100%	0%	2.0	6.0	5.0	
Damage Compensation Antelope	Res	Antelope	SWR 184	See Regulations		3	3	3	100%	100%	33%	2.7	4.3	4.0	
Damage Compensation Antelope	Res	Antelope	SWR 245	See Regulations		1			0%			0.0	0.0		
Damage Compensation Antelope	Res	Antelope	SWR 251	See Regulations		10	9	9	90%	100%	38%	2.6	3.6	4.9	
PIW Antelope Horns Longer Than Ears	Res	Antelope	SWR Any Open Unit	Aug 01 - Oct 30	2,970	5	5	4	0.2%	100%	25%	4.2	10.0	4.8	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 011	Aug 22 - Sep 07	425	5	4	4	1%	100%	0%	4.3	7.8	3.3	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 012 - 014	Aug 22 - Sep 07	448	20	19	11	4%	100%	9%	3.5	4.5	3.3	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 015	Aug 22 - Sep 07	346	8	5	3	2%	88%	33%	3.0	4.2	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 021, 022	Aug 22 - Sep 07	525	4	2	2	1%	100%	50%	2.0	7.0	1.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 031	Aug 22 - Sep 07	232	15	12	8	6%	93%	13%	3.2	3.6	3.6	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 032, 034	Aug 22 - Sep 07	138	6	5	4	4%	83%	0%	4.0	5.6	2.3	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 033	Aug 22 - Aug 28	410	4	4	3	1%	100%	0%	3.8	4.0	3.3	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 033	Aug 29 - Sep 07	106	4	4	2	4%	100%	0%	4.8	5.5	3.8	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 035	Aug 29 - Sep 07	56	2	2	2	4%	100%	0%	2.0	4.5	3.5	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 041, 042	Aug 22 - Aug 28	166	3	3	2	2%	100%	50%	1.7	3.0	2.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 041, 042	Aug 29 - Sep 07	65	3	2	2	5%	100%	0%	1.0	4.0	4.5	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 043 - 046	Aug 22 - Sep 07	225	15	15	15	7%	100%	14%	2.5	3.5	4.7	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 051	Aug 22 - Sep 07	101	5	5	4	5%	100%	25%	3.0	4.2	3.8	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 061, 062, 064, 071, 073	Aug 22 - Sep 07	366	8	8	6	2%	100%	0%	3.4	5.3	3.4	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 065, 142, 144	Aug 22 - Sep 07	103	2	2	2	2%	100%	0%	1.5	3.5	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 066	Aug 22 - Sep 07	58	3	3	2	5%	100%	50%	5.0	5.3	4.5	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 067, 068	Aug 22 - Sep 07	359	7	6	5	2%	100%	20%	2.2	2.3	3.4	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 072, 074 - 075	Aug 22 - Sep 07	183	5	5	3	3%	60%	33%	1.7	3.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 076, 077, 079, 081, 091	Aug 22 - Sep 07	1,652	3	3	3	0.2%	100%	0%	3.0	3.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 078, 105 - 107, 121	Aug 22 - Sep 07	122	2	2	2	2%	100%	0%	4.5	6.0	4.5	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 101 - 104, 108 - 109, 144	Aug 22 - Sep 07	149	8	8	7	5%	100%	14%	1.8	2.6	4.7	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 111 - 114	Aug 22 - Sep 07	234	3	2	2	1%	67%	0%	2.0	2.5	3.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 115, 231, 242	Aug 22 - Sep 07	142	5	5	3	4%	100%	33%	3.4	5.0	3.5	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 131, 145, 163 - 164	Aug 22 - Sep 07	124	2	2	1	2%	100%	100%	1.0	3.0	5.0	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021			Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued	Afield									
Antelope Horns Longer Than Ears	NR	Antelope	ALW 132 - 134, 245	Aug 22 - Sep 07	139	3	3	2	2%	100%	50%	3.0	3.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 141, 143, 151 - 156	Aug 22 - Sep 07	349	20	19	17	6%	100%	24%	2.4	4.1	4.4	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 161 - 162	Aug 22 - Sep 07	217	5	4	2	2%	75%	0%	3.5	3.5	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 171 - 173	Aug 22 - Sep 07	63	5	4	4	8%	80%	25%	2.5	3.0	4.3	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 181 - 184	Aug 22 - Sep 07	95	5	5	5	5%	100%	0%	3.2	3.8	3.6	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 202, 204	Oct 15 - Oct 30	29	1	1	1	3%	100%	0%	2.0	4.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 205 - 208	Aug 22 - Sep 07	53	2	2	2	4%	100%	0%	4.0	4.0	4.5	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 221 - 223, 241	Aug 22 - Sep 07	97	5	5	4	5%	100%	25%	3.0	3.6	3.7	
Antelope Horns Longer Than Ears	NR	Antelope	ALW 251	Aug 22 - Sep 07	397	5	5	5	1%	100%	20%	1.2	4.4	3.6	
Antelope Horns Longer Than Ears	NR	Antelope	AR 011	Aug 01 - Aug 21	27	1	1	0	4%	100%	0%	0.0	0.0		
Antelope Horns Longer Than Ears	NR	Antelope	AR 012 - 014	Aug 01 - Aug 21	26	3	2	2	12%	100%	0%	5.5	6.5		
Antelope Horns Longer Than Ears	NR	Antelope	AR 015	Aug 01 - Aug 21	21	3	3	2	14%	100%	50%	5.7	8.7	2.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 021, 022	Aug 01 - Aug 21	33	1	1	0	3%	100%	0%	7.0	7.0	3.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 031	Aug 01 - Aug 21	12	2	2	0	17%	100%	0%	6.0	6.0	3.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 032, 034	Aug 01 - Aug 21	13	3	2	1	23%	100%	0%	3.0	5.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 033	Aug 01 - Aug 21	38	1	1	1	3%	100%	0%	8.0	13.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 035	Aug 01 - Aug 21	5	1	1	0	20%	100%	0%	5.0	5.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 041, 042	Aug 01 - Aug 21	33	1	1	0	3%	100%	0%	3.0	5.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 043 - 046	Aug 01 - Aug 21	9	5	5	3	56%	100%	60%	5.4	7.4	4.3	
Antelope Horns Longer Than Ears	NR	Antelope	AR 051	Aug 01 - Aug 21	12	4	4	1	33%	100%	0%	3.3	4.0	1.7	
Antelope Horns Longer Than Ears	NR	Antelope	AR 061, 062, 064, 071, 073	Aug 01 - Aug 21	14	4	4	1	29%	100%	25%	5.5	7.0	2.3	
Antelope Horns Longer Than Ears	NR	Antelope	AR 065, 142, 144	Aug 01 - Aug 21	2	1	1	0	50%	100%	0%	5.0	7.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 067, 068	Aug 01 - Aug 21	35	4	4	3	11%	100%	33%	3.8	4.5	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 072, 074 - 075	Aug 01 - Aug 21	10	3	3	1	30%	100%	100%	4.7	7.0	3.5	
Antelope Horns Longer Than Ears	NR	Antelope	AR 078, 105 - 107, 121	Aug 01 - Aug 21	9	1	1	0	11%	100%	0%	8.0	17.0	1.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 101 - 104, 108 - 109, 144	Aug 01 - Aug 21	5	2	2	1	40%	100%	50%	3.5	4.5	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 111 - 114	Aug 01 - Aug 21	20	1	1	0	5%	100%	0%	5.0	8.0	1.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 115, 231, 242	Aug 01 - Aug 14	15	1	1	0	7%	100%	0%	0.0	0.0		
Antelope Horns Longer Than Ears	NR	Antelope	AR 131, 145, 163 - 164	Aug 01 - Aug 14	4	1	1	1	25%	100%	100%	5.0	5.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 132 - 134, 245	Aug 01 - Aug 14	19	1	1	1	5%	100%	100%	1.0	1.0		
Antelope Horns Longer Than Ears	NR	Antelope	AR 141, 143, 151 - 156	Aug 01 - Aug 21	32	7	5	2	22%	100%	0%	4.0	5.6	4.7	
Antelope Horns Longer Than Ears	NR	Antelope	AR 161 - 162	Aug 01 - Aug 21	9	1	1	1	11%	100%	0%	4.0	6.0		
Antelope Horns Longer Than Ears	NR	Antelope	AR 171 - 173	Aug 01 - Aug 21	4	1	1	0	25%	100%	0%	2.0	5.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 181 - 184	Aug 01 - Aug 21	2	1	1	1	50%	100%	100%	5.0	5.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	AR 205 - 208	Aug 01 - Aug 21	6	1	1	0	17%	100%	0%	1.0	3.0	3.0	
Antelope Horns Longer Than Ears	NR	Antelope	M 012 - 014	Sep 25 - Oct 04	7	1	1	1	14%	100%	100%	4.0	9.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	M 031	Sep 25 - Oct 04	4	1	1	0	25%	100%	0%	2.0	3.0	2.0	
Antelope Horns Longer Than Ears	NR	Antelope	M 043 - 046	Sep 25 - Oct 04	2	1	1	0	50%	100%	0%	4.0	4.0	3.0	
Antelope Horns Longer Than Ears	NR	Antelope	M 061, 062, 064, 071, 073	Sep 25 - Oct 04	7	1	1	1	14%	100%	0%	2.0	3.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	M 067, 068	Sep 25 - Oct 04	27	1	1	1	4%	100%	100%	2.0	2.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	M 078, 105 - 107, 121	Sep 25 - Oct 04	3	1	1	0	33%	100%	0%	6.0	7.0	4.0	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Season	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Apps Issued											
Antelope Horns Longer Than Ears	NR	Antelope	M	101 - 104, 108 - 109, 144	5	1	1	1	20%	100%	100%	0%	3.0	4.0	4.0	
Antelope Horns Longer Than Ears	NR	Antelope	M	111 - 114	1	1	1	1	100%	100%	100%	0%	3.0	4.0	5.0	
Antelope Horns Longer Than Ears	NR	Antelope	M	141, 143, 151 - 156	3	1	1	1	33%	100%	100%	0%	1.0	1.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	022			1	1		100%	100%	0%	2.0	2.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	032			3	3		100%	100%	33%	1.3	2.3	4.7	
Damage Compensation Antelope	NR	Antelope	SWR	034			2	2		100%	50%	0%	4.0	5.0	3.0	
Damage Compensation Antelope	NR	Antelope	SWR	035			7	7		100%	100%	17%	2.6	4.1	4.7	
Damage Compensation Antelope	NR	Antelope	SWR	044			1	1		100%	100%	0%	3.0	6.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	046			2	2		100%	100%	0%	1.0	4.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	051			5	3		80%	100%	33%	1.7	5.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	062			3	3		100%	100%	33%	1.7	2.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	068			1			0%			0.0	0.0		
Damage Compensation Antelope	NR	Antelope	SWR	114, 115			1	1		100%	100%	100%	2.0	4.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	115			7	5		71%	100%	40%	1.8	2.2	4.8	
Damage Compensation Antelope	NR	Antelope	SWR	121			2	2		100%	50%	0%	2.0	2.5	3.5	
Damage Compensation Antelope	NR	Antelope	SWR	141			1	1		100%	100%	0%	1.0	2.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	144			3	2		100%	67%	0%	2.0	2.3	4.7	
Damage Compensation Antelope	NR	Antelope	SWR	145			1	0		100%	0%		3.0	3.0	2.0	
Damage Compensation Antelope	NR	Antelope	SWR	156			6	6		100%	100%	0%	3.0	4.2	4.7	
Damage Compensation Antelope	NR	Antelope	SWR	161, 173			1	0		100%	0%		5.0	6.0	4.0	
Damage Compensation Antelope	NR	Antelope	SWR	164			1	0		100%	0%		5.0	8.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	172			5	4		80%	100%	25%	3.3	3.8	4.7	
Damage Compensation Antelope	NR	Antelope	SWR	172, 184			8	6		88%	100%	33%	3.8	4.7	4.3	
Damage Compensation Antelope	NR	Antelope	SWR	183			1	1		100%	100%	0%	4.0	4.0	4.0	
Damage Compensation Antelope	NR	Antelope	SWR	184			2	2		100%	100%	0%	3.0	3.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	231			2	2		100%	100%	0%	2.0	2.0	5.0	
Damage Compensation Antelope	NR	Antelope	SWR	251			2	2		100%	100%	0%	1.5	3.5	4.0	
Silver State Pronghorn Antelope	NR	Antelope	ALW	Any Open Unit	6,304	1	1	0	0.02%	100%	0%		14.0	14.0	2.0	
Wildlife Heritage Antelope	NR	Antelope	ALW	Any Open Unit			2	2		100%	100%	0%	1.0	1.0	5.0	
Dream Antelope	Res	Antelope	SWR	Any Open Unit			1	1		100%	100%	0%	2.0	4.0	5.0	
Black Bear Either Sex	Res	Black Bear	ALW	192,194-196,201-204,206,291	3,665	45	45	37	1%	98%	35%		9.7	12.4	3.8	
Black Bear Either Sex	NR	Black Bear	ALW	192,194-196,201-204,206,291	308	5	3	3	2%	100%	33%		5.0	7.3	3.0	
Dream Black Bear	NR	Black Bear	SWR	Any Open Unit			1	0		100%	0%		5.0	5.0	4.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	011, 013	180	1	1	1	1%	100%	100%		18.0	18.0	4.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	012	463	3	3	2	1%	100%	67%		12.3	13.0	4.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	014	173	2	2	2	1%	100%	50%		3.5	4.5	4.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	021, 022	703	2	2	2	0.3%	100%	100%		9.0	12.0	4.5	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	031	1,601	6	6	6	0.4%	100%	100%		4.8	10.2	4.8	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	032	1,132	11	11	9	1%	100%	82%		5.5	9.5	3.5	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	032, 033	263	3	3	3	1%	100%	33%		13.3	18.0	3.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	034	877	8	8	6	1%	100%	75%		12.3	16.4	3.4	

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Hunt	RES /NR	Species	Weapon Unit Group	2021		Season	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Apps Issued											
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	035	593	7	7	7	1%	100%	100%		12.1	15.6	4.6	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	051	569	2	2	2	0.4%	100%	100%		8.0	11.0	5.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	066	169	1	1	1	1%	100%	100%		4.0	24.0	4.0	
California Bighorn Sheep Any Ram	Res	California Bighorn	ALW	068	2,442	5	5	5	0.2%	100%	100%		4.6	8.4	5.0	
PIW California Bighorn Sheep Any Ram	Res	California Bighorn	SWR	Most Units	3,154	1	1		0.03%	0%			0.0	0.0		
California Bighorn Sheep Any Ram	NR	California Bighorn	ALW	012	1,376	1	1	1	0.1%	100%	100%		3.0	10.0	3.0	
California Bighorn Sheep Any Ram	NR	California Bighorn	ALW	032	2,117	1	1	1	0.05%	100%	100%		3.0	3.0	5.0	
California Bighorn Sheep Any Ram	NR	California Bighorn	ALW	034	737	1	1	1	0.1%	100%	100%		5.0	25.0	5.0	
California Bighorn Sheep Any Ram	NR	California Bighorn	ALW	035	1,595	1	1	1	0.1%	100%	100%		4.0	8.0	5.0	
California Bighorn Sheep Any Ram	NR	California Bighorn	ALW	068	5,567	1	1	1	0.02%	100%	100%		7.0	7.0	5.0	
Wildlife Heritage California BHS	NR	California Bighorn	ALW	Most Units			1	1		100%	100%		40.0	43.0	5.0	
Dream California Bighorn Sheep	NR	California Bighorn	SWR	Most Units			1	1		100%	100%		5.0	5.0	5.0	
Desert Bighorn Sheep Any Ewe	Res	Desert Bighorn	ALW	161	214	30	26	22	14%	97%	85%		2.4	3.4	4.4	
Desert Bighorn Sheep Any Ewe	Res	Desert Bighorn	ALW	213	400	15	15	10	4%	100%	67%		2.3	3.2	4.5	
Desert Bighorn Sheep Any Ewe	Res	Desert Bighorn	ALW	268	758	76	68	42	10%	99%	62%		2.9	3.9	4.3	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	044, 182	704	15	15	15	2%	100%	100%		9.0	16.1	4.9	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	045, 153	213	2	2	2	1%	100%	50%		3.0	4.5	2.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	131, 164	97	1	1	1	1%	100%	100%		2.0	2.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	132 North	33	2	2	2	6%	100%	50%		12.0	12.5	3.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	132 South	11	2	2	2	18%	100%	100%		3.5	6.5	4.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	133, 245	59	4	4	4	7%	100%	100%		7.3	14.8	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	134, 251	76	5	5	2	7%	100%	40%		11.6	15.2	3.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	161	207	8	8	7	4%	100%	88%		6.3	11.5	4.6	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	161	90	7	7	7	8%	100%	100%		3.9	5.7	4.9	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	162 - 163	249	7	6	6	3%	100%	100%		4.5	11.3	4.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	173N	42	4	4	2	10%	100%	50%		16.8	23.5	3.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	173S	44	2	2	2	5%	100%	50%		4.5	7.0	4.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	181	1,144	18	17	16	2%	100%	94%		4.6	11.9	4.7	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	183	264	6	6	6	2%	100%	100%		3.2	10.7	4.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	184	161	6	6	5	4%	100%	83%		6.0	8.5	4.2	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	202	224	4	4	3	2%	100%	75%		2.5	4.8	4.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	204	92	2	2	2	2%	100%	100%		1.0	3.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	205	389	8	8	5	2%	100%	63%		8.8	15.6	4.4	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	206, 208	54	4	4	3	7%	100%	75%		4.3	7.8	3.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	207	63	3	3	2	5%	100%	67%		3.3	4.0	4.3	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	211	222	10	10	6	5%	100%	60%		4.2	5.9	4.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	212	157	7	7	7	4%	100%	100%		2.4	4.7	4.9	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	212	68	7	7	6	10%	100%	100%		2.7	4.5	4.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	213	142	7	7	6	5%	100%	100%		4.3	7.1	4.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	213	56	6	6	6	11%	100%	100%		2.5	7.3	4.7	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW	221, 223	110	3	3	3	3%	100%	100%		2.0	6.7	5.0	

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				Quota	Tags Issued									
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 241	42	5	4	12%	80%	50%		10.5	20.8	3.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 242, 271	291	8	8	3%	100%	75%		11.9	18.8	4.6	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 243	86	5	5	6%	100%	60%		11.0	20.0	4.4	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 244	122	3	3	2%	100%	100%		10.7	17.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 252	133	3	2	2%	100%	100%		11.0	18.0	4.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 253	708	6	6	1%	100%	100%		3.0	13.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 254	44	5	5	8%	100%	100%		3.2	6.6	4.4	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 261	66	5	5	2%	100%	100%		6.6	8.6	3.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 262	312	5	5	2%	100%	40%		6.2	9.8	3.6	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 263	996	6	6	1%	100%	100%		4.2	10.7	4.8	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 264, 265, 266	162	2	2	1%	100%	100%		3.5	13.5	4.5	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 267	383	9	9	2%	100%	89%		4.3	10.2	4.6	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 268	2,925	37	34	1%	95%	97%		5.0	10.7	4.6	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 272	61	1	1	2%	100%	100%		1.0	2.0	1.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 280	68	5	5	7%	100%	60%		6.8	7.0	3.4	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 281	74	8	8	11%	100%	75%		4.8	4.8	3.9	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 282	182	5	3	3%	100%	67%		8.3	10.0	4.7	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 283 - 284	89	4	4	4%	100%	75%		10.8	16.3	3.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	ALW 286	119	5	1	4%	100%	100%		5.0	11.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	AR 044, 182	64	2	2	3%	100%	50%		9.5	15.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	AR 162 - 163	28	1	1	4%	100%	100%		1.0	22.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	AR 202, 204	23	1	1	4%	100%	100%		10.0	14.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	AR 211	9	1	1	11%	100%	100%		7.0	8.0	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	AR 212	14	2	2	14%	100%	100%		3.5	6.5	5.0	
Desert Bighorn Sheep Any Ram	Res	Desert Bighorn	AR 213	15	2	2	13%	100%	50%		8.5	12.5	5.0	
PIW Desert Bighorn Sheep	Res	Desert Bighorn	SWR Most Units	3,250	1	1	0.03%	100%	100%		4.0	25.0	5.0	
Silver State Desert Bighorn Sheep	Res	Desert Bighorn	ALW Most Units	8,772	1	1	0.01%	100%	100%		3.0	23.0	3.0	
Desert Bighorn Sheep Any Ewe	NR	Desert Bighorn	ALW 161	59	3	3	5%	100%	33%		3.3	4.3	3.7	
Desert Bighorn Sheep Any Ewe	NR	Desert Bighorn	ALW 213	123	1	1	1%	100%	100%		6.0	6.0	4.0	
Desert Bighorn Sheep Any Ewe	NR	Desert Bighorn	ALW 268	178	9	7	4%	89%	57%		2.7	3.3	4.6	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 044, 182	1,049	2	2	0.2%	100%	100%		4.5	6.5	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 161	211	1	1	0.5%	100%	100%		4.0	5.0	2.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 161	215	1	1	0.5%	100%	100%		4.0	4.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 162 - 163	271	1	1	0.4%	100%	100%		2.0	2.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 181	687	2	1	0.3%	100%	100%		5.0	5.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 183	181	1	1	1%	100%	100%		3.0	6.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 184	79	1	1	1%	100%	100%		5.0	11.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 205	259	1	1	0.4%	100%	100%		1.0	9.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 207	98	1	1	1%	100%	100%		4.0	8.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 211	211	2	2	1%	100%	100%		1.5	5.0	4.5	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 212	126	1	1	1%	100%	100%		3.0	6.0	5.0	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued									
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 212	102	1	1	1%	100%	100%		2.0	3.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 213	228	2	2	1%	100%	50%		10.0	14.0	4.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 213	80	2	2	3%	100%	100%		2.0	6.0	4.5	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 242, 271	678	1	1	0.1%	100%	100%		1.0	6.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 244	407	1	1	0.2%	100%	100%		7.0	10.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 253	349	1	1	0.3%	100%	100%		3.0	13.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 263	3,021	1	1	0.03%	100%	100%		1.0	1.0	5.0	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 267	425	1	1	0.2%	0%			0.0	0.0		
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 268	4,245	5	5	0.1%	100%	100%		3.4	9.2	4.2	
Desert Bighorn Sheep Any Ram	NR	Desert Bighorn	ALW 283 - 284	137	1	1	1%	100%	100%		4.0	8.0	5.0	
Wildlife Heritage Desert BHS #1	NR	Desert Bighorn	ALW Most Units	1	1	1	100%	100%	100%		2.0	5.0	3.0	
Wildlife Heritage Desert BHS #2	NR	Desert Bighorn	ALW Most Units	1	1	1	100%	100%	100%		4.0	4.0	5.0	
Dream Desert Bighorn Sheep	NR	Desert Bighorn	SWR Most Units	1	1	1	100%	100%	100%		5.0	5.0	5.0	
Elk Antlered	Res	Elk	ALW 076, 077, 079, 081	379	65	63	17%	98%	57%	69%	14%	6.8	9.2	3.5
Elk Antlered	Res	Elk	ALW 108, 131 - 132	415	60	56	14%	98%	50%	61%	22%	6.7	9.8	3.3
Elk Antlered	Res	Elk	ALW 061, 071	306	40	33	13%	98%	61%	60%	17%	5.3	7.3	4.2
Elk Antlered	Res	Elk	ALW 062, 064, 066 - 068	461	14	14	3%	93%	27%	67%	0%	5.0	5.9	3.2
Elk Antlered	Res	Elk	ALW 062, 064, 066 - 068	160	13	12	4%	92%	33%	75%	33%	5.2	8.6	2.9
Elk Antlered	Res	Elk	ALW 072 - 074	1,019	100	92	10%	98%	37%	71%	13%	5.8	7.1	3.4
Elk Antlered	Res	Elk	ALW 072 - 074	460	100	86	22%	96%	33%	64%	15%	6.9	9.2	3.3
Elk Antlered	Res	Elk	ALW 231	352	45	44	13%	100%	61%	52%	20%	6.0	9.4	3.8
Elk Antlered	Res	Elk	ALW 075	50	9	7	2%	100%	29%	50%	100%	4.6	6.0	3.3
Elk Antlered	Res	Elk	ALW 078, 105 - 107, 109	134	16	14	9%	94%	64%	100%	38%	6.4	8.8	3.9
Elk Antlered	Res	Elk	ALW 161 - 164, 171 - 173	314	35	32	16%	97%	50%	50%	15%	5.7	7.5	3.6
Elk Antlered	Res	Elk	ALW 104, 108, 121	709	70	69	41%	99%	59%	51%	22%	6.0	8.4	3.4
Elk Antlered	Res	Elk	ALW 075	108	9	8	8%	89%	75%	83%	40%	4.8	7.4	4.1
Elk Antlered	Res	Elk	ALW 078, 105 - 107, 109	221	16	13	9%	100%	69%	89%	33%	5.2	6.8	4.3
Elk Antlered	Res	Elk	ALW 111 - 115	1,327	80	71	6%	91%	58%	54%	21%	6.1	8.5	4.1
Elk Antlered	Res	Elk	ALW 076, 077, 079, 081	1,277	65	64	4%	100%	67%	74%	36%	5.2	7.4	4.0
Elk Antlered	NR	Elk	ALW 161 - 164, 171 - 173	80	4	3	2%	100%	67%	50%	50%	4.7	4.7	5.0
Elk Antlered	NR	Elk	ALW 072 - 074	224	10	9	7%	100%	78%	57%	29%	4.3	6.0	4.0
Elk Antlered	NR	Elk	ALW 076, 077, 079, 081	184	8	6	4%	75%	100%	100%	17%	4.0	5.3	4.5
Elk Antlered	Res	Elk	ALW 061, 071	706	30	30	20%	100%	69%	75%	11%	4.3	6.2	4.1
Elk Antlered	Res	Elk	ALW 161 - 164, 171 - 173	247	35	33	13%	14%	100%	39%	18%	6.8	10.2	3.4
Elk Antlered	NR	Elk	ALW 075	24	1	1	4%	100%	100%	100%	0%	4.0	4.0	5.0
Elk Antlered	Res	Elk	ALW 221 - 223	411	60	56	15%	95%	45%	60%	39%	6.0	8.7	4.1
Elk Antlered	NR	Elk	ALW 104, 108, 121	192	8	8	4%	100%	88%	71%	43%	5.9	6.1	4.4
Elk Antlered	NR	Elk	ALW 161 - 164, 171 - 173	102	4	3	4%	100%	100%	33%	67%	3.0	9.7	5.0
Elk Antlered	Res	Elk	ALW 111 - 115	2,170	80	76	52%	99%	68%	73%	39%	5.2	8.1	4.1
Elk Antlered	Res	Elk	ALW 241, 242	113	4	4	4%	100%	75%	33%	33%	8.0	17.3	3.5
Elk Antlered	Res	Elk	AR 061, 071	77	30	29	4%	100%	14%	25%	0%	8.7	13.0	3.6

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued									
Elk Antlered	Res	Elk	AR 062, 064, 066 - 068	14	2	0	14%	100%	0%		7.0	7.5	3.0	
Elk Antlered	Res	Elk	AR 072 - 074	130	60	8	46%	95%	15%	88%	38%	8.6	11.0	3.2
Elk Antlered	Res	Elk	AR 075	9	3	0	33%	100%	0%		17.7	22.7	3.3	
Elk Antlered	Res	Elk	AR 076, 077, 079, 081	105	25	15	24%	100%	65%	93%	29%	10.6	13.5	3.9
Elk Antlered	Res	Elk	AR 078, 105 - 107, 109	47	10	8	21%	100%	25%	50%	50%	8.9	12.0	4.1
Elk Antlered	Res	Elk	AR 091	4	3	1	44%	100%	33%	100%	100%	11.7	15.7	3.7
Elk Antlered	Res	Elk	AR 104, 108, 121	84	11	11	13%	100%	55%	100%	67%	14.2	20.1	4.4
Elk Antlered	Res	Elk	AR 108, 131 - 132	67	7	6	10%	100%	86%	100%	50%	10.7	14.4	4.3
Elk Antlered	Res	Elk	AR 111 - 115	370	30	19	8%	97%	66%	89%	68%	9.6	11.4	4.7
Elk Antlered	Res	Elk	AR 161 - 164, 171 - 173	79	15	15	19%	100%	40%	100%	50%	8.7	12.7	4.2
Elk Antlered	Res	Elk	AR 221 - 223	264	25	11	9%	100%	46%	82%	45%	8.0	12.1	4.4
Elk Antlered	Res	Elk	AR 231	139	20	12	14%	100%	60%	92%	36%	8.3	12.5	4.6
Elk Antlered	Res	Elk	AR 241, 242	10	2	1	20%	100%	100%	0%		9.0	9.0	5.0
Elk Antlered	Res	Elk	AR 262	43	1	1	2%	100%	100%	100%	100%	3.0	4.0	5.0
Elk Antlered	Res	Elk	M 051	7	2	2	29%	100%	50%	100%	100%	5.5	9.0	4.0
Elk Antlered	Res	Elk	M 061, 071	130	16	14	12%	93%	43%	50%	33%	7.7	11.4	4.5
Elk Antlered	Res	Elk	M 062, 064, 066 - 068	54	4	4	7%	100%	100%	100%	50%	4.8	9.0	5.0
Elk Antlered	Res	Elk	M 072 - 074	183	30	17	16%	97%	59%	82%	29%	6.4	9.5	4.4
Elk Antlered	Res	Elk	M 075	31	2	2	6%	100%	100%	100%	0%	6.0	11.5	3.0
Elk Antlered	Res	Elk	M 076, 077, 079, 081	77	15	14	19%	93%	50%	71%	29%	6.9	11.9	3.7
Elk Antlered	Res	Elk	M 078, 105 - 107, 109	58	12	12	21%	100%	75%	89%	44%	6.4	12.3	4.6
Elk Antlered	Res	Elk	M 104, 108, 121	65	20	13	31%	100%	65%	92%	33%	8.0	14.3	3.3
Elk Antlered	Res	Elk	M 108, 131 - 132	32	7	6	22%	86%	33%	50%	0%	8.8	10.2	3.7
Elk Antlered	Res	Elk	M 111 - 115	155	20	12	13%	100%	57%	67%	36%	5.3	8.0	3.9
Elk Antlered	Res	Elk	M 161 - 164, 171 - 173	45	15	14	33%	93%	58%	71%	57%	5.9	9.3	3.6
Elk Antlered	Res	Elk	M 221 - 223	83	15	15	18%	100%	47%	86%	33%	8.4	12.6	3.9
Elk Antlered	Res	Elk	M 231	80	6	4	8%	100%	67%	50%	25%	5.0	10.8	4.2
Elk Antlered	Res	Elk	M 241, 242	23	2	2	9%	100%	50%	100%	100%	5.5	11.5	3.0
Elk Antlered	Res	Elk	M 262	9	1	1	11%	100%	100%	0%	0%	4.0	14.0	5.0
Elk Antlerless	Res	Elk	ALW 051	205	6	6	3%	100%	17%		5.7	7.7	5.0	
Elk Antlerless	Res	Elk	ALW 061, 071	1,852	235	192	13%	97%	34%	34%	4.6	6.1	3.6	
Elk Antlerless	Res	Elk	ALW 061, 071	624	195	141	31%	95%	28%	28%	5.4	6.7	3.4	
Elk Antlerless	Res	Elk	ALW 062, 064, 066 - 068	877	65	53	7%	98%	45%	45%	3.9	5.1	3.8	
Elk Antlerless	Res	Elk	ALW 072 - 074	637	65	63	10%	98%	38%	38%	4.3	5.2	3.7	
Elk Antlerless	Res	Elk	ALW 072 - 075	812	50	40	6%	98%	18%	18%	5.2	6.1	3.7	
Elk Antlerless	Res	Elk	ALW 072 Wilderness	133	5	4	4%	100%	50%	50%	2.3	2.5	3.8	
Elk Antlerless	Res	Elk	ALW 075	170	4	4	2%	100%	25%		6.0	7.8	2.5	
Elk Antlerless	Res	Elk	ALW 076, 077, 079, 081	1,249	45	40	4%	98%	60%	60%	3.6	4.7	4.3	
Elk Antlerless	Res	Elk	ALW 076, 077, 079, 081	486	30	26	6%	100%	54%	54%	3.4	4.0	4.3	
Elk Antlerless	Res	Elk	ALW 078, 105 - 107, 109	288	70	60	24%	100%	42%	42%	4.7	6.3	2.9	
Elk Antlerless	Res	Elk	ALW 078, 105 - 107, 109	106	40	36	38%	98%	67%	67%	4.0	4.6	3.6	

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				Quota	Tags Issued									
Elk Antlerless	Res	Elk	ALW 091	159	5	4	3%	80%	75%		2.5	3.0	3.3	
Elk Antlerless	Res	Elk	ALW 091	101	5	5	5%	100%	100%		1.2	3.0	4.4	
Elk Antlerless	Res	Elk	ALW 104, 108, 121	880	50	49	6%	98%	63%	63%	3.3	3.9	4.1	
Elk Antlerless	Res	Elk	ALW 104, 108, 121	146	20	18	14%	95%	56%	56%	4.2	5.2	4.2	
Elk Antlerless	Res	Elk	ALW 108, 131 - 132	319	10	8	3%	90%	25%	25%	4.0	4.8	3.3	
Elk Antlerless	Res	Elk	ALW 111, 112	1,717	70	67	4%	97%	51%	51%	3.7	4.7	3.8	
Elk Antlerless	Res	Elk	ALW 111, 112	645	65	52	10%	98%	58%	58%	4.1	4.7	3.9	
Elk Antlerless	Res	Elk	ALW 113	115	15	11	4	13%	100%	36%	4.6	5.4	3.5	
Elk Antlerless	Res	Elk	ALW 113	86	20	16	3	23%	90%	19%	4.9	5.7	2.6	
Elk Antlerless	Res	Elk	ALW 113N	44	15	14	8	34%	86%	13%	3.9	4.1		
Elk Antlerless	Res	Elk	ALW 114, 115	373	65	59	17%	98%	29%	29%	4.3	5.9	3.2	
Elk Antlerless	Res	Elk	ALW 114, 115	295	75	61	21%	99%	34%	34%	4.3	5.9	4.0	
Elk Antlerless	Res	Elk	ALW 161 - 164	680	70	55	10%	99%	31%	31%	4.4	5.2	3.3	
Elk Antlerless	Res	Elk	ALW 161 - 164	484	75	53	4	15%	99%	8%	5.9	7.2	2.8	
Elk Antlerless	Res	Elk	ALW 162 Wilderness	102	10	9	5	10%	100%	56%	2.7	2.7	4.6	
Elk Antlerless	Res	Elk	ALW 221	323	40	34	13	12%	98%	38%	4.6	6.3	2.8	
Elk Antlerless	Res	Elk	ALW 221	114	25	15	4	22%	92%	27%	4.4	6.4	2.9	
Elk Antlerless	Res	Elk	ALW 222 - 223	1,080	40	34	16	4%	98%	47%	3.8	5.1	3.6	
Elk Antlerless	Res	Elk	ALW 222 - 223	424	45	40	14	11%	96%	35%	3.9	5.7	3.5	
Elk Antlerless	Res	Elk	ALW 222 Wilderness	65	10	10	9	15%	100%	90%	2.3	5.3	4.6	
Elk Antlerless	Res	Elk	ALW 222 Wilderness	34	10	10	4	29%	100%	40%	2.8	2.9	3.7	
Elk Antlerless	Res	Elk	ALW 231	1,133	45	43	27	4%	100%	63%	3.5	5.0	4.2	
Elk Antlerless	Res	Elk	ALW 231	414	50	40	10	12%	96%	25%	4.7	5.6	3.4	
Elk Antlerless	Res	Elk	ALW 231 Wilderness	77	30	24	9	39%	97%	38%	3.9	5.4	3.5	
Elk Antlerless	Res	Elk	ALW 241, 242	181	10	7	2	6%	100%	29%	4.0	6.0	3.6	
Elk Antlerless	Res	Elk	AR 061, 071	130	60	41	8	46%	98%	20%	4.7	6.0	3.3	
Elk Antlerless	Res	Elk	AR 062, 064, 066 - 068	32	10	9	1	31%	100%	11%	5.8	8.7	3.6	
Elk Antlerless	Res	Elk	AR 072 - 074	50	10	10	0	20%	100%	0%	4.7	6.8	3.2	
Elk Antlerless	Res	Elk	AR 075	7	2	2	0	29%	100%	0%	5.5	5.5	3.5	
Elk Antlerless	Res	Elk	AR 076, 077, 079, 081	71	10	9	4	14%	100%	44%	5.9	8.6	3.9	
Elk Antlerless	Res	Elk	AR 078, 105 - 107, 109	39	20	18	1	51%	100%	6%	6.8	8.9	2.8	
Elk Antlerless	Res	Elk	AR 104, 108, 121	49	10	9	2	20%	100%	22%	5.8	9.3	3.4	
Elk Antlerless	Res	Elk	AR 108, 131 - 132	47	2	2	0	4%	100%	0%	7.5	11.0	3.0	
Elk Antlerless	Res	Elk	AR 111, 112	183	20	18	9	11%	100%	50%	5.3	7.5	3.9	
Elk Antlerless	Res	Elk	AR 113	59	25	21	3	42%	100%	14%	5.5	7.5	3.2	
Elk Antlerless	Res	Elk	AR 114, 115	63	25	21	8	40%	100%	38%	7.0	9.0	4.2	
Elk Antlerless	Res	Elk	AR 161 - 164	77	20	16	2	26%	95%	13%	6.1	7.2	3.9	
Elk Antlerless	Res	Elk	AR 221 - 223	207	25	21	4	12%	100%	19%	6.0	7.7	4.1	
Elk Antlerless	Res	Elk	AR 231	141	20	17	1	14%	100%	6%	6.6	9.2	3.8	
Elk Antlerless	Res	Elk	AR 241, 242	14	3	2	2	21%	100%	100%	4.0	6.5	4.5	
Elk Antlerless	Res	Elk	M 072 - 074	110	7	5	1	6%	100%	20%	7.4	8.8	4.2	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued									
Elk Antlerless	Res	Elk	M 075	17	4	4	24%	100%	0%		3.5	5.3	2.3	
Elk Antlerless	Res	Elk	M 076,077,079,081	83	15	14	18%	100%	50%		4.9	5.9	4.1	
Elk Antlerless	Res	Elk	M 078,105-107,109	29	15	12	52%	100%	8%		6.6	9.2	2.8	
Elk Antlerless	Res	Elk	M 104,108,121	74	10	9	14%	100%	67%		3.6	10.8	4.9	
Elk Antlerless	Res	Elk	M 108,131-132	37	2	2	5%	100%	100%		4.0	6.5	2.0	
Elk Antlerless	Res	Elk	M 111,112	112	10	9	9%	100%	67%		3.4	3.9	4.8	
Elk Antlerless	Res	Elk	M 113	25	4	3	16%	100%	100%		3.0	4.3	5.0	
Elk Antlerless	Res	Elk	M 114,115	68	20	19	4%	29%	100%	21%	4.1	4.5	3.5	
Elk Antlerless	Res	Elk	M 161-164	71	20	18	2%	28%	100%	11%	5.8	6.4	3.5	
Elk Antlerless	Res	Elk	M 221-223	141	25	24	18%	100%	33%		4.0	5.3	3.9	
Elk Antlerless	Res	Elk	M 231	136	10	9	7%	100%	67%		3.2	4.0	4.7	
Elk Depredation Antlerless	Res	Elk	ALW 101-103	1,372	50	44	26%	98%	59%	76%	21%	5.9	7.9	4.0
Elk Depredation Antlerless	Res	Elk	ALW 101-103	667	50	44	15%	98%	34%	50%	15%	7.4	9.2	3.5
Elk Depredation Antlerless	Res	Elk	ALW 115	955	5	5	4%	100%	80%	100%	4.0	8.8	2.0	
Elk Depredation Antlerless	Res	Elk	ALW 115	66	5	5	8%	100%	60%	100%	0%	5.2	6.8	1.4
Elk Depredation Antlerless	Res	Elk	ALW 115	405	5	4	1%	100%	75%	67%	6.8	12.8	2.5	
Elk Depredation Antlerless	Res	Elk	ALW 115	76	5	4	7%	100%	100%	50%	0%	3.3	4.3	4.8
Elk Depredation Antlerless	Res	Elk	ALW 115	88	5	5	6%	100%	80%	75%	50%	5.2	8.6	3.8
Elk Depredation Antlerless	Res	Elk	ALW 144,145	295	5	5	4%	2%	100%	25%	25%	4.6	5.8	4.8
Elk Depredation Antlerless	Res	Elk	ALW 144,145	54	5	4	9%	100%	25%	0%	0%	5.8	7.8	2.5
Elk Depredation Antlerless	Res	Elk	ALW 144,145	83	5	4	0%	6%	100%	0%	7.3	11.8	2.5	
Elk Depredation Antlerless	Res	Elk	ALW 251	378	5	5	4%	1%	100%	80%	25%	4.8	5.6	4.8
Elk Depredation Antlerless	Res	Elk	ALW 081 1st	97	10	8	4%	10%	100%	50%	3.3	4.3	4.1	
Elk Depredation Antlerless	Res	Elk	ALW 081 2nd	122	16	10	6%	13%	100%	60%	3.0	3.8	4.3	
Elk Depredation Antlerless	Res	Elk	ALW 081 3rd	129	15	15	14%	12%	100%	93%	2.6	3.4	5.0	
Elk Depredation Antlerless	Res	Elk	ALW 081 4th	88	15	15	9%	17%	93%	67%	3.8	4.0	4.2	
Elk Depredation Antlerless	Res	Elk	ALW 101-103	618	150	98	24%	94%	16%		6.3	8.1	3.1	
Elk Depredation Antlerless	Res	Elk	ALW 115	145	10	10	4%	7%	100%	50%	3.0	4.0	4.3	
Elk Depredation Antlerless	Res	Elk	ALW 115	16	10	10	63%	100%	50%		3.5	5.6	2.2	
Elk Depredation Antlerless	Res	Elk	ALW 115	69	10	10	14%	100%	0%		8.4	13.5	1.9	
Elk Depredation Antlerless	Res	Elk	ALW 115	33	10	8	0%	30%	100%	0%	4.0	4.5	1.9	
Elk Depredation Antlerless	Res	Elk	ALW 115	38	10	9	0%	26%	100%	0%	3.8	5.7	1.6	
Elk Depredation Antlerless	Res	Elk	ALW 121 1st	103	25	22	12%	24%	96%	55%	4.3	5.4	4.1	
Elk Depredation Antlerless	Res	Elk	ALW 121 2nd	37	10	9	0%	27%	100%	0%	4.2	5.8	2.1	
Elk Depredation Antlerless	Res	Elk	ALW 121 3rd	72	15	15	2%	21%	100%	14%	6.0	7.6	3.0	
Elk Depredation Antlerless	Res	Elk	ALW 144,145	57	5	5	1%	9%	100%	20%	5.6	9.8	3.0	
Elk Depredation Antlerless	Res	Elk	ALW 144,145	27	5	5	0%	19%	100%	0%	4.4	5.0	1.4	
Elk Depredation Antlerless	Res	Elk	ALW 144,145	46	5	5	0%	11%	100%	0%	4.8	6.4	3.0	
Elk Depredation Antlerless	Res	Elk	ALW 251	122	10	10	8%	100%	0%		4.8	6.3	2.5	
Elk Incentive Hunt	Res	Elk	ALW 061,071	1	1	1	100%	100%	100%	100%	0%	1.0	3.0	5.0
Elk Incentive Hunt	Res	Elk	ALW 076,077,079,081	2	2	2	100%	100%	100%	50%	0%	3.5	3.5	5.0

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued									
Elk Incentive Hunt	Res	Elk	ALW 091	1	1	1	100%	100%	100%	100%	4.0	4.0	4.0	5.0
Elk Incentive Hunt	Res	Elk	ALW 111-115	3	3	2	100%	100%	67%	100%	100%	11.3	13.0	4.7
Elk Incentive Hunt	Res	Elk	ALW 221-223	5	5	2	100%	100%	40%	100%	0%	11.8	16.6	3.4
Elk Incentive Hunt	Res	Elk	ALW 231,221-223	2	2	1	100%	100%	50%	0%	0%	4.5	10.0	4.5
Elk Incentive Hunt	Res	Elk	AR 072-074	1	1	0	100%	100%	0%		7.0	7.0	5.0	
Elk Incentive Hunt	Res	Elk	AR 111-115	3	3	3	100%	100%	100%	100%	9.0	9.0	4.3	
Elk Incentive Hunt	Res	Elk	AR 221-223	1	1	1	100%	100%	100%	100%	6.0	8.0	5.0	
Elk Incentive Hunt	Res	Elk	M 061,071	2	2	2	100%	100%	100%	100%	2.5	3.0	4.5	
Elk Incentive Hunt	Res	Elk	M 072-074	2	2	1	100%	100%	50%	0%	3.0	3.0	5.0	
Elk Incentive Hunt	Res	Elk	M 076,077,079,081	1	1	0	100%	100%	0%		10.0	10.0	4.0	
Elk Spike	Res	Elk	ALW 061,071	270	8	6	3%	100%	33%		2.8	3.2	4.0	
Elk Spike	Res	Elk	ALW 061,071	171	8	7	5%	100%	71%		4.0	4.3	4.4	
Elk Spike	Res	Elk	ALW 062,064,066-068	142	3	3	2%	100%	33%		4.0	5.7	5.0	
Elk Spike	Res	Elk	ALW 062,064,066-068	58	3	3	5%	100%	33%		7.7	7.7	3.3	
Elk Spike	Res	Elk	ALW 072-074	212	20	14	3%	9%	100%	21%	4.4	4.7	3.6	
Elk Spike	Res	Elk	ALW 072-074	97	20	15	7%	21%	100%	47%	5.9	6.2	3.5	
Elk Spike	Res	Elk	ALW 076,077,079,081	300	10	10	6%	3%	100%	60%	4.7	5.6	3.6	
Elk Spike	Res	Elk	ALW 076,077,079,081	159	10	7	4%	6%	100%	57%	3.0	4.0	3.1	
Elk Spike	Res	Elk	ALW 078,105-107,109	89	15	11	4%	17%	100%	36%	4.3	5.6	3.1	
Elk Spike	Res	Elk	ALW 104,108,121	106	15	13	5%	14%	100%	38%	4.2	6.2	4.0	
Elk Spike	Res	Elk	ALW 111,112	163	20	17	9%	12%	95%	53%	2.7	3.7	4.4	
Elk Spike	Res	Elk	ALW 111,112	66	20	14	7%	30%	100%	50%	3.1	4.0	3.7	
Elk Spike	Res	Elk	ALW 113	16	10	10	3%	63%	100%	30%	3.1	3.8	4.1	
Elk Spike	Res	Elk	ALW 113	13	10	10	1%	77%	100%	10%	3.4	3.9	2.5	
Elk Spike	Res	Elk	ALW 114,115	56	20	17	6%	36%	100%	35%	2.8	4.5	3.3	
Elk Spike	Res	Elk	ALW 114,115	34	20	17	9%	59%	100%	53%	4.3	5.5	4.1	
Elk Spike	Res	Elk	ALW 161-164	108	15	9	1%	14%	100%	11%	3.8	6.2	3.4	
Elk Spike	Res	Elk	ALW 221	42	10	8	2%	24%	100%	25%	4.3	6.8	3.0	
Elk Spike	Res	Elk	ALW 221	15	10	9	0%	67%	100%	0%	5.3	7.1	3.0	
Elk Spike	Res	Elk	ALW 222-223	118	15	14	4%	13%	93%	29%	4.1	6.0	3.4	
Elk Spike	Res	Elk	ALW 222-223	30	15	14	7%	50%	100%	50%	5.3	6.7	3.6	
Elk Spike	Res	Elk	ALW 231	121	10	8	3%	8%	100%	38%	3.8	6.6	3.8	
Elk Spike	Res	Elk	ALW 231	35	10	6	0%	29%	100%	0%	6.7	9.0	4.2	
Private Lands Hunt Antlerless Elk	Res	Elk	SWR Most Units	3,539	3	3	2%	0.1%	100%	67%	50%	15.3	23.3	5.0
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 062	5	4	4	80%	100%	100%		2.5	3.0	3.8	
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 062	4	4	4	100%	100%	50%		2.5	3.0	4.3	
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 076,077,079,081	13	11	11	92%	100%	100%	0%	1.5	5.8	5.0	
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 111	12	12	3	100%	100%	25%		2.2	3.0	2.8	
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 144	2	1	1	100%	100%	100%		2.0	3.0	5.0	
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 231 (8MR)	3	3	2	100%	100%	67%		1.7	2.0	3.3	
Private Lands Hunt Antlerless Elk	Res	Elk	ALW 231 (8MR)	2	2	2	100%	100%	100%		2.5	2.5	2.5	

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Hunt	RES /NR	Species	Weapon Unit Group	2021			Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction	
				Quota	Tags Issued	Afield										
Private Lands Hunt	Antlerless Elk	Res	ALW 231 (FNR)	Aug 01 - Sep 30	3	3	3	100%	100%	100%	100%	10.0	16.7	5.0		
Private Lands Hunt	Antlerless Elk	Res	ALW 231 (FNR)	Nov 01 - Dec 31	3	3	1	100%	100%	33%	33%	5.7	12.7	4.3		
Private Lands Hunt	Antlerless Elk	Res	ALW 231 (LVR)	Aug 01 - Dec 31	5	5	2	100%	100%	40%	40%	3.2	4.2	4.2		
Elk Antlered		Res	ALW 221 - 223	Nov 06 - Nov 20	1,879	60	55	3%	98%	71%	72%	34%	5.0	7.7	4.4	
Elk Antlered		Res	ALW 231	Nov 06 - Nov 20	1,273	40	36	3%	93%	69%	60%	24%	6.4	9.1	4.0	
Elk Antlered		NR	ALW 061, 071	Oct 22 - Nov 05	134	4	4	3%	100%	75%	67%	0%	3.8	7.5	4.0	
Elk Antlered		NR	ALW 062, 064, 066 - 068	Nov 06 - Nov 20	64	1	1	0	2%	100%	0%	0%	5.0	5.0	5.0	
Elk Antlered		NR	ALW 078, 105 - 107, 109	Oct 22 - Nov 05	112	3	3	3%	100%	100%	67%	33%	3.0	9.0	3.7	
Elk Antlered		NR	ALW 072 - 074	Oct 22 - Nov 05	374	10	9	7	3%	90%	78%	86%	5.7	6.3	4.1	
Elk Antlered		NR	ALW 221 - 223	Nov 21 - Dec 04	266	7	6	6	3%	86%	100%	83%	3.0	4.5	4.5	
Elk Antlered		NR	ALW 078, 105 - 107, 109	Nov 06 - Nov 20	79	2	2	2	3%	100%	100%	50%	4.5	6.0	4.5	
Elk Antlered		NR	ALW 231	Nov 21 - Dec 04	203	5	5	5	2%	100%	40%	20%	3.8	4.6	4.4	
Elk Antlered		Res	ALW 051	Sep 17 - Sep 30	334	6	5	3	2%	100%	100%	0%	3.0	8.6	3.2	
Elk Antlered		NR	ALW 076, 077, 079, 081	Nov 06 - Nov 20	454	8	7	6	2%	100%	83%	17%	4.4	5.1	4.3	
Elk Antlered		NR	ALW 075	Oct 22 - Nov 05	57	1	1	1	2%	100%	0%	0%	2.0	2.0	5.0	
Elk Antlered		Res	ALW 091	Sep 10 - Oct 01	719	12	11	8	2%	92%	73%	63%	7.3	10.0	2.7	
Elk Antlered		NR	ALW 108, 131 - 132	Nov 06 - Nov 20	106	7	7	3	7%	100%	43%	100%	67%	7.3	10.7	3.6
Elk Antlered		NR	ALW 111 - 115	Nov 21 - Dec 04	578	9	8	6	2%	89%	75%	83%	6.5	9.5	4.3	
Elk Antlered		NR	ALW 061, 071	Oct 05 - Oct 21	268	4	4	2	1%	100%	50%	0%	7.3	13.3	4.5	
Elk Antlered		NR	ALW 231	Nov 06 - Nov 20	373	5	5	5	1%	100%	100%	60%	3.6	5.4	4.2	
Elk Antlered		NR	ALW 062, 064, 066 - 068	Oct 22 - Nov 05	150	2	2	1	1%	100%	50%	100%	3.0	5.5	3.0	
Elk Antlered		Res	ALW 161 - 164, 171 - 173	Sep 17 - Sep 30	1,120	7	7	7	1%	100%	100%	43%	2.6	4.3	4.9	
Elk Antlered		Res	ALW 262	Sep 17 - Sep 30	551	3	3	3	1%	100%	100%	33%	3.3	13.7	3.7	
Elk Antlered		NR	ALW 111 - 115	Nov 06 - Nov 20	2,253	9	8	7	0.4%	89%	88%	100%	7.9	11.1	4.3	
Elk Antlered		NR	ALW 221 - 223	Nov 06 - Nov 20	1,504	6	6	6	0.4%	100%	100%	67%	4.0	5.3	4.5	
Elk Antlered		NR	ALW 161 - 164, 171 - 173	Sep 17 - Sep 30	1,397	1	1	1	0.1%	100%	100%	100%	3.0	3.0	5.0	
Elk Antlered		NR	AR 061, 071	Aug 16 - Aug 31	56	3	3	0	5%	100%	0%	100%	11.3	12.0	2.7	
Elk Antlered		NR	AR 062, 064, 066 - 068	Aug 16 - Aug 31	27	1	1	0	4%	100%	0%	0%	9.0	11.0	5.0	
Elk Antlered		NR	AR 072 - 074	Aug 25 - Sep 16	185	8	7	2	4%	100%	29%	100%	7.9	9.1	3.6	
Elk Antlered		NR	AR 076, 077, 079, 081	Aug 25 - Sep 16	135	3	3	2	2%	100%	67%	50%	5.7	10.3	4.0	
Elk Antlered		NR	AR 078, 105 - 107, 109	Sep 01 - Sep 20	63	1	1	0	2%	100%	0%	0%	11.0	11.0	4.0	
Elk Antlered		NR	AR 104, 108, 121	Aug 25 - Sep 16	137	1	1	1	1%	100%	100%	100%	9.0	17.0	5.0	
Elk Antlered		NR	AR 108, 131 - 132	Aug 25 - Sep 16	125	1	1	1	1%	100%	100%	100%	8.0	13.0	5.0	
Elk Antlered		NR	AR 111 - 115	Aug 25 - Sep 16	1,354	3	3	3	0.2%	100%	100%	67%	7.7	9.0	5.0	
Elk Antlered		NR	AR 161 - 164, 171 - 173	Aug 25 - Sep 16	73	2	2	1	3%	100%	100%	100%	5.0	4.5	5.0	
Elk Antlered		NR	AR 221 - 223	Aug 25 - Sep 16	884	2	2	2	0.2%	100%	100%	50%	11.5	11.5	4.0	
Elk Antlered		NR	AR 231	Aug 25 - Sep 16	178	2	2	0	1%	100%	0%	100%	11.5	13.5	3.0	
Elk Antlered		NR	M 061, 071	Sep 01 - Sep 16	84	2	2	1	2%	100%	50%	100%	9.0	10.5	4.5	
Elk Antlered		NR	M 062, 064, 066 - 068	Sep 01 - Sep 16	63	1	1	0	2%	100%	0%	0%	16.0	19.0	5.0	
Elk Antlered		NR	M 072 - 074	Sep 17 - Sep 30	231	4	3	1	2%	75%	33%	100%	8.7	12.0	4.3	
Elk Antlered		NR	M 076, 077, 079, 081	Oct 22 - Nov 05	37	2	2	1	5%	100%	50%	100%	7.0	11.5	3.0	

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Hunt	RES /NR	Species	Weapon Unit Group	2021			Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Tags Issued	Afield									
Elk Antlered		NR	M 078, 105 - 107, 109	Oct 05 - Oct 21	82	1	1	0	1%	100%	0%	0%	7.0	7.0	4.0
Elk Antlered		NR	M 104, 108, 121	Oct 22 - Nov 05	25	2	0	8%	50%	0%	0%	0.0	0.0	0.0	0.0
Elk Antlered		NR	M 111 - 115	Oct 22 - Nov 05	183	2	2	2	1%	100%	100%	50%	4.0	18.0	4.5
Elk Antlered		NR	M 161 - 164, 171 - 173	Oct 22 - Nov 05	18	2	2	1	11%	100%	100%	0%	6.5	8.5	4.0
Elk Antlered		NR	M 221 - 223	Oct 22 - Nov 05	127	2	2	1	2%	100%	50%	100%	6.5	8.0	3.0
Elk Antlered		NR	M 231	Oct 22 - Nov 05	26	1	1	0	4%	100%	0%	0%	7.0	8.0	5.0
Elk Antlerless		NR	ALW 061, 071	Sep 17 - Oct 04	253	35	33	14	14%	100%	42%	40%	5.0	6.1	3.9
Elk Antlerless		NR	ALW 061, 071	Nov 06 - Jan 01	141	30	15	6	21%	90%	40%	4.3	4.6	4.2	
Elk Antlerless		NR	ALW 062, 064, 066 - 068	Sep 17 - Oct 04	107	9	8	5	8%	100%	63%	2.9	4.4	4.9	
Elk Antlerless		NR	ALW 072 - 074	Oct 01 - Oct 20	86	7	7	4	8%	100%	57%	3.1	4.0	4.0	
Elk Antlerless		NR	ALW 072 - 075	Nov 21 - Jan 01	160	5	3	0	3%	100%	0%	3.7	4.7	3.0	
Elk Antlerless		NR	ALW 104, 108, 121	Sep 25 - Oct 04	95	5	5	4	5%	100%	80%	2.6	4.0	4.2	
Elk Antlerless		NR	ALW 104, 108, 121	Dec 05 - Jan 01	41	2	2	2	5%	100%	100%	4.5	5.0	4.5	
Elk Antlerless		NR	ALW 108, 131 - 132	Sep 25 - Oct 04	16	1	0	6%	100%	0%	0.0	0.0	0.0	0.0	
Elk Antlerless		NR	ALW 111, 112	Sep 25 - Oct 04	123	7	7	4	6%	100%	57%	3.7	5.1	3.9	
Elk Antlerless		NR	ALW 111, 112	Dec 05 - Jan 01	103	7	6	2	7%	100%	33%	3.0	3.3	3.5	
Elk Antlerless		NR	ALW 113	Sep 25 - Oct 04	20	1	1	1	5%	100%	100%	1.0	1.0	5.0	
Elk Antlerless		NR	ALW 113	Dec 05 - Jan 01	12	2	0	17%	100%	0%	0.0	0.0	0.0	0.0	
Elk Antlerless		NR	ALW 113N	Jan 02 - Jan 31	5	2	2	1	40%	100%	100%	2.0	2.0	2.0	
Elk Antlerless		NR	ALW 114, 115	Sep 25 - Oct 04	10	7	6	2	70%	100%	33%	3.5	3.8	3.0	
Elk Antlerless		NR	ALW 114, 115	Dec 05 - Jan 01	18	8	8	2	44%	100%	25%	4.0	6.4	2.5	
Elk Antlerless		NR	ALW 161 - 164	Oct 01 - Oct 20	71	7	5	3	10%	100%	60%	3.0	3.6	3.8	
Elk Antlerless		NR	ALW 161 - 164	Dec 05 - Jan 01	74	7	7	3	9%	100%	43%	3.3	4.3	3.4	
Elk Antlerless		NR	ALW 221	Sep 25 - Oct 04	9	4	4	2	44%	100%	50%	5.0	5.5	2.0	
Elk Antlerless		NR	ALW 221	Dec 05 - Jan 01	3	3	3	2	100%	100%	67%	4.0	4.0	3.0	
Elk Antlerless		NR	ALW 222 - 223	Sep 25 - Oct 04	12	4	4	0	33%	100%	0%	5.0	5.8	3.0	
Elk Antlerless		NR	ALW 222 - 223	Dec 05 - Jan 01	15	5	3	0	33%	100%	0%	3.3	4.7	2.3	
Elk Antlerless		NR	ALW 231	Sep 25 - Oct 04	56	5	5	3	9%	100%	60%	4.6	6.2	4.6	
Elk Antlerless		NR	ALW 231	Dec 05 - Jan 01	47	5	4	4	11%	80%	100%	3.3	3.8	5.0	
Elk Antlerless		NR	AR 061, 071	Aug 01 - Aug 15	7	6	5	2	86%	83%	40%	6.0	6.2	4.4	
Elk Antlerless		NR	AR 062, 064, 066 - 068	Aug 01 - Aug 15	1	1	1	0	100%	100%	0%	8.0	14.0	4.0	
Elk Antlerless		NR	AR 072 - 074	Aug 01 - Aug 24	9	1	1	0	11%	100%	0%	5.0	5.0	5.0	
Elk Antlerless		NR	AR 076, 077, 079, 081	Aug 01 - Aug 24	9	1	1	0	11%	100%	0%	5.0	5.0	3.0	
Elk Antlerless		NR	AR 078, 105 - 107, 121	Aug 01 - Aug 15	3	2	2	1	67%	100%	0%	4.0	7.0	5.0	
Elk Antlerless		NR	AR 104, 108, 121	Aug 01 - Aug 24	1	1	1	0	100%	100%	0%	4.0	4.0	2.0	
Elk Antlerless		NR	AR 108, 131 - 132	Aug 01 - Aug 24	5	1	1	0	20%	100%	0%	4.0	4.0	3.0	
Elk Antlerless		NR	AR 111, 112	Aug 01 - Aug 24	5	2	2	1	40%	100%	50%	7.5	8.5	5.0	
Elk Antlerless		NR	AR 113	Aug 01 - Aug 24	2	3	3	0	100%	100%	0%	9.7	10.3	3.0	
Elk Antlerless		NR	AR 114, 115	Aug 01 - Aug 24	4	3	1	1	75%	100%	100%	3.0	3.0	5.0	
Elk Antlerless		NR	AR 161 - 164	Aug 01 - Aug 24	2	2	1	1	100%	50%	100%	4.0	4.0	5.0	
Elk Antlerless		NR	AR 221 - 223	Aug 01 - Aug 24	4	3	2	1	75%	100%	50%	4.0	4.0	4.5	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Season	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Issued											
Elk Antlerless	NR	Elk	AR 231	2	1	Aug 01 - Aug 24	1	0	50%	100%	0%		6.0	6.0	5.0	
Elk Antlerless	NR	Elk	M 072 - 074	8	1	Sep 17 - Sep 30	1	1	13%	100%	100%		2.0	4.0	5.0	
Elk Antlerless	NR	Elk	M 076, 077, 079, 081	17	1	Sep 17 - Sep 30	1	0	6%	100%	0%		2.0	2.0	3.0	
Elk Antlerless	NR	Elk	M 078, 105 - 107, 109	6	2	Aug 16 - Aug 31	2	0	33%	100%	0%		5.0	12.5	3.0	
Elk Antlerless	NR	Elk	M 104, 108, 121	2	1	Sep 17 - Sep 24	1	0	50%	100%	0%		8.0	11.0	4.0	
Elk Antlerless	NR	Elk	M 108, 131 - 132	3	1	Sep 17 - Sep 24	1	1	33%	100%	100%		5.0	6.0	5.0	
Elk Antlerless	NR	Elk	M 111, 112	3	1	Sep 17 - Sep 24	1	1	100%	100%	100%		2.0	3.0	4.0	
Elk Antlerless	NR	Elk	M 113	1	1	Sep 17 - Sep 24	1	1	50%	100%	100%		3.0	3.5	5.0	
Elk Antlerless	NR	Elk	M 114, 115	4	2	Sep 17 - Sep 24	2	2	22%	100%	100%		3.5	3.5	5.0	
Elk Antlerless	NR	Elk	M 161 - 164	9	2	Sep 01 - Sep 16	2	2	100%	100%	33%		5.7	7.0	2.7	
Elk Antlerless	NR	Elk	M 221 - 223	3	3	Sep 17 - Sep 24	3	1	100%	100%	0%		3.0	3.0	1.0	
Elk Antlerless	NR	Elk	M 231	1	1	Sep 17 - Sep 24	1	0	100%	100%	0%		5.3	5.3	3.7	
Elk Antlerless	NR	Elk	ALW 061, 071	3	3	Oct 05 - Nov 05	3	1	100%	100%	33%	100%	0%	5.3	5.3	3.7
Elk Antlerless	NR	Elk	ALW 072 - 074	4	3	Oct 22 - Nov 20	4	2	75%	100%	67%	100%	0%	3.7	3.7	4.3
Elk Antlerless	NR	Elk	ALW 075	3	3	Oct 22 - Nov 20	3	3	100%	100%	100%	100%	67%	4.0	4.7	5.0
Elk Antlerless	NR	Elk	ALW 076, 077, 079, 081	16	15	Nov 06 - Dec 04	16	14	94%	93%	79%	14%	6.6	9.7	4.1	
Elk Antlerless	NR	Elk	ALW 104, 108, 121	2	2	Nov 06 - Nov 20	2	2	100%	100%	100%	0%	3.5	3.5	4.0	
Elk Antlerless	NR	Elk	ALW 111 - 115	5	5	Nov 06 - Dec 04	5	3	100%	100%	60%	100%	67%	8.6	8.6	2.6
Elk Antlerless	NR	Elk	ALW 221 - 223	3	3	Nov 06 - Dec 04	3	2	100%	100%	67%	100%	100%	4.7	6.3	5.0
Elk Antlerless	NR	Elk	ALW 231	11	9	Nov 06 - Dec 04	11	7	91%	100%	78%	71%	29%	4.3	4.7	4.4
Elk Antlerless	NR	Elk	ALW 231, 221 - 223	7	6	Nov 06 - Dec 04	7	4	86%	100%	67%	0%	4.2	4.7	4.8	
Elk Antlerless	NR	Elk	AR 061, 071	1	1	Aug 16 - Aug 31	1	0	100%	100%	0%		7.0	7.0	2.0	
Elk Antlerless	NR	Elk	AR 076, 077, 079, 081	14	11	Aug 25 - Sep 16	14	6	79%	79%	55%	83%	10.5	12.9	3.7	
Elk Antlerless	NR	Elk	AR 091	1	1	Aug 21 - Sep 10	1	0	100%	100%	0%		7.0	10.0	4.0	
Elk Antlerless	NR	Elk	AR 111 - 115	4	4	Aug 25 - Sep 16	4	3	100%	100%	75%	100%	6.8	6.8	4.5	
Elk Antlerless	NR	Elk	AR 221 - 223	4	4	Aug 25 - Sep 16	4	3	100%	100%	75%	100%	7.0	7.3	4.3	
Elk Antlerless	NR	Elk	AR 231	1	1	Aug 25 - Sep 16	1	1	100%	100%	100%	100%	3.0	3.0	5.0	
Elk Antlerless	NR	Elk	AR 231, 221 - 223	2	2	Aug 25 - Sep 16	2	1	100%	100%	50%	100%	3.5	3.5	4.5	
Elk Antlerless	NR	Elk	M 061, 071	1	1	Sep 01 - Sep 16	1	1	100%	100%	100%	0%	12.0	12.0	5.0	
Elk Antlerless	NR	Elk	M 072 - 074	8	8	Sep 17 - Sep 30	8	7	100%	100%	88%	100%	4.0	4.9	4.6	
Elk Antlerless	NR	Elk	M 075	5	5	Sep 17 - Sep 30	5	4	100%	100%	80%	100%	3.0	3.2	4.6	
Elk Antlerless	NR	Elk	M 076, 077, 079, 081	3	3	Oct 22 - Nov 05	3	2	100%	100%	67%	100%	5.3	5.3	3.3	
Elk Antlerless	NR	Elk	M 111 - 115	2	2	Oct 22 - Nov 05	2	1	100%	100%	50%	100%	5.5	7.0	3.5	
Elk Antlerless	NR	Elk	M 241, 242	1	1	Sep 17 - Sep 30	1	0	100%	100%	0%		5.0	5.0	4.0	
Private Lands Hunt-Antlerless Elk	NR	Elk	ALW 076,077,079,081	1	1	Aug 15 - Nov 30	1	1	100%	100%	100%		1.0	1.0	5.0	
Private Lands Hunt-Antlerless Elk	NR	Elk	ALW 231 (LVR)	8	7	Aug 01 - Dec 31	8	6	100%	100%	86%		2.7	2.7	5.0	
Silver State Elk	NR	Elk	ALW Most Units	1	1	Aug 01 - Dec 31	1	1	0.01%	100%	100%	100%	100%	8.0	11.0	5.0
Wildlife Heritage Elk	NR	Elk	ALW Most Units	2	2	Aug 01 - Dec 31	2	2	100%	100%	100%	100%	20.0	41.0	4.0	
Dream Elk	NR	Elk	SWR Most Units	1	1	Aug 01 - Jan 01	1	1	100%	100%	100%	100%	3.0	6.0	5.0	
Mountain Goat Either Sex	Res	Mountain Goat	ALW 101	1,903	1	Sep 01 - Oct 31	1	1	0.1%	100%	100%		4.0	4.0	5.0	
Mountain Goat Either Sex	Res	Mountain Goat	ALW 102	3,991	7	Sep 01 - Oct 31	7	5	0.2%	100%	60%		5.8	11.2	3.6	

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Hunt	RES /NR	Species	Weapon Unit Group	2021		Season	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Issued											
Mountain Goat Either Sex	Res	Mountain Goat	ALW 103	679	1	Sep 01 - Oct 31	1	1	0.1%	100%	100%		2.0	10.0	5.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 013	1	1	See Regulations	1	1	100%	100%	100%	100%	10.0	17.0	1.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 015	1	1	See Regulations	1	0	100%	0%	0%		4.0	8.0	5.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 034	2	1	See Regulations	2	1	100%	100%	100%	0%	2.0	4.0		
Damage Compensation Mule Deer	Res	Mule Deer	SWR 045	1	1	See Regulations	1	0	100%	0%	0%		15.0	20.0	2.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 051	2	2	See Regulations	2	0	100%	0%	0%		7.5	8.5	5.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 062	1	1	See Regulations	1	1	100%	100%	100%	100%	20.0	21.0	5.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 073	1	1	See Regulations	1	1	100%	100%	100%	100%	4.0	4.0	4.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 102	3	3	See Regulations	3	2	100%	67%	0%		11.3	19.7	1.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 103	1	1	See Regulations	1	0	100%	0%	0%		8.0	8.0		
Damage Compensation Mule Deer	Res	Mule Deer	SWR 121	2	2	See Regulations	2	1	100%	50%	100%	100%	4.5	4.5	3.5	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 132, 164	2	2	See Regulations	2	1	100%	100%	100%	100%	3.5	6.5	1.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 141	2	2	See Regulations	2	0	100%	0%	0%		3.5	3.5	2.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 144	1	1	See Regulations	1	0	100%	0%	0%		2.0	7.0	2.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 152	2	2	See Regulations	2	2	100%	100%	100%	100%	5.5	10.5	5.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 231	11	10	See Regulations	11	6	91%	60%	83%		7.7	9.8	2.4	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 231, 242	1	1	See Regulations	1	0	100%	0%	0%		14.0	17.0	1.0	
Damage Compensation Mule Deer	Res	Mule Deer	SWR 242	1	1	See Regulations	1	0	0%	0%	0%		0.0	0.0		
Mule Deer Antlered	Res	Mule Deer	ALW 011 - 013	65	65	Oct 05 - Nov 05	65	34	10%	95%	61%	44%	5.1	7.4	3.6	
Mule Deer Antlered	Res	Mule Deer	ALW 014	193	15	Oct 05 - Nov 05	15	7	8%	93%	58%	14%	5.2	6.3	3.5	
Mule Deer Antlered	Res	Mule Deer	ALW 015	171	35	Dec 11 - Jan 01	35	28	20%	94%	29%	88%	4.6	7.0	3.2	
Mule Deer Antlered	Res	Mule Deer	ALW 021	727	40	Dec 21 - Jan 01	40	37	6%	95%	46%	65%	4.0	8.1	3.3	
Mule Deer Antlered	Res	Mule Deer	ALW 022	361	45	Oct 05 - Nov 05	45	43	12%	98%	49%	33%	6.8	9.2	3.0	
Mule Deer Antlered	Res	Mule Deer	ALW 031	667	140	Oct 05 - Nov 05	141	123	21%	97%	64%	39%	5.4	7.1	3.8	
Mule Deer Antlered	Res	Mule Deer	ALW 032	160	85	Oct 05 - Nov 05	85	75	53%	98%	45%	41%	4.5	6.1	3.5	
Mule Deer Antlered	Res	Mule Deer	ALW 033	163	20	Oct 05 - Nov 05	20	17	12%	100%	65%	36%	5.1	7.8	3.8	
Mule Deer Antlered	Res	Mule Deer	ALW 034	103	30	Oct 05 - Nov 05	30	21	29%	93%	43%	22%	6.0	6.8	3.7	
Mule Deer Antlered	Res	Mule Deer	ALW 035	203	75	Oct 05 - Nov 05	75	60	37%	95%	45%	26%	5.8	8.0	3.3	
Mule Deer Antlered	Res	Mule Deer	ALW 041, 042	172	25	Oct 05 - Nov 05	25	3	15%	100%	15%	0%	6.2	9.0	3.4	
Mule Deer Antlered	Res	Mule Deer	ALW 043 - 046	395	70	Oct 05 - Oct 20	395	24	18%	96%	38%	38%	5.1	7.2	3.5	
Mule Deer Antlered	Res	Mule Deer	ALW 043 - 046	185	30	Oct 21 - Nov 05	185	9	16%	97%	32%	33%	5.4	6.9	3.4	
Mule Deer Antlered	Res	Mule Deer	ALW 051	865	170	Oct 05 - Nov 05	170	145	20%	97%	52%	42%	5.6	8.1	3.8	
Mule Deer Antlered	Res	Mule Deer	ALW 061, 062, 064, 066 - 068	2,025	800	Oct 05 - Oct 20	800	662	40%	96%	43%	27%	4.4	6.2	3.6	
Mule Deer Antlered	Res	Mule Deer	ALW 061, 062, 064, 066 - 068	836	95	Oct 21 - Nov 05	95	88	11%	99%	63%	55%	4.7	5.7	3.7	
Mule Deer Antlered	Res	Mule Deer	ALW 065	404	45	Oct 05 - Nov 05	45	43	11%	98%	63%	44%	5.0	7.7	3.1	
Mule Deer Antlered	Res	Mule Deer	ALW 071 - 079, 091	2,198	850	Oct 05 - Oct 20	2,198	433	39%	96%	57%	30%	4.6	6.1	3.6	
Mule Deer Antlered	Res	Mule Deer	ALW 071 - 079, 091	200	200	Oct 21 - Nov 05	200	183	11%	98%	70%	57%	5.5	7.1	3.6	
Mule Deer Antlered	Res	Mule Deer	ALW 081	727	65	Dec 11 - Jan 01	727	25	9%	100%	40%	44%	6.1	7.7	2.6	
Mule Deer Antlered	Res	Mule Deer	ALW 101 - 109	1,194	850	Oct 01 - Oct 16	1,194	181	71%	95%	28%	17%	4.4	5.8	3.2	
Mule Deer Antlered	Res	Mule Deer	ALW 101 - 109	1,032	850	Oct 17 - Oct 30	1,032	210	82%	96%	30%	25%	4.9	6.3	3.2	
Mule Deer Antlered	Res	Mule Deer	ALW 101 - 109	515	150	Oct 31 - Nov 08	515	126	29%	95%	59%	38%	4.8	6.1	3.7	

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Hunt	RES /NR	Species	Weapon Unit Group	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Issued									
Mule Deer Antlered	Res	Mule Deer	ALW 111 - 113	1,399	270	220	19%	94%	43%	19%	4.5	6.1	3.4	
Mule Deer Antlered	Res	Mule Deer	ALW 111 - 113	409	25	24	6%	100%	63%	53%	4.7	5.9	4.4	
Mule Deer Antlered	Res	Mule Deer	ALW 114, 115	209	60	50	29%	93%	48%	38%	4.9	7.1	3.7	
Mule Deer Antlered	Res	Mule Deer	ALW 114, 115	57	5	5	9%	100%	80%	75%	2.8	4.0	4.8	
Mule Deer Antlered	Res	Mule Deer	ALW 115	130	5	2	4%	100%	50%	0%	7.0	7.5	5.0	
Mule Deer Antlered	Res	Mule Deer	ALW 121	499	85	67	17%	98%	51%	15%	4.0	5.4	3.4	
Mule Deer Antlered	Res	Mule Deer	ALW 121	211	8	8	4%	100%	38%	67%	4.6	5.4	2.9	
Mule Deer Antlered	Res	Mule Deer	ALW 131 - 134	300	300	258	74	32%	29%	16%	4.7	6.2	2.8	
Mule Deer Antlered	Res	Mule Deer	ALW 131 - 134	332	30	26	8	9%	97%	31%	6.0	7.6	2.8	
Mule Deer Antlered	Res	Mule Deer	ALW 141 - 145	595	230	204	96	39%	47%	25%	4.4	6.0	3.7	
Mule Deer Antlered	Res	Mule Deer	ALW 141 - 145	201	25	21	9	12%	92%	44%	5.0	6.7	3.7	
Mule Deer Antlered	Res	Mule Deer	ALW 151 - 156	478	160	135	52	33%	97%	39%	4.9	6.6	3.3	
Mule Deer Antlered	Res	Mule Deer	ALW 151 - 156	158	15	15	11	9%	100%	45%	4.7	6.7	3.5	
Mule Deer Antlered	Res	Mule Deer	ALW 161 - 164	804	290	249	57	36%	99%	23%	5.1	6.9	3.1	
Mule Deer Antlered	Res	Mule Deer	ALW 161 - 164	357	35	30	8	10%	97%	27%	6.2	8.0	3.3	
Mule Deer Antlered	Res	Mule Deer	ALW 171 - 173	636	280	228	47	44%	98%	21%	4.2	5.9	3.3	
Mule Deer Antlered	Res	Mule Deer	ALW 171 - 173	205	190	165	40	93%	96%	24%	4.7	6.1	3.5	
Mule Deer Antlered	Res	Mule Deer	ALW 171 - 173	255	45	43	29	18%	100%	67%	3.7	5.0	4.2	
Mule Deer Antlered	Res	Mule Deer	ALW 181 - 184	597	150	123	46	25%	97%	37%	4.7	6.9	3.4	
Mule Deer Antlered	Res	Mule Deer	ALW 192	296	55	50	31	19%	98%	62%	4.5	6.5	3.8	
Mule Deer Antlered	Res	Mule Deer	ALW 194, 196	2,641	60	55	49	2%	98%	89%	5.8	10.2	4.3	
Mule Deer Antlered	Res	Mule Deer	ALW 195	291	25	23	17	9%	96%	74%	6.1	9.3	3.8	
Mule Deer Antlered	Res	Mule Deer	ALW 201, 204	307	20	19	9	7%	95%	47%	4.3	5.9	4.2	
Mule Deer Antlered	Res	Mule Deer	ALW 202, 205 - 208	245	40	38	24	16%	100%	63%	5.9	7.4	4.0	
Mule Deer Antlered	Res	Mule Deer	ALW 203	189	30	26	16	16%	93%	62%	5.9	9.0	4.2	
Mule Deer Antlered	Res	Mule Deer	ALW 211 - 213	217	50	46	20	23%	94%	43%	8.1	10.4	3.1	
Mule Deer Antlered	Res	Mule Deer	ALW 221 - 223	925	220	181	56	24%	98%	31%	4.8	7.3	3.1	
Mule Deer Antlered	Res	Mule Deer	ALW 221 - 223	455	130	114	25	29%	95%	22%	5.1	6.7	2.8	
Mule Deer Antlered	Res	Mule Deer	ALW 221 - 223	822	20	19	11	2%	95%	64%	5.0	6.6	2.9	
Mule Deer Antlered	Res	Mule Deer	ALW 231	1,787	140	120	76	8%	96%	63%	5.9	8.3	3.8	
Mule Deer Antlered	Res	Mule Deer	ALW 241 - 245	1,393	120	108	51	9%	98%	47%	7.7	10.9	3.1	
Mule Deer Antlered	Res	Mule Deer	ALW 251 - 254	81	30	27	1	37%	97%	4%	0%	5.8	8.4	2.6
Mule Deer Antlered	Res	Mule Deer	ALW 261 - 268	1,037	75	66	31	7%	99%	47%	5.8	9.6	3.3	
Mule Deer Antlered	Res	Mule Deer	ALW 271, 272	168	25	24	11	15%	100%	46%	7.3	10.7	2.7	
Mule Deer Antlered	Res	Mule Deer	ALW 291	597	45	40	31	8%	96%	78%	4.4	6.5	4.1	
Mule Deer Antlered	Res	Mule Deer	AR 011 - 013	49	20	20	12	5	41%	100%	4.5	6.4	4.0	
Mule Deer Antlered	Res	Mule Deer	AR 014	20	10	10	7	3	50%	100%	5.1	8.5	2.3	
Mule Deer Antlered	Res	Mule Deer	AR 015	8	5	3	0	63%	100%	0%	4.3	9.0	3.0	
Mule Deer Antlered	Res	Mule Deer	AR 021	41	15	14	1	37%	93%	7%	4.2	6.7	3.8	
Mule Deer Antlered	Res	Mule Deer	AR 022	31	15	15	2	48%	100%	13%	7.3	13.3	3.9	
Mule Deer Antlered	Res	Mule Deer	AR 031	32	20	18	6	63%	100%	33%	6.3	10.4	3.8	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Issued									
Mule Deer Antlered	Res	Mule Deer	AR 032	30	60	45	3	100%	97%	7%	5.9	7.4	3.0	
Mule Deer Antlered	Res	Mule Deer	AR 033	12	10	10	1	83%	100%	10%	7.3	8.2	3.6	
Mule Deer Antlered	Res	Mule Deer	AR 034	8	7	5	0	88%	100%	0%	6.2	8.8	2.8	
Mule Deer Antlered	Res	Mule Deer	AR 035	55	60	49	4	100%	97%	8%	6.3	9.0	3.3	
Mule Deer Antlered	Res	Mule Deer	AR 041, 042	20	15	12	2	75%	100%	17%	6.8	10.2	3.8	
Mule Deer Antlered	Res	Mule Deer	AR 043 - 046	65	60	47	3	92%	98%	6%	6.8	9.9	3.1	
Mule Deer Antlered	Res	Mule Deer	AR 051	67	55	50	16	82%	100%	32%	5.5	8.6	4.0	
Mule Deer Antlered	Res	Mule Deer	AR 061, 062, 064, 066 - 068	291	270	222	44	93%	98%	20%	6.9	10.0	3.6	
Mule Deer Antlered	Res	Mule Deer	AR 065	19	5	5	2	26%	100%	40%	9.6	12.4	2.8	
Mule Deer Antlered	Res	Mule Deer	AR 071 - 079, 091	355	280	242	50	79%	96%	21%	7.6	10.3	3.5	
Mule Deer Antlered	Res	Mule Deer	AR 071 - 079, 091	130	30	27	11	23%	97%	41%	6.1	7.3	3.7	
Mule Deer Antlered	Res	Mule Deer	AR 081	60	10	9	2	17%	100%	22%	8.3	8.6	3.9	
Mule Deer Antlered	Res	Mule Deer	AR 101 - 109	389	500	395	53	99%	98%	13%	6.6	8.8	3.3	
Mule Deer Antlered	Res	Mule Deer	AR 101 - 109	34	20	16	4	59%	100%	25%	6.1	8.6	3.2	
Mule Deer Antlered	Res	Mule Deer	AR 111 - 113	114	30	22	9	26%	100%	41%	6.3	7.3	4.1	
Mule Deer Antlered	Res	Mule Deer	AR 114, 115	91	70	55	6	77%	96%	11%	50%	6.4	9.0	4.0
Mule Deer Antlered	Res	Mule Deer	AR 121	29	15	10	3	52%	87%	30%	9.1	13.5	2.8	
Mule Deer Antlered	Res	Mule Deer	AR 121	22	3	3	1	14%	100%	33%	4.3	8.3	3.0	
Mule Deer Antlered	Res	Mule Deer	AR 131 - 134	168	60	51	14	36%	97%	27%	7.7	10.6	2.9	
Mule Deer Antlered	Res	Mule Deer	AR 141 - 145	213	200	163	29	94%	96%	18%	6.5	8.8	3.8	
Mule Deer Antlered	Res	Mule Deer	AR 151 - 156	75	60	51	17	80%	95%	33%	5.5	8.5	4.3	
Mule Deer Antlered	Res	Mule Deer	AR 161 - 164	189	140	108	13	74%	94%	12%	6.3	8.5	3.5	
Mule Deer Antlered	Res	Mule Deer	AR 171 - 173	209	200	156	12	96%	98%	8%	5.9	7.8	3.5	
Mule Deer Antlered	Res	Mule Deer	AR 181 - 184	79	60	47	2	76%	97%	4%	7.3	9.9	3.5	
Mule Deer Antlered	Res	Mule Deer	AR 192	34	15	11	3	44%	100%	27%	6.6	9.3	2.2	
Mule Deer Antlered	Res	Mule Deer	AR 192	46	20	18	5	43%	95%	28%	7.6	10.6	4.0	
Mule Deer Antlered	Res	Mule Deer	AR 194, 196	138	15	14	7	11%	100%	29%	9.1	14.9	4.3	
Mule Deer Antlered	Res	Mule Deer	AR 194, 196	108	18	19	10	17%	100%	53%	9.8	14.7	4.3	
Mule Deer Antlered	Res	Mule Deer	AR 195	31	5	4	1	16%	100%	25%	8.8	12.0	3.5	
Mule Deer Antlered	Res	Mule Deer	AR 201 - 202, 204 - 208	9	5	4	0	56%	100%	0%	8.0	12.8	2.3	
Mule Deer Antlered	Res	Mule Deer	AR 201, 204	20	5	4	1	25%	80%	25%	4.0	6.0	4.0	
Mule Deer Antlered	Res	Mule Deer	AR 202, 205 - 208	10	5	2	0	50%	100%	0%	2.0	3.7	2.5	
Mule Deer Antlered	Res	Mule Deer	AR 203	41	15	12	2	37%	100%	17%	7.0	9.0	3.8	
Mule Deer Antlered	Res	Mule Deer	AR 203	23	15	13	4	65%	93%	31%	6.2	10.0	4.6	
Mule Deer Antlered	Res	Mule Deer	AR 211 - 213	15	15	12	5	100%	100%	42%	4.9	7.8	4.5	
Mule Deer Antlered	Res	Mule Deer	AR 221 - 223	153	65	58	8	42%	100%	14%	8.7	12.9	3.0	
Mule Deer Antlered	Res	Mule Deer	AR 231	133	40	33	6	30%	95%	18%	7.8	10.5	3.7	
Mule Deer Antlered	Res	Mule Deer	AR 241 - 245	82	15	14	5	18%	100%	36%	8.3	13.1	3.8	
Mule Deer Antlered	Res	Mule Deer	AR 251 - 254	10	8	6	1	80%	100%	17%	8.2	12.4	2.8	
Mule Deer Antlered	Res	Mule Deer	AR 261 - 268	94	15	13	5	16%	100%	38%	9.9	15.1	4.2	
Mule Deer Antlered	Res	Mule Deer	AR 271, 272	15	10	8	2	67%	100%	25%	15.4	20.7	3.0	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Season	Apprs	Quota	Tags Issued	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Issued														
Mule Deer Antlered	Res	Mule Deer	AR 291	29	15	15	29	15	11	4	52%	93%	36%	25%	8.3	8.3	12.3	4.1	
Mule Deer Antlered	Res	Mule Deer	M 011 - 013	38	7	7	38	7	5	1	18%	100%	20%	0%	5.4	5.4	11.6	3.0	
Mule Deer Antlered	Res	Mule Deer	M 014	12	5	5	12	5	1	0	42%	100%	0%	0%	5.0	5.0	6.0	1.0	
Mule Deer Antlered	Res	Mule Deer	M 015	12	5	5	12	5	5	2	42%	100%	40%	100%	3.8	3.8	6.6	3.0	
Mule Deer Antlered	Res	Mule Deer	M 021	26	5	5	26	5	5	3	19%	100%	60%	67%	5.6	5.6	15.0	2.6	
Mule Deer Antlered	Res	Mule Deer	M 022	15	5	5	15	5	5	3	33%	100%	60%	33%	5.6	5.6	8.8	3.2	
Mule Deer Antlered	Res	Mule Deer	M 031	25	5	5	25	5	4	3	20%	100%	75%	67%	6.8	6.8	6.8	2.5	
Mule Deer Antlered	Res	Mule Deer	M 032	5	5	5	5	5	5	0	100%	100%	0%	0%	4.6	4.6	6.6	2.2	
Mule Deer Antlered	Res	Mule Deer	M 033	14	5	5	14	5	5	2	36%	100%	40%	50%	8.0	8.0	8.6	3.8	
Mule Deer Antlered	Res	Mule Deer	M 034	10	5	5	10	5	5	1	50%	100%	20%	0%	5.6	5.6	9.0	3.0	
Mule Deer Antlered	Res	Mule Deer	M 035	11	7	7	11	7	6	2	64%	100%	33%	0%	6.2	6.2	8.7	3.2	
Mule Deer Antlered	Res	Mule Deer	M 041, 042	14	10	10	14	10	9	2	71%	100%	22%	50%	4.4	4.4	6.9	4.0	
Mule Deer Antlered	Res	Mule Deer	M 043 - 046	31	20	20	31	20	18	6	65%	100%	33%	17%	7.5	7.5	10.3	3.6	
Mule Deer Antlered	Res	Mule Deer	M 051	50	15	15	50	15	14	6	30%	100%	43%	67%	5.6	5.6	8.6	4.2	
Mule Deer Antlered	Res	Mule Deer	M 061, 062, 064, 066 - 068	149	70	70	149	70	65	22	47%	99%	34%	59%	5.9	5.9	8.3	2.9	
Mule Deer Antlered	Res	Mule Deer	M 065	33	5	5	33	5	5	5	15%	100%	100%	60%	5.6	5.6	8.4	3.6	
Mule Deer Antlered	Res	Mule Deer	M 071 - 079, 091	192	85	85	192	85	69	31	44%	98%	45%	42%	5.8	5.8	7.9	3.6	
Mule Deer Antlered	Res	Mule Deer	M 081	284	20	20	284	20	19	12	7%	100%	63%	58%	6.3	6.3	7.9	3.2	
Mule Deer Antlered	Res	Mule Deer	M 101 - 109	117	80	80	117	80	65	10	68%	94%	15%	40%	5.8	5.8	8.0	3.0	
Mule Deer Antlered	Res	Mule Deer	M 111 - 113	71	15	15	71	15	13	6	21%	93%	46%	33%	6.9	6.9	10.0	3.4	
Mule Deer Antlered	Res	Mule Deer	M 114, 115	112	20	20	112	20	17	8	18%	95%	47%	100%	6.2	6.2	8.0	3.7	
Mule Deer Antlered	Res	Mule Deer	M 121	35	7	7	35	7	5	3	20%	100%	60%	33%	4.2	4.2	5.4	3.8	
Mule Deer Antlered	Res	Mule Deer	M 131 - 134	131	35	35	131	35	33	10	27%	100%	30%	20%	5.4	5.4	6.3	2.8	
Mule Deer Antlered	Res	Mule Deer	M 141 - 145	42	20	20	42	20	19	5	48%	95%	26%	60%	6.6	6.6	8.2	3.6	
Mule Deer Antlered	Res	Mule Deer	M 151 - 156	25	9	9	25	9	8	6	36%	100%	75%	50%	4.9	4.9	6.5	4.7	
Mule Deer Antlered	Res	Mule Deer	M 161 - 164	80	25	25	80	25	23	8	31%	100%	35%	25%	5.9	5.9	6.9	2.6	
Mule Deer Antlered	Res	Mule Deer	M 171 - 173	123	70	70	123	70	69	7	57%	100%	13%	29%	5.4	5.4	6.5	3.6	
Mule Deer Antlered	Res	Mule Deer	M 181 - 184	67	20	20	67	20	15	8	30%	95%	53%	13%	4.5	4.5	5.5	3.7	
Mule Deer Antlered	Res	Mule Deer	M 192	17	10	10	17	10	7	3	59%	90%	43%	67%	5.7	5.7	8.0	3.9	
Mule Deer Antlered	Res	Mule Deer	M 194, 196	56	5	5	56	5	5	3	9%	100%	60%	67%	6.4	6.4	6.8	3.2	
Mule Deer Antlered	Res	Mule Deer	M 195	11	5	5	11	5	5	0	45%	100%	0%	0%	9.2	9.2	11.2	2.4	
Mule Deer Antlered	Res	Mule Deer	M 201, 204	17	5	5	17	5	5	2	29%	100%	40%	50%	3.2	3.2	3.8	4.6	
Mule Deer Antlered	Res	Mule Deer	M 202, 205 - 208	18	10	10	18	10	7	4	56%	100%	57%	75%	3.6	3.6	4.7	4.2	
Mule Deer Antlered	Res	Mule Deer	M 211 - 213	15	8	8	15	8	7	4	53%	88%	57%	50%	4.7	4.7	5.6	3.9	
Mule Deer Antlered	Res	Mule Deer	M 221 - 223	78	15	15	78	15	14	7	19%	93%	50%	29%	8.0	8.0	13.2	2.9	
Mule Deer Antlered	Res	Mule Deer	M 231	119	20	20	119	20	19	9	17%	95%	47%	56%	6.8	6.8	12.1	3.4	
Mule Deer Antlered	Res	Mule Deer	M 241 - 245	67	7	7	67	7	7	2	10%	100%	29%	100%	11.0	11.0	17.4	3.0	
Mule Deer Antlered	Res	Mule Deer	M 251 - 254	6	5	5	6	5	2	0	83%	80%	0%	0%	2.0	2.0	3.0	2.5	
Mule Deer Antlered	Res	Mule Deer	M 261 - 268	64	20	20	64	20	16	8	31%	100%	50%	25%	8.4	8.4	14.8	3.9	
Mule Deer Antlered	Res	Mule Deer	M 271, 272	14	10	10	14	10	10	1	71%	100%	10%	0%	11.2	11.2	18.8	2.3	
Mule Deer Antlered	Res	Mule Deer	M 291	18	5	5	18	5	5	4	28%	100%	80%	25%	11.2	11.2	20.8	4.6	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	2021		Season	Apprs	Quota	Tags Issued	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				Quota	Issued														
Mule Deer Antlerless	Res	Mule Deer	ALW 051	568	25	25	568	25	15	6	4%	96%	40%	0%	3.0	3.0	3.4	3.1	
Mule Deer Antlerless	Res	Mule Deer	ALW 061, 062, 064, 066 - 068	990	120	120	990	120	97	65	12%	98%	67%	0%	2.6	2.6	3.4	4.1	
Mule Deer Antlerless	Res	Mule Deer	ALW 062, 067 - 068	453	120	120	453	120	89	65	26%	97%	73%	0%	2.3	2.3	3.3	3.9	
Mule Deer Antlerless	Res	Mule Deer	ALW 071 - 079, 091	290	290	290	290	290	227	161	27%	95%	71%	0%	2.5	2.5	3.4	4.2	
Mule Deer Antlerless	Res	Mule Deer	ALW 101, 102, 109	797	160	160	797	160	126	70	20%	98%	56%	0%	2.8	2.8	3.8	4.2	
Mule Deer Antlerless	Res	Mule Deer	ALW 114 - 115 (Baker Ranch)	241	40	40	241	40	27	12	17%	100%	44%	0%	2.9	2.9	3.7	2.8	
Mule Deer Antlerless	Res	Mule Deer	ALW 114 - 115 (Baker Ranch)	81	10	10	81	10	4	3	12%	100%	75%	0%	2.8	2.8	3.8	2.0	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 011 - 013	46	30	30	46	30	23	16	65%	93%	70%	36%	4.3	4.3	5.3	3.6	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 014	20	10	10	20	10	6	5	50%	90%	83%	50%	3.2	3.2	4.3	4.3	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 015	14	10	10	14	10	5	4	71%	90%	80%	33%	3.4	3.4	5.5	4.7	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 021	58	15	15	58	15	13	6	26%	93%	46%	20%	4.4	4.4	6.8	3.8	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 022	41	15	15	41	15	13	9	37%	93%	69%	29%	4.5	4.5	8.0	4.1	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 031	84	65	65	84	65	58	43	77%	94%	74%	32%	3.6	3.6	5.2	4.2	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 032	37	55	55	37	55	40	23	100%	93%	58%	44%	3.8	3.8	4.8	4.3	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 033	17	15	15	17	15	13	9	88%	100%	69%	44%	3.5	3.5	5.5	4.3	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 034	10	8	8	10	8	8	6	80%	100%	75%	17%	5.5	5.5	7.0	3.4	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 035	45	35	35	45	35	28	13	78%	97%	46%	10%	4.0	4.0	5.1	3.5	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 041, 042	18	15	15	18	15	9	2	83%	100%	22%	100%	4.8	4.8	7.5	3.3	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 043 - 046	95	70	70	95	70	54	31	74%	94%	57%	15%	5.6	5.6	7.9	3.9	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 051	104	70	70	104	70	56	31	67%	93%	55%	54%	5.6	5.6	7.6	3.9	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 061, 062, 064, 066 - 068	393	320	320	393	320	272	179	81%	97%	66%	34%	4.8	4.8	6.7	4.0	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 065	28	15	15	28	15	13	11	54%	87%	85%	45%	3.8	3.8	5.8	4.2	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 071 - 079, 091	496	380	380	496	380	341	264	77%	96%	77%	38%	4.9	4.9	6.7	4.0	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 081	82	35	35	82	35	30	20	43%	94%	67%	42%	5.4	5.4	7.3	3.2	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 101 - 109	419	490	490	419	490	397	192	100%	95%	48%	35%	5.3	5.3	6.9	3.5	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 111 - 113	195	120	120	195	120	104	80	62%	94%	77%	15%	3.6	3.6	5.2	4.0	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 114, 115	46	30	30	46	30	26	15	65%	97%	58%	22%	4.3	4.3	5.9	3.7	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 121	86	45	45	86	45	41	37	52%	93%	90%	30%	4.2	4.2	6.2	3.9	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 131 - 134	231	170	170	231	170	139	81	74%	96%	58%	30%	4.9	4.9	6.4	3.5	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 141 - 145	206	190	190	206	190	163	118	92%	95%	72%	40%	4.3	4.3	6.0	4.2	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 151 - 156	78	65	65	78	65	53	36	83%	91%	68%	48%	4.5	4.5	6.1	4.0	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 161 - 164	159	140	140	159	140	116	62	88%	97%	53%	27%	5.0	5.0	6.6	3.3	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 171 - 173	191	180	180	191	180	153	71	94%	99%	46%	27%	4.7	4.7	6.2	4.0	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 181 - 184	76	55	55	76	55	46	24	72%	91%	52%	35%	4.9	4.9	7.5	3.8	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 192	47	25	25	47	25	20	10	53%	100%	50%	78%	4.6	4.6	9.6	4.2	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 194, 196	202	1														

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	Season		2021 Quota		Tags Issued	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				See Regulations	See Regulations	270	170											
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 221 - 223	See Regulations	270	170	170	135	51	63%	89%	38%	33%	5.3	5.3	7.6	3.1	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 231	See Regulations	209	70	70	59	50	33%	94%	85%	43%	4.7	4.7	6.4	4.3	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 241 - 245	See Regulations	188	45	45	39	25	24%	98%	64%	41%	6.9	6.9	9.9	3.4	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 251 - 254	See Regulations	25	20	20	13	6	80%	95%	46%	40%	4.0	4.0	4.2	3.2	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 261 - 268	See Regulations	147	35	35	31	14	24%	97%	45%	27%	4.4	4.4	7.8	3.9	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 271, 272	See Regulations	19	10	10	9	5	53%	100%	56%	20%	7.9	7.9	11.3	2.6	
Mule Deer Junior Antlered/Antlerless	Res	Mule Deer	SWR 291	See Regulations	48	20	20	19	14	42%	95%	74%	69%	4.3	4.3	7.2	4.5	
PW Mule Deer Antlered	Res	Mule Deer	SWR Any Open Unit	Aug 10 - Jan 01	6,440	22	22	19	13	0.3%	91%	68%	77%	12.2	12.2	19.9	4.0	
Silver State Mule Deer	Res	Mule Deer	ALW Any Open Unit	Aug 01 - Dec 31	11,879	1	1	1	0	0.01%	100%	0%	100%	21.0	21.0	26.0	1.0	
Wildlife Heritage Mule Deer	Res	Mule Deer	ALW Any Open Unit	Aug 01 - Dec 31		2	2	2	1	100%	100%	50%	0%	13.5	13.5	19.0	2.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 011 - 013	Oct 05 - Nov 05	9	2	2	1	1	22%	50%	100%	0%	7.0	7.0	7.0	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 014	Oct 05 - Nov 05	2	1	1	1	0	50%	100%	0%	0%	4.0	4.0	4.0	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 015	Dec 11 - Jan 01	2	2	2	1	1	100%	100%	100%	100%	2.0	2.0	5.0	5.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 021	Dec 21 - Jan 01	8	2	2	1	0	25%	50%	0%	0%	5.0	5.0	5.0	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 022	Oct 05 - Nov 05	3	2	2	1	1	67%	100%	100%	100%	6.0	6.0	12.0	2.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 031	Oct 05 - Nov 05	20	8	8	7	5	40%	100%	71%	60%	5.7	5.7	5.7	3.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 033	Oct 05 - Nov 05	5	1	1	1	0	20%	100%	0%	0%	7.0	7.0	16.0	2.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 034	Oct 05 - Nov 05	2	2	2	2	1	100%	100%	50%	0%	5.0	5.0	5.0	2.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 035	Oct 05 - Nov 05	4	3	3	3	1	75%	100%	33%	100%	3.0	3.0	3.0	3.3	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 041, 042	Oct 05 - Nov 05	2	2	2	2	0	100%	100%	0%	0%	3.0	3.0	4.5	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 043 - 046	Oct 05 - Oct 20	9	4	4	3	3	44%	100%	100%	33%	2.7	2.7	3.7	3.7	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 043 - 046	Oct 21 - Nov 05	2	2	2	1	1	100%	50%	100%	0%	1.0	1.0	1.0	1.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 051	Oct 05 - Nov 05	27	8	7	6	4	30%	86%	67%	100%	4.0	4.0	4.0	3.7	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 061, 062, 064, 066 - 068	Oct 05 - Oct 20	46	40	40	36	29	87%	98%	81%	66%	4.1	4.1	5.1	3.9	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 061, 062, 064, 066 - 068	Oct 21 - Nov 05	23	5	3	3	3	22%	100%	100%	67%	4.0	4.0	4.3	3.3	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 065	Oct 05 - Nov 05	8	3	3	3	2	38%	100%	67%	50%	3.0	3.0	3.0	4.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 071 - 079, 091	Oct 05 - Oct 20	117	35	34	32	22	30%	97%	69%	82%	4.0	4.0	4.3	4.3	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 071 - 079, 091	Oct 21 - Nov 05	213	10	3	3	2	5%	100%	67%	50%	4.7	4.7	4.7	3.7	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 081	Dec 11 - Jan 01	91	3	3	3	2	3%				0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 101 - 109	Oct 01 - Oct 16	30	25	24	22	12	83%	92%	55%	67%	3.8	3.8	4.3	4.1	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 101 - 109	Oct 17 - Oct 30	29	27	25	23	9	93%	100%	39%	56%	4.0	4.0	4.9	3.4	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 101 - 109	Oct 31 - Nov 08	16	6	1	1	1	38%	100%	100%	100%	3.0	3.0	3.0	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 111 - 113	Oct 05 - Oct 20	15	11	8	7	4	73%	100%	57%	50%	5.9	5.9	6.6	2.3	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 111 - 113	Oct 21 - Nov 05	8	1	1	1	0	13%				0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 114, 115	Oct 05 - Oct 20	5	2	2	2	2	40%	100%	100%	100%	3.0	3.0	3.0	4.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 114, 115	Oct 21 - Nov 05	6	1	1	1	1	17%	100%	100%	100%	6.0	6.0	6.0	3.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 115	Dec 01 - Dec 15	30	1	1	1	0	3%				0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 121	Oct 05 - Oct 20	8	7	7	7	4	88%	100%	57%	75%	4.6	4.6	4.6	4.6	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 121	Oct 21 - Nov 05	2	1	1	1	1	50%	100%	100%	100%	5.0	5.0	5.0	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 131 - 134	Oct 05 - Oct 20	19	14	5	4	3	74%	100%	75%	67%	5.5	5.5	6.0	2.8	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 131 - 134	Oct 21 - Nov 05	10	2	1	1	0	20%	100%	0%	0%	9.0	9.0	13.0	3.0	

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	Season		2021 Quota		Tags Issued	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
				See Regulations	See Regulations	15	11											
Guided Mule Deer Antlered	NR	Mule Deer	ALW 141 - 145	Oct 05 - Oct 20	15	11	11	9	7	73%	100%	78%	57%	4.4	4.4	5.0	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 141 - 145	Oct 21 - Nov 05	6	1	1	1	1	17%	100%	100%	100%	1.0	1.0	3.0	5.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 151 - 156	Oct 05 - Oct 20	5	5	5	4	3	100%	80%	75%	33%	4.5	4.5	6.5	3.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 151 - 156	Oct 21 - Nov 05	2	1	1	1	0	50%	100%	0%	0%	5.0	5.0	5.0	1.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 161 - 164	Oct 05 - Oct 20	17	17	16	14	6	100%	94%	43%	33%	4.3	4.3	4.6	2.9	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 161 - 164	Oct 21 - Nov 05	2	2	2	2	0	100%	100%	0%	0%	6.0	6.0	8.5	1.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 171 - 173	Oct 05 - Oct 16	1	6	1	1	1	100%	100%	100%	100%	2.0	2.0	4.0	5.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 171 - 173	Oct 17 - Oct 30	5	6	5	5	5	100%	100%	100%	80%	5.0	5.0	5.2	4.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 171 - 173	Oct 31 - Nov 08	8	5	4	3	1	63%	100%	33%	0%	4.7	4.7	4.7	3.7	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 181 - 184	Oct 05 - Nov 05	7	5	5	5	5	71%	100%	100%	80%	2.4	2.4	2.4	4.6	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 192	Nov 05 - Nov 30	3	2	2	2	2	67%	100%	100%	0%	4.5	4.5	6.5	5.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 194, 196	Nov 05 - Nov 30	33	3	2	2	2	9%	100%	100%	100%	4.0	4.0	4.5	5.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 195	Oct 05 - Nov 02	5	1	1	1	1	20%	100%	100%	0%	4.0	4.0	4.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 202, 205 - 208	Nov 05 - Nov 30	3	2	2	2	2	67%	100%	100%	0%	2.5	2.5	2.5	4.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 203	Nov 05 - Nov 30	3	2	1	1	1	67%	100%	100%	100%	3.0	3.0	8.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 211 - 213	Nov 05 - Nov 30	8	3	2	2	1	38%	100%	50%	0%	4.0	4.0	4.0	2.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 221 - 223	Oct 05 - Oct 16	33	11	9	9	7	33%	100%	78%	71%	5.4	5.4	6.0	3.4	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 221 - 223	Oct 17 - Oct 30	52	6	6	6	3	12%	100%	50%	100%	4.5	4.5	4.7	3.5	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 221 - 223	Oct 31 - Nov 08	88	1	1	1	0	1%	0%			0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 231	Oct 05 - Oct 31	72	9	7	7	3	13%	100%	43%	100%	8.4	8.4	11.1	3.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 241 - 245	Oct 05 - Oct 31	855	6	3	3	0	1%	100%	0%	0%	6.3	6.3	7.0	1.0	
Guided Mule Deer Antlered	NR	Mule Deer	ALW 251 - 254	Oct 05 - Nov 02	5	3	3	3	0	60%				0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 261 - 268	Nov 05 - Nov 30	9	3	3	3	1	33%				0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 271, 272	Nov 05 - Nov 30	8	1	1	1	1	13%				0.0	0.0	0.0		
Guided Mule Deer Antlered	NR	Mule Deer	ALW 291	Nov 05 - Nov 30	2	2	2	2	2	100%	100%	100%	100%	1.5	1.5	3.0	5.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 012	See Regulations		2	2	2	1		100%	50%	100%	2.5	2.5	2.5	3.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 013	See Regulations		3	3	3	1		100%	33%	100%	3.7	3.7	3.7	3.3	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 014	See Regulations		3	3	3	3		100%	100%	100%	3.0	3.0	3.0	4.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 022	See Regulations		1	1	1	1		100%	100%	100%	6.0	6.0	9.0	1.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 031	See Regulations		15	14	9	9		93%	64%	56%	6.0	6.4	6.4	3.9	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 031 - 032	See Regulations		2	2	2	2		100%	100%	0%	4.0	4.0	4.5	5.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 032	See Regulations		4	4	3	3		100%	75%	67%	4.5	5.3	4.0	4.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 034	See Regulations		5	5	5	5		100%	100%	80%	3.4	7.4	4.2	4.2	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 035	See Regulations		3	2	2	2		100%	100%	50%	4.5	4.5	4.5	3.5	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 051	See Regulations		16	13	11	11		94%	85%	82%	5.1	7.2	4.5	4.5	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 062	See Regulations		3	3	3	1		100%	33%	100%	8.7	8.7	8.7	1.0	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 073	See Regulations		4	4	4	3		100%	75%	33%	9.0	10.8	3.7	3.7	
Damage Compensation Mule Deer	NR	Mule Deer	SWR 075	See Regulations		1	1	1	1		100%	100%	100%	10.0	10.0	20.0	2.0	

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Hunt	RES /NR	Species	Weapon Unit Group	Season	Apps	2021 Quota	Tags Issued	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
Damage Compensation Mule Deer	NR	Mule Deer	SWR 115	See Regulations		2	2	2	2	100%	100%	100%	100%	100%	2.5	3.5	5.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 121	See Regulations		3	2	1	1	100%	100%	50%	100%	100%	4.0	7.0	4.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 131 - 132	See Regulations		3	3	0	0	100%	100%	0%			6.0	7.7	1.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 132	See Regulations		2	2	1	1	100%	100%	50%	100%	100%	6.0	7.0	3.5
Damage Compensation Mule Deer	NR	Mule Deer	SWR 132, 164	See Regulations		1	1	0	0	100%	100%	0%			7.0	8.0	1.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 132, 221	See Regulations		2	2	1	1	100%	100%	50%	100%	100%	4.5	4.5	3.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 141	See Regulations		2	2	2	2	100%	100%	100%	100%	100%	2.5	5.0	4.5
Damage Compensation Mule Deer	NR	Mule Deer	SWR 143	See Regulations		3	3	0	0	100%	100%	0%			9.3	11.7	4.3
Damage Compensation Mule Deer	NR	Mule Deer	SWR 144	See Regulations		6	5	4	4	83%	83%	80%	50%	50%	7.6	8.4	4.4
Damage Compensation Mule Deer	NR	Mule Deer	SWR 152	See Regulations		3	3	3	3	100%	100%	100%	100%	100%	4.7	7.3	5.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 163	See Regulations		4	3	3	3	75%	100%	100%	33%	33%	2.7	2.7	5.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 223	See Regulations		2	2	2	2	100%	100%	100%	100%	100%	13.0	13.0	2.5
Damage Compensation Mule Deer	NR	Mule Deer	SWR 223, 242	See Regulations		2	2	1	1	100%	100%	50%	100%	100%	6.0	8.5	1.5
Damage Compensation Mule Deer	NR	Mule Deer	SWR 223, 245	See Regulations		4	4	4	4	100%	100%	100%	75%	75%	11.0	11.0	5.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 231	See Regulations		47	40	23	23	87%	87%	58%	87%	87%	8.5	12.0	3.3
Damage Compensation Mule Deer	NR	Mule Deer	SWR 231, 242	See Regulations		6	6	2	2	100%	100%	33%	50%	50%	10.8	15.5	3.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 241	See Regulations		3	2	0	0	67%	0%	0%			16.0	18.5	1.5
Damage Compensation Mule Deer	NR	Mule Deer	SWR 241, 242	See Regulations		4	2	0	0	100%	100%	0%			5.0	6.0	1.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 242	See Regulations		4	3	2	2	75%	67%	67%	100%	100%	6.3	8.0	2.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 242, 243	See Regulations		2	2	0	0	100%	100%	0%			15.5	18.0	3.0
Damage Compensation Mule Deer	NR	Mule Deer	SWR 272	See Regulations		1	1	0	0	100%	100%	0%			4.0	4.0	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 011 - 013	Oct 05 - Nov 05	254	5	4	4	4	2%	80%	100%	50%	50%	7.0	12.3	3.5
Mule Deer Antlered	NR	Mule Deer	ALW 014	Oct 05 - Nov 05	41	2	1	1	1	5%	50%	100%	100%	100%	6.0	6.0	
Mule Deer Antlered	NR	Mule Deer	ALW 015	Dec 11 - Jan 01	192	3	3	1	1	2%	100%	33%	100%	100%	5.3	7.7	2.0
Mule Deer Antlered	NR	Mule Deer	ALW 021	Dec 21 - Jan 01	215	3	3	1	1	1%	100%	33%	100%	100%	4.7	7.7	2.3
Mule Deer Antlered	NR	Mule Deer	ALW 022	Oct 05 - Nov 05	58	4	4	4	4	7%	100%	100%	75%	75%	4.8	7.3	2.7
Mule Deer Antlered	NR	Mule Deer	ALW 031	Oct 05 - Nov 05	275	7	5	5	5	3%	86%	100%	40%	40%	7.4	8.4	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 032	Oct 05 - Nov 05	55	8	6	3	3	15%	100%	50%	100%	100%	8.8	13.7	2.0
Mule Deer Antlered	NR	Mule Deer	ALW 033	Oct 05 - Nov 05	70	2	2	1	1	3%	100%	50%	0%	0%	3.5	4.5	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 034	Oct 05 - Nov 05	20	2	2	2	2	10%	100%	100%	50%	50%	5.0	5.0	2.0
Mule Deer Antlered	NR	Mule Deer	ALW 035	Oct 05 - Nov 05	47	5	5	3	3	11%	100%	60%	33%	33%	6.0	8.0	3.8
Mule Deer Antlered	NR	Mule Deer	ALW 041, 042	Oct 05 - Nov 05	29	3	2	1	1	10%	100%	50%	0%	0%	2.5	5.0	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 043 - 046	Oct 05 - Oct 20	44	6	6	3	3	14%	100%	50%	67%	67%	6.0	8.8	2.7
Mule Deer Antlered	NR	Mule Deer	ALW 043 - 046	Oct 21 - Nov 05	30	3	3	1	1	10%	100%	33%	100%	100%	5.3	6.7	2.7
Mule Deer Antlered	NR	Mule Deer	ALW 051	Oct 05 - Nov 05	208	15	15	11	11	7%	100%	85%	55%	55%	4.2	4.6	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 061, 062, 064, 066 - 068	Oct 05 - Oct 20	448	50	46	26	26	11%	96%	57%	62%	62%	5.1	6.6	3.3
Mule Deer Antlered	NR	Mule Deer	ALW 061, 062, 064, 066 - 068	Oct 21 - Nov 05	284	5	4	3	3	2%	100%	75%	100%	100%	7.0	7.2	3.8
Mule Deer Antlered	NR	Mule Deer	ALW 065	Oct 05 - Nov 05	71	5	5	2	2	7%	100%	40%	0%	0%	6.8	7.6	2.6
Mule Deer Antlered	NR	Mule Deer	ALW 071 - 079, 091	Oct 05 - Oct 20	589	60	54	33	33	10%	97%	61%	39%	39%	4.1	5.4	3.9
Mule Deer Antlered	NR	Mule Deer	ALW 071 - 079, 091	Oct 21 - Nov 05	1,046	15	14	10	10	1%	100%	71%	90%	90%	5.5	6.2	3.2
Mule Deer Antlered	NR	Mule Deer	ALW 081	Dec 11 - Jan 01	962	4	4	3	3	0.4%	100%	100%	67%	67%	5.7	6.3	3.7

TABLE 1. 2021 BIG GAME HARVEST BY SPECIES, RESIDENCY, SEX, WEAPON, AND UNIT GROUP

Hunt	RES /NR	Species	Weapon Unit Group	Season	Apps	2021 Quota	Tags Issued	Hunters Afield	Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
Mule Deer Antlered	NR	Mule Deer	ALW 101 - 109	Oct 01 - Oct 16	249	65	65	55	21	26%	91%	38%	52%	52%	6.0	7.0	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 101 - 109	Oct 17 - Oct 30	189	65	65	58	28	34%	95%	48%	61%	61%	5.5	6.0	3.2
Mule Deer Antlered	NR	Mule Deer	ALW 101 - 109	Oct 31 - Nov 08	223	10	10	8	5	4%	90%	63%	80%	80%	3.9	4.8	4.1
Mule Deer Antlered	NR	Mule Deer	ALW 111 - 113	Oct 05 - Oct 20	230	20	20	16	5	9%	95%	31%	60%	60%	5.0	6.8	3.1
Mule Deer Antlered	NR	Mule Deer	ALW 111 - 113	Oct 21 - Nov 05	118	2	2	2	1	2%	100%	50%	0%	0%	3.0	5.0	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 114, 115	Oct 05 - Oct 20	63	6	6	6	5	10%	100%	83%	80%	80%	3.5	5.5	4.5
Mule Deer Antlered	NR	Mule Deer	ALW 114, 115	Oct 21 - Nov 05	84	2	2	2	2	2%	100%	100%	100%	100%	9.0	10.0	4.5
Mule Deer Antlered	NR	Mule Deer	ALW 115	Dec 01 - Dec 15	197	2	2	2	1	1%	100%	50%	100%	100%	5.5	5.5	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 121	Oct 05 - Oct 20	72	2	2	2	2	3%	100%	100%	100%	100%	1.5	3.0	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 121	Oct 21 - Nov 05	74	2	2	2	1	3%	100%	50%	100%	100%	5.0	5.0	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 131 - 134	Oct 05 - Oct 20	221	20	20	17	4	9%	100%	24%	50%	50%	5.4	6.3	2.2
Mule Deer Antlered	NR	Mule Deer	ALW 131 - 134	Oct 21 - Nov 05	402	2	2	2	0	0.5%	100%	0%			6.5	9.5	1.5
Mule Deer Antlered	NR	Mule Deer	ALW 141 - 145	Oct 05 - Oct 20	120	15	15	12	7	13%	93%	58%	57%	57%	4.9	6.0	3.9
Mule Deer Antlered	NR	Mule Deer	ALW 141 - 145	Oct 21 - Nov 05	36	2	2	1	1	6%	100%	100%	0%	0%	6.0	9.0	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 151 - 156	Oct 05 - Oct 20	87	15	15	15	6	17%	100%	40%	50%	50%	3.8	5.1	2.8
Mule Deer Antlered	NR	Mule Deer	ALW 151 - 156	Oct 21 - Nov 05	33	2	2	1	1	6%	50%	100%	0%	0%	4.0	6.0	2.0
Mule Deer Antlered	NR	Mule Deer	ALW 161 - 164	Oct 05 - Oct 20	171	15	15	13	3	9%	87%	23%	67%	67%	6.7	9.2	2.2
Mule Deer Antlered	NR	Mule Deer	ALW 161 - 164	Oct 21 - Nov 05	73	2	2	2	1	3%	100%	50%	0%	0%	5.0	5.0	1.5
Mule Deer Antlered	NR	Mule Deer	ALW 171 - 173	Oct 05 - Oct 16	124	30	29	26	10	24%	100%	38%	30%	30%	4.5	6.6	3.6
Mule Deer Antlered	NR	Mule Deer	ALW 171 - 173	Oct 17 - Oct 30	19	15	15	15	6	79%	100%	40%	50%	50%	4.6	6.0	4.1
Mule Deer Antlered	NR	Mule Deer	ALW 171 - 173	Oct 31 - Nov 08	65	2	2	1	1	3%	100%	100%	0%	0%	1.0	1.0	5.0
Mule Deer Antlered	NR	Mule Deer	ALW 181 - 184	Oct 05 - Nov 05	85	15	15	14	7	18%	100%	50%	43%	43%	6.6	7.8	3.8
Mule Deer Antlered	NR	Mule Deer	ALW 192	Nov 05 - Nov 30	53	4	4	4	3	8%	100%	75%	100%	100%	2.8	3.8	4.8
Mule Deer Antlered	NR	Mule Deer	ALW 194, 196	Nov 05 - Nov 30	740	3	3	3	2	0.4%	100%	67%	50%	50%	7.0	9.0	2.7
Mule Deer Antlered	NR	Mule Deer	ALW 195	Oct 05 - Nov 02	16	2	2	1	1	13%	100%	100%	0%	0%	2.0	2.0	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 201, 204	Nov 05 - Nov 30	54	2	2	2	2	4%	100%	100%	100%	100%	7.5	7.5	3.5
Mule Deer Antlered	NR	Mule Deer	ALW 202, 205 - 208	Nov 05 - Nov 30	69	2	2	2	2	3%	100%	100%	50%	50%	6.0	7.5	4.5
Mule Deer Antlered	NR	Mule Deer	ALW 203	Nov 05 - Nov 30	39	2	2	2	1	5%	100%	50%	0%	0%	9.0	11.0	4.5
Mule Deer Antlered	NR	Mule Deer	ALW 211 - 213	Nov 05 - Nov 30	130	5	5	5	4	4%	100%	80%	25%	25%	8.2	11.2	3.4
Mule Deer Antlered	NR	Mule Deer	ALW 221 - 223	Oct 05 - Oct 16	130	15	15	13	3	12%	100%	23%	67%	67%	7.2	9.4	2.5
Mule Deer Antlered	NR	Mule Deer	ALW 221 - 223	Oct 17 - Oct 30	186	8	8	6	2	4%	88%	33%	100%	100%	4.5	4.8	2.7
Mule Deer Antlered	NR	Mule Deer	ALW 221 - 223	Oct 31 - Nov 08	1,155	2	2	2	2	0.2%	100%	100%	50%	50%	6.5	6.5	1.0
Mule Deer Antlered	NR	Mule Deer	ALW 231	Oct 05 - Oct 31	785	6	6	6	4	1%	100%	67%	0%	0%	11.0	15.2	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 241 - 245	Oct 05 - Oct 31	2,088	6	6	5	2	0.3%	83%	40%	50%	50%	10.0	10.8	2.4
Mule Deer Antlered	NR	Mule Deer	ALW 251 - 254	Oct 05 - Nov 02	27	2	2	2	0	7%	100%	0%			7.0	9.5	1.5
Mule Deer Antlered	NR	Mule Deer	ALW 261 - 268	Nov 05 - Nov 30	109	5	4	1	1	5%	100%	100%	0%	0%	6.0	6.0	4.0
Mule Deer Antlered	NR	Mule Deer	ALW 271, 272	Nov 05 - Nov 30	70	2	2	2	1	3%	100%	50%	100%	100%	12.5	12.5	3.0
Mule Deer Antlered	NR	Mule Deer	ALW 291	Nov 05 - Nov 30	56	4	4	2	2	7%	75%	100%	50%	50%	2.0	3.7	4.5
Mule Deer Antlered	NR</																

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Hunt	RES /NR	Species	Weapon	Unit Group	2021			Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
					Apps	Quota	Tags Issued									
Mule Deer Antlered	NR	Mule Deer	AR	021	27	2	2	0	7%	100%	0%	0%	7.0	7.0	7.0	3.5
Mule Deer Antlered	NR	Mule Deer	AR	022	3	2	2	1	67%	100%	100%	100%	6.0	6.0	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	031	11	2	2	0	18%	100%	0%	0%	13.0	10.0		
Mule Deer Antlered	NR	Mule Deer	AR	032	14	6	6	1	43%	100%	17%	0%	4.3	5.3	2.0	2.0
Mule Deer Antlered	NR	Mule Deer	AR	033	8	2	2	0	25%	100%	0%	0%	8.0	8.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	034	3	2	2	2	67%	100%	100%	50%	8.5	10.0	3.5	3.5
Mule Deer Antlered	NR	Mule Deer	AR	035	16	7	7	0	44%	100%	0%	0%	5.1	6.3	1.9	1.9
Mule Deer Antlered	NR	Mule Deer	AR	041, 042	5	2	2	0	40%	100%	0%	0%	3.0	3.5	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	AR	043 - 046	12	6	6	1	50%	100%	17%	100%	4.7	7.0	3.6	3.6
Mule Deer Antlered	NR	Mule Deer	AR	051	24	6	6	2	25%	100%	33%	100%	5.3	7.5	4.5	4.5
Mule Deer Antlered	NR	Mule Deer	AR	061, 062, 064, 066 - 068	79	30	30	9	38%	97%	35%	22%	5.6	6.8	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	065	22	2	2	0	9%	100%	0%	0%	7.0	7.0	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	AR	071 - 079, 091	160	30	30	8	19%	93%	31%	88%	5.3	6.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	071 - 079, 091	88	3	3	1	3%	100%	33%	100%	7.7	7.7	3.7	3.7
Mule Deer Antlered	NR	Mule Deer	AR	081	129	2	2	0	2%	100%	0%	0%	6.0	7.0	1.5	1.5
Mule Deer Antlered	NR	Mule Deer	AR	101 - 109	179	50	51	44	28%	94%	11%	40%	5.9	7.0	3.7	3.7
Mule Deer Antlered	NR	Mule Deer	AR	101 - 109	21	2	2	0	10%	100%	0%	0%	7.0	8.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	111 - 113	38	3	3	1	8%	100%	33%	0%	12.0	19.0	2.0	2.0
Mule Deer Antlered	NR	Mule Deer	AR	114, 115	47	7	7	6	15%	86%	33%	50%	5.8	5.8	4.3	4.3
Mule Deer Antlered	NR	Mule Deer	AR	121	9	2	2	1	22%	100%	50%	100%	4.0	4.5	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	AR	121	14	2	2	0	14%	100%	0%	0%	7.0	7.0	2.0	2.0
Mule Deer Antlered	NR	Mule Deer	AR	131 - 134	163	6	6	3	4%	100%	50%	67%	6.2	8.8	2.4	2.4
Mule Deer Antlered	NR	Mule Deer	AR	141 - 145	46	25	25	2	54%	100%	10%	100%	5.7	6.8	3.8	3.8
Mule Deer Antlered	NR	Mule Deer	AR	151 - 156	20	6	6	4	30%	100%	67%	25%	4.2	5.5	4.3	4.3
Mule Deer Antlered	NR	Mule Deer	AR	161 - 164	48	15	15	0	31%	93%	0%	0%	6.1	7.2	2.3	2.3
Mule Deer Antlered	NR	Mule Deer	AR	171 - 173	45	20	20	3	44%	90%	25%	33%	6.4	9.5	4.8	4.8
Mule Deer Antlered	NR	Mule Deer	AR	181 - 184	9	6	6	5	67%	83%	60%	67%	2.8	3.4	3.4	3.4
Mule Deer Antlered	NR	Mule Deer	AR	192	9	2	2	1	22%	100%	50%	0%	3.5	3.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	192	13	2	2	1	15%	100%	50%	0%	2.5	3.5	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	AR	194, 196	31	2	2	1	6%	50%	100%	100%	6.0	12.0		
Mule Deer Antlered	NR	Mule Deer	AR	194, 196	107	2	2	2	2%	100%	100%	50%	7.0	8.5	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	AR	195	8	2	2	1	0	25%	100%	0%	5.0	5.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	AR	201 - 202, 204 - 208	4	2	2	1	0	50%	100%	0%	4.0	5.0	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	AR	201, 204	16	2	2	2	13%	100%	100%	0%	4.0	6.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	AR	202, 205 - 208	10	2	2	1	0	20%	100%	0%	12.0	13.0	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	AR	203	8	2	2	0	25%	100%	0%	0%	7.5	9.0	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	203	8	2	2	0	25%	100%	0%	0%	2.0	7.0	4.5	4.5
Mule Deer Antlered	NR	Mule Deer	AR	211 - 213	6	2	2	2	33%	100%	100%	0%	5.5	9.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	AR	221 - 223	82	6	6	5	7%	100%	60%	67%	7.8	10.0	4.8	4.8
Mule Deer Antlered	NR	Mule Deer	AR	231	263	4	4	1	2%	100%	25%	100%	5.0	6.0	4.3	4.3
Mule Deer Antlered	NR	Mule Deer	AR	241 - 245	454	2	2	1	0.4%	100%	50%	100%	12.0	14.0	5.0	5.0

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Hunt	RES /NR	Species	Weapon	Unit Group	2021			Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
					Apps	Quota	Tags Issued									
Mule Deer Antlered	NR	Mule Deer	AR	251 - 254	3	2	2	1	67%	100%	0%	0%	1.0	1.0	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	AR	261 - 268	9	2	2	0	22%	100%	0%	0%	7.5	12.0	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	AR	271, 272	4	2	2	1	0	50%	100%	0%	8.0	9.0	1.0	1.0
Mule Deer Antlered	NR	Mule Deer	AR	291	7	2	2	1	29%	100%	100%	0%	1.0	3.0	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	011 - 013	18	2	2	1	11%	100%	50%	100%	9.0	13.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	014	5	2	2	1	40%	100%	50%	0%	2.5	3.0	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	M	015	15	2	2	0	13%	100%	0%	0%	7.0	8.0	3.5	3.5
Mule Deer Antlered	NR	Mule Deer	M	021	25	2	2	1	0	8%	50%	0%	1.0	2.0	1.0	1.0
Mule Deer Antlered	NR	Mule Deer	M	022	4	2	2	2	50%	100%	100%	50%	5.0	5.0	3.5	3.5
Mule Deer Antlered	NR	Mule Deer	M	031	16	2	2	1	13%	100%	100%	0%	3.0	3.0	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	M	032	6	2	2	0	33%	100%	0%	0%	4.0	4.0	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	M	033	5	2	2	1	40%	100%	50%	0%	3.5	5.0	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	M	034	9	2	2	1	22%	100%	50%	0%	2.5	4.5	4.5	4.5
Mule Deer Antlered	NR	Mule Deer	M	035	5	2	2	0	40%	100%	0%	0%	4.0	4.5	2.0	2.0
Mule Deer Antlered	NR	Mule Deer	M	041, 042	6	2	2	0	33%	100%	0%	0%	6.0	8.0	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	M	043 - 046	8	2	2	1	25%	100%	50%	100%	6.5	7.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	051	9	2	2	0	22%	100%	0%	0%	6.0	6.0	3.5	3.5
Mule Deer Antlered	NR	Mule Deer	M	061, 062, 064, 066 - 068	36	8	8	4	22%	100%	50%	50%	8.6	10.9	3.4	3.4
Mule Deer Antlered	NR	Mule Deer	M	065	10	2	2	0	20%	100%	0%	0%	7.0	8.5	1.5	1.5
Mule Deer Antlered	NR	Mule Deer	M	071 - 079, 091	68	7	7	3	10%	100%	43%	100%	8.0	12.7	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	M	081	388	2	2	2	1%	100%	100%	100%	6.5	7.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	101 - 109	32	9	8	6	28%	100%	33%	0%	6.2	7.3	3.2	3.2
Mule Deer Antlered	NR	Mule Deer	M	111 - 113	16	2	2	2	13%	100%	100%	0%	3.0	7.0	4.5	4.5
Mule Deer Antlered	NR	Mule Deer	M	114, 115	69	2	2	1	3%	100%	50%	100%	3.5	4.5	2.5	2.5
Mule Deer Antlered	NR	Mule Deer	M	121	9	2	2	2	22%	100%	100%	50%	5.0	7.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	131 - 134	64	4	3	0	6%	100%	0%	0%	8.0	12.3	2.7	2.7
Mule Deer Antlered	NR	Mule Deer	M	141 - 145	16	2	2	1	13%	100%	50%	100%	3.5	3.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	M	151 - 156	6	4	4	3	67%	100%	33%	0%	4.3	5.3	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	M	161 - 164	14	3	3	2	21%	100%	50%	100%	4.0	4.0	3.5	3.5
Mule Deer Antlered	NR	Mule Deer	M	171 - 173	20	7	7	3	35%	100%	43%	100%	4.7	5.1	3.2	3.2
Mule Deer Antlered	NR	Mule Deer	M	181 - 184	13	2	2	1	15%	100%	50%	0%	4.5	5.0	3.5	3.5
Mule Deer Antlered	NR	Mule Deer	M	192	6	2	2	1	33%	50%	0%	0%	2.0	5.0	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	M	194, 196	13	2	2	2	15%	100%	100%	50%	3.0	4.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	195	8	2	2	2	25%	100%	100%	100%	4.0	4.5	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	M	201, 204	16	2	2	2	13%	100%	100%	50%	2.0	2.0	4.0	4.0
Mule Deer Antlered	NR	Mule Deer	M	202, 205 - 208	18	2	2	1	11%	100%	0%	0%	3.0	3.0	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	211 - 213	9	2	2	2	22%	100%	100%	0%	3.5	3.5	5.0	5.0
Mule Deer Antlered	NR	Mule Deer	M	221 - 223	24	2	2	0	8%	100%	0%	0%	14.5	17.0	1.5	1.5
Mule Deer Antlered	NR	Mule Deer	M	231	70	2	2	0	3%	100%	0%	0%	13.5	16.5	4.5	4.5
Mule Deer Antlered	NR	Mule Deer	M	241 - 245	128	2	2	0	2%	100%	0%	0%	6.5	12.5	3.0	3.0
Mule Deer Antlered	NR	Mule Deer	M	251 - 254	5	2	2	0	40%	100%	0%	0%	3.0	4.0	2.0	2.0

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Hunt	RES /NR	Species	Weapon	Unit Group	Season	2021		Successful Hunters	Draw Rate	Survey Rate	Hunter Success	Points or Greater	Length or Greater	Hunt Days	Effort Days	Hunter Satisfaction
						Quota	Tags Issued									
Mule Deer Antlered	NR	Mule Deer	M	261 - 268	Sep 10 - Oct 04	2	11	2	18%	100%	100%	0%		5.5	7.0	4.5
Mule Deer Antlered	NR	Mule Deer	M	271, 272	Sep 10 - Oct 04	2	5	2	40%	100%	0%			4.5	5.5	2.0
Mule Deer Antlered	NR	Mule Deer	M	291	Sep 10 - Oct 04	2	7	2	29%	100%	0%			2.0	2.0	
P/W Mule Deer Antlered	NR	Mule Deer	SWR	Any Open Unit	Aug 10 - Jan 01	3	4,750	3	0.1%	100%	33%	100%		21.0	29.3	3.0
Dream Mule Deer	Res	Mule Deer	SWR	Any Open Unit	Aug 10 - Jan 01	1	1	0		100%	0%			21.0	31.0	2.0
Rocky Mountain Bighorn Sheep Any Ram	Res	Rocky Bighorn	ALW	074	Sep 01 - Oct 31	1	2,912	1	0.03%	100%	100%			1.0	6.0	5.0
Rocky Mountain Bighorn Sheep Any Ram	Res	Rocky Bighorn	ALW	114	Aug 01 - Feb 20	2	2,945	2	0.1%	50%	0%			21.0	42.0	1.0
Rocky Mountain Bighorn Sheep Any Ram	Res	Rocky Bighorn	ALW	115	Nov 15 - Feb 20	2	1,034	2	0.2%	100%	100%			13.0	15.5	3.0

**TABLE 2. 2021 MULE DEER POINT CLASS BY UNIT AND UNIT GROUP**

Unit of Harvest	Does	Fawns		Bucks by Antler Points					Unit Buck Total	Unit Group Buck Total	% 4+ pts	TOTAL DEER
		Female	Male	1	2	3	4	5+				
011	2				2	7	9	2	20			
012					1	1	9	10	25			
013	1				2	7	7	2	25	70	49%	73
014	1				1	4	5	7	20	20	50%	21
015	1						3	10	15	15	80%	16
021	1					3	9	14	29	29	59%	30
022	2					10	13	19	42	42	45%	44
031	7				3	31	54	50	146	146	40%	153
032	4		1		2	18	15	21	62	62	44%	67
033						4	11	8	25	25	40%	25
034						9	10	8	28	28	32%	28
035	3				1	16	19	10	49	49	27%	52
041						2	3	3	8			
042						1	1		2	10	30%	10
043	6				2	9	11	7	31			
044	4				1	5	7	7	21			
045	1					4	1	6	11			
046						5	3	1	9	72	33%	83
051	8		1		4	27	46	61	154	154	50%	163
061	25				5	56	32	21	120			
062	70		3		12	79	62	68	239			
064	9		1		1	8	12	9	34			
066	11	1			2	12	10	19	46			
067	19				2	16	13	32	64			
068	23		6		2	27	33	52	117			
unk^						1	2		3	623	38%	791
065					1	11	16	17	49	49	43%	49
071	40	1	2		2	30	33	38	106			
072	28		1		4	41	40	64	156			
073	31		1		6	32	34	30	105			
074	2				3	13	10	15	42			
075	33	2	1		6	98	89	105	310			
076	10				4	22	26	41	102			
077	25	1	1		8	29	32	39	116			
078	4					7	4	8	20			
079	3				1	1	4	5	13			
091						2	1		3			
unk^								3	3	976	40%	1,162
081	1				3	3	26	28	63	63	49%	64
101	38	1	1		11	50	48	53	172			
102	73		3		24	133	111	115	401			
103	14		1		3	33	21	14	71			
104	11				4	9	21	13	49			
105	1					2			3			
106	1					3	2	1	6			
107	1				1	2		1	4			

**TABLE 2. 2021 MULE DEER POINT CLASS BY UNIT AND UNIT GROUP**

Unit of Harvest	Does	Fawns		Bucks by Antler Points					Unit Buck Total	Unit Group Buck Total	% 4+ pts	TOTAL DEER
		Female	Male	1	2	3	4	5+				
108	6			2	9	6	4		21			
109	4				5	5	1		11			
unk^	2				1	1	2		4	742	32%	899
111	37	1		21	65	37	33	4	160			
112	1					5	2		7			
113		1			2	5	1		8			
unk^					1		1		2	177	23%	217
114	5		1		6	7	12	3	28			
115	15				3	14	19	9	45			
unk^							1		1	74	59%	95
121	5		2	13	23	20	30	2	88	88	36%	95
131	16		1	6	48	22	20	2	98			
132	13	1		5	14	19	15	2	55			
133	1				1	4	6		11			
134					1	2			3	167	27%	199
141	9			4	23	20	28	2	77			
142	3				1	2	4	1	8			
143	2			3	10	10	9	3	35			
144	19			7	27	35	32	1	102			
145				2	12	6	4		24			
unk^					1		1		2	248	34%	281
151					3	10	10	3	26			
152				2	6	13	13	4	38			
153	1					5	5	2	12			
154	1			1	10	10	8		29			
155					7	9	9	1	26			
156	1				1	3	3		7			
unk^						1			1	139	42%	142
161	13		1	7	14	24	10	3	58			
162	9		1	1	14	20	16		51			
163	4				7	8	6	1	22			
164						1	1		2			
unk^	1								0	133	28%	162
171	7			3	10	11	10	1	35			
172	4			3	14	11	19	1	48			
173	21	1		17	31	37	29	4	118			
unk^	1			1					1	202	32%	236
181	1		1	1	9	12	9	1	32			
182					1		1		2			
183	1			2	10	7	13	0	32			
184	1				5	6	15	1	27	93	43%	97
192	1			2	12	16	27	1	58	58	48%	59

**TABLE 2. 2021 MULE DEER POINT CLASS BY UNIT AND UNIT GROUP**

Unit of Harvest	Does	Fawns		Bucks by Antler Points					Unit Buck Total	Unit Group Buck Total	% 4+ pts	TOTAL DEER
		Female	Male	1	2	3	4	5+				
194					1	16	21	10	48			
196					5	12	23	3	43			
unk^							1		1	92	63%	92
195				1	3	9	9	3	25	25	48%	25
201				1	3	4	6	0	14			
204				1	1	2	4		8	22	45%	22
202	4			3	5	6	8		22			
205						3	1		4			
206				1	3	3	4		11			
207									0			
208				1					1	38	34%	42
203	1			1	4	8	15	2	30	30	57%	31
211	1				12	7	6	1	26			
212	3				6	7	9	1	23			
213					2		1		3	52	35%	56
221	3			2	10	12	11	5	40			
222	6			2	22	35	34	3	96			
223	3			1	11	9	11	3	35	171	39%	183
231	8			1	30	55	69	17	172	172	50%	180
241	2			1	5	7	9	7	29			
242	1			2	5	12	24	9	52			
243						1			1			
245						2	6		8	90	61%	93
251					1	3	1		5			
252	1						1		1			
253					1				1	7	29%	8
261	1				1	4			5			
262	1			1	19	15	15		50			
263	1			1		1	1		3			
264									0			
265									0			
268									0	58	28%	61
271					3	2	4		9			
272				1	2	3	3	2	11	20	45%	20
291	1				9	20	23	6	58	58	50%	59
<b>TOTAL</b>	<b>756</b>	<b>10</b>	<b>30</b>	<b>246</b>	<b>1,449</b>	<b>1,598</b>	<b>1,798</b>	<b>298</b>	<b>5,389</b>		<b>39%</b>	<b>6,185</b>

^unable to verify correct unit of harvest in unit group

**SPECIAL TAGHOLDER HARVEST BY UNIT**

HUNT	UNIT	#	HUNT	UNIT	#	HUNT	UNIT	#
PIW	021	2	PIW	194	2	SILVER	--	0
PIW	066	1	PIW	196	1	HERITAGE	242	1
PIW	115	3	PIW	241	1	HERITAGE	--	0
PIW	121	1	PIW	245	1	DREAM	--	0
PIW	181	1	PIW	291	1			

**TABLE 3. % FOUR-POINT OR GREATER MULE DEER HARVEST BY UNIT GROUP, 2012-2021**

Unit Group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
011- 013	40%	38%	38%	43%	46%	47%	50%	50%	53%	49%
014	54%	41%	40%	25%	32%	18%	27%	28%	18%	50%
015	47%	42%	36%	42%	33%	58%	65%	28%	50%	80%
021	47%	45%	46%	65%	57%	43%	62%	60%	55%	59%
022	67%	57%	51%	52%	52%	42%	32%	59%	51%	45%
031	39%	48%	50%	48%	43%	46%	38%	45%	43%	40%
032	27%	32%	34%	24%	23%	32%	28%	26%	22%	44%
033	26%	36%	44%	33%	63%	45%	41%	40%	52%	40%
034	45%	64%	45%	43%	49%	68%	32%	50%	43%	32%
035	39%	45%	30%	34%	41%	25%	29%	42%	30%	27%
041, 042	21%	27%	55%	46%	53%	37%	18%	23%	30%	30%
043 - 046	32%	33%	35%	33%	32%	31%	29%	39%	24%	33%
051	27%	38%	40%	40%	46%	41%	46%	46%	51%	50%
061,062,064,066-068	46%	40%	39%	39%	40%	42%	40%	41%	45%	38%
065	58%	58%	51%	54%	54%	66%	65%	49%	38%	43%
071 - 079, 091	40%	33%	33%	40%	51%	54%	56%	61%	54%	40%
081	65%	71%	87%	81%	79%	88%	88%	84%	78%	49%
101 - 108	30%	28%	27%	29%	32%	37%	34%	35%	36%	32%
111 - 113	24%	26%	25%	31%	32%	34%	33%	36%	30%	23%
114, 115	40%	41%	45%	44%	50%	55%	62%	64%	53%	59%
121	22%	36%	32%	31%	36%	36%	27%	27%	28%	36%
131 - 134	45%	43%	42%	44%	43%	51%	43%	45%	32%	27%
141 - 145	27%	30%	28%	23%	33%	30%	31%	30%	30%	34%
151, 152, 154, 155	32%	31%	37%	28%	41%	40%	37%	34%	43%	42%
161 - 164	34%	39%	30%	39%	44%	33%	36%	34%	30%	28%
171 - 173	26%	33%	28%	33%	25%	29%	29%	30%	36%	32%
181 - 184	37%	32%	36%	40%	41%	35%	42%	44%	31%	43%
192	41%	54%	38%	41%	44%	35%	35%	29%	31%	48%
194, 196	64%	61%	60%	72%	74%	72%	65%	58%	61%	63%
195	66%	25%	74%	36%	53%	60%	43%	35%	18%	48%
201, 204	42%	19%	23%	30%	21%	33%	32%	33%	36%	45%
202, 205-208	27%	49%	46%	28%	28%	29%	40%	28%	36%	34%
203	33%	42%	39%	38%	29%	33%	36%	38%	36%	57%
211, 212	39%	44%	55%	29%	28%	52%	35%	47%	46%	35%
221 - 223	42%	43%	37%	40%	49%	47%	48%	58%	43%	39%

**TABLE 3. % FOUR-POINT OR GREATER MULE DEER HARVEST BY UNIT GROUP, 2012-2021**

231	55%	55%	54%	61%	58%	65%	60%	62%	49%	50%
241 - 245	62%	62%	65%	69%	64%	75%	75%	82%	75%	61%
251 - 253	56%	53%	74%	67%	81%	41%	47%	56%	80%	29%
261 - 268	35%	27%	40%	57%	47%	43%	43%	58%	41%	28%
271, 272	54%	45%	65%	62%	46%	65%	33%	55%	55%	45%
291	22%	46%	34%	36%	33%	40%	38%	33%	50%	50%
<b>Statewide</b>	<b>37%</b>	<b>37%</b>	<b>37%</b>	<b>38%</b>	<b>41%</b>	<b>43%</b>	<b>41%</b>	<b>45%</b>	<b>43%</b>	<b>39%</b>

\*Includes harvest from all hunts and weapon classes combined

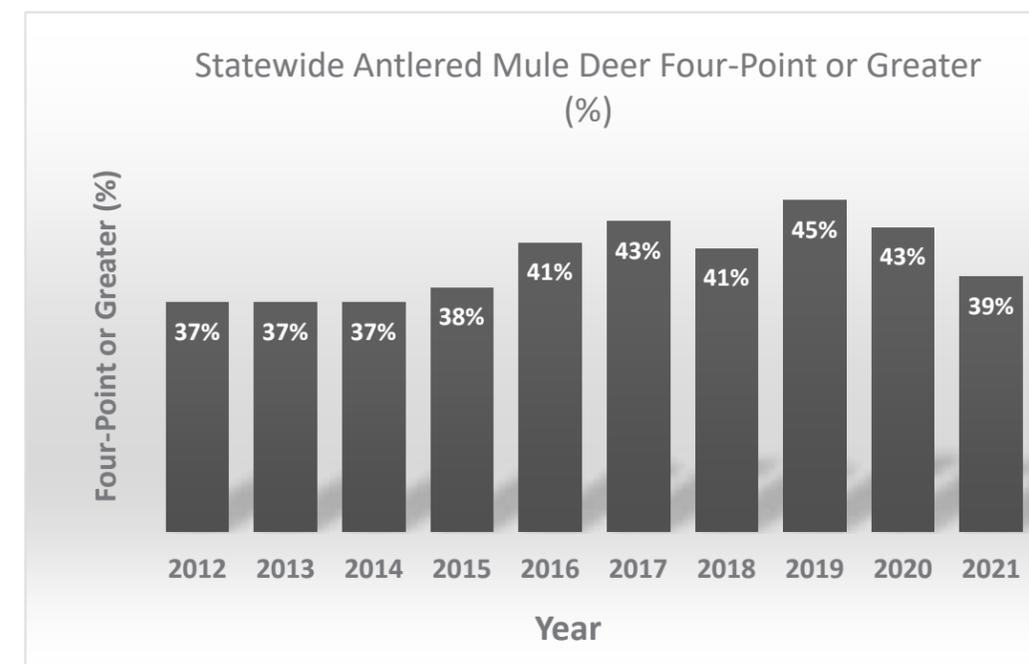


TABLE 4. 2021 PRONGHORN HARVEST BY UNIT FOR ALL HUNTS

Unit of Harvest	Fawns		Adult Does	Yrlg Bucks	Adult Bucks	Adults Bucks	All Pronghorn		Adult Buck % 15-in+
	Female	Male				Unit Group Total	Unit Total	Unit Group Total	
011			1		37	37	38	38	14%
012					57		57		
013					32		32		
014					24		24		
unk^					1	114	1	114	9%
015					44	44	44	44	7%
021					13		13		
022					23		23		
unk^					1	37	1	37	22%
031			3	2	75	75	80	80	4%
032			4		20		24		
034			2		17	37	19	43	3%
033					42	42	42	42	10%
035	1	1	4	1	26	26	33	33	12%
041			4		34		38		
042			4		27		31		
unk^					1	62	1	70	5%
043			6		39		45		
044			6	1	46		53		
045			1		6		7		
046		2	8		47		57		
unk^			1		2	140	3	165	12%
051					51	51	51	51	12%
061	2	2	21	4	17		46		
062		1	32	12	24		69		
064		1	7		5		13		
071	1		9	3	7		20		
073	1	2	17	5	29		54		
unk^			2			82	2	204	10%
065			4		15		19		
142					2		2		
144					4	21	4	25	19%
066		2	4	1	24	24	31	31	25%
067	1	2	15	3	26		47		
068	1	2	25	2	40		70		
unk^		1	1		1	67	3	120	22%
072	1		8	1	20		30		
074			9	2	6		17		
075		1	19	1	15	41	36	83	18%
076	1		5		24		30		
077			1	1	6		8		
079							0		

TABLE 4. 2021 PRONGHORN HARVEST BY UNIT FOR ALL HUNTS

Unit of Harvest	Fawns		Adult Does	Yrlg Bucks	Adult Bucks	Adults Bucks	All Pronghorn		Adult Buck % 15-in+
	Female	Male				Unit Group Total	Unit Total	Unit Group Total	
081			4		3		7		
091			1		3	36	4	49	22%
078			1				1		
105					1		1		
106							0		
107							0		
121			3		16		19		
unk^						17	0	21	18%
101			1		4		5		
102			3		8		11		
103					4		4		
104		1	2		32		35		
108			2		7		9		
109					1		1		
144			3	1	26		30		
unk^						82	0	95	20%
111			3	2	19		24		
112					2		2		
113							0		
114			6	1	3	24	10	36	8%
115		1	2	1	33		37		
231					20		20		
242						53	0	57	21%
131			15	1	10		26		
145					2		2		
163					4		4		
164					3		3		
unk^					1	20	1	36	15%
132					15		15		
133					10		10		
134					3		3		
245					7	35	7	35	23%
141	2	2	31	6	37		78		
143		2	13	1	12		28		
151	2		18	5	13		38		
152	1	4	25	3	24		57		
153	1	1	37	4	18		61		
154		1	20	6	11		38		
155	1	2	26	5	22		56		
156		2	42	9	35		88		
unk^			1			172	1	445	9%
161					29		29		

**TABLE 4. 2021 PRONGHORN HARVEST BY UNIT FOR ALL HUNTS**

Unit of Harvest	Fawns		Adult Does	Yrlg Bucks	Adult Bucks	Adults Bucks	All Pronghorn		Adult Buck % 15-in+
	Female	Male				Unit Group Total	Unit Total	Unit Group Total	
162					9	38	9	38	18%
171					17		17		
172					24		24		
173		1			9	50	10	51	10%
181			2		4		6		
182				1	5		6		
183		2	4	1	23		30		
184			6		23	55	29	71	16%
202					8		8		
204					1	9	1	9	0%
203					2		2		
291					7	9	7	9	11%
205					8		8		
206					11		11		
207					1		1		
208					1	21	1	21	0%
211					5		5		
212					5		5		
213					1	11	1	11	9%
221					13		13		
222					11		11		
223					7		7		
241					8	39	8	39	5%
251					47	47	47	47	15%
<b>TOTAL</b>	<b>16</b>	<b>36</b>	<b>494</b>	<b>86</b>	<b>1,618</b>			<b>2,250</b>	<b>13%</b>

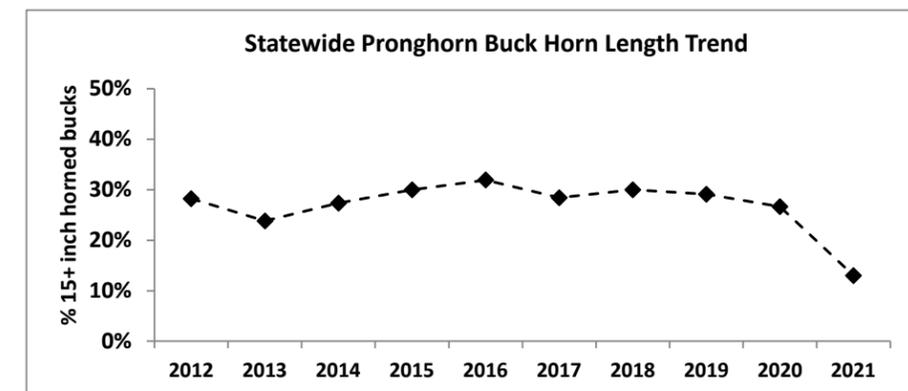
^unable to verify correct unit of harvest in unit group

**HERITAGE, SILVER STATE, DREAM AND PIW TAGHOLDER HARVEST BY UNIT**

HUNT	UNIT	#	HUNT	UNIT	#
PIW	076	1	Heritage	144	2
PIW	101	1	Silver	--	
PIW	152	1	Dream	011	1
PIW	161	1			

**TABLE 5. PRONGHORN HORN TRENDS - % OF BUCKS 15+ INCHES BY UNIT GROUP, 2012-2021**

Unit Group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
011	32%	22%	28%	30%	31%	30%	22%	24%	34%	14%
012 - 014	32%	15%	31%	35%	36%	26%	30%	22%	24%	9%
015	31%	10%	21%	25%	28%	26%	41%	31%	33%	7%
021, 022	41%	32%	55%	39%	46%	52%	43%	45%	42%	22%
031	27%	20%	18%	27%	19%	19%	34%	21%	9%	4%
032, 034	29%	27%	19%	18%	34%	13%	20%	10%	23%	3%
033	36%	19%	44%	48%	34%	30%	46%	37%	23%	10%
035	14%	16%	6%	18%	23%	22%	15%	26%	44%	12%
041, 042	40%	31%	26%	39%	41%	28%	25%	32%	25%	5%
043 - 046	40%	10%	24%	13%	33%	25%	33%	18%	27%	12%
051	20%	24%	21%	30%	21%	16%	32%	33%	24%	12%
061, 062, 064, 071, 073	26%	23%	31%	39%	32%	32%	33%	27%	23%	10%
065, 142, 144	33%	42%	39%	38%	32%	36%	25%	26%	27%	19%
066	29%	48%	36%	46%	58%	28%	40%	33%	10%	25%
067, 068	27%	24%	31%	33%	44%	40%	37%	34%	33%	22%
072, 074, 075	21%	28%	35%	35%	37%	26%	21%	25%	24%	18%
076, 077, 079, 081, 091	43%	50%	54%	60%	50%	55%	62%	57%	52%	22%
078, 105 - 107, 121	26%	8%	27%	19%	25%	27%	38%	24%	27%	18%
101 - 104, 108, 109, 144	21%	25%	34%	45%	31%	42%	29%	36%	35%	20%
111 - 114	13%	14%	8%	10%	17%	17%	14%	21%	22%	8%
115, 231, 242	40%	20%	22%	24%	24%	30%	24%	30%	29%	21%
131, 145, 163, 164	20%	27%	38%	29%	37%	33%	25%	28%	22%	15%
132 - 134, 245	32%	38%	37%	40%	36%	24%	44%	28%	26%	23%
141, 143, 151 - 156	31%	28%	24%	17%	28%	27%	27%	27%	18%	9%
161, 162	32%	35%	20%	41%	29%	35%	19%	39%	49%	18%
171 - 173	12%	27%	14%	21%	20%	12%	38%	40%	33%	10%
181 - 184	13%	19%	21%	21%	27%	27%	36%	40%	22%	16%
202, 204	0%	0%	0%	33%	20%	40%	100%	50%	0%	0%
203, 291	0%		25%	0%	20%	40%	0%	14%	33%	11%
205, 206, 207, 208	17%	13%	20%	25%	8%	22%	21%	21%	26%	0%
211, 212	50%	0%	100%	67%	29%	0%	0%	17%	13%	9%
221 - 223, 241	12%	14%	31%	33%	28%	23%	23%	14%	26%	5%
251	53%	46%	60%	42%	74%	33%	52%	50%	50%	15%
<b>Statewide</b>	<b>28%</b>	<b>24%</b>	<b>27%</b>	<b>30%</b>	<b>32%</b>	<b>28%</b>	<b>30%</b>	<b>29%</b>	<b>27%</b>	<b>13%</b>



**TABLE 6. 2021 ELK HARVEST BY UNIT AND UNIT GROUP FOR ALL HUNTS**

Unit	Female		Male	Unit Group	Number of Left Antler Points							Unit Bull	Unit Group	% 6+	Total
	Cows	Calves	Calves		Antlerless	1	2	3	4	5	6				
051	1			1						4		4	4	100%	5
061	20	1					1	3	7	13	2	26			
071	110	3	2	136	6	2		2	7	19	6	42	68	66%	204
unk^	1											0			
062	31	2	2					2	6	1		9			
064										1		1			
066	1										2	2			
067	1											2			
068				38								0	12	83%	50
065				0								0	0		0
unk^										1		1			
072	27	1			5	1	4	5	10	61	10	96			
073	4				5			2	3	10		20			
074	1			33					3	3	1	7	124	75%	157
075	7			7				3	16			19	19	84%	26
unk^										1		1			
076	14		1		2		1	2	7	17	2	31			
077	21		1		2	1	1		5	27	5	41			
079					1				1	7	1	10			
081	52		2	91	3	2		3	10	47	2	67	150	77%	241
unk^												0			
078	19		2							10	1	11			
105	16				1				2	8	1	12			
106	4				1				1	2	1	5			
107										3		3			
109	10	1		52	1				1	3	1	6	37	88%	89
091	8			8			1		2	6	1	10	10	70%	18
101	2	1	1		1			1	4	8	1	15			
102	10		2						5	9		14			
103	2			18		1			1	8		10	39	67%	57
104	5								3	4		7			
108	9		1		1			1		5		7			
121	49	4	1	69	5	1	2	2	15	32	4	61	75	64%	144
108										2		2			
131	3				2			3	4	21	2	32			
132	2			5				1	2	2	1	6	40	70%	45
unk^										2		2			
111	78		9		11	3	2	9	13	63	15	116			
112	7				1				2	7	3	13			
113	17				3	1			2	2		8			
114	32		1		5	1	1	1		13	1	22			
115	32	1	1	178	6	2		1	8	23	4	44	205	75%	383
144	2										1	1			
145				2				1	3			4	5	20%	7
161	5							2	4	7		13			
162	30	1	1		2	1	1	2	9	23	3	41			
163	2								1	4		5			
164												0			
171												0			
172												0			

**TABLE 6. 2021 ELK HARVEST BY UNIT AND UNIT GROUP FOR ALL HUNTS**

Unit	Female		Male	Unit Group	Number of Left Antler Points							Unit Bull	Unit Group	% 6+	Total					
	Cows	Calves	Calves		Antlerless	1	2	3	4	5	6					7+	Total	Bull Total	Pts*	Harvest
173												39	0	59	64%	98				
221	26		1		1	1	1		5	33	1	42								
222	40	1	1		10	2			5	13	34	10	74							
223	9									4	1	1	6	122	73%	200				
231	73	2	1		3	1	1	3	31	46	8	93	93	60%	169					
241	1								1			1								
242	3									2	2	4	5	40%	9					
251										3	1	4	4	100%	4					
262									1	1	1	2	5	5	40%	5				
<b>TOTAL</b>	<b>787</b>	<b>18</b>	<b>30</b>							<b>78</b>	<b>21</b>	<b>17</b>	<b>50</b>	<b>199</b>	<b>620</b>	<b>91</b>	<b>1,076</b>	<b>1,076</b>	<b>71%</b>	<b>1,911</b>

^ unable to verify correct unit of harvest in hunt group

\*% 6+ Pts omits reported harvest from spike-only hunts.

**HERITAGE, SILVER STATE, DREAM, AND PIW TAGHOLDER HARVEST BY UNIT**

HUNT	UNIT	#	HUNT	UNIT	#	HUNT	UNIT	#
PIW	115	1	Heritage	111	1	Silver State	222	1
PIW	223	1	Heritage	115	1	Dream	161	1
PIW	--							

TABLE 7. ELK 2021 ANTLER LENGTH BY UNIT GROUP

Unit Group	Count of Antlers by Class Size					Total	Response	Percent of Antlers by Class Size				Avg Beam Length (in)
	0"-29"	30"-43"	44"-49"	50" plus	50" plus			0"-29"	30"-43"	44"-49"	50" plus	
051	0	2	1	1	4	100%	0%	50%	25%	25%	46	
061, 071	2	27	18	9	56	92%	4%	48%	32%	16%	43	
062, 064, 066 - 068	0	3	5	3	11	92%	0%	27%	45%	27%	46	
065					0	--					--	
072 - 074	7	44	35	23	109	96%	6%	40%	32%	21%	43	
075	0	6	6	5	17	89%	0%	35%	35%	29%	46	
076, 077, 079, 081	5	46	52	33	136	96%	4%	34%	38%	24%	45	
078, 105 - 107, 109	1	8	11	13	33	97%	3%	24%	33%	39%	47	
091	1	3	3	2	9	90%	11%	33%	33%	22%	43	
101 - 103	3	14	13	7	37	95%	8%	38%	35%	19%	41	
104, 108 <sup>A</sup> , 121	1	28	14	20	63	90%	2%	44%	22%	32%	44	
108 <sup>B</sup> , 131, 132	3	8	13	12	36	88%	8%	22%	36%	33%	45	
111 - 115	8	44	39	71	162	93%	5%	27%	24%	44%	46	
144, 145	0	4	0	1	5	100%	0%	80%	0%	20%	42	
161 - 164, 171 - 173	3	16	14	20	53	91%	6%	30%	26%	38%	46	
221 - 223	4	29	27	45	105	96%	4%	28%	26%	43%	46	
231	3	28	31	21	83	92%	4%	34%	37%	25%	45	
241, 242	0	1	1	2	4	80%	0%	25%	25%	50%	49	
251	0	0	3	1	4	100%	0%	0%	75%	25%	49	
262	1	2	0	2	5	100%	20%	40%	0%	40%	41	
<b>Statewide</b>	<b>42</b>	<b>313</b>	<b>286</b>	<b>291</b>	<b>932</b>	<b>94%</b>	<b>5%</b>	<b>34%</b>	<b>31%</b>	<b>31%</b>	<b>45</b>	

TABLE 8. ELK 2021 COMPOSITION OF 50-IN BEAMS IN HARVEST, 2012-2021

Note: Historic main beam data has been updated to exclude spike hunt results from 2014-2021

Unit Group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	3-Yr Avg
051				100%	100%	29%	17%	50%	50%	25%	42%
061, 071	12%	10%	11%	21%	21%	22%	8%	19%	17%	16%	17%
062, 064, 066 - 068	24%	27%	37%	30%	25%	39%	37%	16%	32%	27%	25%
065			50%			0%	0%		100%		100%
072 - 074	32%	23%	30%	26%	26%	20%	23%	22%	21%	21%	21%
075	37%	13%	12%	28%	23%	10%	26%	17%	24%	29%	24%
076, 077, 079, 081	23%	18%	33%	22%	23%	17%	26%	24%	36%	24%	28%
078, 105 - 107, 109	40%	42%	42%	44%	35%	45%	68%	48%	55%	39%	48%
091	33%	0%	67%	25%	71%	60%	33%	63%	44%	22%	43%
101 - 103	14%	15%	5%	11%	4%	16%	17%	10%	34%	19%	21%
104, 108 <sup>A</sup> , 121	34%	38%	42%	29%	34%	42%	29%	45%	46%	32%	41%
108 <sup>B</sup> , 131, 132	20%	16%	70%	30%	19%	39%	39%	42%	39%	33%	38%
111 - 115	40%	46%	48%	48%	40%	44%	45%	49%	41%	44%	44%
144, 145	30%	20%	33%	11%	0%	17%	100%	0%	33%	20%	18%
161 - 164, 171 - 173	40%	40%	44%	32%	44%	25%	29%	40%	33%	38%	37%
221 - 223	32%	34%	47%	43%	39%	39%	25%	39%	35%	43%	39%
231*	42%	40%	39%	35%	29%	30%	16%	34%	34%	25%	31%
241, 242					100%	50%	20%	20%	20%	50%	30%
251							0%	100%	33%	25%	53%
262	33%	0%	20%	20%	0%	67%	25%	25%	0%	40%	22%
<b>Statewide</b>	<b>29%</b>	<b>26%</b>	<b>35%</b>	<b>32%</b>	<b>30%</b>	<b>29%</b>	<b>28%</b>	<b>32%</b>	<b>34%</b>	<b>31%</b>	<b>32%</b>

\*For 2008-2015, includes 50+ inch main beams from Unit Group 241, 242.

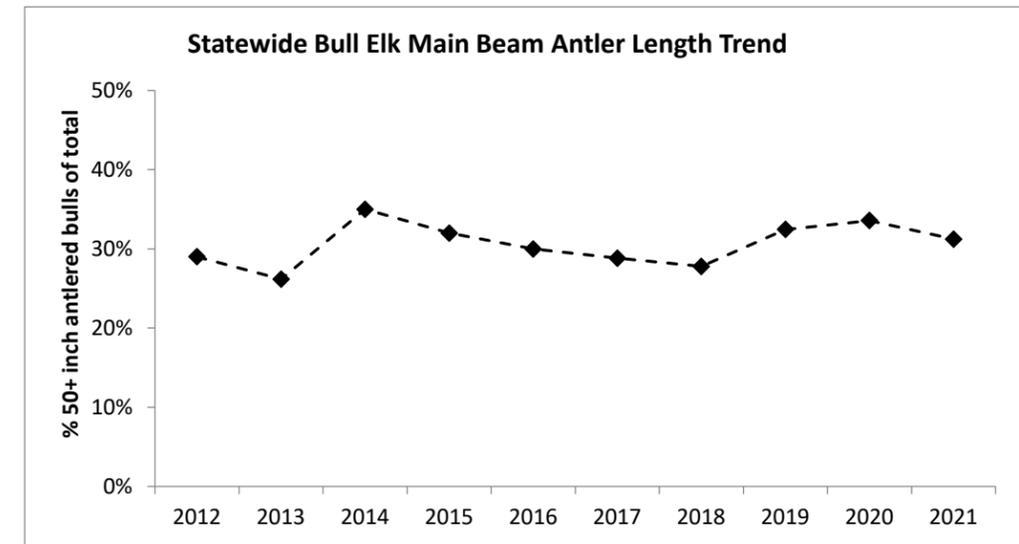


TABLE 9. INTENTIONALLY LEFT BLANK

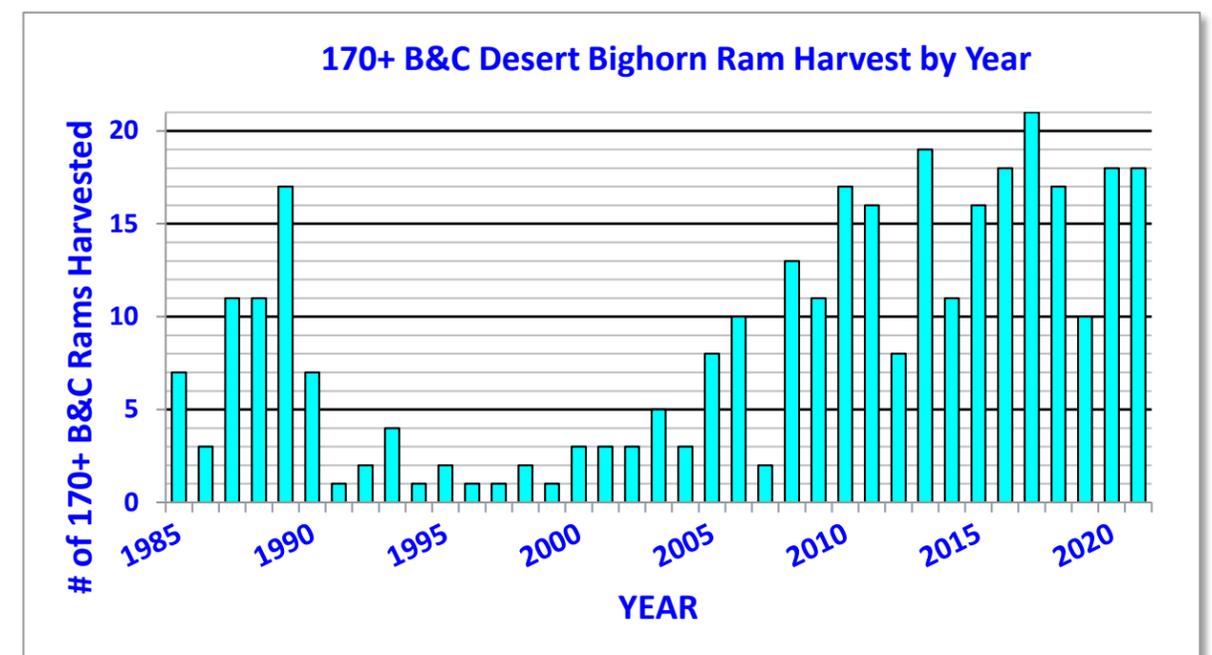
TABLE 10. BIGHORN SHEEP RAM HARVEST HISTORY

DESERT BIGHORN BY YEAR

Year	# Tags Issued	Percent Success**	Avg Days Hunted	Average Age	Average B&C Score	Maximum B&C Score	Maximum Horn Length
2002	140	81%	6.4	6.3	148 4/8	183 2/8	
2003	133	90%	6.2	6.4	150 7/8	173	38
2004	138	92%	6.1	6.1	150 3/8	174 6/8	39 3/8
2005	149	91%	4.7	6.5	153 1/8	176 5/8	37 6/8
2006	154	92%	5.5	6.7	152 3/8	177 6/8	39 7/8
2007	172	87%	6.1	6.4	149 5/8	172 7/8	37
2008	173	88%	5.8	6.3	152 3/8	178 5/8	39 4/8
2009	193	91%	5.2	6.2	153 3/8	177 4/8	39
2010*	216	86%	5.6	6.5	153 5/8	189 6/8	41
2011	222	87%	4.9	6.6	153 6/8	181 6/8	39 7/8
2012	281	85%	5.6	6.5	154	182 2/8	39 6/8
2013	275	91%	5.7	6.3	153 2/8	182 3/8	43 4/8
2014	287	90%	4.5	6.4	152 1/8	183 3/8	40 2/8
2015	307	92%	4.7	6.4	152 5/8	181 1/8	41 1/8
2016	310	92%	4.3	6.5	153 7/8	182 7/8	41 3/8
2017	334	94%	4.5	6.6	154 4/8	178 7/8	39 5/8
2018	309	91%	5.4	6.4	151 5/8	179 7/8	40 6/8
2019	311	89%	5.6	6.9	154 1/8	185	41
2020	315	95%	4.6	6.8	153 6/8	179 1/8	40 4/8
2021	321	82%	5.5	6.9	152 5/8	181 1/8	41 1/8
<b>Total/Avg</b>	<b>4,740</b>	<b>89%</b>	<b>5.4</b>	<b>6.4</b>	<b>152 2/8</b>	<b>189 6/8</b>	<b>43 4/8</b>

\* Includes Rocky Mtn Ram harvested in Unit 131

\*\*% Success doesn't include tags returned and not reallocated to alternates or 1st Come/1st Serve



**TABLE 10. BIGHORN SHEEP RAM HARVEST HISTORY**

**CURRENT COMPARISON - DESERT BIGHORN BY UNIT GROUP 2019 - 2021**

Unit	# Tags Issued	Percent Success	Average Ram Age	Max Horn Length	Maximum Horn Base	Average B&C Score	Max B&C Score
045, 153	22	83%	5.8	35 3/8	15 7/8	147 1/8	169 2/8
131, 164	8	57%	5.8	35 7/8	15 1/8	149 4/8	168 2/8
132	13	89%	5.5	32 5/8	15	138 6/8	150
134, 251	16	73%	6.5				
161	52	96%	6.0	34 6/8	16	151	173 4/8
162, 163	27	96%	5.9	37 5/8	16	151 2/8	173 5/8
173 N	14	50%	5.3	35 1/8	15 1/8	144 3/8	162 1/8
173 S	5	80%	6.5	34 4/8	14 4/8	158 3/8	164 4/8
181	60	98%	6.7	36	16 3/8	156 5/8	175 2/8
044, 182	59	97%	5.8	37 4/8	16	154 2/8	174 6/8
183	19	100%	6.2	34 4/8	15 2/8	154 1/8	170 6/8
184	18	94%	6.0	34	15 5/8	149	163
202	16	93%	5.4	35 2/8	15 7/8	150 5/8	167 7/8
204	6	100%	5.5	32 6/8	15	150 2/8	156 5/8
205	32	81%	7.0	37	15 5/8	155 3/8	171
206, 208	12	73%	6.3	33 6/8	15	150 4/8	156 4/8
207	14	92%	6.3	35 4/8	15	144 1/8	167 5/8
211	40	85%	6.8	37 7/8	14 5/8	149 5/8	170 1/8
212	51	100%	7.8	35 4/8	15 2/8	150	165 4/8
213	51	90%	5.8	34 2/8	14 5/8	140 2/8	155 2/8
223, 221	11	90%	7.2	35 2/8	15 1/8	152 5/8	169 2/8
241	12	80%	6.8	33 4/8	15 1/8	160 5/8	165 6/8
243	16	67%	7.0	40 1/8	16 1/8	160 6/8	177 2/8
244	15	100%	7.6	37 2/8	15 4/8	155 4/8	176 4/8
245, 133	12	100%	6.1	32 5/8	16	141 3/8	163 3/8
252	11	90%	8.6	37 4/8	16	160 6/8	174 7/8
253	22	100%	7.9	36 4/8	15 7/8	159 1/8	167 4/8
254	11	82%	7.4	33 7/8	15 2/8	142 5/8	166 4/8
261	15	86%	7.7	34 4/8	15 2/8	150 4/8	175
262	17	75%	7.4	41	15 2/8	161 7/8	178 3/8
263	27	100%	8.0	40 4/8	16	164 6/8	179 1/8
264, 265	6	100%	7.0	35 2/8	14 2/8	151 7/8	152 6/8
267	30	97%	7.5	37 7/8	14 2/8	156 6/8	170 4/8
268	106	97%	7.5	40 6/8	16	160	185
271, 242	30	83%	8.0	38 2/8	15 4/8	162 3/8	179 7/8
272	3	33%	8.0	30 1/8	14 6/8	147 7/8	147 7/8
280	15	67%	9.0	39 4/8	15 1/8	158 6/8	173 2/8
281	21	75%	7.5	39 4/8	15 4/8	157	172 3/8
282	13	73%	8.6	39 4/8	16	168 2/8	179 2/8
283, 284	15	87%	6.5	37 4/8	15 5/8	147	169 7/8
286	15	100%	7.5	36 7/8	15 1/8	160 1/8	172 6/8

**TABLE 10. BIGHORN SHEEP RAM HARVEST HISTORY**

**ROCKY MOUNTAIN BIGHORN BY YEAR**

Year	# Tags Issued	Percent Success	Avg Days Hunted	Average Age	Average B&C Score	Maximum B&C Score
2002	3	100%	3.0	6.7	167 6/8	183 1/8
2003	6	100%	4.7	6.8	168 1/8	183 4/8
2004	6	83%	3.2	8.0	176 7/8	189 4/8
2005	6	83%	8.5	7.4	174 5/8	178 2/8
2006	6	83%	2.7	7.0	170 1/8	190 5/8
2007	9	100%	3.2	6.1	172	190 5/8
2008	13	92%	6.4	6.8	169 4/8	191 5/8
2009	11	100%	3.8	7.9	172 2/8	195 4/8
2010	4	100%	3.0	5.8	153 6/8	160 1/8
2011	5	60%	8.0	7.7	159 5/8	167 2/8
2012	8	88%	5.1	7.0	158	174 7/8
2013	7	100%	6.3	6.6	153 3/8	170
2014	5	80%	12.0	7.0	150	154 6/8
2015	4	25%	12.0	7.0	146 5/8	146 5/8
2016	5	40%	11.6	5.5	151 5/8	155 6/8
2017	6	67%	12.7	7.0	166 3/8	167 6/8
2018	5	100%	9.4	5.8	140 3/8	166 2/8
2019	7	71%	9.0	5.4	137 6/8	166 2/8
2020	6	50%	22.5	5.0	144	146 2/8
2021	5	80%	17.0	6.0	156 2/8	172
<b>Total/Avg</b>	127	84%	7.5	6.8	162	195 4/8

**CURRENT COMPARISON - ROCKY MOUNTAIN BIGHORN BY UNIT GROUP 2019 - 2021**

Unit	# Tags Issued	Percent Success	Average Ram Age	Max Horn Length	Maximum Horn Base	Average B&C Score	Max B&C Score
074	3	67%	5.0	30 3/8	14 6/8	146 4/8	151 2/8
091	1	100%	10.0	33 6/8	14 4/8	166 2/8	166 2/8
114	8	57%	5.3	32 3/8	15 3/8	145 5/8	147 7/8
115	6	67%	5.0	34	15 6/8	140	172

**TABLE 10. BIGHORN SHEEP RAM HARVEST HISTORY**

**CALIFORNIA BIGHORN BY YEAR**

Year	# Tags	Percent Success	Average Ram Age	Max Horn Length	Maximum Horn Base	Average B&C Score	Max B&C Score
2002	41	83%	5.8	6.4	146 3/8	165 7/8	
2003	39	87%	6.1	6.8	148 6/8	168 7/8	
2004	35	91%	5.7	7.3	152 2/8	166	
2005	39	90%	7.1	6.6	149 5/8	167 1/8	
2006	42	88%	7.3	6.8	151 5/8	171 3/8	
2007	43	100%	6.4	6.8	147 4/8	165 2/8	
2008	42	95%	6.1	7.1	152 3/8	172 4/8	
2009	48	98%	7.0	7.3	155 3/8	169 6/8	
2010	52	100%	6.4	7.4	156	175 1/8	
2011	58	95%	6.2	7.0	153 6/8	173 2/8	
2012	61	95%	6.1	7.0	148 3/8	169 4/8	
2013	67	92%	6.4	7.2	153 5/8	171 7/8	
2014	66	92%	6.1	7.0	153 1/8	173 4/8	
2015	63	89%	5.3	6.8	153	172 7/8	
2016	57	95%	6.4	6.8	152 1/8	172 3/8	
2017	57	95%	8.6	6.7	151 1/8	177 4/8	
2018	61	98%	7.7	6.4	149	175 6/8	
2019	59	88%	7.5	6.9	150 7/8	172	
2020	68	83%	9.1	7.0	152 6/8	171 5/8	
2021	59	86%	8.6	6.7	147 3/8	165	
<b>Total/Avg</b>	<b>1,057</b>	<b>90%</b>	<b>6.6</b>	<b>6.9</b>	<b>151</b>	<b>184 7/8</b>	

**CURRENT COMPARISON - CALIFORNIA BIGHORN BY UNIT GROUP 2019 - 2021**

Unit	# Tags Issued	Percent Success	Average Ram Age	Max Horn Length	Maximum Horn Base	Average B&C Score	Max B&C Score
011, 013	1	100%	5.0	29.0	13 3/8	138 6/8	138 6/8
012	13	92%	6.8	36.3	14 2/8	148	163 7/8
014	6	50%	7.0	31.4	14	141 3/8	145 7/8
022	7	100%	7.7	34.6	15 2/8	153 5/8	167 6/8
031	20	90%	7.2	33.5	15 4/8	156	164 6/8
032	36	91%	6.0	35.0	14 6/8	140 3/8	159
033	9	63%	5.8	33.0	15 4/8	147	160 7/8
034	29	75%	7.0	34.3	15 5/8	147 6/8	161 6/8
035	25	84%	7.1	36.0	16	157 6/8	169 6/8
041	2	100%	7.0	33.3	15	155 4/8	164 1/8
051	9	78%	6.9	31.5	15 1/8	150 2/8	157 4/8
066	3	67%	6.5	33.3	14 1/8	149 6/8	151 7/8
068	27	100%	7.4	38	15 6/8	156 7/8	172

**TABLE 11. MAXIMUM RAM HORN BASE AND LENGTH BY UNIT GROUP 2018-2021**

Unit Group	HORN BASE				HORN LENGTH			
	2018	2019	2020	2021	2018	2019	2020	2021
<b>DESERT BIGHORN</b>								
045, 153	15.1	15.9	15.4	14.5	32.3	32.4	35.4	31.5
131, 164	15.1	14.0	14.3	14.0	35.9	29.9	33.0	28.3
132	14.4	14.6	13.7	14.2	30.2	29.3	27.5	30.3
134, 251	15.1	15.4	15.8	15.1	32.5	33.0	33.8	30.5
161	15.1	16.0	15.3	15.8	34.8	34.8	33.8	32.3
162, 163	15.5	15.4	16.0	14.8	37.6	35.4	35.0	33.5
173 N	15.1	13.5	14.3	13.5	33.3	30.3	35.1	31.8
173 S	14.0	13.8	14.5	15.0	34.3	34.0	34.5	36.0
181	16.0	16.4	15.8	15.0	35.8	35.0	36.0	35.0
182, 044	16.0	15.6	15.1	15.4	35.5	37.5	35.5	36.1
183	15.0	15.3	15.0	14.6	34.5	34.3	33.8	35.3
184	15.0	15.6	14.9	15.5	34.0	33.5	33.3	32.0
202	15.9	15.3	15.0	15.0	34.0	35.3	33.0	32.6
204	15.0	14.5	14.5	14.6	28.6	31.0	32.8	30.3
205	15.6	15.6	15.0	15.4	36.6	35.3	37.0	35.1
206, 208	15.0	14.3	14.6	14.4	29.9	28.8	33.8	31.4
207	15.0	14.6	15.0	14.9	31.3	34.1	35.5	30.0
211	14.5	14.5	14.6	14.9	37.9	35.5	34.4	35.3
212	14.1	14.8	15.3	14.9	34.3	35.5	34.0	36.0
213	14.3	14.1	14.6	14.4	30.8	31.5	34.3	32.5
223	12.9	14.5	14.4	14.3	30.6	33.9	30.9	30.8
241	14.0	14.4	14.7	14.5	31.9	32.8	34.0	33.6
243	14.6	14.8	16.1	15.8	40.2	36.3	37.1	40.0
244	15.5	15.3	15.5	15.3	37.3	34.4	36.3	33.4
245, 133	14.0	16.0	14.4	15.4	29.9	32.6	31.8	33.8
252	16.0	15.0	15.4	14.1	34.4	34.3	37.5	34.5
253	15.9	14.8	14.3	15.5	36.5	36.0	36.5	39.0
254	15.3	13.8	15.1	14.1	33.0	32.0	33.9	33.0
261	14.6	14.0	15.3	15.5	34.5	32.3	34.4	33.0
262	15.0	15.3	15.0	14.6	36.4	41.0	35.5	34.5
263	15.1	14.9	16.0	15.4	36.9	36.9	40.5	40.0
264, 265, 266	14.0	14.6	14.2	12.9	33.6	30.9	33.1	32.9
267	14.3	14.3	14.1	14.3	37.4	36.0	37.9	36.5
268	15.5	16.0	15.6	15.0	40.8	39.5	38.5	41.1
271, 242	15.5	14.5	15.3	14.8	38.3	36.3	36.9	36.6
272	14.8			14.0	30.1			28.1

Cells Gray if 15.5" or bigger

Cells Gray if 36" or longer

TABLE 11. MAXIMUM RAM HORN BASE AND LENGTH BY UNIT GROUP 2018-2021

Unit Group	HORN BASE				HORN LENGTH			
	2018	2019	2020	2021	2018	2019	2020	2021
<b>DESERT BIGHORN</b>								
280	14.5	15.1	14.5	13.9	36.3	37.9	39.5	35.8
281	14.0	15.1	15.5	15.1	36.0	39.5	35.1	35.6
282	16.0	15.0	15.0	15.0	39.5	35.0	37.1	37.4
283, 284	15.6	15.3	14.6	15.3	33.5	37.5	35.6	38.8
286	15.0	15.1	15.0	15.0	36.5	36.9	36.3	34.5
<b>CALIFORNIA BIGHORN</b>								
011, 013				13.4				29.0
012	15.9	14.3	14.3	14.3	35.0	33.5	36.3	32.3
014	13.8	14.0	13.3	13.3	31.8	27.0	31.4	23.9
022	14.0	15.3	14.1	15.0	29.1	34.0	30.4	34.6
031	16.0	15.5	15.4	15.3	34.5	32.9	33.3	33.5
032	15.0	14.8	14.6	14.8	33.0	35.0	31.0	32.9
033	15.3	15.5	14.9	14.4	32.5	32.3	33.0	24.4
034	14.8	14.9	14.9	15.6	32.8	33.8	34.3	31.5
035	15.4	15.5	15.5	16.0	33.4	34.9	36.0	33.4
051	15.1	15.1	14.6	15.0	35.3	31.1	31.0	31.5
068	15.0	14.5	15.8	15.6	35.1	38.0	36.6	36.0
<b>ROCKY MOUNTAIN BIGHORN</b>								
114	15.3	15.4	13.9	15.0	30.9	30.4	32.4	29.8
115	15.5	13.8		15.8	28.5	24.8		34.0

Cells Gray if 15.5" or bigger

Cells Gray if 36" or longer

TABLE 12. BIGHORN SHEEP RAM MAXIMUM B&C SCORE TRENDS, 2014 - 2021

Unit Group	2014	2015	2016	2017	2018	2019	2020	2021
<b>DESERT BIGHORN</b>								
045, 153	165 6/8	156 4/8	161	156 7/8	157 3/8	157 6/8	169 2/8	154
131, 164	159 3/8	170 1/8	157 2/8	162 4/8	168 2/8	139 3/8	148 4/8	144 2/8
132	155		148 3/8	145 2/8	150	145 4/8	146 6/8	164 4/8
134, 251	158	156	156 3/8	161 5/8	160 2/8	163 6/8	164 5/8	155
161	162 6/8	156 2/8	164 7/8	162 3/8	160 7/8	173 4/8	161 2/8	158 2/8
162, 163	164	164	164	164 6/8	173 5/8	168 5/8	169 4/8	165
173 N	156 4/8	155 3/8	135 6/8	159	158 6/8	148 2/8	162 1/8	150 2/8
173 S	155 7/8	161 7/8	161 6/8	165 4/8	164 4/8	161 5/8	159 1/8	167 3/8
181	167 1/8	170 5/8	172	170 7/8	166 5/8	166 5/8	175 2/8	171 4/8
182, 044	168	172 7/8	163 2/8	164	168 6/8	174 6/8	165 3/8	165 7/8
183	161 3/8	165 4/8	165 2/8	170 2/8	168	170 6/8	161 7/8	163 6/8
184	161 3/8	152 1/8	146 2/8	158 4/8	161 2/8	163	157 2/8	167 3/8
202	155 7/8	165	157	151	163 2/8	167 7/8	158 4/8	164 6/8
204	147 7/8				155 4/8	154 1/8	156 5/8	141 2/8
205	166 6/8	163 6/8	177 2/8	169 1/8	170 5/8	169 2/8	171	172 4/8
206, 208	163 4/8	160 5/8	156 4/8	153 6/8	152 4/8	149 7/8	156 4/8	152 4/8
207	155 3/8	159 1/8	156 2/8	161 5/8	147 4/8	162	167 5/8	156 4/8
211	165 6/8	159 2/8	163 6/8	171 1/8	170 1/8	159 1/8	165 4/8	163 1/8
212	154	167 2/8	160 4/8	159 7/8	161 6/8	158 5/8	165 4/8	163 1/8
213	155 3/8	158 4/8	157 4/8	159 3/8	154 5/8	151 6/8	155 2/8	147 3/8
223, 241		157	156 3/8	175 6/8	154 2/8	169 2/8	168 6/8	157
241 SE	174 1/8	176 5/8	156 6/8	165 6/8	160 7/8	158	165 6/8	173 3/8
243	157 6/8	170 3/8	161 3/8	153	177 2/8	166 6/8	172 6/8	178 6/8
244	172 1/8	168 4/8	165 5/8	166 3/8	176 4/8	164 5/8	163 2/8	161 3/8
245, 133	156 6/8	153 6/8	165 2/8	162 2/8	153 1/8	163 3/8	153 6/8	162 2/8
252	173 4/8	173 7/8	164 4/8	164 6/8	172 4/8	162 6/8	174 7/8	161 6/8
253	172 1/8	176 5/8	180 4/8	172 2/8	167 4/8	166 2/8	165 5/8	180
254	146 2/8	161 3/8	167 6/8	150 6/8	165 2/8	154 4/8	166 4/8	158 6/8
261	168 3/8	157 4/8	160 7/8	164	158 1/8	151 1/8	175	158 6/8
262	177	163 4/8	175	178 7/8	172 7/8	178 3/8	172 5/8	161 7/8
263	165 2/8	181 1/8	173	178 6/8	168 7/8	169 2/8	179 1/8	181 1/8
264, 265, 266	166 3/8	174 2/8	161	154 3/8	151 2/8	152 6/8	153 5/8	144 4/8
267	172 7/8	160 3/8	168 5/8	170 4/8	170 4/8	164 1/8	169 6/8	166
268	183 3/8	170 2/8	175 6/8	173 1/8	175 2/8	185	171 7/8	171

Cells are gray if B&C Score is 168 or higher

**TABLE 12. BIGHORN SHEEP RAM MAXIMUM B&C SCORE TRENDS, 2014 - 2021**

Unit Group	2014	2015	2016	2017	2018	2019	2020	2021
<b>DESERT BIGHORN</b>								
271	165 7/8	171 1/8	168 5/8	172 7/8	179 7/8	166 7/8	171 6/8	171 4/8
272	170 6/8	161 5/8		164	147 7/8			149 3/8
280	161 4/8	150	162 4/8	162 4/8	164 2/8	173 2/8	172	163 6/8
281	157 2/8	169 7/8	165 3/8	165 5/8	162 2/8	172 3/8	160 3/8	165 5/8
282	170 3/8	174 1/8	174 5/8	176	179 2/8	174 4/8	175 3/8	175 5/8
283, 284	164	169	171 2/8	163 5/8	167 6/8	169 7/8	163 5/8	179
286	164 7/8	153 4/8	182 7/8	175 4/8	166 6/8	172 6/8	164	164 4/8

**CALIFORNIA BIGHORN**

011, 013								138 6/8
012	158 4/8	156 3/8	161	151 2/8	163 4/8	163 7/8	158 5/8	153
014	141	148	157 1/8	151 7/8	145 3/8	145 4/8	145 7/8	132 6/8
022	160 2/8	166 6/8	152 3/8	164 4/8	151 5/8	167 6/8	150 3/8	161
031	173 4/8	172 7/8	166 4/8	162 4/8	169 4/8	164 1/8	164 6/8	161 1/8
032	168 1/8	164 1/8	163 6/8	162 7/8	164 3/8	159	154 1/8	158 6/8
033	152 4/8	159 3/8	139 7/8	166 2/8	146 5/8	160 7/8	157 4/8	125 5/8
034	163	154 2/8	166 2/8	154 3/8	156 6/8	159 4/8	159 1/8	161 6/8
035	152 7/8	160 1/8	161	158 5/8	163 1/8	163 3/8	169 6/8	162 7/8
041		168 1/8	172 3/8	163 2/8	133 6/8	164 1/8	146 6/8	
051	155 7/8	161	165 3/8	177 4/8	175 6/8	155 5/8	149 6/8	157 4/8
066		163 4/8	150		155 6/8		147 4/8	151 7/8
068	149 5/8	156 7/8	165 4/8	164 6/8	162 4/8	172	171 5/8	165

**ROCKY MOUNTAIN BIGHORN**

074	154 6/8						141 5/8	151 2/8
091		146 5/8		162 6/8		166 2/8		
114	146		155 6/8	167 6/8	166 2/8	147 7/8	146 2/8	143 6/8
115	153 2/8		147 4/8		152 4/8	129 2/8		172

Cells are gray if B&C Score is 168 or higher

**TABLE 13. MOUNTAIN GOAT HARVEST HISTORY BY UNIT AND YEAR, 2012 - 2021**

Year	Tags	Harvest	Average Days Hunted	Average Age	Average Left Horn	Average Right Horn
<b>Unit 101 - East Humboldt Range</b>						
2012	2	2	3.0	5.5	8 2/8	8 2/8
2013	2	1	6.0	4.0	8 2/8	8 3/8
2014	5	5	1.8	7.0	8 3/8	8 4/8
2015	6	6	2.2	6.2	8	8 2/8
2016	4	3	10.5	5.3	8 2/8	7 7/8
2017	1	1	1.0	7.0	9 3/8	9 2/8
2018	1	1	4.0	10.0	9	9
2019	1	1	8.0	7.0	9 2/8	9 1/8
2020	1	1	3.0	4.0	8 5/8	8 3/8
2021	1	1	3.0	7.0	9	8 6/8
<b>Totals/Average</b>	<b>24</b>	<b>22</b>	<b>4.2</b>	<b>6.3</b>	<b>8 5/8</b>	<b>8 5/8</b>

**Unit 102 - Ruby Mountains**

2012	3	3	6.7	4.7	8 5/8	8 5/8
2013	4	4	4.0	6.3	8 4/8	7 2/8
2014	6	6	3.2	5.5	8 5/8	7
2015	5	5	7.4	5.0	8 1/8	8 6/8
2016	8	7	5.4	6.1	8 6/8	9 1/8
2017	7	5	8.3	4.8	8 6/8	8 2/8
2018	6	5	5.5	5.8	7 1/8	7 4/8
2019	6	4	6.3	6.0	7 3/8	8 1/8
2020	7	6	4.2	5.3	8 5/8	8 7/8
2021	7	3	5.8	4.0	8 4/8	8 3/8
<b>Totals/Average</b>	<b>59</b>	<b>48</b>	<b>5.7</b>	<b>5.3</b>	<b>8 2/8</b>	<b>8 2/8</b>

**Unit 103 - Pearl Peak Area, Southern Ruby Mountains**

2012	1	1	7.0	6.0	9 7/8	9 7/8
2013	1	1	2.0	5.0	9	9 2/8
2014	1	1	15.0	7.0	8 5/8	8 4/8
2015	1	1	6.0	2.0	7 2/8	7 4/8
2016	1	1	6.0	6.0	8 4/8	8 1/8
2017	1	1	2.0	2.0	8 4/8	9
2018	1	0	10.0			
2019	1	1	7.0	12.0	10 2/8	10 2/8
2020	1	1	2.0	4.0	9 2/8	9 1/8
2021	1	1	2.0	5.0	9 3/8	9 5/8
<b>Totals/Average</b>	<b>11</b>	<b>10</b>	<b>6.0</b>	<b>5.4</b>	<b>9</b>	<b>9</b>

**TABLE 13. MOUNTAIN GOAT HARVEST HISTORY BY UNIT AND YEAR, 2012 - 2021**

**ALL UNITS**

Year	Tags	Harvest	Hunter Success	# of Billies	# of Nannies	% Nannies
2011	11	11	100%	8	3	27%
2012	6	6	100%	4	2	33%
2013	7	6	86%	4	2	33%
2014	12	12	100%	9	3	25%
2015	12	12	100%	11	1	8%
2016	13	11	85%	8	3	27%
2017	9	7	78%	4	3	43%
2018	8	6	75%	4	2	33%
2019	8	6	75%	5	1	17%
2020	9	8	89%	5	3	38%
2021	9	5	56%	4	1	20%
<b>Total</b>	<b>104</b>	<b>90</b>		<b>66</b>	<b>24</b>	
<b>Average</b>	<b>9</b>	<b>8</b>	<b>87%</b>	<b>6</b>	<b>2</b>	<b>27%</b>

**TABLE 14. 2021 BLACK BEAR DRAW AND HUNT RESULTS**

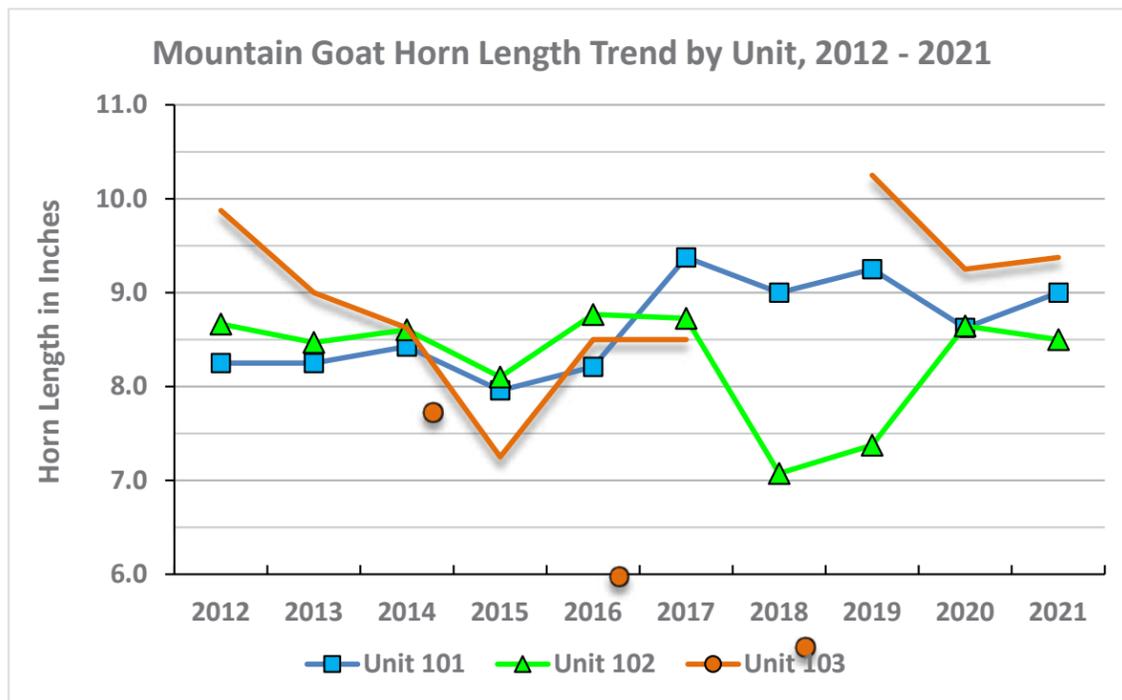
**BLACK BEAR HARVEST COMPOSITION\***

Year	Gender	Harvest	Mean Age	3-yr Average Age
2020	Males	6	9.3	7.7
	Females	7	5.9	5.2

\*see Table 1 for detailed hunt information (e.g., hunt success, days hunted, etc.)

**BLACK BEAR HARVEST BY UNIT**

Unit	# Bears		Total
	Male	Female	
192	0	0	0
194	2	1	3
196	1	0	1
201	2	0	2
202	0	0	0
203	0	0	0
204	1	0	1
291	7	0	7
<b>TOTAL</b>	<b>13</b>	<b>1</b>	<b>14</b>





**TABLE 17. LATE SUMMER/FALL 2021 DESERT BIGHORN SHEEP SURVEY COMPOSITION**

UNIT GROUP	2021			TOTAL	2021	2021	2020	2019
	RAMS	EWES	LAMBS		RAMS: 100 EWES	LAMBS: 100 EWES	LAMBS: 100 EWES	LAMBS: 100 EWES
045, 153	10	29	7	46	35	24	32	39
131, 164	6	7	6	19	86	86	--	38
132	12	24	10	46	50	42	--	35
134	23	63	26	112	37	41	--	22
161	66	166	49	281	40	30	--	35
162				--	--	--	--	--
163				--	--	--	24	--
173 S				--	--	--	21	--
173 N	3	23	10	36	13	44	--	39
181	119	243	17	379	49	7	18	40
182, 044	29	104	20	153	28	19	21	28
183	40	72	26	138	56	36	21	5
184	11	49	9	69	22	18	26	32
195				--	--	--	13	0
202	6	25	6	37	24	24	20	32
204				--	--	--	16	--
205, 207	84	182	17	283	46	9	5	39
206, 208	17	67	14	98	25	21	6	44
211	68	140	33	241	49	24	--	36
212	106	136	7	249	78	5	--	26
213				--	--	--	20	--
221, 223, 241				--	--	--	38	--
241 SE				--	--	--	--	8
243	35	116	17	168	30	15	--	25
244				--	--	--	49	--
245, 133				--	--	--	36	--
252				--	--	--	3	--
253	44	71	2	117	62	3	--	--
254				--	--	--	20	--
261				--	--	--	53	--
262	17	44	19	80	39	43	--	--
263	51	105	9	165	49	9	--	--
264				--	--	--	--	--
265				--	--	--	--	33
266				--	--	--	--	40
267	90	154	52	296	58	34	--	21
268	161	187	32	380	86	17	--	50
269				--	--	--	6	--
271	23	46	8	77	50	17	--	38
272				--	--	--	--	31
280				--	--	--	12	--
281	17	40	15	72	43	38	51	--
282	15	30	7	52	50	23	39	54
283, 284	30	41	17	88	73	42	--	26
286	20	30	5	55	67	17	--	45
<b>2021 TOTALS</b>	<b>1,103</b>	<b>2,194</b>	<b>440</b>	<b>3,737</b>	<b>50</b>	<b>20</b>		
<i>2020 TOTALS</i>	<i>934</i>	<i>1,856</i>	<i>397</i>	<i>3,187</i>	<i>50</i>	<i>21</i>		

**TABLE 18. LATE SUMMER/FALL 2021 CALIFORNIA BIGHORN SHEEP SURVEY COMPOSITION**

UNIT GROUP	2021				2021	2021	2020
	RAMS	EWES	LAMBS	TOTAL	RAMS/ 100 EWES	LAMBS/ 100 EWES	LAMBS/ 100 EWES
011, 013	4	33	6	43	12	18	--
012	8	43	8	59	19	19	41
014				--	--	--	39
021, 022	20	34	5	59	59	15	--
031	12	53	17	82	23	32	66
032				--	--	--	53
033	4	26	6	36	15	23	--
034				--	--	--	60
035	35	59	19	113	59	32	37
041	7	11	4	22	64	36	--
051	17	62	14	93	27	23	66
066	12	20	12	44	60	60	28
068	45	47	23	115	96	49	74
<b>2021 TOTALS</b>	<b>164</b>	<b>388</b>	<b>114</b>	<b>666</b>	<b>42</b>	<b>29</b>	
<i>2020 TOTALS</i>	<i>183</i>	<i>396</i>	<i>207</i>	<i>786</i>	<i>46</i>	<i>52</i>	

**TABLE 19. SUMMER/WINTER/EARLY SPRING 2021 - 2022 ROCKY MOUNTAIN BIGHORN SHEEP SURVEY COMPOSITION**

UNIT GROUP	2021-22				2021-22	2021-22	2020-21
	RAMS	EWES	LAMBS	TOTAL	RAMS/ 100 EWES	LAMBS/ 100 EWES	LAMBS/ 100 EWES
074	7	11	5	23	64	46	44
091	4	20	4	28	20	20	25
101	4	10	6	20	40	60	50
102	17	14	8	39	121	57	50
114	7	15	5	27	47	33	40
115	1	5	2	8	20	40	50
<b>2021-22 TOTALS</b>	<b>40</b>	<b>75</b>	<b>30</b>	<b>145</b>	<b>53</b>	<b>40</b>	
<i>2020-21 TOTALS</i>	<i>54</i>	<i>90</i>	<i>32</i>	<i>176</i>	<i>60</i>	<i>36</i>	

Units with (--) were not surveyed.

**TABLE 20. JANUARY 2022 MOUNTAIN GOAT SURVEY COMPOSITION**

UNIT GROUP	ADULTS	KIDS	TOTAL	2022	2021
				KIDS/ 100 ADULTS	KIDS/ 100 ADULTS
101	18	2	20	11	12
102	128	43	171	34	33
103	9	1	10	11	17
<b>2022 TOTALS</b>	<b>155</b>	<b>46</b>	<b>201</b>	<b>30</b>	
<i>2021 TOTALS</i>	<i>152</i>	<i>40</i>	<i>192</i>	<i>26</i>	

**TABLE 21. WINTER 2021-2022 ROCKY MOUNTAIN ELK SURVEY COMPOSITION**

UNIT GROUP	BULLS	COWS	CALVES	TOTAL	2021-2022		2020-2021
					BULLS/ 100 COWS	CALVES/ 100 COWS	CALVES/ 100 COWS
051	2	28	10	40	7	36	76
061, 071	533	1230	566	2,329	43	46	39
062, 064, 066-068	161	443	160	764	36	36	39
065				--	--	--	--
072 - 074	88	121	62	271	73	51	65
075				--	--	--	48
076, 077, 079, 081	298	649	317	1,264	46	49	38
078,104, 105-107	91	317	124	532	29	39	42
091	38	66	20	124	58	30	--
104,108,121	62	172	75	309	36	44	44
108,131 - 132	40	112	21	173	36	19	28
111 - 115	348	713	191	1,252	49	27	39
221 - 223	141	428	90	659	33	21	43
161 - 164	81	338	42	461	24	12	--
171 - 173				--	--	--	--
231	57	72	14	143	79	19	--
241, 242	1	24	5	30	4	21	--
262				--	--	--	6
<b>2021-2022 Totals</b>	<b>1,941</b>	<b>4,713</b>	<b>1,697</b>	<b>8,351</b>	<b>41</b>	<b>36</b>	
<i>2020-2021 Totals</i>	<i>1,643</i>	<i>4,389</i>	<i>1,785</i>	<i>7,817</i>	<i>37</i>	<i>41</i>	

Units with (--) were not surveyed.

**TABLE 22. 2022 MULE DEER POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
011 - 013	900	1,400
014	250	500
015**	190	230
021**	400	500
022	500	550
031	1,800	2,000
032***	850	950
033	320	400
034***	210	240
035	650	750
041, 042	650	700
043 - 046	1,500	1,700
051	2,000	2,100
061,062,064, 066 - 068	8,600	7,300
065	650	650
071 - 079, 091	11,000	11,100
081	850	900
101 - 108	13,500	13,000
111 - 113	3,100	3,600
114 - 115	1,000	1,100
121	1,700	2,100
131 - 134	2,200	4,300
141 - 145	4,400	3,900
151, 152 ,154, 155	2,500	2,000
161 - 164	2,100	3,600
171 - 173	3,100	3,400
181 - 184	1,200	1,250
192**	520	540
194, 196**	750	875
195	500	500
201, 204**	500	570
202, 205 - 208**	380	380
203	600	600
211, 213	400	400
221 - 223	3,000	3,800
231	2,500	3,300
241 - 245	1,200	1,300
251 - 254	400	400

**TABLE 22. 2022 MULE DEER POPULATION ESTIMATES**

261 - 268	500	500
271, 272	240	240
291	600	600
<b>TOTAL</b>	<b>78,000</b>	<b>84,000</b>
<b>Percent Change</b>	<b>-7%</b>	

\*Estimates - Values generated from computer models that reconstruct age and sex classes based on sampled herd composition, harvest data, and population demographic variables. The confidence limits around these estimates may be as high as + or - 20%.

\*\*Estimate based on apportionment of an interstate herd.

\*\*\*Estimate includes deer that primarily inhabit agricultural fields

**TABLE 23. 2022 ROCKY MOUNTAIN ELK POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
051	100	90
061, 071**	1,400	1,700
062, 064, 066 - 068**	450	400
065	60	60
072 - 075**	1,200	1,100
076, 077, 079, 081**	1,200	1,100
078, 105 - 107, 109	750	600
091	390	450
104, 108, 121	900	900
108, 131, 132	310	230
111 - 115	2,500	2,700
221 - 223	1,700	1,800
145	30	30
161 - 164	650	750
171 - 173	100	100
231	600	500
241, 242	110	110
262	160	160
<b>TOTAL</b>	<b>12,500</b>	<b>13,000</b>
<b>Percent Change</b>	<b>-4%</b>	

\*Estimates - Values generated from computer models that reconstruct age and sex classes based on sampled herd composition, harvest data, and population demographic variables. The confidence limits around these estimates may be as high as + or - 20%.

\*\*Estimate based on apportionment of an interstate herd.

**TABLE 24. 2022 PRONGHORN POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
011	600	700
012-014	1,800	1,900
015	900	1,050
021, 022	600	600
031	1,200	1,300
032, 034, 035	1,500	1,650
033**	1,000	1,200
041, 042	1,300	1,400
043 - 046	1,900	1,400
051	700	700
061, 062, 064, 071, 073	1,900	1,500
065, 142, 144	700	700
066	400	400
067, 068	1,000	1,050
072, 074, 075	1,100	1,100
076, 077, 079, 081, 091	600	600
078, 105 - 107, 121	700	700
101 - 104, 108, 109, 144	925	900
111 - 114	900	1,100
115, 231, 242	550	500
131, 145, 163, 164	400	600
132 - 134, 245	360	450
141, 143, 151 - 156	4,200	3,900
161, 162	350	400
171 - 173	330	380
181 - 184	900	800
202, 204	100	100
203, 291	140	90
205 - 208	270	300
211 - 213	80	110
221 - 223, 241	400	400
251	300	350
<b>TOTAL</b>	<b>28,000</b>	<b>28,500</b>
<b>Percent Change</b>	<b>-2%</b>	

\*The confidence limits around these estimates may be as high as + or - 20%.

\*\*Estimate represents approximately 50% of the total pronghorn that inhabit the Sheldon NWR that are accessible during the hunting season.

**TABLE 25. 2022 DESERT BIGHORN POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
045	90	120
131, 164	60	80
132	130	130
134, 251	150	170
153	20	20
161	550	550
162	60	50
163	260	270
173 N	110	110
173 S	70	60
181	600	600
182, 044	550	550
183	260	270
184	140	160
195	130	130
202	140	150
204	50	50
205, 207	330	410
206, 208	210	240
211	400	450
212	350	400
213	330	400
221, 223, 241	220	240
243	170	180
244	110	140
245, 133	130	130
252	100	120
253	100	130
254	120	160
261	120	140
262	120	140
263	130	170
264, 265, 266	90	140
267, 268	800	900
269	190	210
271	300	300
272	70	90

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
280	90	130
281	110	160
282	60	130
283, 284	110	150
286	100	170
<b>TOTAL</b>	<b>8,200</b>	<b>9,300</b>
<b>Percent Change</b>	<b>-12%</b>	

\*Estimates - Values generated from computer models that reconstruct age and sex classes based on sampled herd composition, harvest data, and population demographic variables. The confidence limits around these estimates may be as high as + or - 20%.

**TABLE 26. 2022 CALIFORNIA BIGHORN POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
011, 013	70	80
012	90	110
014	70	80
021, 022	80	90
031	150	150
032	290	350
033	100	120
034	340	340
035	310	310
041	30	40
051	110	120
066	40	35
068	160	150
<b>TOTAL</b>	<b>1,800</b>	<b>2,000</b>
<b>Percent Change</b>	<b>-10%</b>	

**TABLE 27. 2022 ROCKY MOUNTAIN BIGHORN POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
074	30	30
091	40	40
101	40	40
102	60	50
114	80	100
115	70	60
<b>TOTAL</b>	<b>320</b>	<b>320</b>
<b>Percent Change</b>	<b>0%</b>	

**TABLE 28. 2022 MOUNTAIN GOAT POPULATION ESTIMATES**

UNIT GROUP	2022 ESTIMATE*	2021 ESTIMATE*
101	55	50
102	240	200
103	45	40
<b>TOTAL</b>	<b>340</b>	<b>290</b>
<b>Percent Change</b>	<b>17%</b>	

\*Estimates - Values generated from computer models that reconstruct age and sex classes based on sampled herd composition, harvest data, and population demographic variables. The confidence limits around these estimates may be as high as + or - 20%.

TABLE 29. BIG GAME POPULATION ESTIMATE HISTORY, 1988 - 2022

YEAR	MULE		ELK	ROCKY MOUNTAIN		MOUNTAIN GOAT	
	DEER	ANTELOPE		DESERT BIGHORN	CALIFORNIA BIGHORN		
1988	240,000	13,500		3,600			
1989	212,000	14,000		3,700			
1990	202,000	15,000	2,000	3,800	480	140	
1991	180,000	16,500	2,400	4,000	530	150	
1992	183,500	18,000	2,700	4,100	650	190	
1993	148,500	16,000	2,900	4,800	700	210	
1994	115,000	15,000	3,100	4,700	800	220	
1995	118,000	15,500	3,500	4,500	900	230	
1996	120,000	15,000	4,000	4,900	1,000	230	
1997	125,000	14,500	4,600	5,000	1,100	240	
1998	132,000	15,000	5,000	5,200	1,200	250	
1999	134,000	14,500	5,500	5,300	1,300	250	
2000	133,000	16,000	5,900	4,900	1,400	210	
2001	129,000	17,000	6,400	4,900	1,400	190	
2002	108,000	18,000	6,600	5,300	1,500	210	
2003	109,000	18,000	7,200	5,000	1,500	240	
2004	105,000	18,500	7,400	5,200	1,500	290	
2005	107,000	20,000	8,000	5,500	1,500	340	
2006	110,000	21,500	8,200	5,800	1,600	360	
2007	114,000	24,000	9,400	6,200	1,700	480	
2008	108,000	24,000	9,500	6,600	1,700	500	
2009	106,000	24,500	10,900	7,000	1,800	550	
2010	107,000	26,000	12,300	7,400	1,900	240	
2011	109,000	27,000	13,500	7,600	2,100	230	
2012	112,000	28,000	15,100	8,600	2,000	220	
2013	109,000	28,500	16,500	8,900	2,100	260	
2014	108,000	27,500	17,500	8,900	1,900	260	
2015	99,000	28,500	18,500	9,600	1,900	230	
2016	94,000	29,000	16,000	9,700	1,800	210	
2017	92,000	29,000	15,000	10,100	1,900	240	
2018	92,000	30,000	13,500	10,100	1,900	230	
2019	93,000	30,300	12,500	10,300	1,900	280	
2020	92,000	29,500	13,000	9,900	2,000	310	
2021	84,000	28,500	13,000	9,300	2,100	320	
2022	78,000	28,000	12,500	8,200	1,800	320	
%Diff to 2021	-7%	-2%	-4%	-12%	-14%	0%	17%
10-YR AVG	96,000	29,000	15,000	9,000	1,900	260	320
%Diff to AVG	-19%	-3%	-17%	-9%	-5%	23%	6%

TABLE 30. BIG GAME TAG SALES AND HARVEST HISTORY BY SPECIES, 1990 - 2021

YEAR	DEER		ANTELOPE		ELK		DESERT BIGHORN RAM		CALIFORNIA BIGHORN RAM		ROCKY MTN BIGHORN		MOUNTAIN GOAT	
	TAGS	HARVEST	TAGS	HARVEST	TAGS	HARVEST	TAGS	HARVEST	TAGS	HARVEST	TAGS	HARVEST	TAGS	HARVEST
1990	31,346	16,715	1,475	1,115	243	141	134	91	3	3	2	2	4	4
1991	26,584	12,442	1,913	1,311	240	141	126	85	5	5	1	1	6	6
1992	28,138	14,273	1,925	1,416	210	164	113	92	10	10	--	--	6	5
1993	16,017	6,276	1,569	1,020	215	176	123	102	12	12	--	--	7	7
1994	17,460	7,315	1,299	979	240	157	125	87	20	14	--	--	10	10
1995	20,014	8,114	1,387	878	306	183	126	90	25	19	2	2	12	11
1996	24,717	11,070	1,211	820	510	292	126	94	32	28	2	1	9	8
1997	20,186	8,263	1,173	805	783	389	113	85	35	30	3	2	6	6
1998	24,077	9,672	1,283	871	1,119	468	113	93	41	33	5	5	12	12
1999	24,023	11,020	1,521	1,173	1,274	577	126	110	47	36	5	5	11	10
2000	26,420	12,499	1,615	1,191	1,621	804	132	113	43	39	4	4	18	16
2001	23,813	9,791	1,518	1,121	1,359	701	143	124	37	34	3	2	23	22
2002	17,484	6,899	1,682	1,166	1,836	887	140	112	41	34	3	3	23	18
2003	14,892	5,982	1,846	1,278	1,821	1,055	133	119	39	34	6	6	23	22
2004	16,010	6,560	1,921	1,323	1,972	1,008	138	127	35	32	6	5	24	23
2005	16,920	7,112	2,393	1,608	2,616	1,246	148	135	38	34	6	5	28	24
2006	18,167	8,346	2,705	1,876	2,360	1,161	154	142	41	36	6	5	29	26
2007	18,599	8,743	2,737	1,847	3,080	1,396	172	150	43	43	9	9	29	29
2008	16,997	7,025	2,476	1,638	2,723	1,315	175	152	42	40	13	12	29	27
2009	16,728	6,837	2,757	1,814	2,972	1,420	193	172	48	47	11	11	28	27
2010	17,134	6,949	2,987	1,928	3,545	1,680	216	186	52	52	4	4	20	20
2011	14,919	5,834	3,121	1,973	4,838	2,007	222	194	57	54	5	3	11	11
2012	24,257	10,112	3,721	2,225	6,035	2,461	281	241	59	53	8	7	6	6
2013	22,992	9,367	3,814	2,336	7,936	2,857	275	251	67	61	7	7	7	6
2014	22,643	8,978	3,953	2,453	11,016	3,474	287	258	66	58	5	4	12	12
2015	20,998	9,155	4,105	2,595	11,271	3,365	307	285	63	56	4	1	12	12
2016	18,111	7,885	4,100	2,653	11,131	3,149	311	280	57	54	5	2	13	11
2017	16,548	7,307	5,086	3,320	9,776	2,693	334	302	57	53	6	3	9	7
2018	17,612	8,007	4,643	3,085	9,283	2,499	317	277	62	59	5	5	8	6
2019	16,868	6,454	4,541	2,888	6,764	1,964	311	268	59	52	7	5	8	6
2020	17,660	6,928	4,326	2,826	5,379	1,984	315	288	68	54	6	2	9	8
2021	16,848	6,185	3,609	2,250	4,917	1,911	321	257	59	51	5	4	9	5
%Diff to 2020	-5%	-11%	-17%	-20%	-9%	-4%	2%	-11%	-13%	-6%	-17%	100%	0%	-38%
10-YR AVG	19,041	7,837	4,093	2,600	8,031	2,579	298	264	61	55	6	4	9	8
%Diff to AVG	-12%	-21%	-12%	-13%	-39%	-26%	8%	-3%	-4%	-7%	-13%	2%	-5%	-39%

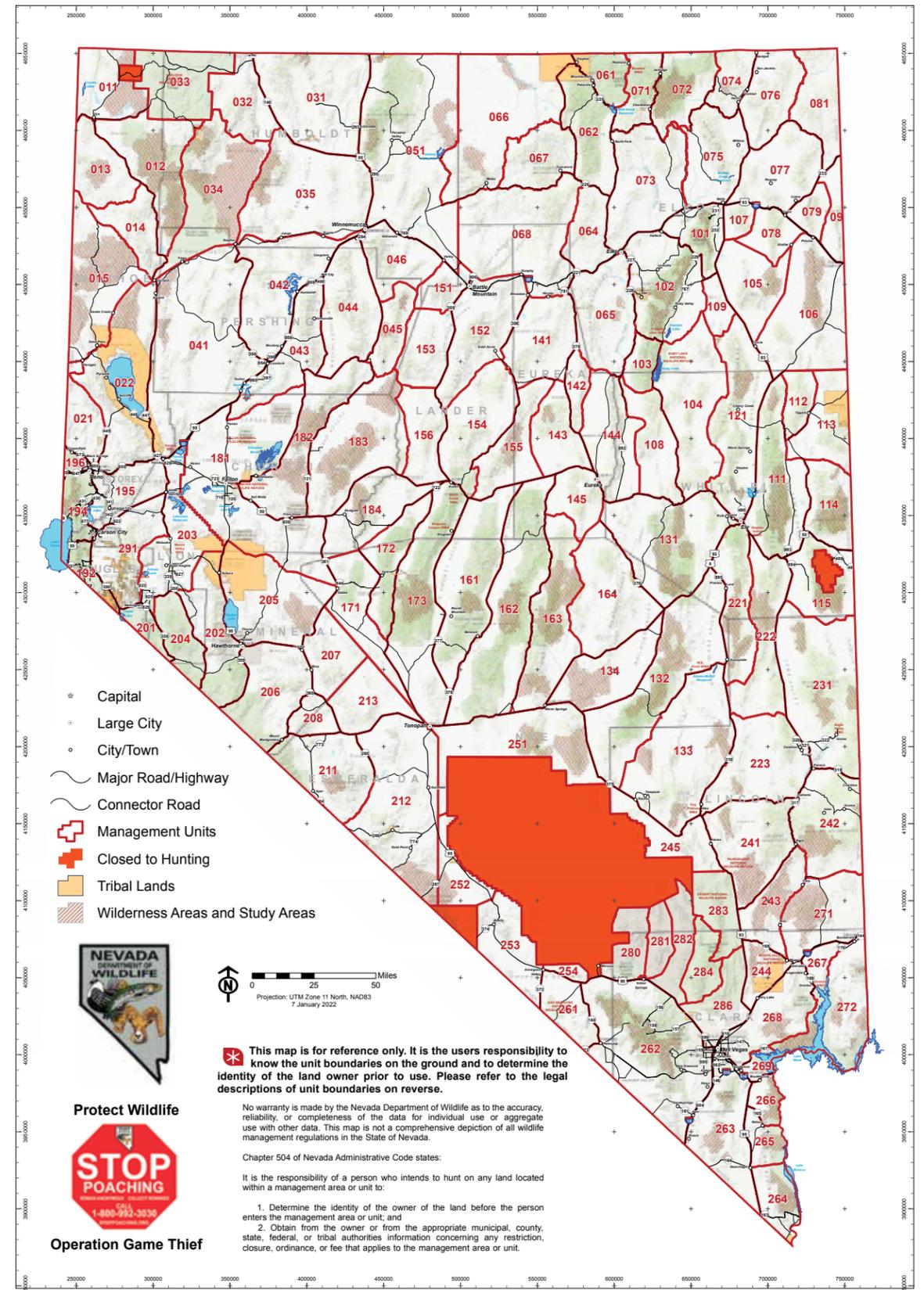
**TABLE 31. NEVADA MOUNTAIN LION TAG SALES, SPORT HARVEST, AND HUNTER SUCCESS, 1981 - 2021**

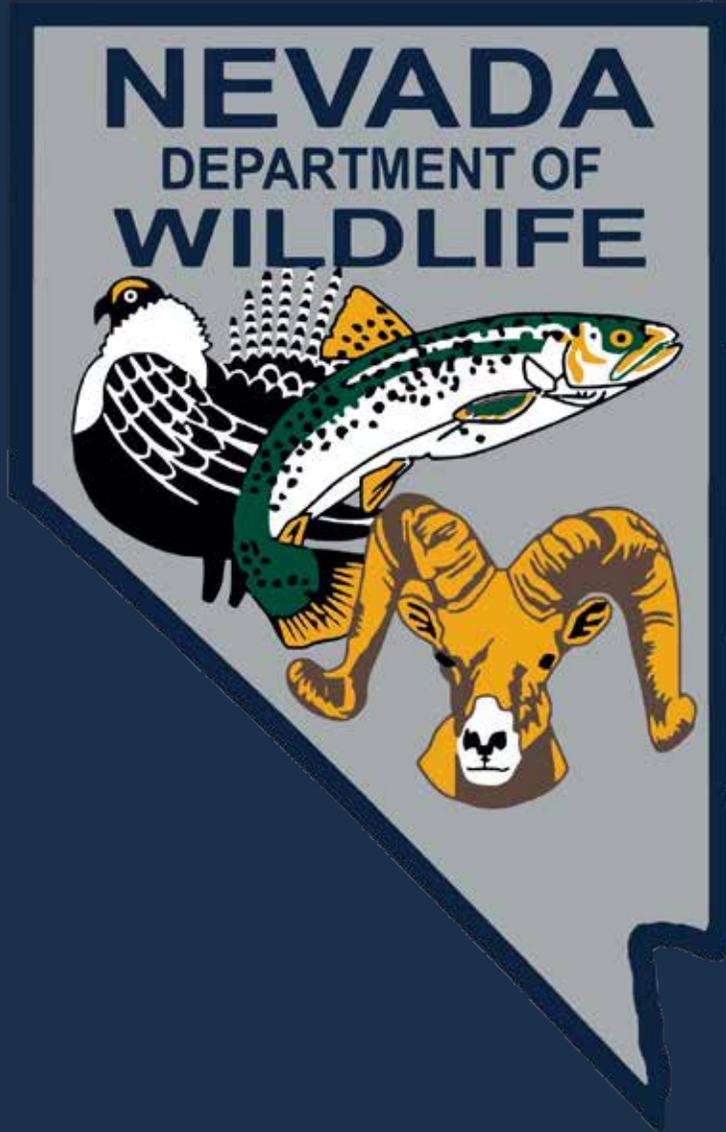
Year	Tag Sales			Harvest			Hunter Success		
	Resident	Nonresident	Total	Resident	Nonresident	Total	Resident	Nonresident	Total
1981 - 1982	527	62	589	36	24	60	7%	39%	10%
1982 - 1983	519	61	580	41	20	61	8%	33%	11%
1983 - 1984	329	50	379	57	21	78	17%	42%	21%
1984 - 1985	352	107	459	60	46	106	17%	43%	23%
1985 - 1986	394	96	490	54	29	83	14%	30%	17%
1986 - 1987	345	114	459	51	36	87	15%	32%	19%
1987 - 1988	416	91	507	41	37	78	10%	41%	15%
1988 - 1989	383	124	507	65	53	118	17%	43%	23%
1989 - 1990	439	184	623	75	77	152	17%	42%	24%
1990 - 1991	318	112	430	55	33	88	17%	29%	20%
1991 - 1992	507	112	619	78	47	125	15%	42%	20%
1992 - 1993	348	149	497	75	75	150	22%	50%	30%
1993 - 1994	405	139	544	99	74	173	24%	53%	32%
1994 - 1995	403	151	554	89	72	161	22%	48%	29%
1995 - 1996	432	186	618	73	61	134	17%	33%	22%
1996 - 1997	480	137	617	80	63	143	17%	46%	23%
1997 - 1998	870	137	1,007	122	88	210	14%	64%	21%
1998 - 1999	643	124	767	73	67	140	11%	54%	18%
1999 - 2000	680	109	789	71	55	126	10%	50%	16%
2000 - 2001	883	169	1,052	104	90	194	12%	53%	18%
2001 - 2002	838	98	936	104	63	167	12%	64%	18%
2002 - 2003	1,060	131	1,191	89	39	128	8%	30%	11%
2003 - 2004	1,133	221	1,354	119	73	192	11%	33%	14%
2004 - 2005	1,186	206	1,392	62	43	105	5%	21%	8%
2005 - 2006	1,021	162	1,183	70	46	116	7%	28%	10%
2006 - 2007	1,366	121	1,487	95	39	134	7%	32%	9%
2007 - 2008	1,521	200	1,721	94	51	145	6%	26%	8%
2008 - 2009	3,484	284	3,768	83	34	117	2%	12%	3%
2009 - 2010	3,873	302	4,175	80	51	131	2%	19%	3%
2010 - 2011	3,942	275	4,217	96	50	146	2%	18%	3%
2011 - 2012	4,067	297	4,364	72	31	103	2%	10%	2%
2012 - 2013	4,735	354	5,089	122	60	182	3%	17%	4%
2013 - 2014	4,968	358	5,326	85	33	118	2%	9%	2%
2014 - 2015	5,325	384	5,709	73	26	99	1%	7%	2%
2015 - 2016	5,332	392	5,724	113	60	173	2%	15%	3%
2016 - 2017	5,346	446	5,792	115	64	179	2%	14%	3%
2017 - 2018	5,479	117	5,596	132	30	164	2%	26%	3%
2018 - 2019	3,530	366	3,896	*	*	177	*	*	5%
2019 - 2020	3,389	126	3,515	*	*	156	*	*	4%
2020 - 2021	3,530	366	3,896	*	*	177	*	*	5%
<b>2021 - 2022</b>	<b>7,806</b>	<b>631</b>	<b>8,437</b>	<b>*</b>	<b>*</b>	<b>195</b>	<b>*</b>	<b>*</b>	<b>2%</b>

<b>Totals</b>	<b>71,816</b>	<b>7,361</b>	<b>79,177</b>	<b>3,057</b>	<b>1,892</b>	<b>5,284</b>
<b>Avg. (40 yrs)</b>	<b>1,752</b>	<b>180</b>	<b>1,931</b>	<b>78</b>	<b>49</b>	<b>129</b>
<b>10-Year Avg</b>	<b>4,611</b>	<b>312</b>	<b>4,923</b>	<b>101</b>	<b>44</b>	<b>150</b>

\*Due to a new accounting system, records may be updated next year.

# NEVADA GAME MANAGEMENT UNITS 2022





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