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Acknowledgement

The field data contained in these reports was collected by the combined efforts of the Cody Region Wildlife Division personnel including District Wildlife Biologists, District Game Wardens, the Wildlife Technicians, the Habitat Biologist, the Wildlife Management Coordinator and Regional Supervisor, and other Department personnel and volunteers working at check stations. The authors wish to express their appreciation to all those who assisted in data collection.

2019 - JCR Evaluation Form

SPECIES: Pronghorn
PERIOD: 6/1/2019 - 5/31/2020

HERD: PR201 - Copper Mountain

HUNT AREAS: 76, 79, 114-116
PREPARED BY: Bart Kroger

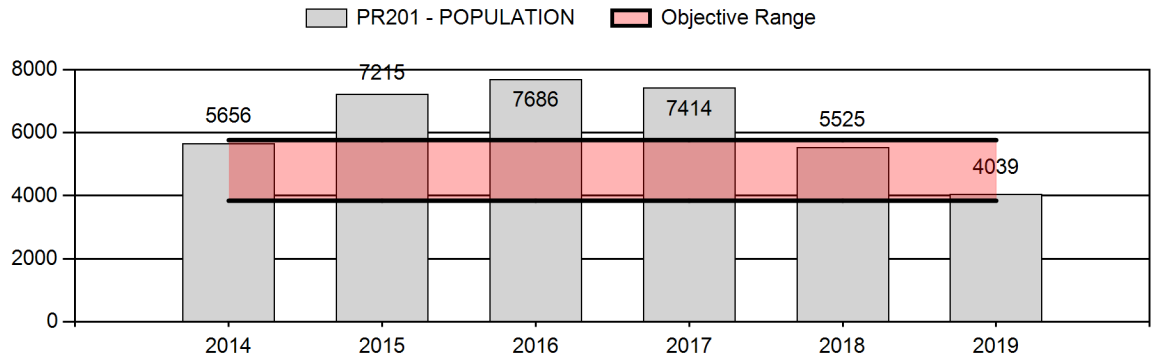
	2014 - 2018 Average	2019	2020 Proposed
Population:	6,699	4,039	3,559
Harvest:	879	991	670
Hunters:	885	1,145	800
Hunter Success:	99%	87%	84%
Active Licenses:	1,032	1,284	850
Active License Success:	85%	77%	79%
Recreation Days:	3,542	4,335	4,500
Days Per Animal:	4.0	4.4	6.7
Males per 100 Females	56	59	
Juveniles per 100 Females	78	41	

Population Objective (± 20%) :	4800 (3840 - 5760)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-15.9%
Number of years population has been + or - objective in recent trend:	5
Model Date:	2/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	20%	15%
Males ≥ 1 year old:	26%	24%
Total:	20%	16%
Proposed change in post-season population:	-27%	-12%

Population Size - Postseason



2020 Hunting Seasons
Copper Mountain Pronghorn (PR201)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
76	1	Aug. 15	Sep. 30	Oct. 1	Oct. 31	150	Any antelope
76	6			Aug. 15	Oct. 31	25	Doe or fawn valid on irrigated land
79	1			Oct. 1	Oct. 15	25	Any antelope valid on or within one-half (1/2) mile of irrigated land
79	6			Sep. 1	Nov. 30	75	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
79	9			Aug. 15	Sep. 30	50	Any antelope, archery only
114	1	Aug. 15	Sep. 30	Oct. 1	Oct. 31	75	Any antelope
114	2			Aug. 15	Sep. 30	25	Any antelope valid on or within one-half (1/2) mile of irrigated land
114	6			Aug. 15	Oct. 24	25	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
114	7			Oct. 25	Nov. 30	25	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
115	1	Aug. 15	Sep. 30	Oct. 1	Oct. 31	200	Any antelope
115	6	Aug. 15	Aug. 31	Sep. 1	Nov. 30	300	Doe or fawn valid east of the Nowood River or south and west of Cornell Gulch or Nowater Stock Trail (B.L.M. Road 1404)

2019 Hunter Satisfaction: 78% Satisfied, 11% Neutral, 11% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: The 2020 hunting season structure is very conservative due to reduced numbers of pronghorn in the herd caused by a significant late winter die-off in 2018/19. Based on field personnel perceptions, along with landowner and hunter comments during the 2019 hunting season, it is believed nearly a 50% loss in this pronghorn population occurred, especially

in Hunt Areas 76 and 114. Hunter satisfaction declined from 92% satisfied in 2018 to 78% satisfied in 2019. Hunters had a much harder time finding and harvesting pronghorn in 2019 because of this loss. In fact, hunter success declined from 103% in 2018 to 87% in 2019. Fawn ratios (41:100) in 2019 were one of the lowest on record, which will further suppress population growth into future. Overall, a reduction of 525 licenses occurred for the herd unit in 2020, including 150 any antelope and 375 doe/fawn licenses, all within Hunt Areas 76 and 114. The Type 2 license in Hunt Area 76 was eliminated because no recent damage concerns, along with reductions in Type 2, 6 and 7 licenses in Hunt Area 114. Hunt Area 115 maintained its current license quotas because losses of pronghorn in this hunt area were less severe. Some Type 6 and 7 licenses remained to address potential damage concerns.

2.) Management Objective Review: The Copper Mountain Pronghorn herd unit objective was not reviewed in 2019. Field managers feel pronghorn numbers are much lower than current model estimates.

3.) Damage issues have and will continue to be major management concerns for this pronghorn herd, especially in those agricultural areas near the Bighorn River in Hunt Areas 76 and 114. Supporting some doe/fawn licenses should be considered annually to allow for crop damage prevention even when herd numbers are suppressed, or below herd objectives.

4.) Overall habitat conditions continue to decline in this herd due to increases in cheatgrass prevalence and expansion. Because of this, pronghorn herd growth will likely continue to struggle, and more erratic declines in numbers may occur more often.

2019 - JCR Evaluation Form

SPECIES: Pronghorn
PERIOD: 6/1/2019 - 5/31/2020

HERD: PR204 - FIFTEENMILE

HUNT AREAS: 77, 83, 110
PREPARED BY: BART KROGER

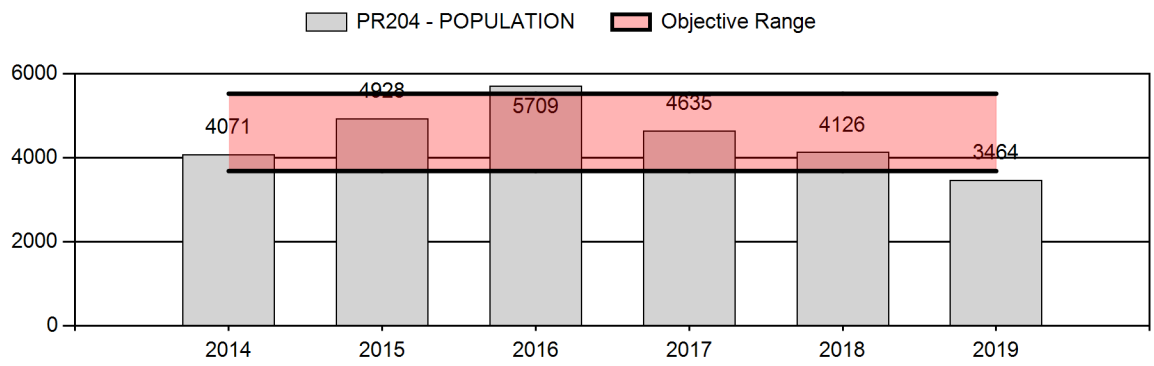
	2014 - 2018 Average	2019	2020 Proposed
Population:	4,694	3,464	3,733
Harvest:	811	1,059	570
Hunters:	785	1,143	625
Hunter Success:	103%	93%	91%
Active Licenses:	900	1,315	650
Active License Success:	90%	81%	88%
Recreation Days:	2,632	4,084	2,500
Days Per Animal:	3.2	3.9	4.4
Males per 100 Females	40	39	
Juveniles per 100 Females	65	46	

Population Objective (± 20%) :	4600 (3680 - 5520)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-24.7%
Number of years population has been + or - objective in recent trend:	1
Model Date:	2/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	21%	6%
Males ≥ 1 year old:	46%	48%
Total:	23%	13%
Proposed change in post-season population:	-23%	+8%

Population Size - Postseason



2020 Hunting Seasons
Fifteen Mile Pronghorn (PR204)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
77	1	Aug. 15	Sep. 19	Sep. 20	Oct. 14	125	Any antelope
77	2			Aug. 15	Sep. 19	25	Any antelope valid on or within one-half (1/2) mile of irrigated land
77	6			Aug. 15	Oct. 24	25	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
77	7			Oct. 25	Nov. 30	25	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
83	1	Aug. 15	Sep. 19	Sep. 20	Nov. 7	250	Any antelope
83	6			Aug. 15	Nov. 15	75	Doe or fawn valid on irrigated land
110	1	Aug. 15	Sep. 19	Sep. 20	Oct. 14	100	Any antelope
110	6	Aug. 15	Sep. 19	Sep. 20	Oct. 14	50	Doe or fawn

2019 Hunter Satisfaction: 84% Satisfied, 10% Neutral, 6% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: The 2020 hunting season structure is very conservative due to a significant loss of pronghorn caused by a late winter die-off in 2018/19, similar to that in the Copper Mountain pronghorn herd. Based on field personnel perceptions, along with landowner and hunter comments during the 2019 hunting season, it is believed nearly a 60% reduction in this population occurred in Hunt Area 83 as well as the eastern portion of Area 77. Hunter satisfaction ratings declined from a 93% satisfied in 2018 to 84% satisfied in 2019. Hunter success declined from 110% in 2018 to 93% in 2019. Fawn ratios (46:100) in 2019 were one of the lowest on record, which will likely suppress population growth in the future. Overall, a reduction of 900 licenses will occur for the 2020 hunting season, including 175 any antelope and 725 doe/fawn licenses, all within Hunt Areas 77 and 83. The Type 2, 6 and 7 license quotas in Hunt Area 77 were reduced because of reductions in damage issues. The Type 7 license in Hunt Area 83 was eliminated, while the Type 6 quota was reduced but changed to an area wide license valid on irrigated lands to address potential damage. Hunt Area 110 maintained its license quotas because winter losses of pronghorn in this hunt area were not evident. Although this pronghorn herd is well below its post-season objective level, more so than model predictions, some Type 6 and 7 licenses remained to address damage concerns.

2.) Management Objective Review: The Fifteen Mile Pronghorn herd unit objective was last reviewed in 2018, with no changes made. This herd is currently 25% below its management objective.

3.) Damage issues have and will continue to be major management concerns for this pronghorn herd, especially in those agricultural areas near the Bighorn River and along Owl Creek in Hunt Areas 77 and 83. Supporting some doe/fawn licenses should be considered annually to allow for crop damage prevention even when herd numbers are suppressed, or below herd objectives.

4.) Overall habitat conditions continue to decline in this herd due to increases in cheatgrass prevalence and expansion. Because of this, pronghorn herd growth will likely continue to struggle, and more erratic declines in the population may occur more often.

5.) Pronghorn migration movements between Hunt Areas 110 and 77, between mile-makers 137-145 on Highway 120 should continue to be monitored annually. Although these movements have not been significant in recent years, the potential for large movements could occur during severe winter conditions.

6.) Pronghorn collared during the fall 2019 in the Carter Mountain Herd have shown movements into Hunt Area 110 of the Fifteen Mile herd during the spring 2020. If significant movements are evident in the future, its likely Hunt Area 110 should be incorporated into the Carter Mountain Herd Unit.

2019 - JCR Evaluation Form

SPECIES: Pronghorn
PERIOD: 6/1/2019 - 5/31/2020

HERD: PR205 - CARTER MOUNTAIN

HUNT AREAS: 78, 81-82
PREPARED BY: SAM STEPHENS

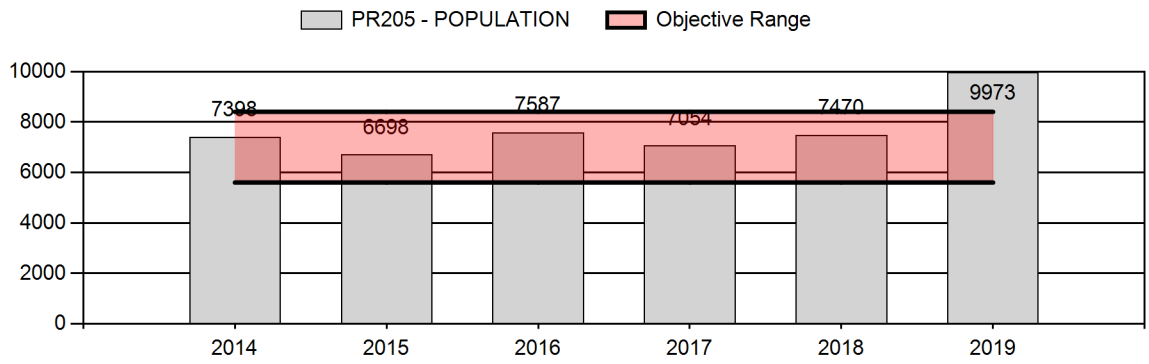
	2014 - 2018 Average	2019	2020 Proposed
Population:	7,241	9,973	8,551
Harvest:	705	835	1,000
Hunters:	709	838	1,000
Hunter Success:	99%	100%	100%
Active Licenses:	817	964	1,100
Active License Success:	86%	87%	91%
Recreation Days:	2,447	2,619	3,000
Days Per Animal:	3.5	3.1	3
Males per 100 Females	51	59	
Juveniles per 100 Females	60	51	

Population Objective (± 20%) :	7000 (5600 - 8400)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	42%
Number of years population has been + or - objective in recent trend:	1
Model Date:	02/28/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	11%	12%
Males ≥ 1 year old:	23%	23%
Total:	10%	11%
Proposed change in post-season population:	-11%	-12%

Population Size - Postseason



2020 HUNTING SEASONS
CARTER MOUNTAIN PRONGHORN HERD (PR205)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
78	1	Aug. 15	Sep. 19	Sep. 20	Oct. 31	150	Any antelope
78	6	Aug. 15	Aug. 30	Sep. 1	Nov. 30	100	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
81	1	Aug. 15	Sep. 19	Sep. 20	Nov. 15	225	Any antelope
81	6	Aug. 15	Sep. 19	Sep. 20	Nov. 15	250	Doe or fawn
82	1	Aug. 15	Sep. 19	Sep. 20	Oct. 14	200	Any antelope
82	6	Aug. 15	Sep. 19	Sep. 20	Oct. 14	175	Doe or fawn
82	8	Aug. 15	Sep. 19	Oct. 15	Nov. 30	100	Doe or fawn valid in Big Horn County

2019 Hunter Satisfaction: 90% Satisfied, 5% Neutral, 4% Dissatisfied

2020 Management Summary

1.) **Hunting Season Evaluation:**
The 2020 seasons aim to increase hunter opportunity and subsequent harvest in the Carter Mountain Herd. This is largely due to the population estimate being over objective (n=9,973) and an increase in sagebrush utilization which indicates that we are seeing the effects of 3 years of increased fawn recruitment (2014-16) and subsequent mild winter conditions. Reductions to the 78 Type 1 quota were made in 2018 and 19 to address a lower buck ratio (35-40:100) within the resident portion of the herd. Based on an increase in the Hunt Area 78 buck ratio in 2019 (52:100) we propose increasing the quota to 150 licenses. Alternatively Hunt Areas 81 and 82 include the more migratory segment of the herd. The success of this migratory life history strategy is reflected in the dissimilarity with respect to fawn recruitment rates between resident and migratory pronghorn, where those that summer at higher elevations in Hunt Areas 82 and 81 typically show a higher fawn ratio. Higher recruitment rates give a population more resilience to mortality events (i.e. hunting or winter-kill). Increases to the 81 Type 1 and 6 quota are intended to increase hunter opportunity and maintain female harvest as a means of population management. Similarly, condensing the 82 Type 6 and 7 quotas to create a doe/fawn hunting opportunity area-wide and also increase female harvest.

2.) **Management Objective Review:**
In 2020 local pronghorn managers reviewed the population objective of 7,000 and determined it was an adequate objective given all available harvest, habitat, and abundance data. Line-transect

sampling conducted in June of 2019 showed an abundance of pronghorn which was over-objective (n= 8,478). Similarly, sagebrush line intercept data corroborates the inference that pronghorn abundance is likely near or exceeding carrying capacity. Sagebrush utilization in the Dry Creek Basin show an increasing trend in recent years where utilization from the 2017-19 winters averaged 41% (Figure 2). It's also significant that the age-class of sagebrush within the Dry Creek Basin is showing an increase in the proportion of mature plants (Figure 3). Over-browsing of an aging sagebrush resource could be a limitation for future population performance of the Carter Mountain Herd. Maintaining harvest levels to curb population growth to the objective range (±20% of 7000) should alleviate the impact to available habitat.

3.) **Line Transect Sampling:**

Line transect sampling efforts were conducted in the Carter Mountain Pronghorn Herd Unit over 16.1 hours between June 2-3rd. Flying conditions were calm and weather was warm. Conditions for spotting pronghorn were marginal since late green-up within the lower elevations occurred due to persistent cold weather and late precipitation. The flights were conducted using Laird Aviation's Husky fixed wing airplane. A total of 48 transects were flown to cover the 1,003 sq. miles of occupied habitat. This resulted in 241 observations along 1,115 miles of transects at an average of 366ft AGL. Due to the variable nature of life history strategies employed by pronghorn within this herd unit (migratory vs non-migratory) the frequency of detections and subsequent densities vary distinctly between the largest (east of Hwy 120) and the smaller portions of the herd unit (west of Hwy 120). Since the differences were so apparent between these areas, separate analyses were done by stratifying the herd unit into high density (west of highway 120) and low density (east of highway 120). Once input data was separated for the respective areas, each were independently analyzed using program *Distance 7.3*. This resulted in an independent density and abundance estimate for each stratum. The two were later combined for a total herd unit abundance estimate (n=*8,478*).

4.) **GPS Collaring:**

In November of 2019 the Wyoming Game and Fish Department worked with researchers from West Inc. to capture and GPS collar pronghorn in the Carter Mountain Herd Unit. GPS collars were deployed on adult female pronghorn (n=100) within the Dry Creek and Little Dry Creek Watersheds, which spans from Wyoming State Highway 120 easterly to Greybull Wyoming (Figure 1). These collars are programmed to collect a location every 2 hours which is then transmitted remotely via satellite. Data from this study will be condensed over a two year period to determine seasonal movements, adult female survival rates, and habitat use for the Carter Mountain Pronghorn Herd. As of May 13, 2020 four (n=4) mortalities have been detected.

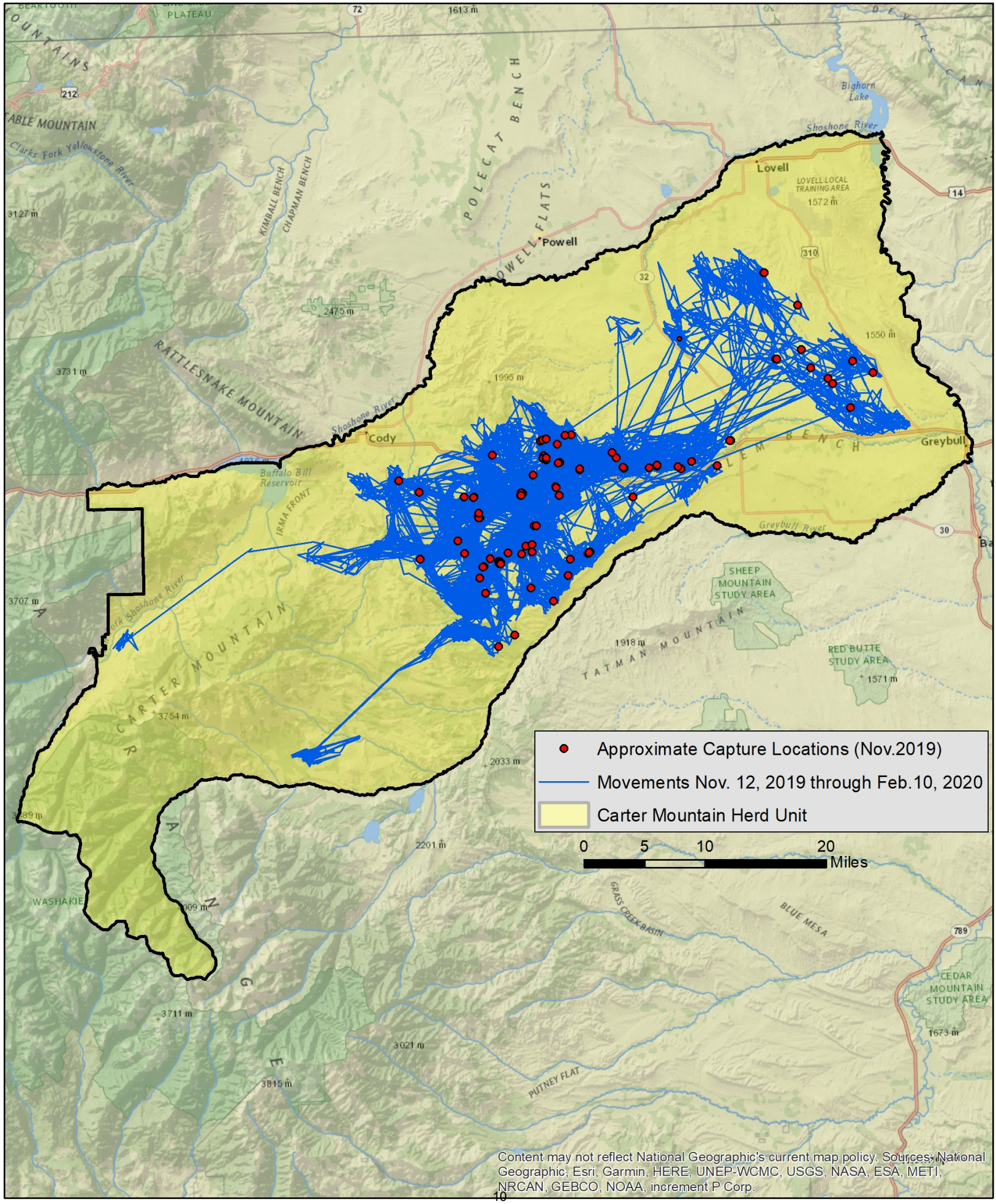

Approximate Capture Locations (Nov.2019)
Movements Nov. 12, 2019 through Feb.10, 2020
Carter Mountain Herd Unit
0 5 10 20
Miles
Cody
Powell
Lovell
Greybull
Buffalo Bill Reservoir
Shoshone River
Bighorn Lake
CARTER MOUNTAIN
RATTLESNAKE MOUNTAIN
POLECAT BENCH
POWELL FLATS
KIMBALL BENCH
CHAPMAN BENCH
IRMA FRONT
LOVELL LOCAL TRAINING AREA
SHEEP MOUNTAIN STUDY AREA
RED BUTTE STUDY AREA
TATMAN MOUNTAIN
GRASS CREEK BASIN
BLUE MESA
CEDAR MOUNTAIN STUDY AREA
PUTNEY FLAT
WASHAKIE
Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Figure 2

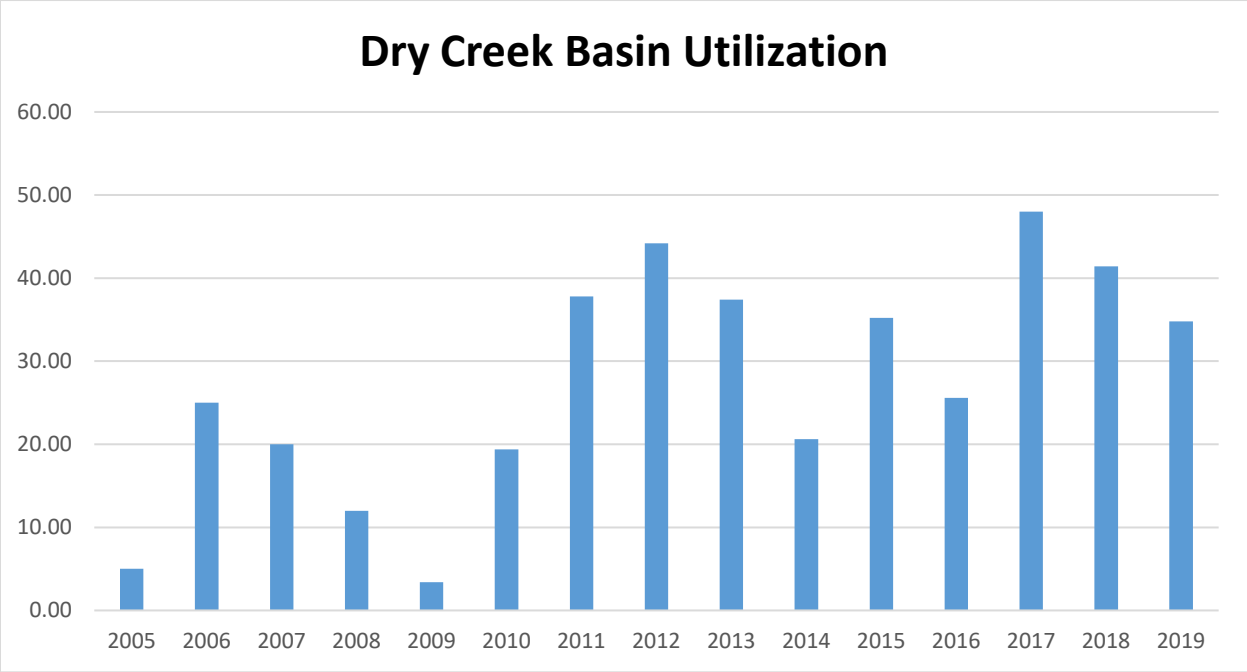
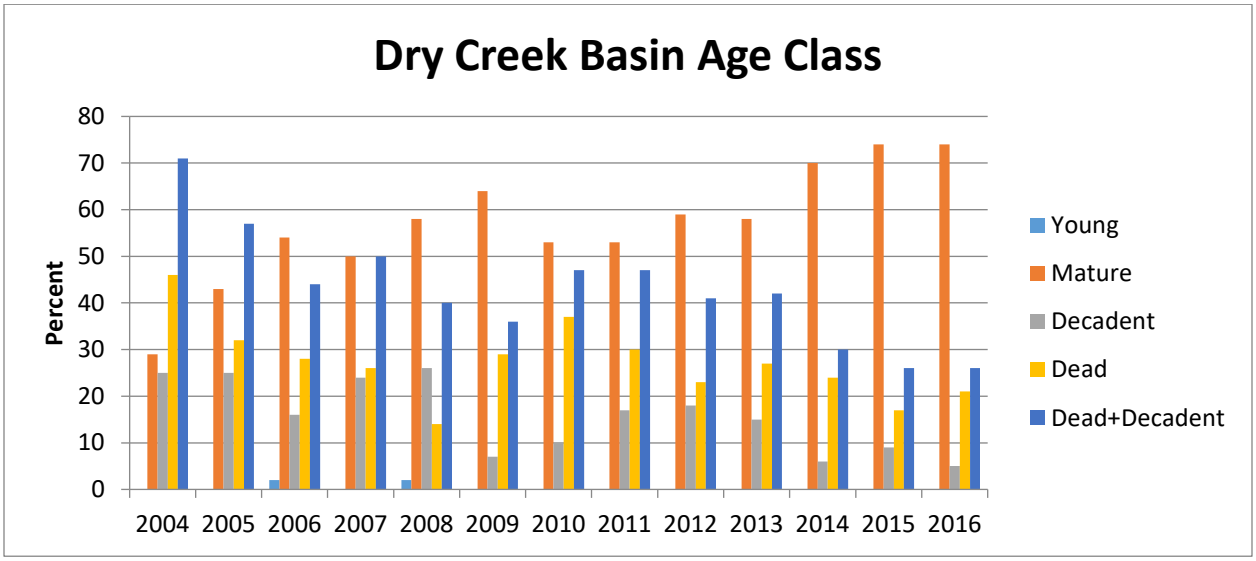


Figure 3



2019 - JCR Evaluation Form

SPECIES: Pronghorn

PERIOD: 6/1/2019 - 5/31/2020

HERD: PR207 - BADGER BASIN

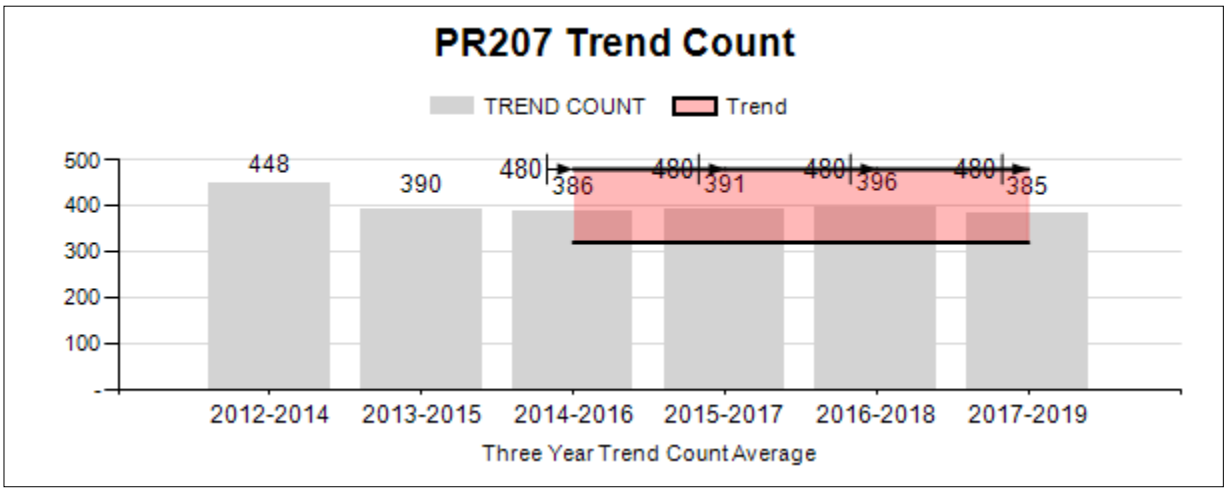
HUNT AREAS: 80

PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Trend Count:	376	430	450
Harvest:	98	54	65
Hunters:	99	66	72
Hunter Success:	99%	82%	90%
Active Licenses:	112	70	95
Active License Success	88%	77%	68%
Recreation Days:	415	218	250
Days Per Animal:	4.2	4.0	3.8
Males per 100 Females:	44	30	
Juveniles per 100 Females	33	38	
Trend Based Objective (± 20%)			400 (320 - 480)
Management Strategy:			Recreational
Percent population is above (+) or (-) objective:			0%
Number of years population has been + or - objective in recent trend:			5

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	n/a%	n/a%
Males ≥ 1 year old:	n/a%	n/a%
Juveniles (< 1 year old):	n/a%	n/a%
Proposed change in post-season population:	n/a%	n/a%



2020 HUNTING SEASONS
BADGER BASIN PRONGHORN HERD (PR207)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
80	1	Aug. 15	Sep. 19	Sep. 20	Oct. 31	75	Any Antelope
80	6	Aug. 15	Sep. 19	Nov. 1	Oct. 31	25	Doe or fawn

2019 Hunter Satisfaction: 85.3% Satisfied, 14.7% Neutral, 0% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: The increase in type 1 licenses for the 2020 hunting season is being implemented due to the higher trend count from the summer of 2019. Although this herd does not grow quickly it seems the population has increased over the last several years from an average of 376 to the count of 430 in 2019. This increase will allow for more buck harvest opportunity throughout the herd unit.

2.) Management Objective Review: This herd is managed using a mid-summer trend count and is currently within the acceptable range of 320 to 480. It was last reviewed 2016.

2019 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: MD207 - PAINTROCK

HUNT AREAS: 41, 46-47
PREPARED BY: SAM STEPHENS

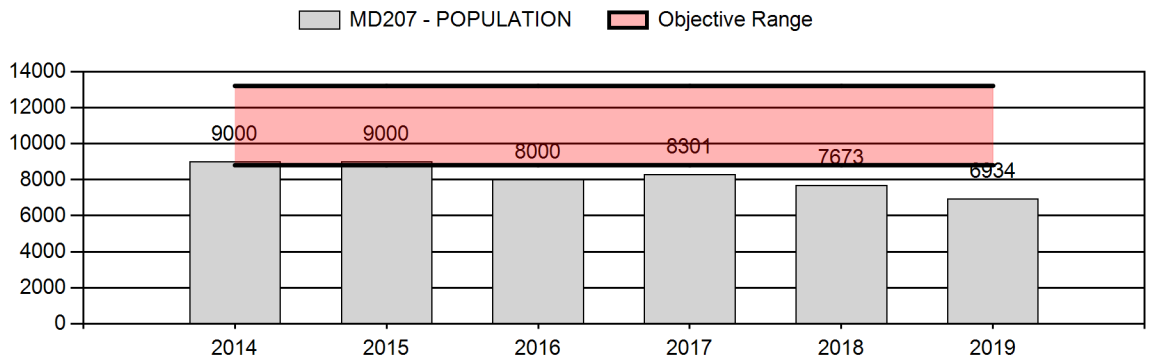
	2014 - 2018 Average	2019	2020 Proposed
Population:	8,395	6,934	7,500
Harvest:	723	623	600
Hunters:	1,357	1,305	1,300
Hunter Success:	53%	48%	46 %
Active Licenses:	1,420	1,373	1,400
Active License Success:	51%	45%	43 %
Recreation Days:	5,991	5,350	5,500
Days Per Animal:	8.3	8.6	9.2
Males per 100 Females	27	25	
Juveniles per 100 Females	68	54	

Population Objective (± 20%) :	11000 (8800 - 13200)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-37.0%
Number of years population has been + or - objective in recent trend:	7
Model Date:	02/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	4%	7%
Males ≥ 1 year old:	38%	35%
Total:	9%	7%
Proposed change in post-season population:	-9%	-7%

Population Size - Postseason



2020 HUNTING SEASONS
PAINTROCK MULE DEER HERD (MD207)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
41	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 24		Any deer
41	6	Sep.1	Sep. 30	Oct. 15	Nov. 15	150	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
46	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 24		Antlered mule deer or any white-tailed deer
47	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 24		Any deer
47	6	Sep. 1	Sep. 30	Oct. 15	Nov. 15	100	Doe or fawn valid on or within one-half (1/2) mile of irrigated land

2020 Region R nonresident quota: 600 licenses

2019 Hunter Satisfaction: 66% Satisfied, 20% Neutral, 14% Dissatisfied

2020 Management Summary

1) Hunting Season Evaluation:

Deficient habitat, suppressed juvenile recruitment, and disease continue to contribute to the poor population performance seen in the Paintrock Mule Deer Herd. Fawn recruitment has declined in recent years following a year of high fawn abundance in 2015. All available data indicate that the Paintrock Mule Deer Herd is on a downward trajectory. Understanding which variables have the most influence over this herd are difficult when disease, nutrition, and abundance datasets are lacking. The best data available to managers is harvest and classification. Public concern regarding mule deer abundance and lack of mature bucks dating back to the early 1990's has resulted in conservative seasons that predominantly limited female harvest. General season limitations were created for Hunt Areas 41 and 47 in 2015 to limit hunters from taking an antlerless deer on a general license. Following that year's record low doe harvest, a subsequent general season was created to target antlerless deer within ½ mile of irrigated land. The 2016 harvest data showed a female harvest similar to what occurred prior to the 2015 change. Collectively when considering the past three management strategies: there has been little change in harvest where adult female segment of harvest has ranged from 10-24% (2013-19). Additional doe/fawn licenses were created prior to these changes in Hunt Areas 41 and 47 to address damage concerns with respect to mule deer on agricultural land. Given that this tool exists to manage cropland depredation, the additional general season (Oct. 15-31) within ½ mile of irrigated land isn't necessary. The impetus behind the doe harvest reduction in 2015 was to grow the segment of the deer herd living on public lands. The result of these management

changes was increased harvest pressure on bucks and reduced hunter opportunity with no indication of a population increase. Poor population performance within this herd can likely be tied to multiple variables, but markedly the amount of quality habitat and high chronic wasting disease (CWD) prevalence ostensibly have the greatest impact. Given that antlerless harvest appears to have little impact on abundance of this herd, the 2020 season will see a shift in the general season limitation for Hunt Areas 41 and 47 to allow the harvest of "any deer". This change is intended to decrease yearling buck harvest by lifting the antlered restriction and allowing non-selective hunters to harvest a doe, simplify the season regulations, and create some level of doe harvest on public lands where the antlerless segment of the herd accounts for roughly 80% of the population but is currently not being managed despite an increasing CWD prevalence rate.

2) Management Objective Review:

This herd is managed in accordance with a model-based population objective of 11,000 deer. The objective was set in 2013 and last reviewed in 2018. The objective is scheduled to be reviewed in 2023.

3) Chronic Wasting Disease:

Intensive chronic wasting disease sampling within the Paintrock Mule Deer Herd Unit is scheduled to occur during the 2021 hunting season. The 2014 to 2019 sample sizes within the CWD prevalence data set for this herd unit has ranged from 25-74 samples tested from adult male mule deer. Results from this sampling shows a CWD prevalence rate which has increased from 0 (2014) to 28% (2019) and averaged 11.9% (n=293) over the last five years.

2019 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: MD208 - SOUTHWEST BIGHORNS

HUNT AREAS: 35-37, 39-40, 164
PREPARED BY: BART KROGER

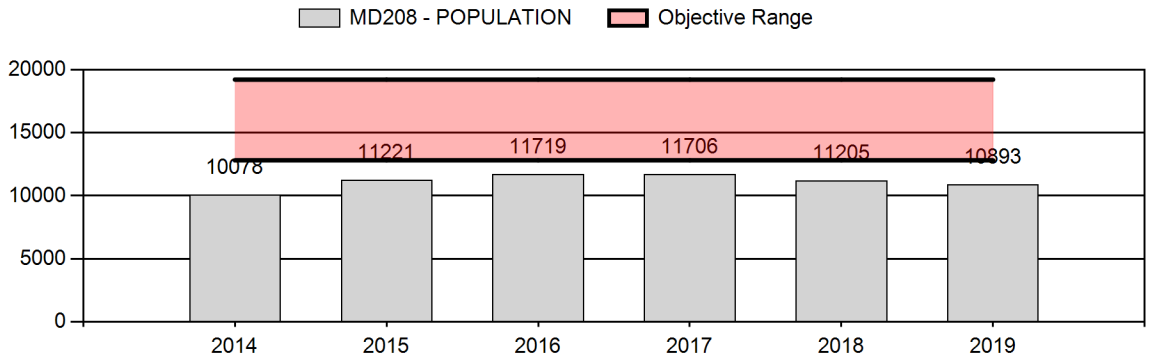
	2014 - 2018 Average	2019	2020 Proposed
Population:	11,186	10,893	11,112
Harvest:	1,267	1,167	880
Hunters:	2,032	2,067	1,700
Hunter Success:	62%	56%	52 %
Active Licenses:	2,119	2,190	1,800
Active License Success:	60%	53%	49 %
Recreation Days:	8,818	8,452	6,000
Days Per Animal:	7.0	7.2	6.8
Males per 100 Females	36	33	
Juveniles per 100 Females	68	54	

Population Objective (± 20%) :	16000 (12800 - 19200)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-31.9%
Number of years population has been + or - objective in recent trend:	20
Model Date:	2/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	5%	2%
Males ≥ 1 year old:	26%	24%
Total:	10%	7%
Proposed change in post-season population:	-4%	-1%

Population Size - Postseason



2020 Hunting Seasons
Southwest Bighorns Mule Deer (MD208)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
35	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 31		Any deer
36	1	Sep. 1	Sep. 30	Oct. 15	Oct. 31	400	Antlered mule deer or any white-tailed deer
36	8	Sep. 1	Sep. 30	Oct. 15	Oct. 31	25	Doe or fawn white-tailed deer
37	1	Sep. 1	Sep. 30	Oct. 15	Oct. 31	125	Antlered deer
37, 39	3	Sep. 1	Sep. 30	Nov. 1	Nov.30	25	Any white-tailed deer
39	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 25		Antlered mule deer or any white-tailed deer
40	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 31		Antlered deer valid on national forest; any deer off national forest
40	6	Sep. 1	Sep. 30	Oct. 15	Oct. 31	100	Doe or fawn valid off national forest
40	8	Sep. 1	Sep. 30	Oct. 1	Nov. 30	400	Doe or fawn white-tailed deer
164	Gen	Sep. 1	Sep. 30	Oct. 1	Oct. 10		Any deer
164	3	Sep. 1	Sep. 30	Oct. 1	Nov. 30	100	Any white-tailed deer; also valid in Area 125
164	6	Sep. 1	Sep. 30	Oct. 25	Nov. 15	50	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
164	7	Sep. 1	Sep. 30	Oct. 1	Oct. 10	50	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
164	8	Sep. 1	Sep. 30	Oct. 1	Dec. 15	150	Doe or fawn white-tailed deer; also valid in Area 125

2020 Region M nonresident quota: 800 licenses

2019 Hunter Satisfaction: 60% Satisfied, 21% Neutral, 19% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: It's believed a winter die-off of mule deer occurred during the latter part of the 2018/19 winter within this herd unit, specifically in Hunt Areas 37, 39 and 164. Field personnel, landowners and hunters observed fewer deer during the 2019 hunting season, which is further supported by reductions in overall harvest, hunter success and hunter satisfaction. Therefore, the 2020 hunting season structure will be more conservative than previous years. It's

believed 60% of the mule deer in Hunt Areas 37 and 39 died during the late winter of 2018/19, with a more moderate die-off in other hunt areas. Overall, hunter satisfaction declined from a 72% satisfied rate in 2018 to a 60% satisfied rate in 2019. Hunter success declined from 67% in 2018 to 53% in 2019, while hunter effort increased by 1 day. Fawn ratios the previous two years (52 and 54:100) were two of the lowest on record, which will likely further suppress population growth in the near future. Because of these declines in mule deer numbers, a herd unit wide reduction of 125 Type 1 licenses and 300 Type 6 licenses will occur for the 2020 mule deer hunting season. The Hunt Area 37 Type 6 license was eliminated due to reduced deer numbers, while the Type 1 license quota was reduced by 100. The Type 6 license quota in Hunt Area 40 was also reduced by 100 licenses. The Region M quota will remain the same at 800 licenses to still allow for some additional buck harvest. Although this mule deer herd is well below its post-season objective level, some Type 6 and 7 licenses will remain to address damage concerns in 2020. An overall increase of 50 Type 3 and 100 Type 8 white-tailed deer licenses will occur to address localized increases in white-tailed deer numbers. The Hunt Area 40 Type 8 licenses will also open earlier to allow for additional hunter opportunity.

2.) Management Objective Review: The Southwest Bighorns Mule Deer herd unit objective was last reviewed in 2019, and no objective changes were warranted. This deer is currently below its management abjective.

3.) Damage issues have and will continue to be major management concerns for this mule deer herd, especially in those agricultural areas near the Bighorn River in Hunt Areas 37 and 164, and along the upper Nowood River in Hunt Area 40. Supporting some doe/fawn licenses should be considered annually to allow for crop damage prevention even when herd numbers are suppressed or below herd objectives.

4.) Overall habitat conditions continue to decline in this herd due to increases in cheatgrass prevalence and expansion. Because of this, mule deer herd growth will likely continue to struggle, and more erratic declines may occur more often due to the loss of desirable forage species.

5.) Chronic wasting disease (CWD) is a concern in this mule deer herd, particularly in Hunt Area 164 south of Worland. CWD is likely contributing to the long-term declines of deer in this herd. Research needs are and will be needed to better understand the complexity of this disease in the near future.

2019 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: MD209 - BASIN

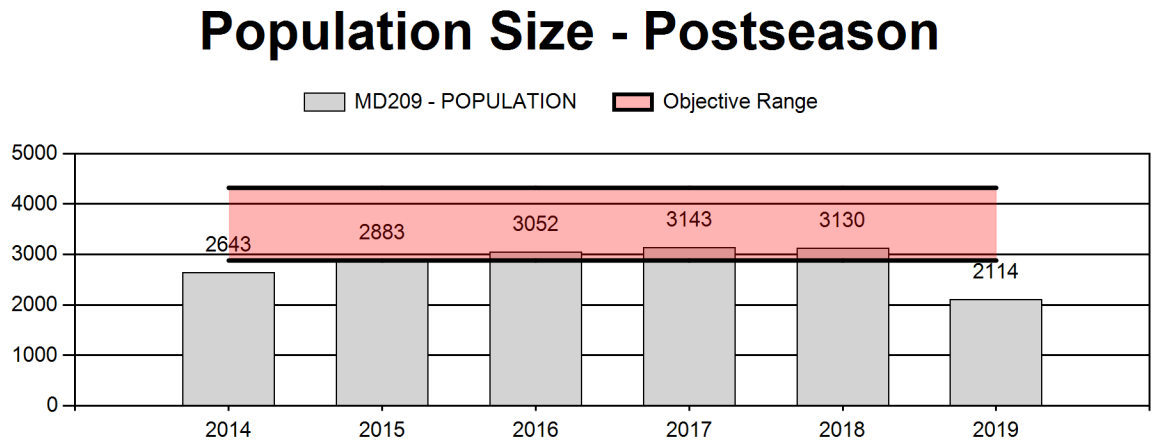
HUNT AREAS: 125, 127
PREPARED BY: BART KROGER

	2014 - 2018 Average	2019	2020 Proposed
Population:	2,970	2,114	1,683
Harvest:	141	88	90
Hunters:	293	231	225
Hunter Success:	48%	38%	40 %
Active Licenses:	299	234	225
Active License Success:	47%	38%	40 %
Recreation Days:	1,146	906	900
Days Per Animal:	8.1	10.3	10
Males per 100 Females	35	33	
Juveniles per 100 Females	66	44	

Population Objective (± 20%) :	3600 (2880 - 4320)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-41.3%
Number of years population has been + or - objective in recent trend:	20
Model Date:	2/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	14%	22%
Total:	4%	5%
Proposed change in post-season population:	-11%	-20%



2020 Hunting Seasons
Basin Mule Deer (MD209)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
125	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	100	Antlered deer
127	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 24		Antlered deer
127	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	25	Any white-tailed deer; also valid in Area 125
127	8	Sep. 1	Sep. 30	Oct. 15	Nov. 30	75	Doe or fawn white-tailed deer

2020 Region X nonresident quota: 300 licenses

2019 Hunter Satisfaction: 51% Satisfied, 17% Neutral, 32% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: The Basin mule deer herd unit has mostly supported conservative hunting seasons in recent years in order to help promote herd growth. However, even under these conservative seasons, growth of this herd has been nonexistent, and is actually showing continuing long-term declines. A late winter die-off in 2018/19 further suppressed this population, similar to that of the Fifteen Mile pronghorn herd. Fewer deer were observed in this herd unit in 2019, compared to previous years. Only 373 mule deer were classified in the herd unit in 2019, a 42% decline compared to the previous 5-year average. The 2019 fawn ratio was 44:100, one of the lowest ratios on record for this herd. Hunter success dropped to an all-time low of 38% in 2019, while days/harvest (10.3 days) was one of the highest on record. Hunter satisfaction dropped from a 64% satisfied rating in 2018 to a 51% satisfied rating in 2019. Buck ratios continue to remain favorable, with 33:100 observed in 2019. Because of suppressed deer numbers, the Type 6 license in Hunt Area 125 was eliminated, with all other seasons remaining unchanged.

2.) Management Objective Review: The Basin Mule Deer herd unit objective was last reviewed in 2019, and no objective changes were warranted. This deer herd is currently below its population management objective.

3.) Overall habitat conditions continue to decline in this herd due to increases in cheatgrass prevalence and expansion. Because of this, mule deer herd growth will likely continue to struggle, and more erratic declines may occur more often due to the loss of desirable forage species.

4.) Chronic wasting disease (CWD) is a concern in this mule deer herd. CWD is likely contributing to the long-term declines of deer in this herd. Research needs are and will be needed to better understand the complexity of this disease in the near future.

2019 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: MD210 - GREYBULL RIVER

HUNT AREAS: 124, 165
PREPARED BY: SAM STEPHENS

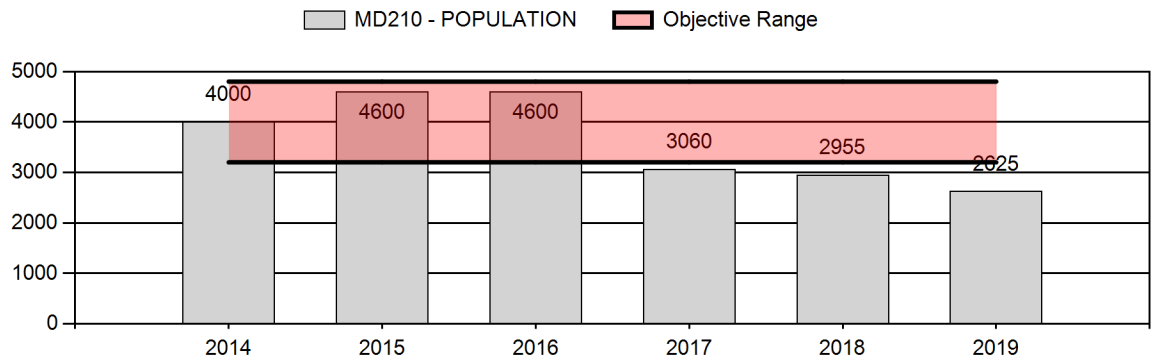
	2014 - 2018 Average	2019	2020 Proposed
Population:	3,843	2,625	2,900
Harvest:	514	388	450
Hunters:	876	788	800
Hunter Success:	59%	49%	56 %
Active Licenses:	995	896	900
Active License Success:	52%	43%	50 %
Recreation Days:	3,196	2,948	3,200
Days Per Animal:	6.2	7.6	7.1
Males per 100 Females	35	25	
Juveniles per 100 Females	89	56	

Population Objective (± 20%) :	4000 (3200 - 4800)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-34.4%
Number of years population has been + or - objective in recent trend:	3
Model Date:	02/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	10%	9%
Males ≥ 1 year old:	40%	41%
Total:	14%	13%
Proposed change in post-season population:	-14%	-13%

Population Size - Postseason



2020 HUNTING SEASONS

GREYBULL RIVER MULE DEER HERD (MD210)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
124	Gen	Sep. 1	Sep. 30	Nov. 1	Nov. 10		Any deer
124	6	Sep. 1	Sep. 30	Oct. 15	Nov. 30	200	Doe or fawn valid on or within one-half (1/2) mile of irrigated land
165	1	Sep. 1	Sep. 30	Oct. 15	Oct. 31	125	Any deer
165	6			Sep. 1	Oct. 31	100	Doe or fawn valid on private land

2020 Region X nonresident quota: 300 licenses

2019 Hunter Satisfaction: 57% Satisfied, 21% Neutral, 22% Dissatisfied

2020 Management Summary

1) Hunting Season Evaluation:

Mule deer abundance and subsequent harvest have continued to decline in the Greybull River Herd. Suppressed fawn recruitment within the herd unit is similar to the patterns we are observing in neighboring herd units (MD207, MD321, MD208). Habitat degradation from invasive species (cheatgrass) is likely the primary driver behind long-term population decline for mule deer herds living in low elevation arid environments. Invasive plant species reduce environmental heterogeneity by dominating a landscape and increasing the risk and impact of wildfire. Additionally it's likely that given the high prevalence rate of chronic wasting disease (CWD) amongst Greybull River Mule Deer, the expected population growth from fawn recruitment could be off-set by CWD related mortality. 2019 saw a significant drop in mule deer harvest (-25%) from the 2014-18 average. This is likely an artifact of decreased mule deer abundance and mild weather which created poor hunting conditions. The 2020 season will be similar with the exception of condensing the 124 Type 6 and Type 7 quotas, in order to remove the Type 7 license. This license was created to address damage concerns within an isolated area west of Burlington. By removing this license type and adding the licenses into the 124 type 6 quota, we anticipate that we can still sufficiently address these damage concerns while simplifying our hunting seasons.

2) Management Objective Review

This mule deer herd is managed in accordance with a model-based population estimate of 4,000 deer. The objective was set in 2016 and is scheduled for review in 2021.

3) Chronic Wasting Disease

Intensive chronic wasting disease sampling within the Greybull River Mule Deer Herd Unit is scheduled to occur during the 2020 hunting season. Annually the number of CWD samples collected from this herd unit from recent years (2014-2019) is limited and ranges from 4-25 samples collected from adult male mule deer. Results from this sampling shows a CWD prevalence rate which has increased from 11.1% (2015) to 44% (2019) and averages 26.5% (n=83) over the last five years.

2019 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: MD211 - SHOSHONE RIVER

HUNT AREAS: 121-123
PREPARED BY: SAM STEPHENS

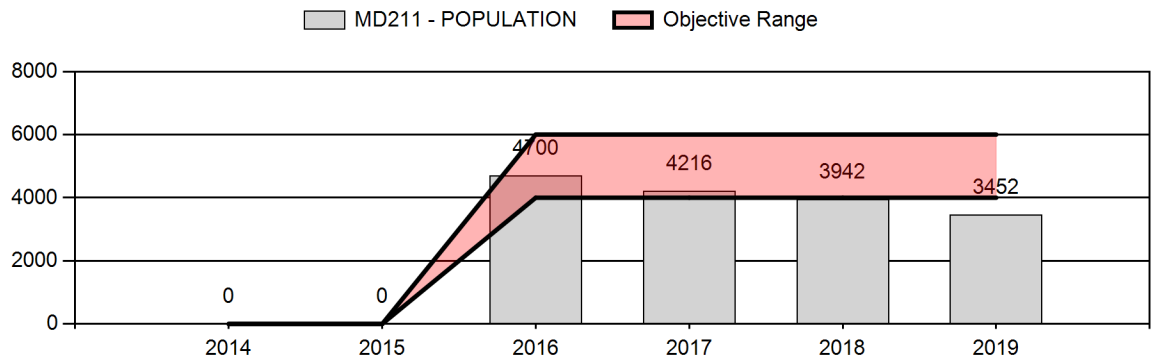
	2014 - 2018 Average	2019	2020 Proposed
Population:	2,572	3,452	3,500
Harvest:	726	601	500
Hunters:	1,489	1,424	1,300
Hunter Success:	49%	42%	38 %
Active Licenses:	1,597	1,508	1,400
Active License Success:	45%	40%	36 %
Recreation Days:	6,096	5,227	4,500
Days Per Animal:	8.4	8.7	9
Males per 100 Females	36	30	
Juveniles per 100 Females	88	68	

Population Objective (± 20%) :	5000 (4000 - 6000)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-31.0%
Number of years population has been + or - objective in recent trend:	4
Model Date:	02/18/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	12%	10%
Males ≥ 1 year old:	43%	45%
Total:	15%	13%
Proposed change in post-season population:	-15%	-13%

Population Size - Postseason



2020 HUNTING SEASONS

SHOSHONE RIVER MULE DEER HERD (MD211)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
121	Gen	Sep. 1	Sep. 30	Nov. 1	Nov. 10		Any deer on private land; antlered mule deer or any white-tailed deer off private land
121	Gen	Sep. 1	Sep. 30	Nov. 11	Nov. 30		Antlerless deer valid on private land
121	6	Sep.1	Sep. 30	Oct. 15	Nov. 30	150	Doe or fawn valid on private land
122	Gen	Sep. 1	Sep. 30	Nov. 1	Nov. 10		Any deer on private land; antlered mule deer or any white-tailed deer off private land
122	Gen	Sep. 1	Sep. 30	Nov. 11	Nov. 30		Antlerless deer valid on private land
122	6	Sep. 1	Sep. 30	Oct. 15	Nov. 30	150	Doe or fawn valid on private land
123	Gen	Sep. 1	Sep. 30	Oct. 15	Oct. 31		Antlered mule deer or any white-tailed deer
123	6	Sep. 1	Sep. 30	Oct. 15	Nov. 30	25	Doe or fawn valid on private land

2020 Region X nonresident quota: 300 licenses

2019 Hunter Satisfaction: 52% Satisfied, 23% Neutral, 22% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation:

Management of mule deer in the Shoshone River Herd Unit continue to be driven by crop damage concerns on private land. The majority of this herd unit is Bureau of Land Management administered land, bisected by riparian corridors and adjacent irrigated lands. The arid climate within the herd unit in the later summer limits plant production on native range and drives deer to irrigated private land. Landowner tolerance of deer and the crop damage is low in all three hunt areas. A November general hunting season is designed to address crop damage and prevent this herd from increasing rapidly during high production years. Relative to other neighboring mule deer herd units, the Shoshone River Mule Deer have a higher juvenile recruitment rate,

ranging from 68-93 fawns per 100 does in the last five years. It's unknown why this herd is more productive, but we infer that it likely has something to do with the abundance of heterogeneous irrigated land and an aggressive harvest management strategy which began in 2009. The 2020 season should see a reduction to doe harvest on public land within the herd unit. Similar changes were made to Hunt Area 121 in 2019. This is largely due to public concern over the 20 day general season which previously, allowed the harvest of antlerless mule deer on public lands in Hunt Area 122. Shifting the season limitations to private land only, should foster those smaller populations of mule deer living in the sagebrush uplands and target the deer living on private land, likely associated with damage concerns.

2.) Management Objective Review:

This herd is managed in accordance with a model-based population objective of 5,000 deer. The objective was set in 2016. The objective is scheduled to be reviewed in 2023.

3.) Chronic Wasting Disease:

Intensive chronic wasting disease sampling within the Shoshone River Mule Deer Herd Unit was conducted in the fall of 2019. Limited sampling and a subsequent low sample size inhibited managers from understanding the impact of CWD within the herd unit. The sample size obtained from the 2019 season yielded 104 samples tested from adult male mule deer. Results from this sampling shows a CWD prevalence rate of 25% (2019).

2019 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: MD212 - OWL CREEK/MEETEETSE

HUNT AREAS: 116-120
PREPARED BY: BART KROGER

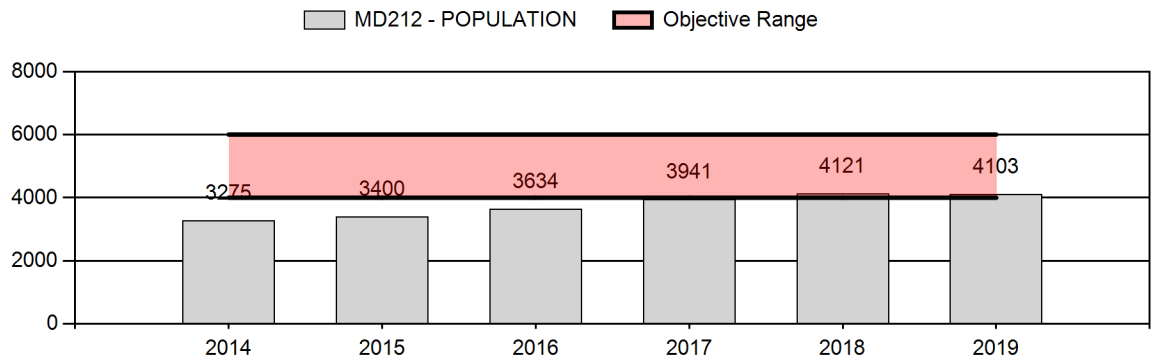
	2014 - 2018 Average	2019	2020 Proposed
Population:	3,674	4,103	4,116
Harvest:	227	253	240
Hunters:	301	338	320
Hunter Success:	75%	75%	75 %
Active Licenses:	315	360	340
Active License Success:	72%	70%	71 %
Recreation Days:	1,363	1,332	1,300
Days Per Animal:	6.0	5.3	5.4
Males per 100 Females	39	30	
Juveniles per 100 Females	75	56	

Population Objective (± 20%) :	5000 (4000 - 6000)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-17.9%
Number of years population has been + or - objective in recent trend:	20
Model Date:	2/27/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	4%	2%
Males ≥ 1 year old:	16%	16%
Total:	6%	5%
Proposed change in post-season population:	0%	0%

Population Size - Postseason



2020 Hunting Seasons
Owl Creek/Meeteetse Mule Deer (MD212)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
116	1	Sep. 1	Sep. 30	Oct. 15	Oct. 31	75	Antlered mule deer or any white-tailed deer
116, 117	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	100	Any white-tailed deer
116	6	Sep. 1	Sep. 30	Oct. 15	Nov. 30	50	Doe or fawn valid on private land
116	7			Sep. 1	Oct. 14	75	Doe or fawn white-tailed deer valid on private land in the Wood River drainage
116, 117, 118	8	Sep. 1	Sep. 30	Oct. 15	Nov. 30	150	Doe or fawn white-tailed deer
117	1	Sep. 1	Sep. 14	Sep. 15	Oct. 15	50	Antlered mule deer or any white-tailed deer
118	1	Sep. 1	Sep. 30	Oct. 15	Oct. 31	25	Antlered deer
118	1	Sep. 1	Sep. 30	Nov. 1	Nov. 30		Any white-tailed deer
119	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	50	Antlered deer
119	2	Sep. 1	Sep. 30	Oct. 1	Oct. 15	75	Antlered deer
119, 120	3	Sep. 1	Sep. 30	Oct. 1	Nov. 30	100	Any white-tailed deer
119	6			Sep. 1	Nov. 15	50	Doe or fawn valid on irrigated land
120	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	75	Antlered deer
120	8			Sep. 1	Dec. 15	200	Doe or fawn white-tailed deer

2019 Hunter Satisfaction: 68% Satisfied, 15% Neutral, 13% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: The 2020 hunting season structure is again fairly conservative in order to promote herd growth. Minimal female harvest in this herd has been the norm in recent years, while Type 1 license quotas appear to be adequate for maintaining higher buck ratios and quality. The population is currently within the lower limit of the objective, despite conservative hunting seasons the past 10 years. Hunter satisfaction did declined in 2019 to a 68% satisfied hunter rating, which in 2018 it was a 76% satisfied rating. Hunter harvest, success and effort in 2019 remained favorable compared to previous years. Both fawn (56:100) and buck (30:100) ratios did decline in 2019, both the lowest in the past 10 years. Since this mule deer herd has remained below or at the lower limit of objective levels, mostly conservative seasons were again implemented. The

only changes for the 2020 hunting season were a reduction of 25 Type 6 licenses in both Hunt Areas 116 and 119, with the Hunt Area 119 limitation being changed to irrigated land. All current Type 1 license quotas were unchanged to still allow for buck harvest opportunity. However, if buck ratios continue to decline, reductions in some quotas may be warranted in the future. The only change to white-tailed deer seasons was a decrease of the Hunt Area 116 Type 7 licenses by 25, due to concerns over fewer deer in the Wood River drainage.

2.) Management Objective Review: The Owl Creek/Meeteetse Mule Deer herd unit objective was last reviewed in 2019, with no objective changes being made. A five year MDI update for this herd was also reviewed and presented to the public in 2019. The herd in currently at the lower end of objective levels.

3.) Damage issues have and will continue to be concerns for portions of this mule deer herd, especially in those agricultural areas in Hunt Areas 116, 119 and 120. Supporting some doe/fawn licenses should be considered annually to allow for crop damage prevention even when herd numbers are suppressed or below herd objectives.

4.) Overall habitat conditions continue to decline in this herd due to increases in cheatgrass prevalence and expansion. Because of this, mule deer herd growth will likely continue to struggle, and more erratic declines may occur more often due to the loss of desirable forage species.

5.) Chronic wasting disease (CWD) is a concern in this mule deer herd. Although prevalence is relatively low at this time, concerns for its increase and long-term effect of this mule deer herd need to be considered.

6.) This herd unit is under Special Management and is also the Cody Region's MDI herd. Strong public support to keep season structures under limited quota, maintain high buck ratios and support good buck quality continues to be voiced by the hunting public.

2019 - JCR Evaluation Form

SPECIES: Mule Deer

PERIOD: 6/1/2019 - 5/31/2020

HERD: MD215 - UPPER SHOSHONE

HUNT AREAS: 110-115

PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Population:	9,080	7,500	8,000
Harvest:	763	357	275
Hunters:	1,622	1,111	1,000
Hunter Success:	47%	32%	28%
Active Licenses:	1,652	1,113	1,020
Active License Success:	46%	32%	27%
Recreation Days:	8,497	5,614	5,000
Days Per Animal:	11.1	15.7	18.2
Males per 100 Females	23	25	
Juveniles per 100 Females	55	63	

Population Objective (± 20%) : 12,000 (9600-14400)

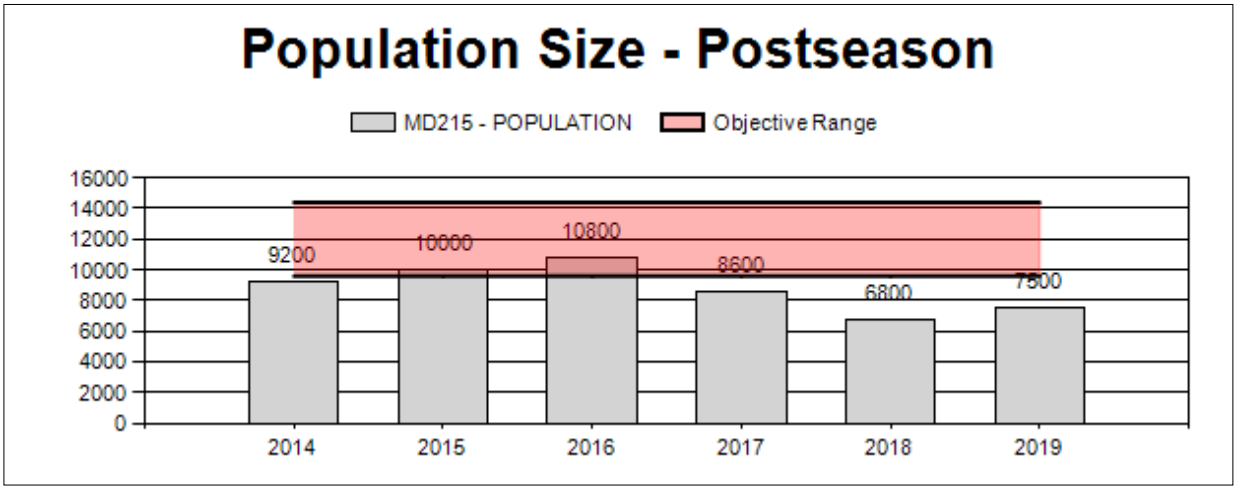
Percent population is above (+) or below (-) objective: -37.5%

Number of years population has been + or - objective in recent trend: 3

Model Date: 02/26/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	0.9%	0.8%
Males ≥ 1 year old:	21.4%	16.3%
Total:	4%	4%
Proposed change in post-season population:	1%	6%



2020 HUNTING SEASONS
UPPER SHOSHONE MULE DEER HERD (MD215)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
110	Gen	Sep. 1	Sep. 30	Oct. 15	Nov. 3		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
110, 111	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	25	Antlered mule deer or any white-tailed deer
110, 111	8	Sep. 1	Sep. 30	Oct. 15	Dec. 31	100	Doe or fawn white-tailed deer
111	Gen	Sep. 1	Sep. 30	Oct. 15	Nov. 3		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
112	Gen	Sep. 1	Sep. 30	Oct. 15	Nov. 3		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
112, 113, 114	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	25	Antlered mule deer or any white-tailed deer
112, 113	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	35	Any white-tailed deer
112, 113	8	Sep. 1	Sep. 30	Oct. 15	Dec. 31	175	Doe or fawn white-tailed deer
113	Gen	Sep. 1	Sep. 30	Oct. 15	Nov. 3		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
113	7	Sep. 1	Sep. 30	Oct. 1	Nov. 15	25	Doe or fawn valid on private land north and east of Carter Creek
114	Gen	Sep. 1	Sep. 30	Oct. 15	Nov. 3		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
115	Gen	Sep. 1	Sep. 9	Sep. 10	Oct. 22		Antlered mule deer four (4) points or more on either antler or any white-tailed deer

2020 Region F nonresident quota: 550 licenses

2019 Hunter Satisfaction: 46% Satisfied, 25% Neutral, 29% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: There are no major season changes occurring for the 2020 season in order to allow for continued increases to population size (little to no doe harvest), buck numbers and buck age classes. The 2019 hunting season showed a slightly higher harvest compared to 2018 but low compared to previous 10 years (previous 10 year average = 774). Early snowfall and movement of deer facilitated a higher harvest than we were predicting for the change in hunting season dates. The lower harvest over the last two seasons has allowed the buck ratio to increase from 19:100 does to 25:100 does. Production within the herd should increase with higher fawn ratios in 2019 which should help the population increase over the next year.

2.) Management Objective Review: This herd is managed by a post-season population estimate. Currently the herd is below the objective of 12,000. The last review of this management objective was 2014.

3.) Trail Camera Data Collection: Currently within the Upper Shoshone mule deer herd we have placed 15 trail cameras along known migration routes to collect classification, trend counts and change-in-ratio data. This data is being analyzed and should be available in future years.

4.) Winter Conditions: This winter has been mild and should allow for high survival rates for fawns within the herd unit. Data collected in relation to a change in ratio for fawns indicated a higher than normal survival with only a 9% drop in the fawn to adult ratio from fall to spring compared to the previous 5-year average of -34%.

2019 - JCR Evaluation Form

SPECIES: Mule Deer | PERIOD: 6/1/2019 - 5/31/2020

HERD: MD216 - CLARKS FORK

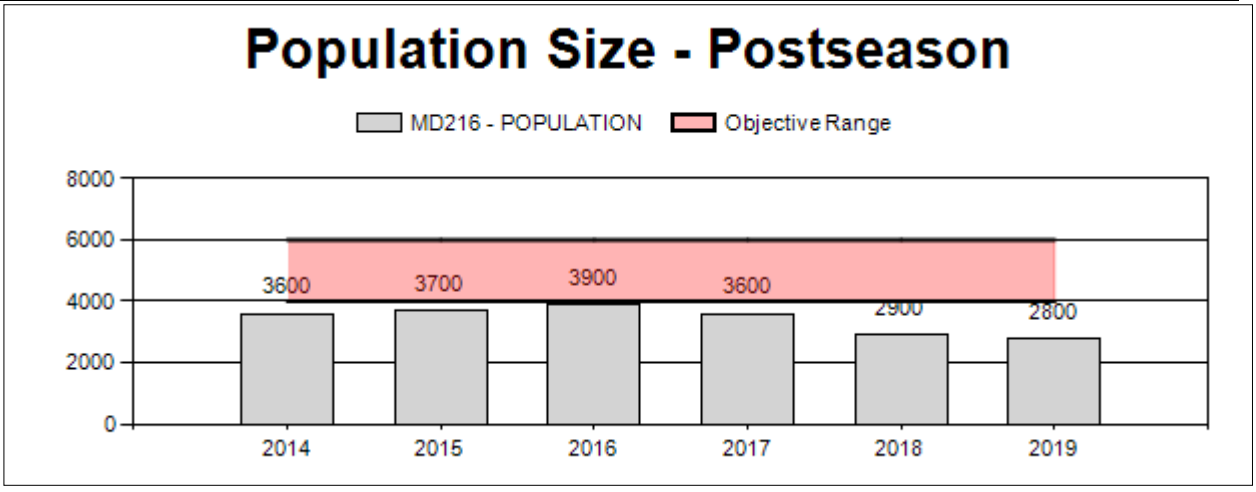
HUNT AREAS: 105-106, 109 | PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Population:	3,540	2,800	2,600
Harvest:	512	166	160
Hunters:	1,132	534	450
Hunter Success:	45%	31%	36%
Active Licenses:	1,187	534	450
Active License Success:	43%	31%	36%
Recreation Days:	5,875	2,960	3,000
Days Per Animal:	11.5	17.8	18.8
Males per 100 Females	29	25	
Juveniles per 100 Females	55	57	

Population Objective (± 20%) :	5000 (4000 - 6000)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-44%
Number of years population has been + or - objective in recent trend:	5
Model Date:	02/26/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	1.7%	0%
Males ≥ 1 year old:	36%	38%
Total:	6%	6%
Proposed change in post-season population:	0%	1%



2020 Hunting Seasons
Clark's Fork Mule Deer Herd (MD216)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
105	Gen	Sep. 1	Sep. 30	Oct. 1	Oct. 24		Antlered mule deer or any white-tailed deer valid on national forest
105	Gen	Sep. 1	Sep. 30	Nov. 1	Nov. 5		Antlered mule deer or any white-tailed deer valid off national forest
105	Gen	Sep. 1	Sep. 30	Nov. 6	Nov. 17		Antlerless deer valid on private land
105, 106, 109	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	25	Any deer
106	Gen	Sep. 1	Sep. 30	Oct. 1	Oct. 24		Antlered mule deer or any white-tailed deer

2020 Region F nonresident quota: 550 licenses

2019 Hunter Satisfaction: 43.4% Satisfied, 21.7% Neutral, 34.9% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: There are no season changes occurring for the 2020 season in order to allow for continued increases to population size (low to no doe harvest), buck numbers and buck age classes. The 2019 season decreased harvest to the lowest level ever recorded for the Clark's Fork Herd Unit, however, the buck ratio continued to decline to 25:100 does. Unfortunately, due to poor estimated fawn survival and overall fawn production from the last 5 years, population estimates still show the population at half the objective and indicate it may take several years to recover from the low population level we are experiencing.

2.) Management Objective Review: This herd is managed by a post-season population estimate. Currently the herd is below the objective of 5,000. The last review of this management objective was 2014.

3.) Trail Camera Data Collection: Currently within the Clark's Fork mule deer herd we have placed 10 trail cameras along known migration routes to collect classification, trend counts and change-in-ratio data. This data is being analyzed and should be available in future years.

4.) Winter Conditions: This winter has been mild and resulted in high survival rates for fawns within the herd unit. Data collected in relation to a change in ratio for fawns indicated a higher than normal survival with only a 9% drop in the fawn to adult ratio from fall to spring compared to the previous 5-year average of - 48%.

2019 - JCR Evaluation Form

SPECIES: White tailed Deer
PERIOD: 6/1/2019 - 5/31/2020

HERD: WD201 - BIGHORN BASIN

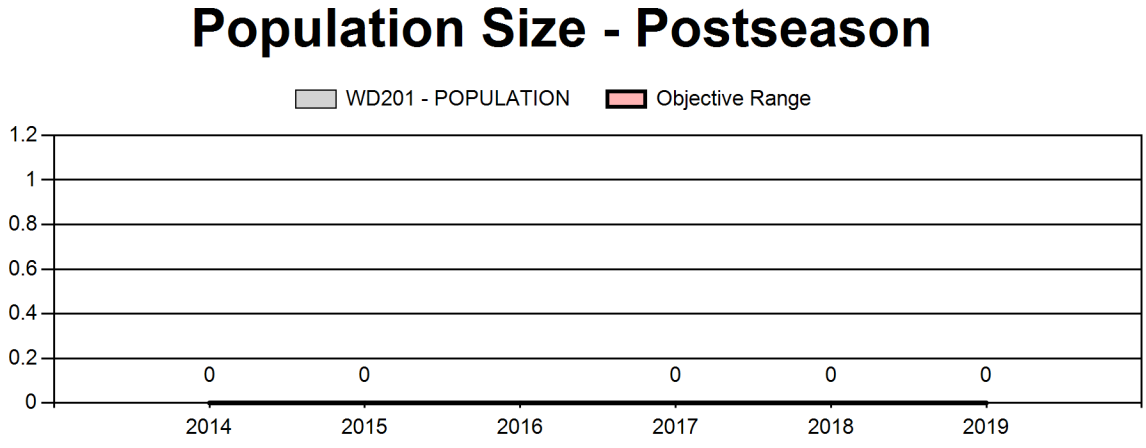
HUNT AREAS: 35, 37, 39-41, 46-47, 50-53, 105-106, 109-125, 127, 164-165
PREPARED BY: SAM STEPHENS

	2014 - 2018 Average	2019	2020 Proposed
Population:	0	N/A	N/A
Harvest:	2,032	2,653	3,000
Hunters:	4,212	4,628	5,000
Hunter Success:	48%	57%	60 %
Active Licenses:	5,088	5,831	6,000
Active License Success:	40%	45%	50 %
Recreation Days:	18,228	20,436	21,000
Days Per Animal:	9.0	7.7	7
Males per 100 Females	36	37	
Juveniles per 100 Females	76	68	

Population Objective (± 20%) :	0 (0 - 0)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	N/A%
Number of years population has been + or - objective in recent trend:	0
Model Date:	02/27/2019

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	0%	0%
Total:	0%	0%
Proposed change in post-season population:	0%	0%



2020 HUNTING SEASONS

BIGHORN BASIN WHITE-TAILED DEER HERD (WD201)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
36	8	Sep. 1	Sep. 30	Oct. 15	Oct. 31	25	Doe or fawn white-tailed deer
37,39	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	25	Any white-tailed deer
40	8	Sep. 1	Sep. 30	Oct. 1	Nov. 30	400	Doe or fawn white-tailed deer
41	3	Sep. 1	Sep. 30	Oct. 15	Nov. 30	150	Any white-tailed deer
41	8	Sep. 1	Sep. 30	Oct. 15	Dec. 15	250	Doe or fawn white-tailed deer
47,51	3	Sep.1	Sep. 30	Oct. 15	Nov. 30	75	Any white-tailed deer
47	8	Sep. 1	Sep. 30	Oct. 15	Dec. 15	150	Doe or fawn white-tailed deer
51	8	Sep. 1	Sep. 30	Oct. 15	Dec. 15	100	Doe or fawn white-tailed deer
110, 111	8	Sep. 1	Sep. 30	Oct. 15	Dec. 31	100	Doe or fawn white-tailed deer
112, 113	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	35	Any white-tailed deer
112, 113	8	Sep. 1	Sep. 30	Oct. 15	Dec. 31	175	Doe or fawn white-tailed deer
116, 117	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	100	Any white-tailed deer
116, 117, 118	8	Sep. 1	Sep. 30	Oct. 15	Nov. 30	150	Doe or fawn white-tailed deer
119, 120	3	Sep. 1	Sep. 30	Oct. 1	Nov. 30	100	Any white-tailed deer
120	8			Sep. 1	Dec. 15	200	Doe or fawn white-tailed deer
121	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	50	Any white-tailed deer
122	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	50	Any white-tailed deer
124	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	75	Any white-tailed deer
124	8	Sep. 1	Sep. 30	Nov. 1	Nov. 30	150	Doe or fawn white-tailed deer
127	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	25	Any white-tailed deer; also valid in Area 125

127	8	Sep. 1	Sep. 30	Oct. 15	Nov. 30	75	Doe or fawn white-tailed deer
164	3	Sep. 1	Sep. 30	Oct. 1	Nov. 30	100	Any white-tailed deer, also valid in Area 125
164	8	Sep. 1	Sep. 30	Oct. 1	Dec. 15	150	Doe or fawn white-tailed deer, also valid in Area 125
165	3	Sep. 1	Sep. 30	Nov. 1	Nov. 30	50	Any white-tailed deer
165	8	Sep. 1	Sep. 30	Nov. 1	Nov. 30	150	Doe or fawn white-tailed deer

2019 Hunter Satisfaction: 67% Satisfied, 18% Neutral, 16% Dissatisfied

Management Summary

1.) Hunting Season Evaluation:

White-tailed deer in the Bighorn Basin are managed as one herd unit consisting of 33 hunt areas under recreational management. Hunting seasons for white-tailed deer are typically set in conjunction with mule deer hunting seasons by Hunt Area. Hunting opportunity exists for licenses exclusive for white-tailed bucks such as Type 3 licenses and white-tailed does or fawns with type 8 licenses. Significant epizootic hemorrhagic disease outbreaks occurred in 2001, 2007, 2011, and 2012 severely reducing white-tailed deer abundance in parts of the Basin. Estimating the percent of the white-tailed deer population affected by disease mortality was never attempted, because no population estimate exists. Anecdotally, white-tailed deer populations have quickly rebounded from the most recent disease outbreak.

White-tailed deer hunting seasons are set to address landowner concerns and provide a late season opportunity to pursue bucks during the rut. White-tailed deer specific licenses (Types 3 & 8) are needed to obtain adequate harvest. Increases to buck and doe licenses for the 2020 season are warranted in particular hunt areas based on an abundance of deer and chronic wasting disease concerns.

2.) Chronic Wasting Disease:

Chronic wasting disease is sampled opportunistically and monitored according to the mule deer herd unit the hunt area exists in. Prevalence rates for adult male white-tailed deer in the Bighorn Basin have ranged from 11% in 2016 (n=35) to 23% in 2018 (n=98). When combined the collective prevalence rate for the Bighorn Basin White-tailed Deer Herd Unit in 2019 was 28% (n=157) in adult male white-tailed deer.

2019 - JCR Evaluation Form

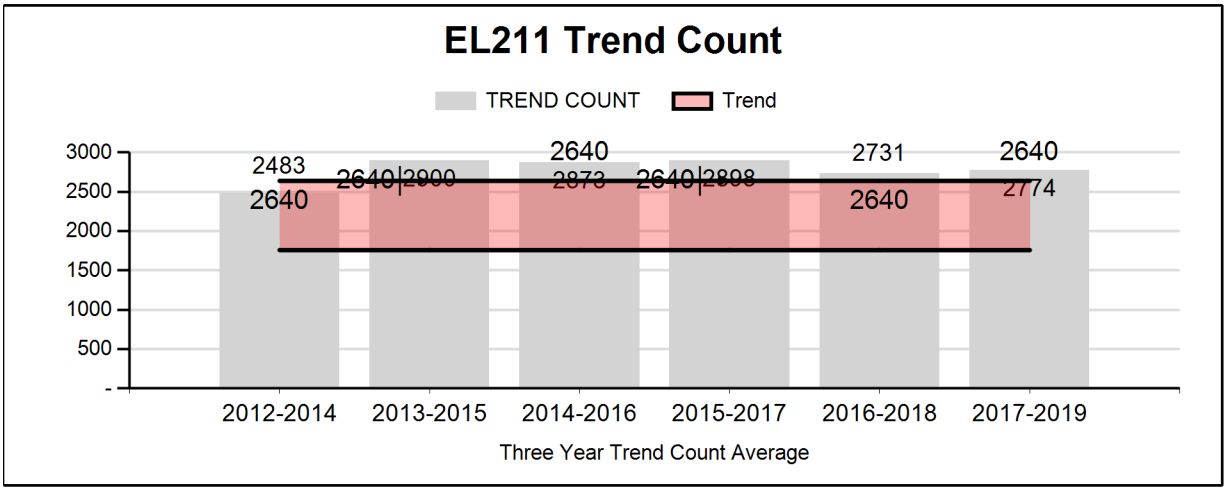
SPECIES: Elk
PERIOD: 6/1/2019 - 5/31/2020
HERD: EL211 - MEDICINE LODGE
HUNT AREAS: 41, 45
PREPARED BY: SAM STEPHENS

	2014 - 2018 Average	2019	2020 Proposed
Trend Count:	2,864	2,625	2,500
Harvest:	805	670	1,040
Hunters:	1,950	1,974	1,900
Hunter Success:	41%	34%	55%
Active Licenses:	2,006	1,910	2,000
Active License Success	40%	35%	52%
Recreation Days:	14,374	13,542	14,000
Days Per Animal:	17.9	20.2	13.5
Males per 100 Females:	30	30	
Juveniles per 100 Females	49	35	

Trend Based Objective (± 20%)	2,200 (1760 - 2640)
Management Strategy:	Recreational
Percent population is above (+) or (-) objective:	19%
Number of years population has been + or - objective in recent trend:	5

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	25%	30%
Males ≥ 1 year old:	30%	30%
Juveniles (< 1 year old):	10%	10%



2020 HUNTING SEASONS

MEDICINE LODGE ELK HERD (EL211)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
41	1	Sep. 15	Sep. 30	Oct. 15	Nov. 4	375	Any elk
41	4	Sep. 15	Sep. 30	Oct. 1	Oct. 10	450	Antlerless elk
41	4			Oct. 15	Nov. 30		Antlerless elk
41	6			Nov. 15	Dec. 21	350	Cow or calf
41	9	Sep. 1	Sep. 30			125	Any elk, archery only
45	1	Sep. 15	Sep. 30	Oct. 15	Nov. 4	350	Any elk
45	4	Sep. 15	Sep. 30	Oct. 15	Nov. 30	150	Antlerless elk
45	5	Sep. 15	Sep. 30	Oct. 1	Oct. 10	200	Antlerless elk
45	5			Nov. 5	Nov. 30		Antlerless elk
45	6			Aug. 15	Nov. 30	225	Cow or calf valid off national forest
45	9	Sep. 1	Sep. 30			150	Any elk, archery only

2019 Hunter Satisfaction: 66% Satisfied, 19% Neutral, 15% Dissatisfied

2020 Management Summary

1) Hunting Season Evaluation:
High calf recruitment and insufficient female harvest continues to yield an elk herd which is over-objective. Access in Hunt Area 41 due to land ownership and topographical constraints limits the cow harvest necessary to curb population growth. Cow harvest decreased significantly in 2019, by roughly 30% from 2018. Concurrently, classification and trend flights showed an over-abundance of elk in the herd unit (2,625). Increasing licenses as a means to increase harvest appears to have limited effect, as hunter success typically ranges between 30-40%. Based on hunter crowding comments and the need to address the over-abundance of elk, 2020 will see a shifting of season dates and the creation of an early cow harvest opportunity in both Hunt Areas 41 and 45. These changes are an attempt to decrease hunting pressure without significantly decreasing licenses. Hunt area 41 will see a modest reduction in Type 4 licenses and the creation of a ten day early season to increase cow harvest and alleviate hunter crowding during the Type 1 season which opens on October 15th. Similarly moving the 45 Type 5 season to the same ten day window should increase cow harvest and reduce hunter crowding during the 45 Type 1 season. Both license types are intended to close after October 10th to give elk a five day buffer prior to the October 15th opener for Type 1 hunters. Additionally a modest increase in the 45 Type 6 quota is warranted to increase opportunity and subsequent harvest on elk which have become a damage concern along cropland adjacent to lower Tensleep and Paintrock Creek.

2) Management Objective Review:

The Medicine Lodge Elk Herd is managed with a three-year running trend count average of 2,200 elk. This objective was set in 2016 and will be reviewed in 2021.

2019 - JCR Evaluation Form

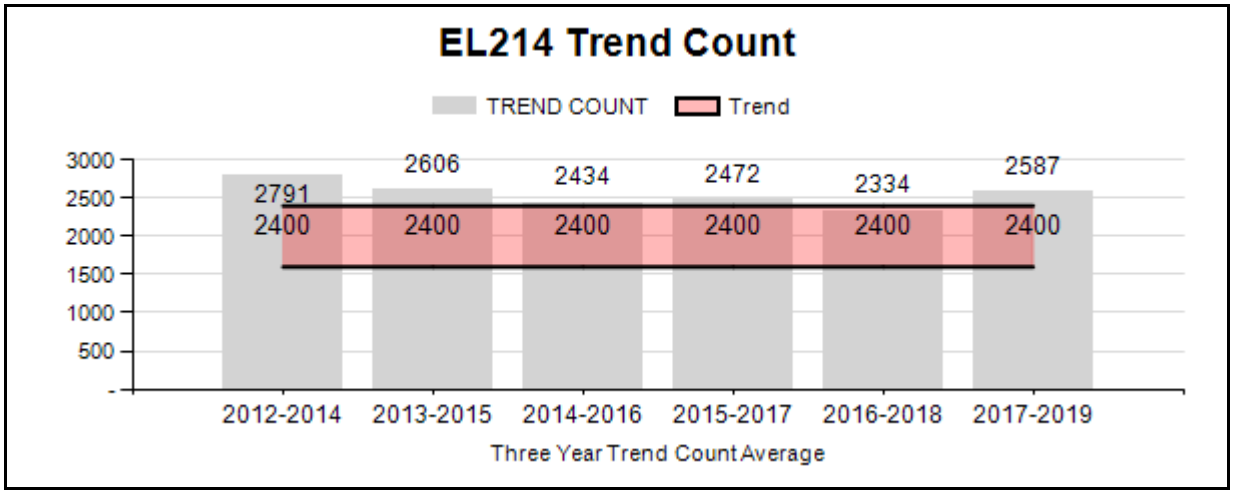
SPECIES: Elk
PERIOD: 6/1/2019 - 5/31/2020
HERD: EL214 - GOOSEBERRY
HUNT AREAS: 62-64
PREPARED BY: BART KROGER

	2014 - 2018 Average	2019	2020 Proposed
Trend Count:	2,415	2,989	2,700
Harvest:	738	580	590
Hunters:	1,389	1,117	1,100
Hunter Success:	53%	52%	54 %
Active Licenses:	1,435	1,158	1,150
Active License Success	51%	50%	51 %
Recreation Days:	8,773	6,484	6,500
Days Per Animal:	11.9	11.2	11.0
Males per 100 Females:	21	28	
Juveniles per 100 Females	22	15	

Trend Based Objective (± 20%)	2,000 (1600 - 2400)
Management Strategy:	Special
Percent population is above (+) or (-) objective:	+29%
Number of years population has been + or - objective in recent trend:	10

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	n/a%	n/a%
Males ≥ 1 year old:	n/a%	n/a%
Juveniles (< 1 year old):	n/a%	n/a%



2020 Hunting Seasons
Gooseberry Elk (EL214)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
62	1	Sep. 1	Sep. 30	Oct. 1	Oct. 21	125	Any elk
62	4	Sep. 1	Sep. 30	Oct. 1	Oct. 21	75	Antlerless elk
62, 63	5	Sep. 1	Sep. 30	Oct. 22	Dec. 21	150	Antlerless elk
63, 64	1	Sep. 1	Sep. 30	Oct. 1	Oct. 21	200	Any elk
63	2	Sep. 1	Sep. 30	Oct. 1	Oct. 21	25	Any elk valid within the Washakie Wilderness; also valid in that portion of Area 64 within the Washakie Wilderness
63	4	Sep. 1	Sep. 30	Oct. 1	Dec. 21	200	Antlerless elk
63	6	Sep. 1	Sep. 30				Cow or calf valid in the entire area
63	6			Aug.15	Oct. 31	100	Cow or calf valid off national forest north of Gooseberry Creek
63	6			Nov. 1	Dec. 21		Cow or calf valid off national forest
64	2	Sep. 1	Sep. 30	Nov. 1	Nov. 15	75	Any elk, also valid in Area 63
64	6			Sep. 1	Nov. 14	200	Cow or calf valid in that portion of the Cottonwood Creek Drainage downstream of and including the 21-Creek Drainage, also valid within the Grass Creek Drainage downstream of the Grass Creek/Little Grass Creek confluence
64	6	Sep. 1	Sep. 30	Nov.15	Dec. 21		Cow or calf valid in the entire area
64	7	Sep. 1	Sep. 30	Oct. 15	Dec. 21	300	Cow or calf valid south of and including the Cottonwood Creek Drainage

2019 Hunter Satisfaction: 73% Satisfied, 14% Neutral, 13% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: The 2020 hunting season structure is again fairly liberal in order to reduce herd numbers. Numerous cow/calf licenses with long seasons continue to be offered in each hunt area to maximize harvest and promote hunter opportunity. Type 1 and 2 license quotas have stayed consistent over the past years to allow for a quality hunting experience and to maintain or improve bull quality. The population has continued to remain slightly above objective levels in recent years. Hunter satisfaction did increase in 2019 to a 73% satisfied hunter rating, which in 2018 was at a 66% satisfied rating. Hunter success (53%) and effort (11 days) in 2019 remained similar to previous years. Calf ratios have continued to decline in recent years, from a high of 26:100 in 2014 to 15:100 in 2019, which is the lowest ratio since 2005. Bull quality still appears favorable with >95% of the male harvest being branched antlered bulls. The only changes for the 2020 season were to the special archery seasons for Hunt Area 62 Type 2 and 64 Type 7 licenses, which restricted those hunters to the limitations of their licenses, along with a slight change to the Hunt Area 64 Type 6 limitation to direct hunters to where potential private land damage is a concern.

2.) Management Objective Review: The Gooseberry elk herd unit objective was last reviewed in 2017, with no objectives changes being made. The herd in currently slightly over its management objective.

3.) Potential damage issues have and will continue to be concerns for portions of this elk herd unit, especially in the lower drainages of Grass Creek and Cottonwood Creek. Directing harvest to these areas has helped reduce damage issues and improved landowner relations.

4.) Overall habitat conditions in this herd are mostly favorable. Numerous prescribed and wild fires over the past 30 years have improved herbaceous production and quality.

5.) Brucellosis is present in this herd, and measures to reduce elk/cattle interaction have and will continue. In 2019, 17 elk tested seropositive for brucellosis, with a prevalence of 27%.

6.) Hunter access is a concern in Hunt Areas 63 and 64, especially during late cow/calf hunts when elk have moved to lower elevations. The Department continues efforts to improve hunter access is these hunt aeras.

7.) This herd unit is under Special Management. Strong public support to keep season structures under limited quota and to maintain or improve bull numbers and quality continues to be voiced by the hunting public.

2019 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2019 - 5/31/2020

HERD: EL216 - CODY

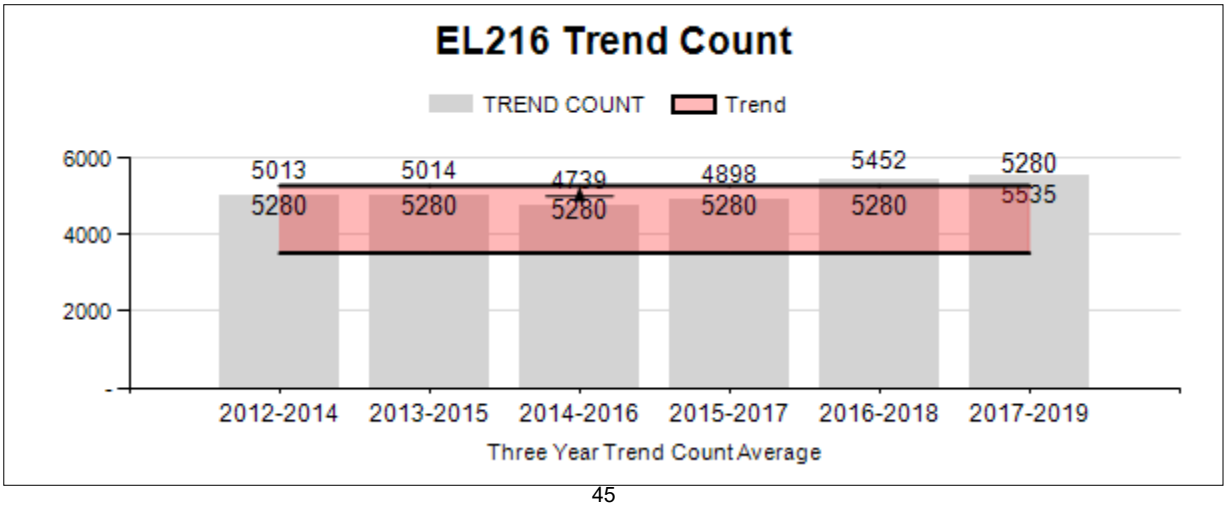
HUNT AREAS: 55-56, 58-61, 66

PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Trend Count:	5,134	5,152	4,800
Harvest:	1,425	1,120	1,300
Hunters:	3,094	2,959	2,800
Hunter Success:	46%	38%	46%
Active Licenses:	3,265	3,142	3,000
Active License Success	44%	36%	43%
Recreation Days:	20,878	19,867	21,000
Days Per Animal:	14.7	17.7	16.2
Males per 100 Females:	36	52	
Juveniles per 100 Females	23	13	
Trend Based Objective (± 20%)			4,400 (3520 - 5280)
Management Strategy:			Special
Percent population is above (+) or (-) objective:			17%
Number of years population has been + or - objective in recent trend:			6

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	n/a%	n/a%
Males ≥ 1 year old:	n/a%	n/a%
Juveniles (< 1 year old):	n/a%	n/a%
Total:	n/a%	n/a%
Proposed change in post-season population:	n/a%	n/a%



2020 HUNTING SEASONS
CODY ELK HERD (EL216)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
55	1	Sep. 1	Sep. 30	Oct. 1	Oct. 31	50	Any elk
55	9			Sep. 1	Sep. 30	25	Any elk, archery only
56	Gen	Sep. 1	Sep. 30				Any elk
56	Gen			Oct. 1	Oct. 21		Antlered elk
56	1	Sep. 1	Sep. 30	Nov. 1	Dec. 7	10	Any elk
56	5	Sep. 1	Sep. 30	Oct. 1	Dec. 21	100	Antlerless elk valid off national forest
56	6	Sep. 1	Sep. 30	Oct. 1	Dec. 21	100	Cow or calf
56	9			Sep. 1	Sep. 30	30	Any elk, archery only
58	1	Sep. 1	Sep. 30	Oct. 1	Nov. 30	35	Any elk
58	6	Sep. 1	Sep. 30	Oct. 1	Dec. 21	75	Cow or calf
59	Gen	Sep. 1	Sep. 30				Any elk
59	Gen			Oct. 1	Oct. 21		Antlered elk
59	1	Sep. 1	Sep. 30	Nov. 1	Nov. 15	10	Any elk
59	6	Sep. 1	Sep. 30	Oct. 1	Dec. 21	125	Cow or calf
59	7	Sep. 1	Sep. 30				Cow or calf valid in the entire area
59	7			Oct. 1	Oct. 31	25	Cow or calf valid within the Washakie Wilderness
59	9			Sep. 1	Sep. 30	25	Any elk, archery only
60	Gen	Sep. 1	Sep. 19				Any elk valid in the entire area
60	Gen			Sep. 20	Oct. 22		Antlered elk
60	9			Sep. 1	Sep. 30	20	Any elk, archery only

61	1	Sep. 1	Sep. 30				Any elk valid in the entire area, also valid in that portion of Area 62 within the Washakie Wilderness south of Avalanche Creek
61	1			Oct. 1	Oct. 31	150	Any elk valid within the Washakie Wilderness, also valid in that portion of Area 62 within the Washakie Wilderness south of Avalanche Creek
61	2	Sep. 1	Sep. 30	Oct. 15	Nov. 15	50	Any elk, also valid in Area 66
61	4	Sep. 1	Sep. 30	Oct. 24	Dec. 21	150	Antlerless elk
61	6			Nov. 1	Nov. 24	200	Cow or calf valid within the Washakie Wilderness
61	6	Sep. 1	Sep. 30	Nov. 25	Dec. 21		Cow or calf valid in the entire area
61	7	Sep. 1	Sep. 30				Cow or calf valid in the entire area
61	7			Sep. 1	Dec. 21	350	Cow or calf valid north of and including the Rawhide Creek Drainage
66	Gen			Aug. 15	Dec. 21		Any elk
66	6			Aug. 15	Jan. 15	350	Cow or calf

2019 Hunter Satisfaction: 62.1% Satisfied, 17.5% Neutral, 20.4% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: There are some slight decreases occurring for the 2020 hunting season in cow harvest in Hunt Areas 56, 58 and 59 due to decreasing trend counts and multiple years below trend objective. In addition, we there is a shift of licenses in Hunt Area 56 from the Type 6 to the Type 5 to address growing numbers of non-migratory elk that occur outside of the national forest. In Hunt Area 58 the Type 6 harvest success was low with only 20% of hunters reporting successful hunts. In Hunt Area 59 there has been a decline in trend counts since 2015 and the last 3 years had an average trend count below the objective. We are eliminating the Hunt Area 61-2 crossover license that was valid in Hunt Area 66 due to the extension and liberalization the Hunt Area 66 general season to December 21. In addition, we opened the Hunt Area 61-4 earlier to increase cow harvest on elk moving into the Pickett Creek area early.

2.) Management Objective Review: This herd is managed by a 3-year average mid-winter trend count by Hunt Area blocks (HA55-56, HA58-59, HA61 and HA66). Currently we are below objective in Hunt Area blocks 55-56 and 58-59. We are above objective in HA61. We were able to do a short flight in Hunt Area 66 and found no elk. This objective was reviewed in 2017.

3.) Cody Elk Herd Movement Study: In 2019, we initiated a movement study in cooperation with Dr. Arthur Middleton at the University of California, Berkley. Since February 2019 we have collared 85 cow elk (60 in 2019 and 25 in 2020) from Hunt Area 61 to Hunt Area 56. In 2020 we deployed 25 Vectronic satellite collars and 23 vaginal implant transmitters (VIT) with those collars. Collar and VIT functionality has been good to date.

2019 - JCR Evaluation Form

SPECIES: Elk
PERIOD: 6/1/2019 - 5/31/2020

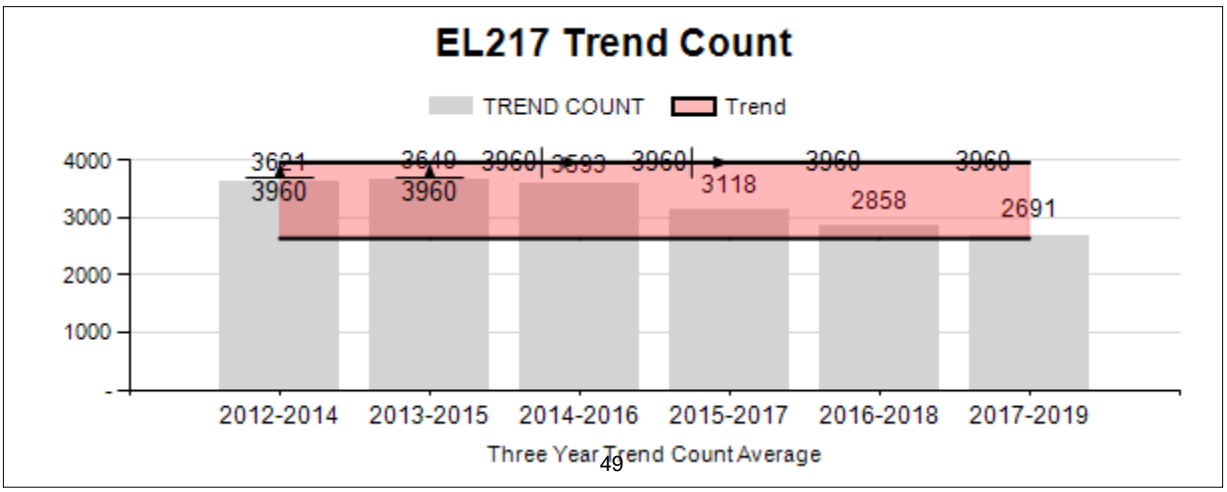
HERD: EL217 - CLARKS FORK

HUNT AREAS: 51, 53-54
PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Trend Count:	3,230	2,704	2,500
Harvest:	464	399	375
Hunters:	940	1,002	950
Hunter Success:	49%	40%	39%
Active Licenses:	987	1,050	1,000
Active License Success	47%	38%	38%
Recreation Days:	6,762	7,723	7,100
Days Per Animal:	14.6	19.4	18.9
Males per 100 Females:	24	20	
Juveniles per 100 Females	21	11	
Trend Based Objective (± 20%)			3,300 (2640 - 3960)
Management Strategy:			Special
Percent population is above (+) or (-) objective:			-18.1%
Number of years population has been + or - objective in recent trend:			3

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	n/a%	n/a%
Males ≥ 1 year old:	n/a%	n/a%
Juveniles (< 1 year old):	n/a%	n/a%
Total:	n/a%	n/a%
Proposed change in post-season population:	n/a%	n/a%



2020 HUNTING SEASONS
CLARKS FORK ELK HERD (EL217)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
51	1			Oct. 1	Oct. 31	100	Any elk south and west of the Clarks Fork River
51	2			Oct. 1	Oct. 31	40	Any elk north and east of the Clarks Fork River
51	4			Nov. 16	Dec. 15	150	Antlerless elk
51	9			Sep. 1	Sep. 30	70	Any elk, archery only
53	1			Oct. 1	Oct. 31	10	Any elk
53	2			Nov. 1	Nov. 30	35	Any elk valid in the North Fork Shoshone River drainage
53	4			Oct. 1	Dec. 15	50	Antlerless elk
53	6			Oct. 15	Dec. 21	100	Cow or calf valid in the North Fork Shoshone River drainage
53	7			Sep. 1	Dec. 21	25	Cow or calf valid on private land
53	9			Sep. 1	Sep. 30	10	Any elk, archery only
54	1			Oct. 1	Nov. 30	50	Any elk valid south of the Clarks Fork River
54	2			Oct. 1	Oct. 31	25	Any elk valid north of the Clarks Fork River
54	6			Sep. 1	Sep. 30	150	Cow or calf valid on private land
54	6			Oct. 1	Oct.31		Cow or calf valid in the entire area
54	7			Nov. 1	Nov. 24	300	Cow or calf
54	7			Nov. 25	Dec. 21		Cow or calf valid east of Wyoming Highway 120
54	9			Sep. 1	Sep. 30	35	Any elk, archery only

2019 Hunter Satisfaction: 54.5% Satisfied, 18.2% Neutral, 27.4% Dissatisfied

2020 Management Summary

1.) Hunting Season Evaluation: There will be minor changes in license availability in Hunt Areas 53 and 54 to adjust to elk numbers and availability for the 2020 hunting season. Over the last several years, there has been a focus on reducing and maintaining elk numbers in Hunt Area 53. During this time we have seen numbers of elk on our trend flight below the Hunt Area objective and a consistent downward trend. There was also a low success rate across all license types at 35%. In Hunt Area 54 we are implemented a slight decrease in cow licenses in order to address issues associated with access to huntable ground in Hunt Area 54 to hunt cows. A majority of the area that holds cow elk during the season is private land and it has been difficult for hunters to gain access to that portion of the hunt area when cow elk are available for harvest. In addition, there was also a severe drop in calf ratios from an average of 24:100 from the previous 5 years to 11:100 in 2019. With these small adjustments, we hope that harvest success increases, which should allow us to continue to decrease overall numbers in Hunt Area 54.

2.) Management Objective Review: This herd is managed by a 3-year average mid-winter trend count by Hunt Area blocks (HA51, HA53 and HA54). Currently we are below objective in Hunt Area blocks 51 and 53. We are above objective in HA54. This objective was reviewed in 2018.

2019 - JCR Evaluation Form

SPECIES: Moose
PERIOD: 6/1/2019 - 5/31/2020

HERD: MO201 - ABSAROKA

HUNT AREAS: 8-9, 11
PREPARED BY: BART KROGER

	2014 - 2018 Average	2019	2020 Proposed
Population:	0	N/A	N/A
Harvest:	9	7	8
Hunters:	10	7	8
Hunter Success:	90%	100%	100 %
Active Licenses:	10	7	8
Active License Success:	90%	100%	100 %
Recreation Days:	82	70	65
Days Per Animal:	9.1	10	8.1

Limited Opportunity Objective:

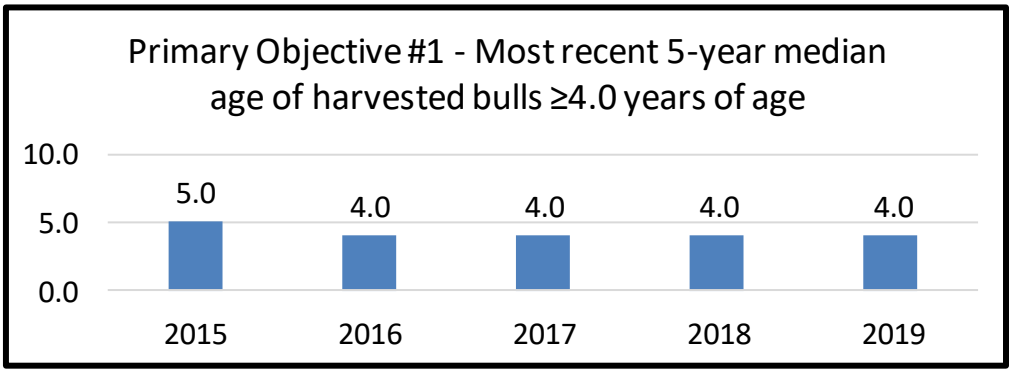
5-year median age of ≥ 4.0 years for harvested bulls

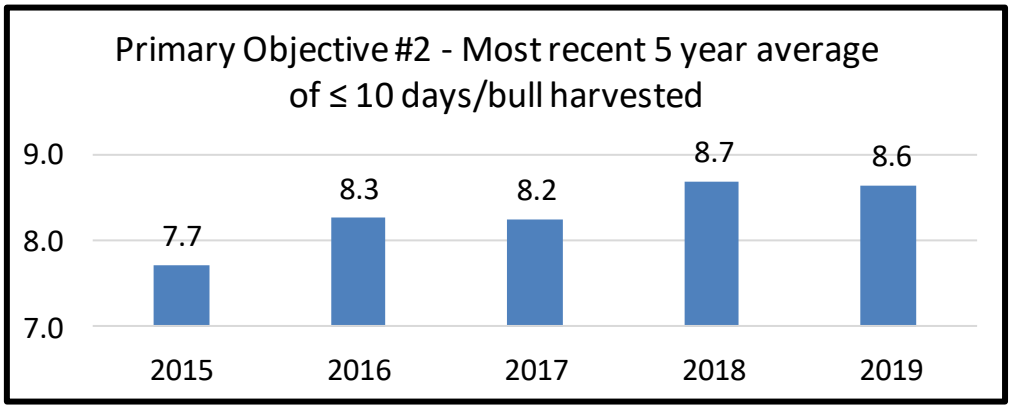
5-year average of ≤ 10 days/animal to harvest

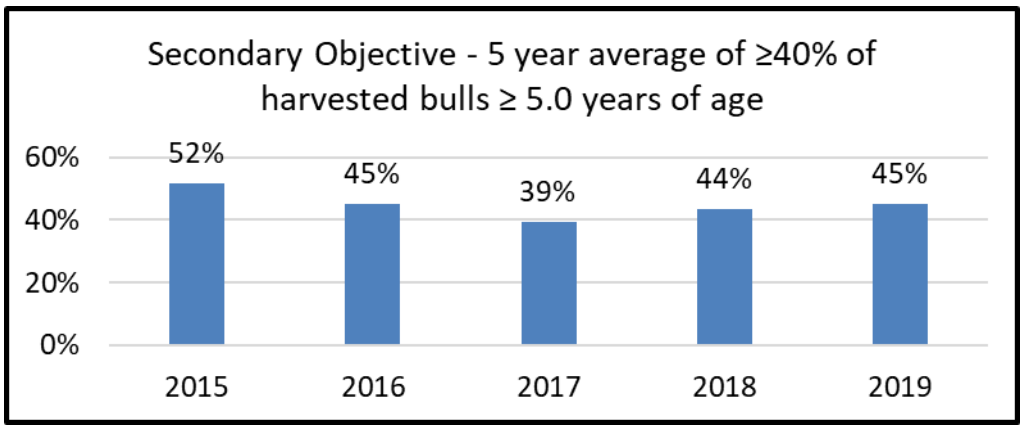
Secondary Objective:

5-year average of 40% of harvested moose are ≥ 5 years of age
Document the occurrence of adult bulls in the population

Management Strategy: Special






Secondary Objective - 5 year average of ≥40% of harvested bulls ≥ 5.0 years of age
60%
40%
20%
0%
52%
45%
39%
44%
45%
2015
2016
2017
2018
2019

2020 Hunting Seasons
Absaroka Moose (MO201)

Hunt Area	License Type	Special Archery Dates		Regular Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
9	1	Sep. 1	Sep. 30	Oct. 1	Oct. 31	3	Antlered moose (2 residents; 1 nonresident)
11	1	Sep. 1	Sep. 9	Sep. 10	Nov. 10	5	Antlered moose

2020 Management Summary

1.) Hunting Season Evaluation: The 2020 hunting season structure for the Absaroka moose herd was unchanged from 2019. Prior to the 2019 season, a quota of 5 licenses were issued for each hunt area. However, in 2019 the Hunt Area 9 quota was reduced to 3 licenses, despite the fact all herd management objectives were being met. Moose numbers in this herd unit are considered at low densities, but enough moose do exist to support a viable population and limited bull harvest. Since 2015, annual winter aerial trend counts have been conducted in Hunt Area 9, with roughly 31 moose on average being observed. From these trend count surveys, the 2019 3-year average bull and calf ratio is 70:100 cows and 44:100 cows, respectively. Trail cameras have also been utilized in Hunt Area 9 to document the number of unique bulls, calf production and moose movements. Based on these camera data, it appears there are more moose in this hunt area than previously thought. In fact, in recent years it appears moose numbers have increased slightly, along with more calves being observed in the area. In 2019, 7 bull moose were harvested, 3 from Hunt Area 9 and 4 from Hunt Area 11, for a hunter success of 100%. The average age of the harvested bulls in 2019 was 6.0 years, with the 5-year average being 4.8 years. Currently all four management objectives for this moose herd are being met for 2019. No changes were made for the 2020 hunting season.

2.) Management Objective Review: The Absaroka Moose herd unit limited opportunity objectives was last reviewed and revised in 2019, with only minor changes being made in order to standardize and be consistent with other moose herds in the State.

3.) Both trail cameras and trend counts surveys need to continue annually to document the presence of bull moose, as well as monitor population trends of the herd. More emphasis needs to be placed on documenting moose in the entire herd unit.

4.) Starting in March 2020 the Meeteetse Moose Project, headed by Dr. Kevin Montieth, was initiated in Hunt Area 9. Sixteen (16) moose were radio collared, including 10 cows and 6 bulls, to determine survival, movement patterns, habitat selection, forage preference and hunter vulnerability. Additional moose will be collared during summer-winter 2020. These data will be used to better access population ecology and dynamics of moose in Hunt Area 9.

2019 - JCR Evaluation Form

SPECIES: Bighorn Sheep
PERIOD: 6/1/2019 - 5/31/2020

HERD: BS200 - ABSAROKA

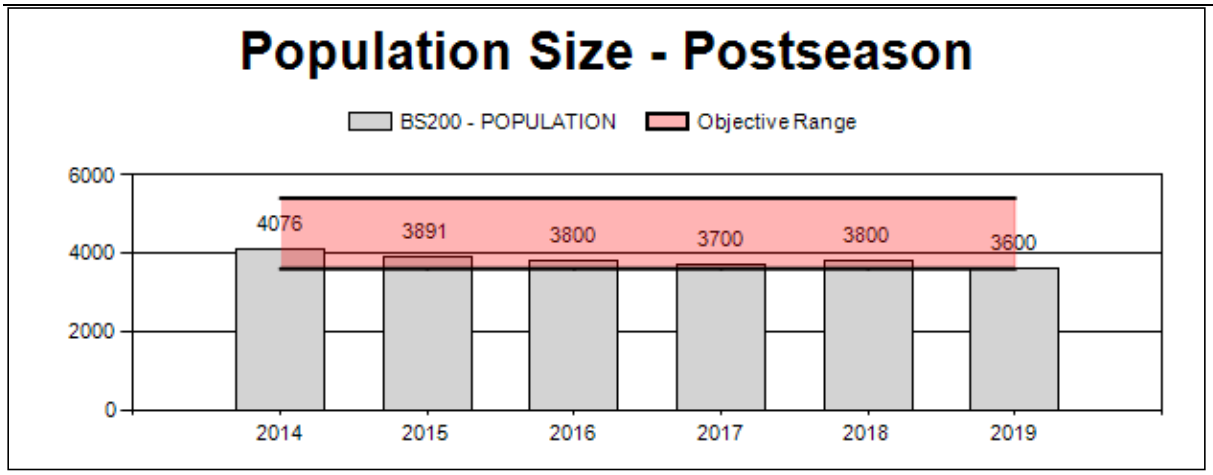
HUNT AREAS: 1-5, 22, 999
PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Population:	3,853	3,600	3,600
Harvest:	124	99	105
Hunters:	155	128	128
Hunter Success:	80%	77%	82%
Active Licenses:	155	128	128
Active License Success:	80%	77%	82%
Recreation Days:	1,331	1,160	1,100
Days Per Animal:	10.7	11.7	10.5
Males per 100 Females	37	34	
Juveniles per 100 Females	27	34	

Population Objective (± 20%) :	4500 (3600 - 5400)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-20%
Number of years population has been + or - objective in recent trend:	0
Model Date:	02/21/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	n/a%	n/a%
Males ≥ 1 year old:	n/a%	n/a%
Total:	n/a%	n/a%
Proposed change in post-season population:	n/a%	n/a%



2020 Hunting Seasons
Absaroka Bighorn Sheep (BS200)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
1	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	12	Any Ram
2	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	20	Any Ram
3	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	32	Any Ram
4	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	24	Any Ram
5	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	34	Any ram (25 residents, 9 nonresidents)
22	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	4	Any Ram
22	1			Oct. 1	Oct. 31	4	Any Ram, also valid in Area 5.

2020 Management Summary

1.) Hunting Season Evaluation: The 2020 hunting seasons will allow us to continue to increase the ram population within the herd unit through lower harvest in all hunt areas. Based on 2019 harvest success, days to harvest and average age of harvest, license numbers in each of the hunt areas are at a level that should allow for higher success hunts and good age class of rams harvested in 2020.

2.) Management Objective Review: Average age of harvested ram, days to harvest and harvest success are the main metrics used to evaluate the management objective for this herd. A population model has been created but is not the primary method of objective evaluation. Currently we are within acceptable ranges for all management objectives. The management objective was last reviewed in 2018.

3.) Hunt Area 5 Issues: Domestic sheep grazing in the Southfork of Owl Creek has become an issue in recent years due to the close proximity to bighorn sheep and/or occupied bighorn sheep habitat. This situation will continue to be monitored annually, and if the risk of domestic and bighorn sheep interacting becomes a concern, management actions will be taken to reduce or alleviate that risk.

4.) Intensive Data Collection Flight Proposal: Due to the lack of data associated with the Absaroka herd financial support is being sought to complete two intensive helicopter flights to take place in the summer and winter of 2020. The objectives of these intensive flights are: 1) determine the best season for population demographic data collection, 2) determine a "minimum" population size (total numbers and adult rams), 3) begin to understand the lamb loss rates from summer to winter and 4) lay the groundwork for more rigorous population estimation techniques (sightability

methods).

2019 - JCR Evaluation Form

SPECIES: Bighorn Sheep
HERD: BS212 - DEVIL'S CANYON
HUNT AREAS: 12

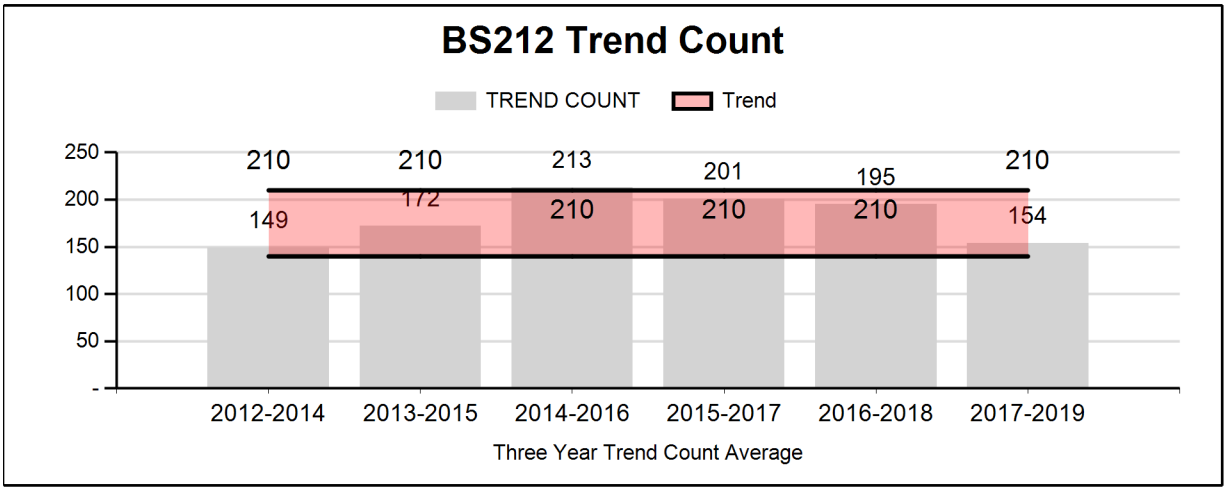
PERIOD: 6/1/2019 - 5/31/2020
PREPARED BY: SAM STEPHENS

	2014 - 2018 Average	2019	2020 Proposed
Trend Count:	192	142	170
Harvest:	5	6	7
Hunters:	5	6	7
Hunter Success:	100%	100%	100%
Active Licenses:	5	6	7
Active License Success	100%	100%	100%
Recreation Days:	28	69	50
Days Per Animal:	5.6	11.5	7.1
Males per 100 Females:	48	66	
Juveniles per 100 Females	44	46	

Trend Based Objective (± 20%)	175 (140 - 210)
Management Strategy:	Special
Percent population is above (+) or (-) objective:	-18.9%
Number of years population has been + or - objective in recent trend:	2

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	8%	9%
Juveniles (< 1 year old):	0%	0%



2020 HUNTING SEASONS
DEVILS CANYON BIGHORN SHEEP HERD (BS212)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
12	1	Aug. 1	Aug. 14	Aug. 15	Oct. 15	6	Any ram

2020 Hunt Area 12 nonresident quota: 1 license

2020 Management Summary

1.) **Hunting Season Evaluation:**
In 2019 we continued a conservative management approach by allocating 6 licenses for the harvest of any ram in Hunt Area 12. With a success rate of 100% we saw a harvest of 6 adult rams which ranged from 5-10 years old and averaged 7.5 y.o. Our 2020 proposal is to maintain this conservative management by allocating 6 any ram licenses, as all field data indicates the population is stable and within 20% of the trend objective.

2.) **Management Objective Review:**
In 2020 we reviewed the current objective structure and determined the methodology and objective were appropriate. Since the previous objective review this herd has only been surveyed with a mid-summer flight. Mid-summer trend counts may lack the ability to monitor lamb recruitment, as the lambs are only 3 months of age at the time of the survey. In December 2019 we had the ability to fly a portion of the herd and obtain post-season classification data from 120 sheep. The lamb ratio observed in December was analogous to the ratio attained from the summer flight, indicating little mortality from late summer through autumn. Annual summer and winter flights should be repeated in this fashion for two additional years to determine the value of using mid-summer lamb ratios to project population growth. Collared bighorn ewes (n=20) captured and fitted with GPS collars in November of 2019 will give managers the ability to efficiently locate and survey ewe/lamb groups over the next 3 years. The trend objective of 175 sheep, set in 2015 is a suitable objective given the limited amount of space available to these sheep (100 mi^2). Available habitat within the herd unit would likely inhibit population growth much beyond the objective range. Significant growth in abundance would probably result in dispersal and the subsequent commingling of Devils Canyon bighorn sheep with domestic sheep on nearby grazing allotments. Therefore, maintaining a conservative population objective is necessary to discourage emigration and ensure separation between the species.

3.) **Disease Sampling:**
Two separate disease sampling efforts were conducted in February and November of 2019, where 12 and 22 adult bighorns (respectively) were sampled for respiratory pathogens. Nasal and tonsil swabs were analyzed for the presence of respiratory pathogens by culture and polymerase chain reaction (PCR). Results were consistent with recent sampling efforts where the three most prevalent pathogens detected were *Mannheimia haemolytica, Pasteurella*

multocida, and *Mannheimia glucosida*. *Mycoplasma ovipneuomoniae* has yet to be detected within the Devils Canyon bighorn sheep.

4.) **GPS Collaring:**

With disease sampling funding secured through the Wyoming chapter of the Wild Sheep Foundation, additional funding was opportunistically granted by the organization ($12,450) and the Wyoming Governors Big Game License Coalition ($15,000) in 2019 to purchase GPS collars (n=30) to monitor habitat use, seasonal movement, and annual recruitment rates of Devils Canyon bighorn sheep. Between two capture efforts (November and March) of the 2019/20 winter, 10 adult males (1-7 y.o) and 20 adult females were captured for disease sampling and subsequently collared. Collars are collecting locations every 6 hours and transmitting data remotely every 2 days. One mortality was detected over the 2019/20 winter and determined to be caused by mountain lion predation. The collars are expected to collect data for a minimum of 3.5 years, and should give us some ecological insight into the future of the Devils Canyon herd as it relates to appropriate management goals.

2019 - JCR Evaluation Form

SPECIES: Mountain Goat
PERIOD: 6/1/2019 - 5/31/2020

HERD: MG201 - BEARTOOTH

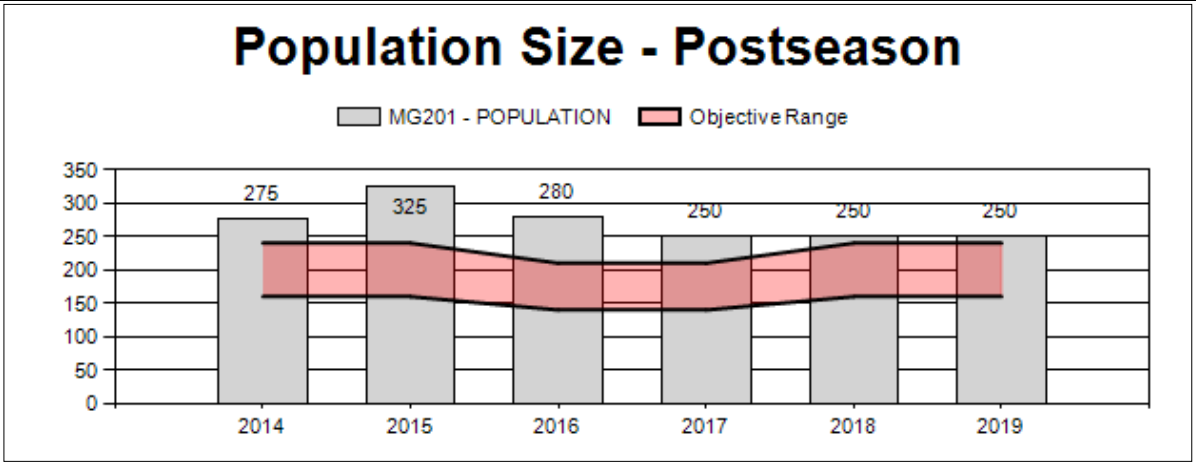
HUNT AREAS: 1, 3, 5, 514, 999
PREPARED BY: TONY MONG

	2014 - 2018 Average	2019	2020 Proposed
Population:	276	250	225
Harvest:	25	28	35
Hunters:	26	44	50
Hunter Success:	96%	64%	70%
Active Licenses:	26	44	60
Active License Success:	96%	64%	58%
Recreation Days:	153	293	350
Days Per Animal:	6.1	10.5	10
Males per 100 Females	0	0 (no data collected)	
Juveniles per 100 Females	38	0 (no data collected)	

Population Objective (± 20%) :	200 (160 - 240)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	25%
Number of years population has been + or - objective in recent trend:	1
Model Date:	02/21/2020

Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
Females ≥ 1 year old:	n/a%	n/a%
Males ≥ 1 year old:	n/a%	n/a%
Total:	n/a%	n/a%
Proposed change in post-season population:	n/a%	n/a%



2020 Hunting Seasons
Beartooth Herd (MG201)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
1	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	8	Any
3	1	Aug. 15	Aug. 31	Sep. 1	Oct. 31	24	Any
	2	Aug. 15	Aug. 31	Sep. 20	Oct. 31	16	Any
5	A	Aug. 15	Aug. 31	Sep. 1	Oct. 31	8	Any

2020 Management Summary

1.) Hunting Season Evaluation: Our objective for the 2020 season is to reduce mountain goat numbers in Hunt Area 3 and maintain numbers in Hunt Area 1. We are concerned that numbers of goats have increased in Hunt Area 3 and may be contributing to a decrease in native bighorn sheep in the overlapping areas. In order to facilitate higher harvest in Hunt Area 3 we are opening the type 2 license earlier for better access to areas that have goats and increase total licenses. The 3 year average trend count from 2018 showed a relatively flat trend for all areas combined, however if you break the flight down into the different survey areas (Hunt Area 1, Hunt Area 3 and Yellowstone NP) it is clear despite declines in Hunt Area 1 that Hunt Area 3 and YNP have increased over the last 5 survey years (Appendix A). Given these increases and struggling bighorn sheep populations in the same area we are increasing goat licenses for 2020 in Hunt Area 3.

2.) Management Objective Review: The management objective for this herd is percent nanny harvest, harvest success, days to harvest and a mid-summer trend count. This herd is currently above the mid-summer trend count objective of 160 to 240. The management objective was last reviewed in 2016.

Appendix A. Trend flight data (3-year average) for the Beartooth Mountain Goat Herd (MG201).