WYOMING 2019 STATEWIDE FALL HUNTING FORECAST August 12, 2019



PRONGHORN (antelope)

Casper

Throughout the Casper Region, antelope herds are continuing to do fairly well after reaching relatively low levels through 2013. Beginning in 2014, excellent fawn production and survival began to spur population recovery, which continued through 2017. While antelope populations are now doing well in most areas, it appears growth is now slowing or has stagnated, with generally below-average fawn production over the past year. Regardless, hunters will experience relatively high antelope densities near Casper due to several years of growth, and generally improved antelope numbers throughout the rest of the Region.

For 2019, antelope hunting seasons in the Casper Region were designed to continue to increase hunting opportunity in most hunt areas around Casper as populations have grown, while largely maintaining license issuance in eastern and northeast Wyoming where growth has recently slowed. In most areas near Casper, doe/fawn license numbers have been increased for 2019 in an effort to reduce antelope populations, while remaining relatively unchanged in Converse, Niobrara, Weston and Crook Counties. In addition, most areas now have strong buck ratios as herds have grown. After steadily increasing any-antelope (buck) license issuance throughout the Region since 2015, managers have again increased Type 1 license issuance in areas south and west of Casper while holding steady in eastern and northeastern Wyoming. Hunting success should continue to remain high in 2019 as the Department continues to manage pronghorn herds for high harvest success. As always, antelope hunters are reminded that hunt areas denoted with an asterisk (*) have limited public hunting access and are largely comprised of private lands. In these areas, hunters should get permission to hunt private land before applying for a license, or at least recognize that hunting small isolated parcels of public land can be difficult and frustrating at times.

Cody

Pronghorn hunters should expect similar pronghorn numbers and hunting in the Cooper Mountain and Carter Mountain herds. The Copper Mountain pronghorn herd (Hunt Areas 76, 79, 114 and 115) will provide additional hunting opportunity because the herd is experiencing increased agricultural damage, and is currently meeting it's population management objective. The Carter Mountain pronghorn herd (Hunt Areas 78, 81 and 82) has increased in the past few years and will be providing additional hunting opportunity in this herd to maintain the herd at it's population management objective. Hunters should expect better pronghorn hunting in these areas than what they experienced in the 2018 season.

Hunters should expect pronghorn hunting to be similar in the Fifteen Mile herd (Hunt Areas 77, 83 and 110) to the 2018 season. The Badger Basin pronghorn herd (Hunt Area 80) has experienced a decline in fawn production and population size, therefore, managers have decreased licenses within this area. Hunters should expect to see fewer pronghorn within this herd compared to the 2018 season.

In the winter of 2019/20 managers plan to place GPS collars on pronghorn within the Carter Mountain herd to determine animal movements, migration patterns and seasonal habitat use. This collaring project is a major collaboration between numerous partners and will provide better information to area pronghorn managers.

Green River

With a few minor exceptions, hunters will generally find more hunting opportunity for antelope in the Green River Region, and hunter success is expected to remain high. Pronghorn numbers increased a modest amount last summer, but the 2018-19 winter has been tougher than normal in many portions of the region. Most documented mortalities involved motor vehicle collisions from semi trucks and passenger vehicles and trains. Additionally, some pronghorn moved out of their normal wintering areas, crossed fences on snowdrifts, and were unable to return to their normal ranges following snowmelt. Hunt areas 94 and 100 experienced this more than others.

Most of our hunt areas, including Hunt Areas 53, 57, 58, 59, 92, 93, 94, 95, 96, 99, 100 and 112 will see similar or increased opportunity when compared to last year due to observed buck ratios, increased populations, and "relatively light" observed winter losses. Additionally, some increased opportunity will exist in a few areas for doe-fawn hunting, to address localized ongoing damage concerns.

The 2019 summer has been mild and wetter than normal throughout much of the region, and habitats responded very favorably to the increased precipitation. Many of the lower elevation habitats are beginning to dry and hunters are reminded to be careful with campfires and vehicle exhausts as fire danger increases and fuels dry. Increased moisture and mild conditions also resulted in increased pronghorn horn growth and some nice bucks exist throughout the region this year.

<u>Jackson</u>

In the Jackson Region, the northernmost subunit of the Sublette Antelope Herd includes Hunt Area 85 (Gros Ventre). Although hunter success is good, there are very limited hunting opportunities. Only 20 licenses will be offered for the 2019 season, similar to recent years. Although the winter was very tough on any antelope that chose to remain in Jackson Hole (few if any did this past winter), most antelope in Hunt Area 85 during the hunting season migrate from the Green River drainage and are therefore not affected by severe winter conditions in Jackson.

Lander

With decreased fawn production and over-winter survival in some herds, pronghorn populations in the Lander Region either decreased or have remained fairly stable. Of the Region's six pronghorn herds with population objectives, two are at, two are below and two are above objective following the 2018 hunting season. Pronghorn classifications in 2018 revealed fawn productivity and yearling buck ratios were below those observed in 2017. Fawn ratios declined by 10/100 and yearling buck ratio declined by 4/100. These declines are largely attributed to an extraordinarily dry late-spring and summer in 2018. The pronghorn herds in the Rawlins area, including the Red Desert and the South Ferris, were particularly impacted by severe winter conditions and overwinter survival was low. Early observations by field personnel indicate pronghorn numbers in these herds are down as expected. Overall, throughout the Region, it is anticipated buck quality is likely to be similar to that in 2018. Mature buck ratios vary throughout the Region, but are still good and hunters drawing a license should expect good to excellent harvest success.

<u>Laramie</u>

The majority of pronghorn herds in the Laramie region are either increasing or stable, with 90% at or above population management objectives. This is a positive trend compared to the substantial decrease in pronghorn numbers that the region experienced from 2010-2013.

Region-wide, the average fawn ratio was 57 fawns: 100 does, an increase over the 2017 estimate. Fawn ratios were low, however, across portions of herds in the eastern side of the region, notably in the Dwyer, Meadowdale and Hawk Springs Herd Units. While the reasons for the decline are unclear, anecdotal observations suggest that hail events in June, lack of timely rain events and some degree of coyote predation may be potential drivers. The estimated average buck ratio across the region was 49 bucks: 100 does, consistent with 2017 estimate (50 bucks: 100 does), and well above the 2016 ratio (41:100). Snowpack during the 2018-19 winter was average to slightly above average, and was bolstered by a severe spring storm. Regional personnel started to see evidence of localized winter mortality in mid-March. While we anticipate that harsh conditions reduced adult survival, these losses may be partially mitigated by increased water on the landscape, productive spring green up and, perhaps, increases in fawn production. We also expect that increased moisture may lead to strong horn growth.

Several thousand acres in the Shirley Basin Herd Unit and surrounding areas are either enrolled in large-scale wind development projects, or are candidates for enrollment in the next few years. To better understand the effects of wind-energy development on pronghorn populations, 101 does were fitted with GPS collars in 2018. As of August 2019, 44 animals died (44%), suggesting a relatively high mortality rate. Preliminary movement data demonstrate substantial variation in habitat use across winters. These patterns may be attributable to differences in winter severity. Additional data will help managers to evaluate the merits of this hypothesis. Collars will remain on animals until 2024.

Based on this information, managers made relatively few changes to pronghorn seasons in 2019. Hunters should expect hunting to be similar to the 2018 season.

Pinedale

In the Pinedale Region, the northern portion of the Sublette antelope herd includes hunt areas 87-91. Population estimates for this herd are below desired levels generally due to harsh winters in 2010-2011 and again during 2016-2017. The 2018 fawn ratio was 55:100, below the previous 5year average (2013-2017) of 65:100, while the total buck:100 doe ratio of 57:100 was near the previous 5-year average of 56:100. This pronghorn population grew slightly during mild winter conditions from 2014-2016, experienced above average mortality during the 2016-2017 winter, exhibited increased survival during the mild 2017-2018 winter, but above average temperatures and the very dry conditions during the summer of 2018 moderated population recovery. Mortalities resulting from the 2018-2019 winter are unknown at this time, but have the potential to be above average given high snow loads in the winter ranges of this herd. For the 2019 hunting season, there are no changes in the Pinedale Region. Although it remains difficult to draw an antelope license, those that do draw should experience high success rates.

Sheridan

Antelope hunting opportunity in the Sheridan Region will be similar to 2018. Most herds remain near management objectives and many hunt areas have high buck ratios. Winter conditions were

generally mild with the exception of below-normal February temperatures and persistent snow cover in the eastern portion of the region. Therefore, overwinter survival was favorable and hunters will see an increased number of licenses for both "any antelope" and "doe/fawn antelope" licenses in some hunt areas. Pronghorn should be in excellent body condition due to abundant precipitation and extended spring green-up. Buck horn growth should be better than average.

The majority of antelope hunting in the Sheridan Region is on private land. Access to private lands and landlocked public lands continues to be difficult in portions of some hunt areas where access fees are high and little or no hunting is allowed. Those hunters who are able to secure access to private land will have high success. Hunter densities on many accessible tracts of public land can be high, especially on opening day and weekends. Hunters who plan hunts later in the season often see fewer hunters.

In past years, hundreds of doe/fawn and any antelope licenses have gone unsold in the Sheridan Region. This is not the case anymore. Demand for hunting opportunity has increased and most hunt areas now sell out in the draw. Hunt areas with licenses remaining have very limited public hunting access and some license types are limited to private land. Hunters desiring to hunt private land are strongly encouraged to secure permission prior to purchasing a license. Hunters are also advised that the days of picking up a license when they arrive at their hunting destination are for the most part gone. So plan ahead.

DEER

Casper

After undergoing a long-term gradual decline since the early 2000s, mule deer populations in the Casper Region experienced a period of much needed growth beginning in 2013 due to excellent fawn production. That growth has now slowed with declining fawn recruitment in 2018, and mule deer numbers appear to have stabilized. Although mule deer populations remain below established management objectives in most herds, they are significantly improved compared to much of the past decade. Overall, the outlook for mule deer in the Casper Region is a mixed bag, with many areas now supporting more mule deer than in much of the past 10 years, with other areas continuing to harbor lower than desired mule deer densities, especially in the Laramie Range (Hunt Areas 65 and 66).

During the summer of 2018, moderate drought beset most of the Casper Region following relatively good spring precipitation, which resulted in relatively poor mule deer fawn survival. Managers attributed relatively poor fawn survival to dry summer conditions causing key vegetative communities to cure relatively quickly in some parts of the Region, thus affecting the nutritional condition of fawns and lactating females. In addition, some increased fawn predation may have also occurred as small mammal densities have dramatically declined. In general, mule deer were in moderate nutritional condition entering the 2018-2019 winter as overall range conditions were fair in key mule deer habitats. The 2018-2019 winter was variable in the Casper Region, with mild winter conditions prevailing throughout the Casper, Douglas and Lusk areas, and relatively harsh winter conditions in northeastern Wyoming. Over-winter survival was about average in most of the Region, but higher than normal winter losses likely occurred in northeast Wyoming. The combination of mild winter weather and relatively poor fawn survival has resulted in relatively stable mule deer populations in most of the region. Although winter losses were somewhat

significant in the Black Hills, this mule deer population grew substantially in recent years, and hunters should still expect to see relatively good mule deer densities in this area.

General license mule deer hunters in Deer Hunt Areas 65 (Nonresident Region J) and 66 (Nonresident Region D) will see about the same or a few less mule deer bucks this fall compared to last year. Following a period of population growth, fawn recruitment and overall mule deer survival appears to have declined over the past year, which will result in fewer young bucks available to hunters in these areas. Hunting seasons will remain conservative to allow for maximum population growth, with harvest restricted to antlered mule deer with three points or more. General license seasons in Hunt Areas 7-9, 11-14 and 21 (Nonresident Region B) will remain unchanged. In these areas, hunters should again expect to see high ratios of mature bucks. However, these areas have limited public access, and hunters should secure permission to private lands before planning a hunt in these areas. In the Black Hills (Hunt Areas 1-6, Nonresident Region A), hunters should still see relatively good mule deer numbers in traditional mule deer habitats. Hunters are reminded that National Forest lands in Hunt Areas 2 and 4 harbor very few mule deer compared to white-tailed deer, and that most mule deer occupy private lands in this part of the state.

Doe/fawn license issuance for mule deer has long been eliminated throughout most of the Casper Region outside of the Black Hills. Throughout the Region, nonresident mule deer hunting opportunity was drastically cut over the past 15 years as mule deer populations declined, although this trend has recently reversed with continued high Region A license issuance and a modest increase in Region B license issuance. Region D and J licenses remain unchanged for 2019. Nonresidents wishing to hunt in Deer Hunt Area 88 should note that this area is now part of Region D (was formerly in Region E).

Three of the four limited quota deer hunt areas in the Casper Region will again see increased licenses as recruitment of bucks has been good since 2014. These areas (Hunt Areas 10, 22, 34 and 89) boast high mature buck ratios, and are managed for quality hunting and high harvest success. For 2019, there was a modest increase in Type 1 (antlered deer) licenses in both Hunt Areas 34 and 89 west of Casper, where there should be good availability of older-aged bucks. These two areas have long been managed conservatively to provide good mature buck hunting opportunity, even in years when mule deer populations are depressed. However, despite an uptick in license issuance, drawing odds for both Hunt Areas 34 and 89 Type 1 licenses will remain low given their popularity. License issuance also increased in Hunt Area 22, although hunters are reminded this area has very limited public access for mule deer hunting. In Hunt Area 10, which is largely comprised of the Thunder Basin National Grasslands, license numbers will remain unchanged. Hunters should temper their expectations regarding antler size of mature buck mule deer in these four areas. Despite licenses being very hard to draw and a management emphasis on maintaing high mature buck ratios, most hunters do not harvest large-antlered mature bucks in these areas.

Outside of the Black Hills, white-tailed deer numbers have increased as favorable weather conditions have provided for improved fawn production, leading to modest population growth in some areas and dramatic growth in others. When conditions are optimal, white-tailed deer are capable of high reproductive rates leading to rapid growth. As a result, issuance of white-tailed deer licenses (Type 3 and 8) will continue to remain relatively high across the entire Casper Region. Type 3 and 8 license issuance has been eliminated in Hunt Areas 7, 8 and 9 due to confusion and enforcement problems created due to a lack of access, while the addition of 100

Type 8 licenses in Hunt Area 88 will help address damage to cultivated lands along the North Platte River. Hunters are reminded that, outside of the Black Hills (Hunt Areas 2 and 4), white-tailed deer primarily occupy private lands along creek bottoms and irrigated meadows. For most of these areas, hunters should plan on securing permission to hunt private land before purchasing a white-tailed deer license.

In the Black Hills, where Wyoming's largest concentration of white-tailed deer occur on public lands, the population increased substantially in recent years and remains high despite elevated winter losses this past year. Regardless, there should still be plenty of deer available to hunters given the extraordinarily high densities of white-tailed deer prior to this winter. Local managers have been trying to reduce this white-tailed deer herd, and have thus maintained high Region A and doe/fawn license issuance. Continued high white-tailed deer densities should provide good hunting quality and harvest success for Black Hills deer hunters on both public and private lands. Hunters should note that all doe/fawn licenses in the Black Hills have been converted to Type 7 to standardize doe/fawn license types valid on private land only. Maintaining liberal nonresident opportunity in the Black Hills is especially important for attaining desired doe harvest, as nonresidents holding Region A licenses typically harvest the majority of doe white-tailed deer on private land in this part of the state.

<u>Cody</u>

Mule deer hunting success in 2019 for the southern Big Horn Basin which includes the Southwest Bighorns herd (Hunt Areas 35,37,39, 40 and 164), the Basin herd (Hunt Areas 125 and 127) and the Owl Creek/Meeteetse herd (Hunt Areas 116-120) should be similar to 2018. In the southern Big Horn Basin, mule deer fawn production has decreased in recent years, which has stabilized or decreased populations in most areas. Buck recruitment has been fair due to a recent decrease in fawn production. Additional antlerless deer hunting opportunity was added in Hunt Area 164 to address damage and increasing prevalence of chronic wasting disease (CWD). Hunters should expect fair to good hunting in all hunt areas in the southern Big Horn Basin.

Buck numbers have decreased over the past few years for the Paintrock herd (Hunt Areas 41, 46 and 47) and in the Northern Bighorn Mountains (Hunt Areas 50, 51 and 53), overall population remains lower than deer numbers observed in the mid-2000s. Buck hunting should be fair, and antlerless deer hunting opportunity will be similar to last year The Greybull River deer herd (Hunt Areas 124 and 165) and the Shoshone River deer herd (Hunt Areas 121, 122 and 123) should have similar hunting seasons compared to 2018 with the normal 10-day general seasons and Type 6 and 8 licenses restricted to private or agricultural lands. Managers have slightly decreased doe/fawn license numbers in 2019 in Hunt Areas 121 and 122 to reduce pressure on Clarks Fork migratory deer and public comment received during the season setting process.

The Shoshone River (Hunt Areas 121, 122 and 123) mule deer herd will be one of the intensive CWD sampling herds within the Cody Region for the 2019 deer season. Managers ask that the public bring in all adult (2 years old or older) mule deer bucks harvested within these hunt areas to a Game and Fish check station, the Cody Regional office, or other advertised sampling locations. The goal for this years sampling effort within this area is to sample 200 adult mule deer bucks. Game and Fish will need the public's help to achieve this goal.

Upper Shoshone (Hunt Areas 110-115) mule deer hunters should expect deer hunting to be fair, and likely not as good as it was in 2018. This herd has experienced chronically low fawn ratios over the past five years that have contributed to a decreased population and overall number of

bucks. In order to address this decrease in population and fawn recruitment, managers have decreased mule deer hunting opportunity within this herd until it shows signs of recovery. The general season ending date has been moved to Nov. 3 to reduce buck harvest while this herd is recovering, so the general season now runs from Oct. 15 - Nov. 3 for Hunt Areas 110-114 during the 2019 deer season. During the season setting process, hunters requested that some hunting in November remain, and as a result, managers included two new limited quota hunts (one is the South Fork, and one in the North Fork) that run from Nov. 1 - 15. These hunts greatly decrease the hunting and harvest pressure on these depressed populations, but still provide some opportunity for hunters later in November. Hunters who have drawn this license will likely have a quality hunt even though populations are low due to lower hunter pressure during that time frame. Additionally managers have decreased antlerless harvest within this herd, and have focused remaining antlerless harvest in private land areas with damage issues and growing resident deer populations, reducing pressure on migratory deer.

The Clarks Fork herd (Hunt Areas 105, 106 and 109), like the Upper Shoshone herd, has experienced chronically low fawn recruitment over the past five years and a reduction in the overall population. Managers have reduced harvest opportunity by removing seven days from the general deer season and changing the quota of 105, 106, 109 Type 1 licenses from 35 to 25. The general season will run from Oct. 1 - 24 for the 2019 deer season. Hunters should expect hunting to be fair, but it will likely not be as good as the 2018 season. The Clarks Fork (Hunt Areas 105, 106 and 109) mule deer herd will be one of the intensive CWD sampling herds within the Cody Region for the 2019 deer season. Managers ask that the public bring in all adult (2 years old or older) mule deer bucks harvested within these Hunt Areas to a Game and Fish check station, the Cody Regional office, or other advertised sampling locations. The Department will need the public's help to achieve this goal.

White-tailed deer numbers continue to do well in the Big Horn Basin, and populations continue to expand into new areas and habitats. In some areas, there is concern over the increased population of white-tailed deer, disease issues and competition with mule deer so harvest opportunity has been liberalized to keep populations in check. Managers added any white-tailed deer to the general seasons for Hunt Areas 41, 46, 47, 50, 51, 52 and 53. Managers also increased Type 3 and 8 licenses in many hunt areas across the Cody Region. Hunters are encouraged to check their 2019 big game regulations to find all changes for the 2019 season. Hunters should expect similar hunting success and conditions as in 2018, with more opportunity to harvest a white-tailed deer in the 2109 season.

Green River

Deer hunters should see improvements over last year's season, especially in the eastern part of the Green River Region. Deer hunting should be especially good in Area 82 east of Baggs and hunters are expected to be pleased as deer numbers are high in this area. Season lengths have been extended a modest amount as buck only hunting has limited influence on overall deer numbers, and buck ratios remain high. Antler point restrictions (APRs) will remain in place throughout most of the region for an additional year to aid in the recruitment of yearling bucks, with the exception of Areas 82, 100 and 101 (limited quota), and 102 (limited quota). The APR in Hunt Areas 82 and 100 (Baggs Deer) was on schedule for removal and buck ratios have reached the management criteria established in this herd. The APR in Hunt Area 131 has been modified from a four-point restriction to a three- point restriction.

Seasons were lengthened in the western portion of the region to provide two weekends of hunting opportunity for the public, a sentiment often voiced by local hunters. Mule deer populations can easily support this extension, despite higher than normal winter mortality observed in localized areas this winter. These areas include Hunt Areas 132, 133, 134, 135 and 168. Antler point restrictions remain in place for the current proposed year, but established management criteria suggest this should be the last year of use in these areas.

Some limited doe-fawn hunting opportunity is being offered throughout the region for a couple of reasons. In the east (Area 82) two license types (6 and 7) are being offered to address both damage concerns and overall deer numbers. Additionally, there are a few doe licenses being offered in Area 131 near Farson and along the Green River, and in the Uinta herd (areas 132, 133, and 168) to address damage to growing or stored crops.

A few Type 3 white-tailed deer licenses were added in 2019 to some areas in the region (131-135, 168) to allow for white-tailed deer hunting opportunity. White-tails can be found in a few widely scattered riparian habitats throughout these areas, and some nice bucks occur. Given this season overlaps the rut, hunting should be very good in appropriate habitats throughout these areas.

<u>Jackson</u>

The Wyoming Range Deer Herd (Hunt Areas 134, 135, 143-145) is designated as a special management strategy herd which focuses on providing high quality hunting opportunities, mature age class deer, and high buck:doe ratios (30-45:100). The winter of 2016-2017 was extremely severe, with very heavy losses of fawns and adults documented.

The winter of 2017-2018, however was very mild and even though the 2017 fawn crop was not large, most survived and helped with the recovery of this deer herd. A comprehensive deer abundance survey on all winter ranges of the Wyoming Range deer herd in mid-February 2018 (which required two helicopters and 133 hours of flight time to complete) produced a total of 25,317 deer actually observed and an estimate of 30,500 deer. This survey gave managers more confidence that current methods of estimating deer numbers accurately track the population and will be very helpful in monitoring the recovery of this deer herd.

The southern portion of the herd unit will offer 13 days of antlered deer hunting in Hunt Areas 134 and 135. As in the last two years, an antler point regulation will allow hunters to take antlered mule deer with three points or more on either antler in Area 134. In Area 135, hunters will be permitted to take antlered mule deer or any white-tailed deer. General license hunting opportunity for antlered mule deer will run from September 15 - October 6 for Hunt Areas 143-145. In Hunt Area 145, a total of 50 limited quota Type 3 licenses valid for any white-tailed deer will be in place from November 1 to November 15, and unused Type 3 licenses valid for antlerless white-tailed deer will continue from November 16 to January 31.

Due to the severity of the 2016-2017 winter and associated deer losses, reductions to the nonresident quota were implemented in both Regions G and H in 2017. These quotas remain the same for 2019, and are 400 in Region G and 600 for Region H. Reduced nonresident quotas combined with a shorter general license season for all hunters will help meet the special management criteria of maintaining at least 30 bucks:100 does and assuring older age class bucks remain in the population.

The 2018 hunting season produced some exceptional buck deer, and hunter satisfaction was quite high even though many portions of the Wyoming Range were closed due to wildfire control efforts. Even though late winter conditions in the Jackson area were quite severe, deer winter ranges along the east slope of the Wyoming Range did not experience this, and impacts are not expected to be above normal. Southern portions of the herd unit did experience increased snow depths in late winter that translated into higher than normal levels of fawn losses.

The northern portion of the Sublette Deer Herd includes Hunt Areas 146, 150-152, 155 and 156 in the Jackson Region. Again, due to high deer mortality caused by severe winter conditions in 2016-2017 and the need to promote population growth, the reduced nonresident quota, shortened season, and antler point restriction will remain in place for 2019. Winter range conditions for some portions of the Sublette Herd were relatively harsh in late winter, although the late onset of severe weather will hopefully minimize impacts.

As the Wyoming Range and Sublette mule deer herds recover from the 2016-2017 winter, and numbers begin to increase, it is the intent to increase hunter opportunity in the form of additional hunting days and appropriate increases in nonresident quotas. In addition, the 3-point or better antler point restriction should be removed to allow more opportunity and reduce hunting pressure placed on adult bucks.

The Targhee Deer Herd (Hunt Area 149) is a small population on the west side of the Teton Range that is managed to provide recreational hunting opportunities. Population growth of this herd is limited by winter range and habitat loss from residential developments. Most crucial winter ranges are situated in Idaho and options to allow this population to grow are limited. In 2018, hunters reported a 19% success rate, but hunter satisfaction remained relatively constant at 57%. Proposed hunting seasons in 2019 include a general license season for antlered deer from September 15 through October 6. A Type 8, limited quota license will be offered again in 2019, valid for doe or fawn white-tailed deer. Fifty licenses will be available. A new, Type 3 license, which was first offered in 2017, will again be valid for any white-tailed deer from September 15 to November 30.

Lander

Similar to pronghorn, mule deer populations had markedly declined over the last several years due to poor fawn productivity until increased fawn production (and likely survival) were realized starting in 2015–2017. In 2018, fawn productivity decreased on average by 13/100 throughout the region. As few as 33/100 were observed in the Beaver Rim herd unit and an average of 61/100 fawns were observed in the Lander Region. Of the five herds within the Lander Region with population objectives, one is at and four are below (but three are moving toward) objective, after the 2018 hunting season. While fawn productivity decreased, observed buck/doe ratios stayed similar and averaged 36/100. Hunters will have opportunity for similar harvest (mostly young bucks) as mule deer numbers remain at similar levels and no antler point restrictions are in place. As a result seasons are similar in 2019 to that offered in 2018.

Continued any white-tailed deer seasons are in place in the Dubois, Lander, Riverton and Jeffrey City areas. Extended seasons and increased license issuance in the South Wind River (Hunt Areas 92, 94 and 160) and Dubois (hunt area 128) herd units for white-tailed deer will offer more hunting opportunity. However, while doing better throughout much of the Region white-tailed deer numbers remain relatively low due to an apparent Epizootic Hemorrhagic Disease (EHD) outbreak three years ago and have yet to fully recover.

<u>Laramie</u>

Most mule deer populations in the Laramie Region are below management objectives, with combinations of habitat quality, disease and unfavorable weather conditions likely hindering growth. Buck ratios remained relatively high in 2018, with ratios exceeding 30 bucks :100 does in every herd. The average fawn ratio across the region was 58 fawns :100 does, an increase over both 2016 and 2017 estimates. Snowpack during the 2018-19 winter was average to above-average in most of the region. We anticipate that the additional water on the landscape will yield robust spring forage, potentially favorable fawn production, and exceptional antler growth.

Chronic Wasting Disease (CWD) continues to be a major concern in the region, especially in the Laramie Mountains Herd, where estimated prevalence from hunter-harvested deer exceeds 20% in some hunt areas. Despite an abundance of males (36 bucks: 100 does) there continues to be a very small percentage of Class III bucks (antler width ≥ 26 ") in the Laramie Mountains population. The majority of males harvested in 2018 were young to middle-aged animals, with 93% of field-checked animals \leq Class II (≤ 25 "; n = 156). The Department encourages hunters in the region to have harvested animals tested for CWD.

Recent fire activity in the Laramie Mountains, Snowy Range and Sierra Madre Mountains will likely improve habitat quality for nearly all of the region's mule deer populations. The Department is engaged with land management partners and local landowners to limit the spread of cheatgrass, a detrimental plant that often invades the landscape following a fire.

The Platte Valley Mule Deer Herd migration corridor was designated in 2018. The designation was based on data collected from 55 does that were collared in the Platte Valley, 2011-2013. To further conserve the corridor, the Department will partner with the public and various stakeholders over the next year to identify potential risks to migration routes and corresponding conservation opportunities.

As part of the Sheep Mountain Mule Deer Herd Initiative 60 does were fitted with GPS collars in 2017. Managers retrieved the collars in April of this year. Preliminary data highlight important areas for wintering herds, and also suggest substantial migratory movements between northern Colorado and southern Wyoming. Data from the collars will help managers to better understand the herd's migration timing, movement corridors, stopover areas, and habitat use patterns.

Changes to 2019 mule deer seasons are minimal. Managers increased buck opportunity in 2017, and would like to run the current seasons for a few years to evaluate the effects on populations.

Southeast Wyoming white-tailed deer seasons are designed to provide hunting opportunities during the rut, and to reduce damage. Liberal seasons provide abundant opportunity, though the majority of white-tailed deer are found on private land, where access can be difficult. White-tailed deer populations appear to be increasing across the region based on harvest data and landowner observations. White-tailed opportunity was increased in most areas for the 2019 season.

Pinedale

Portions of two mule deer herds are managed in the Pinedale Region: the Sublette and Wyoming Range herds. Both are large populations with special management strategies designed to provide high quality hunting opportunities, older age class deer and high buck:100 doe ratios (30-45:100). For the Sublette herd, this population decreased below the post-hunt population objective in 2004 following significant winter losses when fawn mortality was estimated at 75% and adult mortality

at 20%, and has remained below desired population objective levels since that time. Despite improved spring moisture and improved shrub productivity from 2009 to 2011, deer losses were extreme from the 2010-2011 winter, with an estimated 70% fawn loss. Dry conditions during 2012 and 2013 resulted in poor production on winter habitats followed by improved moisture and forage production in 2014 and 2015. Good fawn survival during 2014-2016 resulted in population growth, but losses during the 2016-2017 were again extreme. Despite a mild winter and excellent fawn survival during winter 2017-2018, snow depths on Sublette deer winter ranges during 2018-2019 were considerable. Change in ratio surveys conducted in April of 2019 indicated about 50% of the fawns were lost during winter. Adult survival estimates of telemetered Sublette deer from ongoing research with the University of Wyoming indicated 76% survival, with some mortalities occurring as late as May.

The goal of the 2019 hunting season for the Sublette mule deer herd (hunt areas 130, 131, 138-142, 146, 150-156, 162) is to minimize buck harvest to maintain postseason buck:doe ratios above 30:100, while still allowing hunting opportunity. Maintaining the current nonresident quota at 600 licenses, coupled with a short hunting season and antler point restrictions (3 points or more) for a third year in a row should help achieve these goals. General license seasons are proposed to run from September 15-October 6, closing on the first Sunday of October.

The Wyoming Range deer herd (hunt areas 134, 135,143-145) also suffered heavy losses during the winter of 2016-2017, with documented losses of all radio-collared fawns and 35% of telemetered adult does, equating to an over-winter loss of approximately 40% of the entire deer herd. Conversely, the winter of 2017-2018 was exceptionally mild and allowed increased fawn survival. However, the winter of 2018-2019 was also severe, but impacted mule deer wintering on the more southern ranges (Evanston-Cokeville) greater than winter ranges near LaBarge.. Change in ratio surveys conducted in April 2019 indicated a loss of nearly 30% of fawns for the entire herd, but a 70% loss in hunt area 134 compared to only a 13% loss in hunt area 143.

The impact of the 2016-2017 winter was seen in December 2017 post season surveys, which indicated that fawn production and survival was low with only 54 fawns:100 does. In 2018, fawn:doe ratios improved slightly to 60 fawns:100 does, but remain lower than the previous five-year average (2013-2017) of 64 fawns:100 does. Yearling buck:doe ratios improved from 5:100 in 2017 to 12:100 in 2018 reflecting increased survival. Although adult buck:doe ratios dropped to 29:100 in 2017, they bumped up to 30:100 in 2018, within management objectives.

The southern portion of the Wyoming Range herd will offer 13 days of antlered deer hunting in hunt areas 134 and 135, allowing hunters to take antlered mule deer with three points or more on either antler or any white-tailed deer. General license hunting opportunity for antlered mule deer will run from September 15-October 6 for hunt areas 142-145. In hunt area 145, a total of 50 Limited quota Type 3 licenses valid for any white-tailed deer will be in place from November 1-November 15, and unused Type 3 licenses valid for antlerless white-tailed deer will continue from November 16-January 31.

Region G and Region H nonresident deer quotas will remain at 400 and 600 licenses, respectively. Conservative nonresident quotas combined with a short general license seasons for all hunters will help meet the "special" management criteria of maintaining at least 30 bucks:100 does and maintain quality bucks in the population.

<u>Sheridan</u>

Mule deer populations in the Sheridan Region are well below the population management objectives in all four herds. Harvest strategies are designed to provide quality buck hunting opportunity while maintaining conservative antlerless deer harvest strategies to maximize herd growth while addressing localized areas of cropland depredation. Postseason fawn ratios have been stagnant the last few years which has resulted in minimal herd growth. In 2018, fawn ratios were again below what was needed to maintain populations in most hunt areas. This is likely the result of the 2017-2018 winter which had record cold and snow in portions of the region.

Access to hunt mule deer, particularly buck mule deer, has become very limited due to conservative hunting strategies on private land. Even though mule deer populations may be lower than desired, overall buck-to-doe ratios in Sheridan Region herds are quite high. Hunter densities on many accessible tracts of public land can be high, especially on opening day and weekends. Hunters who plan hunts later in the season often see fewer hunters.

To address concerns regarding mule deer populations and hunter access to private and public lands, mule deer seasons have been designed to provide needed flexibility. Seasons will allow harvest of does and fawns on private land where there are damage concerns. In the Black Hills, where deer numbers have noticeably increased, Type 7 doe/fawn licenses are limited to private land to address increasing mule deer and white-tailed deer populations. Nonresident hunters will see a slight increase in the number of Region C licenses whereas the Region Y quota will be unchanged from 2018.

White-tailed deer seasons will again be very liberal with ample opportunity to put venison in the freezer, especially if one secures access to private lands. Nearly all hunt areas offer November hunting seasons for white-tailed deer and many doe/fawn seasons extend into December to allow maximum harvest to manage this population. Securing access to private land increases a hunter's chance of being successful since most white-tailed deer are found on private land. Hunters are reminded that late season hunting is very popular with increasing interest in doe/fawn hunting, so contacting landowners early increases one's chance to secure access.

There will be more opportunity to harvest a buck white-tailed deer this year with increased Type 3 quotas in Hunt Areas 23, 26 and 24 and extended seasons in Hunt Areas 28 and 29. Hunters are reminded that although Hunt Area 28 is public land, white-tailed deer distribution is limited during the late season.

ELK

Casper

Elk numbers remain at or above objective levels in all herds in the Casper Region. Elk seasons therefore continue to be extremely liberal in terms of season length and license issuance. In recent years, elk harvest has approached or exceeded record levels in many Casper Region herds. The Casper Region continues to provide excellent bull elk hunting opportunities, with many areas reporting excellent harvest success on any-elk licenses and good mature bull antler quality in recent years. Antlerless elk hunter success continues to be good in most of the Region, although high hunter densities on public lands often result in reduced hunter success in the early fall. Overall, 2019 seasons will continue to emphasize female elk harvest throughout the Casper Region, while

also providing good mature bull hunting in most areas. Hunters willing to expend the effort should continue to enjoy remarkable numbers of elk and good success if the weather cooperates.

In the Laramie Peak/Muddy Mountain elk herd (Hunt Areas 7 and 19), overall elk harvest continues to be outstanding as cooperation with landowners has resulted in good hunter access for cow elk on private lands along with expanding Walk-In-Area and Hunter Management Area opportunities. Unfortunately, harvest success declined in 2018, although this was due to atypical elk movements to lower elevation early in the season following an unseasonable cold and snowy late October and early November. Elk hunting in the Laramie Range should continue to be good this coming fall, although hunter success on public lands during October and November rifle seasons has diminished in recent years as many elk tend to congregate on private lands with restricted hunting access. Availability of elk on public lands during September archery seasons continues to be excellent. Antlerless elk seasons will again run through January in both Hunt Areas 7 and 19, although only 50 Type 7 (January) licenses were issued in Hunt Area 7.

Antlerless hunting opportunities will extend through mid-December in Hunt Areas 23 and 120 until the end of December in Hunt Area 122. Overall, elk harvest success in Hunt Area 23 continues to be limited as the vast majority of elk tend to congregate on one large ranch with little to no hunting pressure. Over the course of the season, elk do occasionally leave this property and become available on adjacent public lands, or can be found in small groups in other portions of the hunt area. This results in moderate elk harvest over the course of a long season, although hunters typically expend more effort per animal here than in other hunt areas within the Casper Region.

Elk hunting in the Black Hills continues to be a mixed bag. Hunters with access to private lands, where the majority of elk occur, have been doing well while public land hunters in Hunt Area 116 typically have little success. The general license season in Hunt Area 116 was designed to increase elk harvest on private lands while allowing for some opportunistic elk harvest on National Forest, where elk numbers are low. Elk densities on the Bearlodge portion of the Black Hills National Forest have always been low during the fall as hunting pressure and human activity quickly displaces them to private lands. Expectations of harvesting an elk on National Forest in Hunt Area 116 should therefore be tempered. Hunters should note that all cow/calf license types valid in Hunt Area 116 have been combined into one Type 7 license that is valid off National Forest. License quotas for Hunt Area 1 will remain relatively low as overall harvest success has been lower than desired in recent years. Finally, in Hunt Area 117, some increased opportunity for antlerless elk harvest should again be provided for early and late season hunters on select private lands to reduce elk damage. Here, hunters should note that all cow/calf license types were combined into one Type 7 license last year to simplify regulations. In addition, a new Type 2 license was added for Hunt Area 117 to permit spike and antlerless harvest.

Cody

Elk populations in the southern BigHhorn Basin continue to do well. Winter trend count flights for 2018 in the South Bighorn elk herd (Hunt Areas 47-49), Gooseberry elk herd (Hunt Areas 62-64) and Hunt Area 61 in the Cody elk herd had higher observed numbers than winter count objectives. Area managers are maintaining a high harvest level in these areas to reduce elk populations toward objective levels. Hunters in 2019 should expect similar season dates and license numbers as in 2018. There are a few changes in Hunt Area 61 designed to better focus elk harvest to meet management objectives. Hunters are reminded to collect blood from their harvested elk for brucellosis testing. Blood sampling kits will again be available from Game and Fish field personnel or the Cody Regional office.

The North Bighorn elk herd (Hunt Areas 39 and 40) remains healthy and productive and should provide a good opportunity to harvest an elk in 2019. Managers have checked many older class bulls in the past years' harvest and predict good hunting success again for those hunters with a Type 1 licence. Based on 2017 and 2018 winter trend counts, elk numbers in Hunt Areas 39 and 40 are stable. Harvest success however, usually depends on the arrival of cold and snowy weather to move elk to accessible locations. Managers increased antlerless licenses in Hunt Area 41 to address an increase in this elk population that remains over it's population management objective.

Most elk populations near Cody are near population objectives, and many of the season recommendations adopted in 2013 during the Cody Elk working group process for Hunt Areas 55, 56, 59 and 60 will remain in place for 2019. Bull numbers and quality remain high, but opportunity can be dependent on weather conditions moving bull elk into accessible areas. Antlerless hunting opportunities will be available throughout the Clarks Fork (Hunt Areas 51, 53 and 54) and Cody (Hunt Areas 55, 56, 58-61 and 66) herds, especially in areas where there are conflicts with elk on private land. Managers increased antlerless licenses in Hunt Area 66 to continue reducing the elk population within this hunt area, and slightly decreased antlerless hunting licenses in Hunt Areas 53 and 59 to address fewer elk counted in the 2018 trend surveys.

Overall, Cody Region elk hunters should expect good elk hunting since most herds are at or above their management objectives.

Green River

The Green River manages six elk herd units and twelve hunt areas, under varying management schemes. All are currently above the post-season population objectives. With a few exceptions, most general license areas in this region have liberal "any elk" seasons, followed by lengthy general license "antlerless" seasons. They also have fairly liberal numbers of antlerless licenses or additional cow-calf licenses available. General license herd units in this region include: West Green River (Hunt Areas 102-105), Uinta (Hunt Areas 106 and 107), and Sierra Madre elk (Hunt Areas 13, 15, 21, 108 and 130). Hunting will remain good in all of these areas. Fairly liberal seasons will continue in all these herds until objectives are achieved. Elk herds above objective have a potential to negatively impact other species, and are often in conflict with agriculture. These conflicts range from direct loss of stored crops to disease concerns, primarily brucellosis. Elk seasons have been dramatically liberalized during the past decade in an effort to check growth and return numbers to appropriate levels. Hunters should be aware that this management shift will reduce elk populations over time, and the level of hunter satisfaction in general license herd units may also decline.

The Green River Region also manages two herd units under limited quota special management, and an additional limited quota herd designated as "recreational management." In reality, due to public desires, all three are managed under the special management criteria, meaning high bull to cow ratios and the presence of older-aged males. Both the Steamboat (Hunt Area 100) and the South Rock Springs (Hunt Area 30, 32) herds are under special management guidelines and managers propose conservative harvest levels to maintain a quality hunting experience. Both herds are very popular with the hunting community. In the case of the South Rock Springs herd, managers are constantly balancing elk management with the needs of the South Rock Springs mule deer herd. While one likely has negative impacts on the other, the need for this balance is difficult to achieve. Recent trend count data suggest that current season structure has been too conservative,

and more licenses are proposed in the Steamboat herd (Hunt Area 100), especially for antlerless elk.

Opportunity in the Petition herd unit (Unit Area 124) was increased in 2012 and 2015 in response to public comments and concern over increasing elk numbers and their impacts to deer and pronghorn. Liberal cow hunting opportunity is maintained on and near the Tipton HMA to reduce landowner conflicts, while bull harvest remains fairly conservative to allow for older aged bulls.

<u>Jackson</u>

In the Jackson Elk Herd, 9,627 elk were counted during the February 2019 mid-winter survey, including 6,586 on the National Elk Refuge (NER). Due to the mild early winter conditions, elk were widely distributed when heavy snows commenced in February and remained widely distributed for the remainder of the winter, which definitely affected the sightability of elk. Although only 86 elk were found in the Gros Ventre during the 2017-18 winter, 2,136 elk were observed there in the 2018-19 winter. Based on movements of radio collared elk, 500 or more elk left the Gros Ventre to winter on the NER. Similar to past years, portions of the herd that migrate from Yellowstone National Park, the Teton Wilderness and the Gros Ventre drainage continue to exhibit low calf recruitment compared to elk that summer in southern Grand Teton National Park (GTNP) and near residential and agricultural areas close to Jackson that have about double the calf recruitment as the long-distance migratory elk in backcountry areas. Managing for these widely varying population segments has been and will continue to be a challenge in the Jackson Herd.

Conservative hunting seasons are proposed for Hunt Areas 70, 71 and 81-83 to address low calf recruitment while trying to maintain bull numbers, and area 79 in GTNP will be closed in order to lend more protection to long-distance migrants. In the southern portion of the herd unit in Hunt Areas 75, 77, 78 and 80, antlerless elk seasons are proposed to address growing elk populations that summer along the Snake River corridor in southern Grand Teton National Park and subdivisions in Hunt Area 78. A slight reduction in Hunt Area 75 licenses is a cautionary response to the lower herd unit trend count and will continue to be evaluated and adjusted as the need to harvest antlerless elk varies.

In Hunt Area 78, Type 1 licenses will be valid off national forest beginning on August 15, and will be valid in the entire hunt area beginning on September 26. For the third year there will be a general license season in Hunt Area 78, valid for antlerless elk on private lands only from August 15 -October 31. Also, for the second year, there will be a Type 2 license for any elk on private lands from August 15-October 31. The Type 7 license will be removed this year due to issues with wounded elk crossing private land boundaries. Hunters who wish to use limited-range weapons may still do so on other license types. The hunting season in Hunt Area 78 is structured to harvest elk that are causing chronic damage to agricultural lands, disperse animals, and reduce elk numbers. In Hunt Area 75 for 2019, there will be 25 fewer Type 4 and 175 fewer Type 6 licenses as were available in 2018. Type 4 license-holders will not be able to hunt in Hunt Area 79, as it has been closed for the 2019 season, but will still be able to hunt that portion of Hunt Area 81 west of the Shadow Mountain Loop Road. The area known as the Snake River Bottom in Hunt Area 75 will be closed again this year, but the State Section near Kelly Warm Springs will be opened again for the entire season. As in the past, the Department's Hunter Management Access system will be used to allocate permits for the National Elk Refuge (Hunt Area 77). The youth hunt is again proposed to occur from November 28 to 30 this year during the Thanksgiving school break. Those with a full price Youth License can apply for a permit to access the National Elk Refuge during that time.

Presumably due to declining opportunities to hunt antlerless elk in other areas around Jackson, many hunters have shifted into Hunt Area 80 creating many complaints of hunter crowding. To address this situation the General Any Elk season ran from September 26 to October 31 in 2018. After that only Hunt Area 80 Type 6 hunters were afield from November 1 to November 30. The customary closure north of the Sheep Creek Road remained in place from November 12-30. Even though elk movements into Hunt Area 80 were less than normal, hunter success was still 38%, and hunter satisfaction improved over that of past years.

It is anticipated that the 2019 hunting season will focus hunting pressure on southern segments of the Jackson elk population that exhibit high calf recruitment and contribute to high numbers on the National Elk Refuge. In addition, lower calf production observed in long-distance migratory segments over the past several years will continue to influence recruitment and contribute to the need for conservative hunting seasons proposed for the backcountry segments of this population.

Elk surveys in the Fall Creek Herd yielded approximately 600 more elk in 2018 compared to the mild winter of 2017. This herd has been slightly below objective and management efforts have been directed at increasing elk numbers and preserving bull ratios. Due to the increased trend count, the general, any elk season will open September 26 and close on October 13, allowing 4 additional days of any elk hunting opportunity compared to 2018. General license antlerled elk, spikes excluded hunting will continue through October 31. This is the fifth year of general license hunting for any elk, with a spikes excluded restriction, which should allow more yearling bulls to be recruited into the population. Increases have been made to the Hunt Area 84 Type 6 and the Hunt Area 84, 85 Type 7 licenses in order to provide slightly more opportunity and to assist in addressing damage situations on private lands.

In the Afton Herd, hunting seasons for antlered elk in the lower Greys River (Hunt Area 89) will again be extended through October 31. The increase in hunting recreation in the lower Greys River is a result of higher numbers of elk counted on the Greys River feedground at Alpine and on native winter ranges in Greys River. In Hunt Area 90, liberal seasons into November and limited quota cow or calf tags are again being proposed to address an increase in elk numbers in the Upper Greys River.

The Targhee Elk Herd (Hunt Area 73) is a small population on the west side of the Teton Range that is managed to provide recreational hunting opportunities. Most crucial winter ranges are situated in Idaho and options to allow this population to grow are limited. In 2018, hunters reported a 52% success rate. Proposed hunting seasons in 2019 will be unchanged from 2018 and will include a general license season for antlered elk, spikes excluded from September 20 through October 25. A new, Type 6 license first offered in 2017 will again be valid for cow or calf elk on private land only from August 15–January 31.

Lander

Like much of Wyoming, elk populations are doing well across the Lander Region and all herd units are near their population objective. Calf production remains on par with previous years and should result in continued robust elk numbers. Similarly, observed bull to cow ratios remain strong over most of central Wyoming. If favorable weather conditions are realized during the fall, hunters should experience excellent harvest opportunity and success in all hunt areas. With elk herds near objective in almost all locations, the 2019 seasons are designed to maintain elk numbers near current numbers.

<u>Laramie</u>

Most elk populations in the Laramie region are above management objectives. Despite relatively liberal seasons, populations continue to be highly productive, with calf ratios that often exceed 40 calves: 100 cows. Limited public access in herds with a large percentage of private land, such as Iron Mountain, can hinder the Department's ability to curtail growth. While this makes reaching herd objectives difficult, it provides good opportunities for hunters to harvest elk, especially those with permission to access private land.

Recent research in the Sierra Madre mountains suggests that the bark-beetle epidemic has altered how elk use the landscape during the summer. Marked animals generally avoided beetle-killed forest during the day, in favor of intact conifer stands, resulting in potential habitat loss. Some of these losses however, may be offset by improved habitat conditions following a number of recent fires in 2018, especially in the Sierra Madre and Snowy Range Herd Units.

Laramie region managers continued liberal elk seasons in 2019, with increased opportunity in the Snowy Range Elk Herd. Much of the elk habitat in the Snowy Range Herd overlaps public land, with good hunter access.

Pinedale

There are 4 elk herds managed in this region: Hoback, Pinedale, Piney and Upper Green. Liberal seasons have been in place for several years and are designed to move populations down toward objective levels, while maintaining at least 15 bulls:100 cows in the post-hunt populations. All herds met bull ratio objectives, ranging from 19 bulls:100 cows in the Hoback herd to 29 bulls:100 cows in the Upper Green River herd. Elk attendance was average to high on most feedgrounds in the Pinedale Region, a result of increased snowloads in most locations during the 2018-2019 winter. Calf:cow ratios averaged 32:100 among the four herds, ranging from 30:100 in the Pinedale herd to 39:100 in the Hoback elk herd. Elk hunter harvest in 2018 was slightly lower in most Pinedale Region elk herds due to warmer than average conditions during fall and the late arrival of snow.

The Piney elk herd is currently within the established population objective after numerous years of liberal seasons to keep the herd from growing. Liberal seasons are again planned for the 2019 hunting season. Hunt areas 92 and 94 will open October 1 for limited quota type 6 cow or calf only hunting and extend to November 23. These licenses will extend to the end of January for a portion of hunt area 92. A type 7 cow or calf only license will allow hunters to take advantage of the month of November to harvest an elk north of Middle Piney Creek in hunt area 94. There will be a total of 800 type 6 cow or calf licenses available in hunt areas 92 and 94 and seasons will run through November 23 to reduce elk numbers.

Elk numbers in the Pinedale herd (hunt areas 97 and 98) have been very stable in recent years and remain within the established population objective. Hunting seasons have been designed to increase antlerless harvest and lower population levels. Hunter success in the Pinedale elk herd remains to be among the highest in the region, with an overall 33% success rate. The 2019 seasons are again designed to target anterless elk and lower population levels.

The 2019 hunting season in the Hoback herd will offer general license any elk hunting through October 31 in hunt areas 86 and 87. This herd is being managed to provide recreational opportunities while maintaining 15 bull:100 cow ratios. An increase in the number of elk wintering

in the northern portion of hunt area 87 will allow for simplified regulations in 2019; all of hunt area 87 will be open for general license hunters for antlerless elk November 1-5.

With stable elk numbers in the Upper Green River herd the past two years, 2019 hunting seasons will continue expanded antlerless elk hunting opportunities first implemented in 2017, specifically increases in Type 6 licenses and season length in hunt area 96. This herd is slightly above the stated objective of 2500 elk, and is managed with a combination of general and limited quota licenses to meet management objectives. Elk hunters with 96 type 1 and 6 licenses can pursue antlerless elk through the end of November in hunt area 96.

<u>Sheridan</u>

The Sheridan Region contains part or all of four elk herd units. Elk seasons are designed to provide ample opportunity to harvest elk in hunt areas where populations are over objective, while more conservative seasons are set for those hunt areas where numbers are near desired levels. Limited access to private lands for elk hunting has been the primary factor contributing to herds exceeding management objectives. Hunters who gain access to hunt or cross private lands are expected to have high success. Mature bulls are available in all hunt areas and hunters have a reasonable chance of harvesting a mature bull.

In Hunt Areas 33, 34, 35, 36, 37 and 38, most antlerless and cow/calf elk hunting seasons will run until December 31 to provide opportunity to harvest elk as they move to winter ranges. Along the Bighorn Mountains, elk find refuge on some private lands. Type 6 hunting seasons in Hunt Areas 34, 35, 36 and 37 have been restructured to target cow/calf elk on private lands. Hunters are reminded that liberal license quotas and leftover licenses mean hunter access is limited.

Hunters will have an increased opportunity to hunt bull elk in Hunt Area 38 with more Type 1 and 9 licenses being offered. Quotas were reduced four years ago due to lower bull numbers. More conservative seasons have allowed the bull numbers to recover.

Hunt Area 2 is also known as the Fortification Elk Herd. The elk population is over the management objective and there are more elk than most landowners desire. The 2019 hunting season will be limited to antlerless elk as the bull season is closed.

In the Rochelle Hills Elk herd, Hunt Area 113 will be open in 2019 as this area alternates hunting seasons every other year. Favorable hunter access and good bull quality make these licenses tough to draw. Hunt Area 123 is closed this fall.

Hunt Area 129 is again open for general license and cow/calf hunting. Elk are in small, scattered herds throughout this hunt area, mostly on private land. Finding access to hunt is very important prior to going hunting. Hunt Area 129 is not considered a "destination hunt" for most hunters, but rather offers more of an opportunity for hunters living nearby to harvest elk when they become available.

MOOSE

<u>Cody</u>

The moose populations in Hunt Areas 9 and 11 of the Absaroka Mountains are at low densities but appear to be stable. Hunt Area 11 will again offer five licenses for the 2019 season. Moose Hunt

Area 9 licenses were reduced from five licenses to three for the 2019 season. In 2018, several 40+ inch bulls were harvested from both hunt areas, indicating there are still plenty of mature bulls available for harvest. Recent trail camera work in Hunt Area 9 has shown higher than expected moose numbers, particularly bull numbers in some drainages, indicating an improvement in overall numbers since the mid 2000's. Harvest success for these moose hunt areas still runs above 90 percent, with most hunters harvesting a mature bull. The 2019 season should again have good success with adequate numbers older aged mature bulls in the population.

Moose hunting in Hunt Area 42 in the Bighorn Mountains should be better than the 2018 season. Managers recently completed their summer moose trend survey and observed the most moose since the survey began. This coupled with the increased incidental moose sightings along highways 14 and 14A this spring and early summer suggest that moose hunting in Hunt Area 42 should be very good.

Green River

Moose populations declined in the mid-2000s throughout the Green River Region and other herds in western Wyoming from a number of reasons that likely include parasites, drought and predation. The Green River Region responded to declining populations by eliminating all antlerless moose hunting opportunities. Antlered moose hunting was also reduced during this time although a modest increase is proposed for this upcoming season. Until moose populations rebound, moose hunting will remain conservative in southwest Wyoming, including Hunt Areas 26, 27, 33 35, 36 and 40 (the season is closed again in Hunt Areas 33 and 44 for 2019).

In the Green River Region, moose numbers (and opportunity) are highest in the Lincoln herd unit (Hunt Areas 26, 33, 36 and 40), especially in Hunt Area 26. A few very large (50+") Shiras bulls are harvested in this herd on an annual basis, and hunters enjoy selecting from a good number of bulls.

<u>Jackson</u>

In the Sublette Moose Herd, management direction in the past has focused on maintaining or building moose numbers in Hunt Areas 10, 20, 21 and 23. Mature bulls, that are four years of age or older, are consistently being harvested in these areas. The opportunity to harvest a trophy class Shiras moose has increased in recent years. Throughout these hunt areas the average antler spread continues to approach 40 inches. In order to maximize success, hunters should plan on hunting when temperatures are the coolest and moose are likely to be feeding – at first light and early evening. Due to a desire to build moose numbers, maintain hunter success, and improve the availability of older age class bulls, the more conservative hunting seasons in Hunt Areas 10 and 21 implemented in 2018 will remain in place for 2019. Only two licenses (1 resident, 1 nonresident) are proposed for Area 21, while eight licenses (7 resident, 1 nonresident) are proposed for Area 10.

The Targhee Moose Herd is designated for special management and conservative hunting seasons and will be maintained in 2019 in the combined Hunt Areas 16 and 37. Hunter success was 100% in 2018, and the harvest was comprised of primarily older age class bulls. Low moose densities remain a concern in this herd unit, and hunting seasons in 2019 will again offer only five antlered moose licenses for the combined Hunt Area 16 and Hunt Area 37.

The Jackson Moose Herd also continues to be a concern as this herd remains well below the objective of 800 moose (observed during mid-winter trend counts) and seasons will remain very

conservative in an effort to build numbers. Although higher numbers of moose (330) were observed during the severe winter of 2016-2017, mild conditions during 2017-2018 resulted in fewer moose being seen (276). In 2018-2019, 258 moose were observed, including more calves and more sets of twins than seen for many years. Calf ratios were exceptional for this herd, and at 52 calves per 100 cows, the highest seen since 1994. Bull ratios remain high at 91 bulls:100 cows. Although overall moose numbers remain very low, the sustained increase in the calf ratio in recent years is a promising sign that this herd may be increasing. License quotas in the Jackson Herd have decreased from a high of 495 in 1991 to a low of 10 licenses in 2013. In 2011, Hunt Areas 7, 14, 15 and 32 were closed because of low calf:cow ratios and declining population trends. Hunt Areas 17 and 28 were combined in 2012 and will again offer five antlered moose licenses in 2019. In the upper Gros Ventre drainage, Hunt Area 18 will remain at five licenses for antlered moose and open on October 1. Conservative seasons are again proposed to address low herd numbers, and to provide quality hunting opportunities. This herd will be closely monitored in future years to evaluate population numbers and determine whether additional hunting opportunity can be offered.

Lander

Populations in both of Lander Region's moose herds are below desired levels and continue to struggle. Personnel counted a similar number of moose this year in the Lander Moose herd, Hunt Areas 2 and 30, and it appears this population is stable and near objective. This herd's trend is slightly increasing over the past four years and observed calf and bull ratios in 2018 mirror that trend. Winter counts in the Dubois country yielded fewer moose compared to last year, and remain at historically low levels. This herd unit (Hunt Area 6) seems to have stabilized over the past four years. Overall herd performance and population size in both herd units continue to be concerns for Department personnel. Seasons for 2019 will be identical to those in 2018 and hunters fortunate enough to draw a license should expect reasonably good harvest success.

<u>Laramie</u>

The Snowy Range Herd Unit (Hunt Areas 38/41) stretches across southern Wyoming, along the Colorado border from Baggs to Cheyenne. Moose are found year-round in areas on Pole Mountain, Sierra Madre Mountains and, most notably, the Snowy Range Mountains. Type 1 licenses are highly sought by hunters looking to harvest mature bulls. Harvest success across both Type 1 and Type 4 licenses continues to be exceptional (98%), however antlerless hunters can struggle to find cows without calves at side to harvest.

The initial Snowy Range moose research project that began in 2014 is complete, with final results expected by fall 2019. Preliminary findings suggest that large-scale beetle kill does not have a strong effect on moose habitat use, with animals mostly preferring aspen and riparian areas, regardless of forest condition. Twenty-eight additional cow moose were collared in the Snowy Range in spring 2018 to evaluate habitat use, survival, recruitment and nutritional condition. Preliminary results indicate high adult survival. Of the 28 marked moose, 26 survived to spring 2019. Based on winter ground surveys, 19 of the 26 had a calf at heel. Collars will remain on animals until spring 2021.

As of 2016, this herd is managed under a mid-winter trend count objective. Department personnel completed the third annual count in early 2019, yielding a 3-year average of 163 moose. The Department did not change moose licenses for the 2019 season.

Pinedale

The Pinedale Region manages the majority of the Sublette Moose herd unit which is managed under a 'special' mangement strategy to provide recreational opportunities and maintain a harvest age of 4 years for bulls to maintain trophy harvest opportunities. This herd has a winter trend count objective of 1,500 moose, and the population has been stable to slightly increasing since 2006. The 2018 trend count was 1,210 moose, similar to the previous 5-year average trend counts of 1,159 animals and below the desired objective of 1,500 moose. The 2019 seasons are designed to maintain quality bull ratios (+50:100) while encouraging the population to grow. Due to concerns over the availability of older age class bulls in hunt area 3 and hunter opportunity complications created by the boundary between areas 3 and 4 boundary, hunt area 3 and 4 license holders were allowed to hunt either area in 2018 with 5 fewer total moose licenses. These area licenses will again be offered that opportunity in 2019.

<u>Sheridan</u>

The Sheridan Region manages Hunt Areas 1 and 34 of the Bighorn Moose Herd. Conservative bull seasons are in place to provide a quality hunting experience for those fortunate enough to draw a license. Type 4 antlerless moose licenses will not be issued because of an ongoing research project. Hunt Area 42, on the west slope of the Bighorn Mountains, is part of the Bighorn Moose Herd and will be open with five Type 1 any moose licenses. Governor's moose licenses will not be eligible for use in the Bighorn Mountains in 2019 because these areas have less than than 10 licenses.

Hunters fortunate to draw a license for any of the Bighorn moose hunt areas have an excellent opportunity to harvest a moose and it is expected some large, mature bulls will be taken. Access to hunt is excellent as most moose are found on the Bighorn National Forest.

BIGHORN SHEEP

<u>Jackson</u>

The Targhee Sheep Herd is small, currently estimated at approximately 100 sheep. Aerial surveys conducted in February 2018 and December 2018 yielded observations of 76 and 81 sheep, respectively, and were much improved compared to similar surveys conducted in 2016 and 2015, which produced counts of 46 and 57 sheep respectively. During hunting seasons from 2006 to 2011, one ram was harvested each year, no rams were harvested in 2012, and one ram was harvested each year from 2013 to 2017. No rams were taken in 2018, as hunter success is limited by the difficult terrain, low sheep numbers, and movements into Grand Teton National Park. Average age of harvested rams over the last five years is 6.5 years old. This herd appears to be limited by poor quality, high elevation winter habitat. Mountain goats, once a rare sighting in the Tetons, have become as plentiful as bighorn sheep and concerns exist over competition between the two in the extremely limited habitats available in winter.

The Hunt Area 6 boundary was changed to remove the Snake River Range portion of the area, as it holds no bighorn sheep and management direction is not to encourage expansion of bighorn sheep there. Sheep hunting opportunities for the Targhee Herd will again be offered in 2019, but with 1 nonresident license.

In the Jackson Sheep Herd, managers began detecting pneumonia in the sheep population in early summer 2012. Some winter ranges in the Jackson and Gros Ventre areas may have experienced a

30% decline in the overall number of sheep during the outbreak. Lamb:ewe ratios also declined to 21 lambs:100 ewes from 50:100 prior to the outbreak. However, the population has rebounded quickly in recent years. The March 2019 trend count indicated the population is doing well, with a lamb:ewe ratio of 49:100 and 363 total sheep classified. Ram:ewe ratios remain stable at 41:100. Hunter success in 2018 was only 64%, but winter surveys show the availability of mature rams has not diminished. The 2019 hunting season proposes to again offer 12 licenses in Hunt Area 7.

<u>Cody</u>

Overall, bighorn sheep hunting in the Absaroka Mountains should be good in 2019 for those lucky enough to draw a license. In 2018, the average age of harvested rams in Hunt Areas 1-5 was a little over 7 years old, with many older age class rams checked. Due to decreased lamb ratios, hunting success and numerous bighorn ram pickup heads being discovered, regional sheep managers reduced sheep licenses in Hunt Areas 1, 2 and 5. Hunt Areas 3 and 4 issued the same number of licenses and 2018.

In Hunt Area 12 (Devils Canyon herd), bighorn sheep continue to do well, and area managers are again proposing six licenses for the 2019 hunting season. Past hunters have all harvested mature rams (6-8 years old) so hunting should be very good for the four resident and two nonresident hunters lucky enough to draw one of the coveted licenses.

Lander

Lamb production in the Whiskey Mountain bighorn sheep population was once again alarmingly low at 17/100 in 2018 and continues to be a concern. Lamb productivity has been depressed in the herd unit for over 20 years and while it has certainly impacted population growth, there are still rams available for harvest. Hunter success in 2019 shouldn't be impacted, though the number of licenses was reduced from 10 to 8 in Hunt Area 8. This reduction was deemed prudent in light of the last two years' low lamb recruitment and decreasing population size. The ram to ewe ratio in 2019 decreased from 58 to 52/100. Those who draw a tag in these areas should expect to see fewer rams than in the past, but should experience reasonable success depending on their expectations. Sheep Hunt Areas 9 and 10 remain unchanged but it is important to note hunting in these areas is difficult and will require a lot of effort to locate mature rams.

Hunt Area 22 (Dubois Badlands) will once again be open for hunting any ram in 2019. Four licenses will be valid to hunt in Hunt Area 22 from September 1-30. After September 30, these licenses will also be valid in Hunt Area 5.

Hunt Area 17 (Ferris/Seminoe Mountains) and Hunt Area 26 (Bennett Mountains) will be open for the seventh year in 2019. We are proposing to allow the harvest of five rams an increase of one compared to 2018. The Ferris/Seminoe herd has been doing well since the supplemental releases in 2009, 2010, 2011, 2015, 2018 and most recently in February, 2019. It is estimated there are nearly 300 sheep in the population. It is expected the license recipients will have excellent opportunity to harvest a ram and for those who hold out could harvest an exceptional ram.

<u>Laramie</u>

The Laramie Peak Sheep Herd (Hunt Area 19) continues to offer trophy quality rams, with outstanding harvest success (2018 = 100%). Over the past few years there have been several fires in the Herd Unit. Arapahoe, Cow Camp, and Russell's Camp fires burned over 112,000 acres, with the Britania and School Creek fires adding another 30,320 acres. Perennial forbs, grasses and aspen have re-established post-fire, which should benefit bighorn sheep in the future. The Department

has partnered with landowners and several land-management agencies to treat cheatgrass in the affected areas. Substantial moisture during spring and summer yielded strong forage production. We anticipate that robust food availability will likely lead to increased offspring survival, along with notable horn growth.

Sheep licenses will not be available for the Douglas Creek and Encampment River Sheep Herds (Hunt Areas 18/21) this year. These herds do not have large enough populations to be hunted every year. Managers propose hunts within these hunt areas on alternating years to provide opportunity consistent with the resources available.

Pinedale

The Darby Mountain sheep herd and a portion of the Whiskey Mountain herd are managed by Pinedale regional personnel. In 2016, the Darby Mountain herd (hunt area 24) was opened for the first time since the season was closed after the 2011 hunting season. In 2019, area 24 will again be open with one license for any ram. Continued population declines in the Whiskey herd prompted another reduction in hunt area 8. A total of 8 licenses will be offered in 2019, compared to 12 licenses in 2017 and 10 offered in 2018. In 2016, hunt areas 8 and 23 were combined to create the new area 8, and the season length was extended to October 31 (September 1–October 31) to provide additional hunter opportunity.

MOUNTAIN GOATS

Cody

Mountain goat numbers differ between Hunt Areas 1 and 3, with a decrease in overall goat numbers in Hunt Area 1, and an increase in numbers in Hunt Area 3. Despite the decrease in Hunt Area 1 licenses, hunters able to access the rugged terrain should still have opportunities to harvest a mature mountain goat. To minimize hunter crowding in Hunt Area 3, a Type 2 license will again be offered in 2019 valid only for the month of October. Access to mountain goats in the late season can be tricky, but the Hunt Area 3 license should provide opportunity for those willing to put in the extra effort. There were no changes to license numbers in these hunt areas for the 2019 season.

To address resource competition and potential disease issues between bighorn sheep and mountain goats regional managers created a new mountain goat license to reduce goats south of the North Fork of the Shoshone River. The new Hunt Area 5A will provide an opportunity for 16 hunters to go hunt goats this fall. Goat densities within the 5A Hunt Area are low, so managers expect harvest success to be relatively low. The hunt area is primarily mountainous backcountry that will require hunters to utilize horses or backpack hunt to access areas that may have goats.

Jackson

Hunt Area 2 encompasses the Palisades Mountain Goat Herd which is an extension of Idaho's Palisades mountain goat population that has expanded into Wyoming. A hunting season was initiated in 1999 with four permits. The hunt area was expanded in 2014 to include lands north of Wyoming Highway 22 and west of Grand Teton National Park on Caribou-Targhee National Forest, and in 2015 permits increased from 8 to 12 licenses. This expanded area was created to address mountain goat expansion into the Tetons, an area emphasizing bighorn sheep management over mountain goats.

In response to the lower number of mountain goats observed during the 2016 mid-summer trend count and decreased kid:adult ratios documented during the 2016-2017 winter trend count, the number of licenses issued in 2017 was decreased from 12 to 8. A trend count in August 2018 revealed 129 goats, which is very close to the objective trend count of 120 goats. As some concern exists over the impacts of severe late winter conditions and numbers of goats are near desired objectives, license numbers will remain at 8 for the 2019 season.

Hunters should expect to find goats in steep, rocky terrain with long trips required of more than 10 miles away from any roads. The 2019 season will remain unchanged and run September 1-October 31, and be valid for any mountain goat.

A new mountain goat hunt area was created in the Jackson Region (Hunt Area 4) and will be hunted with the new Type A license for any mountain goat. Hunt Area 4 was carved out of Hunt Area 2, and consists of lands on the Caribou-Targhee National Forest and Bridger-Teton National Forest north of Wyoming Highway 22. This hunt area and license type was created to reduce mountain goat numbers in the Teton Range and minimize the expansion of mountain goats into high priority bighorn sheep habitats, in this case the Targhee sheep herd. Unlike mountain goat Type 1 and Type 2 licenses, Type A licenses are not once-in-a-lifetime, and a hunter could potentially draw a license and harvest a mountain goat every year. Forty-eight licenses will be offered in 2019. Due to the very difficult terrain, the low number of goats that reside outside of Grand Teton National Park at the current time, and the intent of this license, hunter success is expected to be very low.

BISON

<u>Jackson</u>

Determining the size of the Jackson Bison Herd was made difficult in 2019 because only 155 bison migrated to the National Elk Refuge (NER) for winter, when normally nearly all bison in the population are found wintering there. Although it is estimated there were between 550 and 600 bison after the 2018 hunting season, only 484 bison were observed during mid winter surveys, with most bison widely dispersed on native winter ranges, and wintering in heavily forested areas.

Management of this herd is complicated because occupied habitat includes Grand Teton National Park (GTNP), the National Elk Refuge (NER) and the Bridger-Teton National Forest (BTNF). Bison remain distributed in GTNP during much of the summer and fall and are not available for hunting until they migrate to either BTNF or the NER. In the past two years, mild weather and aversion to hunting pressure on the NER have resulted in delayed movements, or little to no movement into open hunt areas, which makes achieving harvest objectives difficult. Some bull hunting occurs on BTNF land to the east of GTNP, but bison availability is intermittent and low in that area.

After the 2016 hunting season there were 546 bison observed in the Jackson Bison Herd, which was closer to the population objective of 500 than it has been since 2000. This was the result of over 10 years of hunting seasons designed to reduce herd numbers from over 1,000 bison. Although the 2017 and 2018 hunting seasons did not produce desirable harvests, additional licenses are not proposed for the 2019 season. Considerably fewer cows in the population, a lower than average calf:cow ratio, and the potential for substantial winter mortality of calves result in fewer licenses necessary to curb the growth of this herd.

Hunters can expect the regular season to run from August 15 to January 1, 2020. Like last year, the season will continue from January 2 to January 31 with National Elk Refuge (NER) permits available on a daily basis through the Jackson Regional Office through the end of the month or until supplemental feeding on the NER is deemed necessary. This will allow for additional hunting opportunities should forage and weather conditions delay the onset of supplemental feeding of elk and bison on the Refuge. A total of 125 Type 1 licenses and 50 Type 4 licenses will be issued in 2019, which is slightly fewer than 2018 levels. The post-season calf:cow ratio was below average in 2018 at 38 calves:100 cows, and the bull:cow ratio remained exceptionally high at 128 bulls:100 cows this winter.

Hunter success usually depends largely on weather, especially for cow/calf hunters, as almost all of the harvest on the Type 4 license occurs on the National Elk Refuge (NER). The majority of the harvest occurs during late December and January. Hunters wishing to hunt on the NER will have an opportunity to apply for a Refuge permit on the Wyoming Game and Fish Department's web page beginning in July. Additional information on NER permits will be available to successful applicants by contacting the Jackson Regional Office.

UPLAND GAME BIRDS - SMALL GAME

Casper

After a period of growth for several years, sage-grouse populations appear to be in the midst of a downward swing within their population cycle throughout the Casper Region. Regardless, hunters should still find plenty of birds in areas south and west of Casper. Sage-grouse populations in northeast Wyoming are relatively small and isolated, with very conservative hunting seasons in place in some counties while other areas remain closed. Blue (dusky) grouse numbers in the Laramie Range were relatively good last year, although dusky grouse numbers can be highly variable from year to year in the Laramie Range. Hungarian partridge numbers declined in the Casper area in recent years, and hunters should not expect to see high numbers in 2019 either. As a general rule, upland game bird hunters should not expect to see high densities of "huns" in this part of the state as much of the Casper Region is not considered to be good Hungarian partridge habitat. The Black Hills will continue to provide modest hunting opportunity for ruffed grouse on National Forest lands, although this can be highly variable from year to year. Hunters willing to work hard and hunt aspen and birch dominated areas should be able to find a few "ruffies" for the table.

After several years of almost unfettered growth resulting in a recent peak in their population cycle, cottontail rabbit populations have declined dramatically in most of the Casper Region. Regardless, even when cottontails are at the low end of their population cycle, there are still ample hunting opportunities in the Casper Region.

Cody

Success for upland game bird hunting in 2019 in the Big Horn Basin will not be as good as it was in the previous season. Upland bird hunting success in 2018 was down compared to previous years, with many hunters finding only scattered numbers of huns, chukars, grouse and pheasants. Biologists observed fewer upland bird broods afield this year. Upland bird production was likely negatively impacted by heavy spring and early summer precipitation. Bird numbers have been down for a few years, so it will take a couple of years with ideal weather conditions for bird

numbers to increase. Bird hunters should remember hunting has little to no effect on upland bird populations; weather and habitat play a much more significant role than hunting by influencing nesting success and chick survival.

Green River

The 2019 upland game bird seasons for the Green River region are similar to last year with the exception of a date shift (anchored to the 3rd Saturday in September) for sage-grouse. Sage-grouse hunting in the Green River Region should be fair to good throughout much of the region. Mountain grouse (ruffed grouse and dusky (blue) grouse) will vary by locality, although some pockets of good hunting are likely to occur.

Cottontail rabbits appeared to have peaked throughout much of the region in 2016, and have been followed by the typical crash in numbers. Rabbits of all species are noticeably fewer than in recent years, and hunters will have a harder time finding a limit of cottontails. Some areas of high densities still occur, and a hunter willing to put the legwork in will find plenty of cottontails. Snowshoe hares, a species that receives very little harvest pressure in the Green River Region, are numerous in some of the higher elevations of the southern Wyoming Range, Uinta, and Sierra Madre mountains, providing additional hunting opportunity and opportunity to use those cross country skis or snowshoes. The Green River Region has limited opportunity for squirrel hunting, with the exception of red squirrels, but this species is abundant.

Jackson

Although relatively severe late winter conditions could possibly have a negative impact on overwinter survival of upland game birds, favorable spring conditions could result in a good start to the nesting season in 2019 and a quick improvement in bird numbers. Similar to other years, hunters will likely find localized populations of grouse that have reproduced well during the year. In 2018, the season for dusky (blue) and ruffed grouse was extended from November 30 to December 31. The birds may not be easy to find at this time of year, but the opportunity is there. Hunters will need to be mindful of winter range closures in some areas that begin either December 1 or December 15.

There is a healthy population of snowshoe hares within the Region, and the season was recently extended to March 31 to allow for more hunting opportunities in late winter. However, several areas of the Bridger Teton National Forest are closed to winter access beginning either December 1 or December 15 and hunters should check with the Bridger Teton National Forest for winter travel plan details.

Lander

Hunting upland game birds (sage, blue, and ruffed grouse, pheasants, chukars and hungarian partridge) will likely be a bit tougher in 2019 in the Lander Region. Cold, wet spring conditions appear to have impacted nesting success thereby decreasing chick. Early field observations of sage-grouse are revealing few hens with broods as expected.

The Sand Mesa and Ocean Lake Wildlife Habitat Management Areas, and the one-day youth hunt at Sand Mesa continues to be very popular with pheasant hunters and will be continued in 2019. This year's youth hunt will occur on Saturday, November 16th . Bird farm pheasants will again be released at the Sand Mesa and Ocean Lake Habitat Units through November.

Cottontails, snowshoe hares, and red squirrels appear to be similar to that in 2018 within the Lander Region. For those interested in pursuing these animals, hunting conditions should again be good in 2019.

<u>Laramie</u>

Sage grouse populations are predicted to decrease this year. Statewide, the 2018 chicks per hen ratio was 0.8 chicks:1 hen. Sage grouse require 1.4-1.6 chicks per hen for population stability. The number of birds harvested each year, however, is related strongly to hatching success and over-summer chick survival. In the Saratoga area, biologists observed a large number of nest/brood failures due to the wet, cold spring conditions. We anticipate a similar trend across most of the region.

Forest grouse hunting should be similar to the 2018 season, though cold conditions during the 2019 nesting and brooding seasons could lead to lower productivity. Populations of pheasants and sharp-tailed grouse in the eastern portion of the region have increased since 2013. Similar to forest grouse, hunting for these species should be comparable to the 2018 season.

Cotton-tailed rabbit numbers increased dramatically in 2016 in the Laramie region. Population growth appears to be slowing, however, with anecdotally fewer numbers on the western slopes of the Snowy Range. Hunters should find pockets of abundant rabbits, but overall anticipate more challenging hunts.

Pinedale

Sage grouse seasons will again run later in September in an attempt to reduce the vulnerability of hens with broods. In 2018, the season for dusky (blue) and ruffed grouse was extended from November 30 to December 31. In years with later than average onset of snow, access to the forested habitats of these gamebirds provides additional time afield for upland enthusiasts and the season structure will remain the same in 2019. Hunters will need to be mindful of winter range closures in some areas that begin in November and December.

There is a healthy population of snowshoe hares and cottontail rabbits within the Region, and the season has been extended to March 31 to allow for more hunting opportunities in late winter. However, several areas of the Bridger Teton National Forest are closed to winter access beginning in November and December and hunters should check with the Bridger Teton National Forest for details of their winter travel plan.

<u>Sheridan</u>

Upland game bird hunters found tougher hunting in 2018 for nearly all species. Blue grouse hunters had more difficulty finding birds in the Bighorn Mountains. Sharp-tailed grouse and gray partridge populations also remained low. Nesting success is key to good fall populations of upland game birds and this year's wet, cool spring likely dampened nesting success and brood survival. Conversely, the excellent moisture and extended green-up benefited broods that survived as well as hens that re-nested. A three-day sage-grouse hunting season in Hunt Area 4 has been set for September 21-23, 2019.

Pheasants from Game and Fish's Sheridan Bird Farm will continue to be released on some Walk-In Areas and other public lands in the Sheridan Region. A fourth annual youth only hunt day will be held Nov. 16, 2019 on the Bud Love Wildlife Habitat Management Area near Buffalo. The youth hunt provides an excellent opportunity for youth hunters to experience upland bird hunting.

TURKEY

Casper

Wild turkey numbers peaked in the Casper Region about a decade ago, likely hitting an all-time high. Bird numbers then fell dramatically before rebounding in 2017 & 2018 to levels about twothirds of their peak. However, weather patterns across the Region have again caused populations to drop in some areas. In the Black Hills, average to very tough winter conditions the past two years combined with reduced, post-hatch poult survival have caused wild turkey numbers to drop an estimated 25%. This means wild turkey numbers in the Black Hills are again about half of what they were at their peak. Consequently, turkey hunters this fall should expect to find it a bit more difficult to locate birds on the National Forest, while hunting on private land should be fair. In the remainder of the Region (Hunt Area 2), wild turkeys are doing much better. Throughout Area 2 wild turkey numbers have held about steady or increased since 2017. With this wild turkey population stabilizing or increasing, Type 3 license issuance has been raised for both the fall 2019 and spring 2020 hunting seasons. In addition, the portion of the hunt area for which these licenses are valid has been expanded to include Converse County. Type 3 licenses allow hunters to harvest an extra turkey or two in addition to one taken on a general tag. In summary, outside of the Black Hills, folks chasing a wild turkey to set on their Thanksgiving table can expect a good hunt, while Black Hills hunters will have to work harder this fall.

<u>Cody</u>

Turkey hunting in Hunt Area 4 will continue to be good, though poult production may be down due to prolonged cold and wet spring and early summer conditions. Shell, Paintrock, Upper and Lower Nowood River drainages have good numbers of turkeys to hunt. Hunters who scout ahead and ask for landowner permission before the season should be able to find a good place to hunt.

<u>Laramie</u>

Turkey populations appear to be stable or increasing throughout most of the region. Sportspersons should expect hunting similar to the 2018 season.

<u>Sheridan</u>

Fall (2019) and spring (2020) wild turkey seasons in Hunt Areas 1 and 3 will again offer general license opportunity. Campbell, Johnson and Sheridan counties comprise Hunt Area 3, and an increase in Hunt Area 3 Type 3 licenses will provide additional opportunity given high turkey numbers and high tom ratios. Hunters will again be able to obtain the Type 3 license as a second or third turkey license. Type 3 licenses provide additional opportunity for hunters that have access to private land where most turkeys are found.

Turkey populations appear to be at a high level in the Sheridan Region. Some damage complaints have been received and some landowners have expressed a willingness to take hunters. However, access to hunt turkeys is difficult as almost all wild turkeys in the Sheridan Region are found on private land, so getting access to hunt is one key to success.

MIGRATORY GAME BIRDS

Statewide Overview

Wyoming's spring weather was inconsistent with numerous spring snow storms and very wet conditions. This often leads to poor production by ground nesting birds such as ducks, but geese tend to fair a little better. Re-nesting efforts by mallards which failed their first attempt at nesting was likely also good due to favorable conditions, however, other species that tend not to renest likely had very little production. Hunters can expect average local populations of ducks across the state. Migration chronology and weather, as well as hunter efforts of scouting for birds and obtaining permission to hunt private land when necessary, will ultimatley influence the success of migratory bird hunters throughout the state.

Ducks

The annual May breeding survey was again conducted by the U.S. Fish and Wildlife Service in 2019. This year's results produced high numbers of breeding ducks across the survey area within the Dakota's and Montana. However, prairie Canada including Alberta where the majortity of Wyoming's migrating ducks come from was very dry and production will be low. Overall, production and the fall flight are expected to be lower than last year.

Dark Geese

Canada geese harvested in the state come from two populations. The Rocky Mountain Population (RMP) which can be found west of the Continental Divide, in the Wind River and Bighorn River Basins, as well as in western Carbon and Natrona counties. The RMP population decreased in 2019 but is still at the 5th highest count ever. Large geese found in eastern Wyoming belong to the Hi-Line Population (HLP). The HLP also decreased in 2019 but the population is at the fourth highest level ever recorded. Generally, Canada goose numbers across the state are driven by winter conditions, and there should be plenty of geese around should the weather cooperate.

Mourning Doves

Production within the state in 2019 was variable with great numbers in the central portions of the state and lower than average numbers elsewhere. The majority of doves will migrate out of the state with the first cold snap, which usually occurs between late-August and mid-September. Doves from northern areas do migrate through the state in mid-September and good hunting can still be found after the first few days of the season.

Sandhill Cranes

Cranes which migrate through eastern Wyoming (Crane Hunt Area 7) are primarily from the Mid-Continent Population, which has been relatively stable since the early 1980s and exceeds the established objective range of 349,000–472,000. Cranes which breed and stage in central and western Wyoming (Hunt Areas 1-6, and 8) are from the Rocky Mountain Population. The fall premigration survey in 2018 counted 21,801 cranes which was above the 2017 count and above the population objective of 17,000-21,000 cranes. However, the 3-year average used to determine harvest allocation decreased, resulting in a reduction of 105 permits available for Wyoming in 2019. Cranes in Areas 4 and 6 tend to roost and feed in the same general locations every year. Roost locations in Hunt Area 4 are Hidden Valley, Riverview Valley, and the south side of Ocean Lake. Roost locations in Hunt Area 6 are located north of Worland, the Otto area, from Powell to Ralston, and Ralston Reservoir. For best success, scout for cranes prior to the season and obtain permission to access the fields they are using.