GREEN RIVER REGION
TABLE OF CONTENTS

Antelope

Sublette……..…….…….…..1

Uinta-Cedar Mountain…….……..……....6

South Rock Springs……..…….....9

Bitter Creek……..……..….. ...11

Carter Lease…….....….14

Baggs…….……...……...17

Mule Deer

Uinta…….…….....20

South Rock Springs…….……...24

Baggs……..……..…..26

Elk

Uinta……...…….…..……30

South Rock Springs…..……..….33

Sierra Madre….…….…….....…..36

Steamboat…….……...…….…….....40

West Green River…….…….…….....43

Petition…….…….…….…….....46

Moose

Uinta…….……..…….....…...49

Lincoln……..……...….53

2021 - JCR Evaluation Form

SPECIES: Pronghorn
PERIOD: 6/1/2021 - 5/31/2022

HERD: PR401 - SUBLETTE

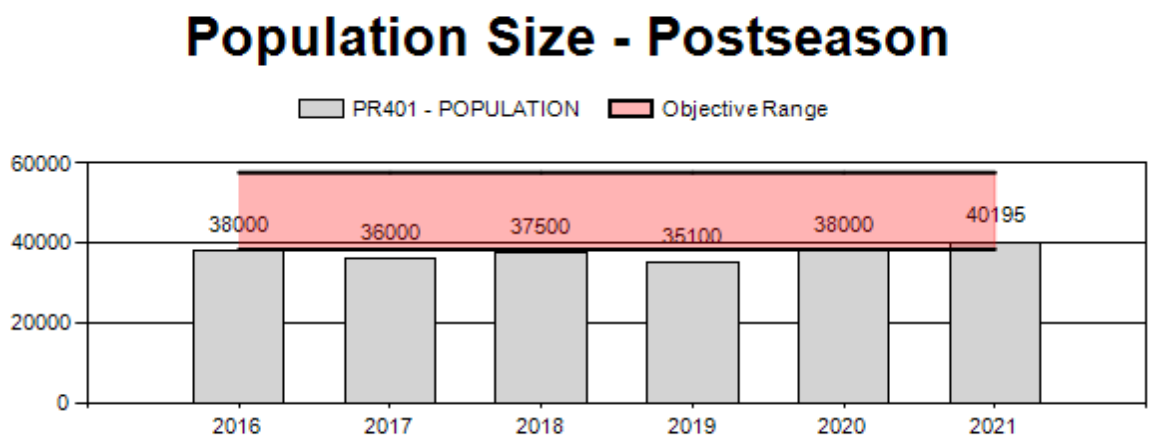
HUNT AREAS: 85-93, 96, 101, 107
PREPARED BY: PATRICK BURKE

	2016 - 2020 Average	2021	2022 Proposed
Population:	36,920	40,195	43,150
Harvest:	2,963	2,976	3,080
Hunters:	3,024	3,104	3,500
Hunter Success:	98%	96%	88 %
Active Licenses:	3,406	3,413	3,400
Active License Success:	87%	87%	91 %
Recreation Days:	9,629	8,927	9,500
Days Per Animal:	3.2	3.0	3.1
Males per 100 Females	56	58	
Juveniles per 100 Females	58	48	

Population Objective (± 20%) :	48000 (38400 - 57600)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-16.3%
Number of years population has been + or - objective in recent trend:	11
Model Date:	2/23/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	6.5%	5%
Males ≥ 1 year old:	22%	20%
Proposed change in post-season population:	0%	8%



2022 Hunting Seasons
Sublette Pronghorn Herd (PR401)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
85	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	20	Any antelope
86	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	50	Any antelope
86	6	Aug. 15	Sept. 9	Sept. 10	Oct. 31	25	Doe or fawn
87	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	175	Any antelope
87	2	Aug. 15	Sept. 9	Sept. 25	Oct. 31	125	Any antelope
87	6	Aug. 15	Sept. 9	Sept. 10	Oct. 31	100	Doe or fawn
87	7	Aug. 15	Sept. 9	Sept. 25	Oct. 31	100	Doe or fawn
88	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	275	Any antelope
88	6	Aug. 15	Sept. 9	Oct. 1	Oct. 31	300	Doe or fawn
89	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	175	Any antelope
89	2	Aug. 15	Sept. 9	Oct. 10	Oct. 31	125	Any antelope
89	6	Aug. 15	Sept. 9	Oct. 1	Oct. 31	325	Doe or fawn
89	6			Nov. 1	Nov. 15		Doe or fawn valid south of Middle Piney Creek and south of Wyoming Highway 351
89	7	Aug. 15	Aug. 31	Sept. 1	Nov. 15	75	Doe or fawn valid on private land, also valid south of Middle Piney Creek and south of Wyoming Highway 351

90	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	150	Any antelope
90	6	Aug. 15	Sept. 9	Sept. 10	Oct. 31	50	Doe or fawn
90	8	Aug. 15	Sept. 9	Aug. 15	Sept. 9	50	Doe or fawn valid on private land
91	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	300	Any antelope
91	6	Aug. 15	Sept. 9	Sept. 10	Oct. 31	125	Doe or fawn
91	7			Aug. 15	Oct. 31	125	Doe or fawn valid on private land and Bureau of Reclamation land within Sweetwater County
92	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	300	Any antelope
92	7			Aug. 15	Nov. 30	75	Doe or fawn valid within the Farson-Eden Irrigation Project
93	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	450	Any antelope
93	6	Aug. 15	Sept. 9	Sept. 10	Oct. 31	25	Doe or fawn
93	7	Aug. 15	Sept. 9	Sept. 10	Oct. 31	100	Doe or fawn valid on or within one half (1/2) mile of private irrigated land
96	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	100	Any antelope
96	7			Aug. 15	Nov. 30	100	Doe or fawn valid within the Farson-Eden Irrigation Project or west of the Blue Rim (Sweetwater County Road 5) and Old Stauffer Roads (Sweetwater County

							Road 7) and south of the OCI Entrance Road (Sweetwater County Road 6) and east of the Green River; also valid in that portion of Area 101 within the Farson-Eden Irrigation Project
101	1	Aug. 15	Sept. 9	Sept. 10	Oct. 31	150	Any antelope
107	1	Aug. 15	Sept. 9	Sept. 10	Oct. 22	100	Any antelope
107	0	Aug. 15	Sept. 9	Aug. 20	Sept. 9	50	Any antelope, muzzleloading firearms and handguns only

2021 Hunter Satisfaction: 91.0% Satisfied, 6.4% Neutral, 2.6% Dissatisfied

2021 Management Summary

1.) **Hunting Season Evaluation:** The 2022 season structure included several changes from the 2021 season, mostly in the southern portions of the herd. Some of those changes included increases in the number of Type 1 licenses issued in hunt areas 92, 93, and 96, as well as a reallocation of some of the Type 7 licenses from HA92 to HA91 around Farson.

The modeled 2021 post-season population estimate for the Sublette herd was 40,200 pronghorn; which is 16% below its objective of 48,000, but within the herd's objective range of 38,400 to 57,600 pronghorn. This is the first time that this herd has been estimated to be within its objective range since 2010. Observed buck ratios in 2021 were 58 bucks per 100 does, which puts the observed ratios for this herd in the recreational management criteria for pronghorn herds. Based on model estimates, the average proportion of adult males harvested for the last three years is roughly 22% of the preseason population. Increases in Type 1 licenses in 2021 should bring this proportion closer to 25%. While the observed buck ratios for the herd are doing well, the observed fawn ratio in 2021 was the lowest that has been seen in the herd since 1992 at 48 fawns per 100 does. Typically fawn ratios in this herd run in the mid-60s to mid-70s, so a fawn ratio in the 40s is a significant deviation from normal for this herd. This ratio suggests that growth may be limited in this

herd and that it may even decline next year as there will be fewer fawns recruited into the adult population.

A line-transect survey conducted in this herd in June 2021 resulted in an estimated herd unit wide, end of biological year, population estimate of 31,433 (25,736-38,389) pronghorn. As well as a whole herd population estimate, density estimates for each of the hunt areas flown during the line-transect survey were also calculated. The calculated density estimates for each hunt area are listed below.

Hunt Area	Pronghorn per SQ Mile
87	6.63
88	5.21
89	4.3
90	4.6
91	4.35
92	3.37
93	5.68
96	1.4
101	1.67
107	12.34

2.) **Management Objective Review:** In 2022, managers for the Sublette pronghorn herd reviewed the past five year's population, weather, and habitat data and determined that the current management objective for the herd of a postseason population objective of 48,000 pronghorn was still appropriate. Some concern had been expressed about the herd's delayed recovery from the 2010-2011 winter, when the herd went from being above objective to below objective due to the winter conditions experienced that year. Part of this concern was exacerbated by the fact that only one line-transect survey had been conducted in the herd unit since the 2010-2011 winter the help inform the model with independent population estimates. The line-transect survey conducted in 2021 indicated that herd had grown back into the low end of its objective range, which help indicate that the herd's objective was still appropriate.

3.) **Population Modeling:** The bio-year 2021 postseason population estimate for this herd unit from the WGFD spreadsheet model was approximately 40,200 pronghorn. In 2021, WGFD managers also began using PopR integrated population models (IPM) to estimate population indices for mule deer and pronghorn. The 2021 postseason population estimate for this herd unit from the PopR IPM was approximately 42,650 (CL = 40,400 – 45,000) pronghorn. Postseason population estimates from both models for 2021 were reported here to allow for comparison during this transitional year.

2021 - JCR Evaluation Form

SPECIES: Pronghorn PERIOD: 6/1/2021 - 5/31/2022

HERD: PR411 - UINTA-CEDAR MOUNTAIN

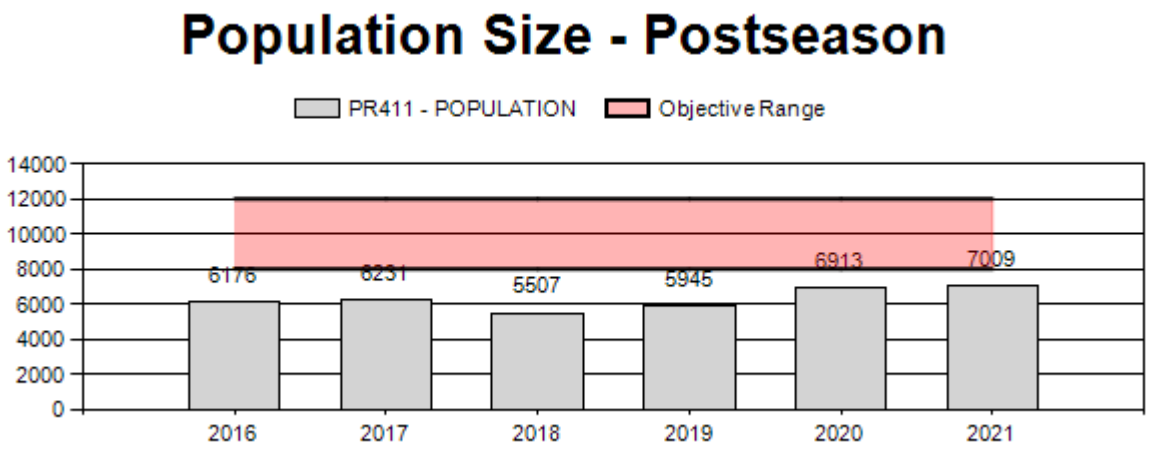
HUNT AREAS: 95, 99 PREPARED BY: JEFF SHORT

	2016 - 2020 Average	2021	2022 Proposed
Population:	6,154	7,009	6,892
Harvest:	832	515	500
Hunters:	902	618	550
Hunter Success:	92%	83%	91 %
Active Licenses:	997	663	600
Active License Success:	83%	78%	83 %
Recreation Days:	3,443	2,308	2,200
Days Per Animal:	4.1	4.5	4.4
Males per 100 Females	56	46	
Juveniles per 100 Females	43	40	

Population Objective (± 20%) :	10000 (8000 - 12000)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-29.9%
Number of years population has been + or - objective in recent trend:	15
Model Date:	02/21/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	2.0%	2.5%
Males ≥ 1 year old:	22.4%	23.6%
Proposed change in post-season population:	-3.5%	-1.6%



2022 HUNTING SEASONS

Uinta-Cedar Mountain Herd Unit (PR411)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
95	1	Aug. 15	Sept. 9	Sep. 10	Oct. 31	325	Any antelope
95	7			Aug. 15	Oct. 31	50	Doe or fawn valid on irrigated land
99	1	Aug. 15	Sept. 9	Sep. 10	Oct. 31	150	Any antelope
99	2			Aug. 15	Nov. 30	25	Any antelope valid north and west of Wyoming Highway 410 and west of Uinta County Road 271
99	7			Aug. 15	Nov. 30	50	Doe or fawn valid north and west of Wyoming Highway 410 and west of Uinta County Road 271
99	8			Aug. 15	Oct. 31	25	Doe or fawn valid on irrigated land within the Henrys Fork and Sage Creek Drainages
99	0			Sep. 1	Oct. 31	25	Any antelope, muzzle-loading firearms only

2021 Hunter Satisfaction: 83.1% Satisfied, 10.9% Neutral, 6.0% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: Increasingly conservative seasons are warranted in this herd. Historical harvest pressure to alleviate landowner complaints, coupled with dry summers and difficult winters have resulted in reduced pronghorn numbers in this herd. We are currently well below objective. Where possible, we are continuing moderate harvest for 2021. We will still maintain harvest pressure on antelope causing damage on private irrigated lands but this will be lower than what was offered historically due to much lower landowner complaints and lower numbers of antelope in those areas.

Hunt Area 95 is the least productive area in the herd, but tends to produce the largest bucks and is a favorite of local pronghorn hunters. We offer Hunt Area 95 type 7 (irrigated land only) licenses solely to alleviate damage issues on key parcels. We will reduce license levels but maintain limited pressure on antelope causing damage to private irrigated lands.

Hunt Area 99 is historically much more productive and has more private landowner complaints. In Hunt Area 99, we propose to reduce type 2 licenses to account for low yearling buck:doe ratios observed since 2017 and less private land available to hunters south of Evanston. We propose to eliminate type 6 doe/fawn harvest which mainly occurs in the public land portions of area 99 to help that population segment rebound. We offer a type 7 doe/fawn hunt in the western portion of Area 99 to target specific private land complaints on the west side of the hunt area. We also have a type 8 hunt that addresses specific private land complaints on the east side of the hunt area.

We provide additional doe/fawn licenses (Type 8) in Area 99 to address damage issues in the eastern portion of the area on irrigated lands. We propose to reduce those licenses since much of that issue has been resolved with this hunt. These license reductions are and effort to help us in moving this population toward objective. Reductions in any antelope licenses should maintain or improve buck:doe ratios. However, we need more favorable weather conditions to truly benefit this herds fawn recruitment.

2.) Winter Severity: We have had 3 severe winters in this herd in the last 4 years (2016-17, 2018-19, and 2019-20). Weather related impacts to pronghorn are less in this area than they are for mule deer. Pronghorn in this herd generally have the ability to migrate to lower elevation flats during severe winters, but this is increasingly challenging. We have had several large scale mortality events involving motor vehicles during the past few years. Movements of pronghorn in this area have become more difficult as human development and disturbance impedes movement corridors and annual migration. The winter of 2021-22 has been very mild as of Late February. This should help this population.

3.) Line Transect Surveys: Population estimates with the Line Transect survey technique are very important for providing adequate data to model antelope herd populations. Without performing these surveys periodically, it is unlikely that the population models can perform reliably. We have not had the budget to conduct line transect surveys in this herd since 2014. This makes our current model estimates less reliable.

4.) Population Modeling: The spreadsheet model predicts a Uinta Herd Unit post-season population of 7,009 pronghorn in 2021. We have low confidence in this model since we have not had the budget to fly a Line Transect Survey since 2014. In 2021, WGFD managers also began using PopR integrated population models (IPM) to estimate population indices for mule deer and pronghorn. The 2021 postseason population estimate for this herd unit from the PopR IPM was 6,304 (CL = 5,738-6,921) pronghorn. Postseason population estimates from both models are reported for 2021 to allow for comparison during this transitional year. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022. In the future it will be imperative that obtain reliable line transect population estimates periodically to check the status of the herd and anchor any model.

2021 - JCR Evaluation Form

SPECIES: Pronghorn
PERIOD: 6/1/2021 - 5/31/2022

HERD: PR412 - SOUTH ROCK SPRINGS

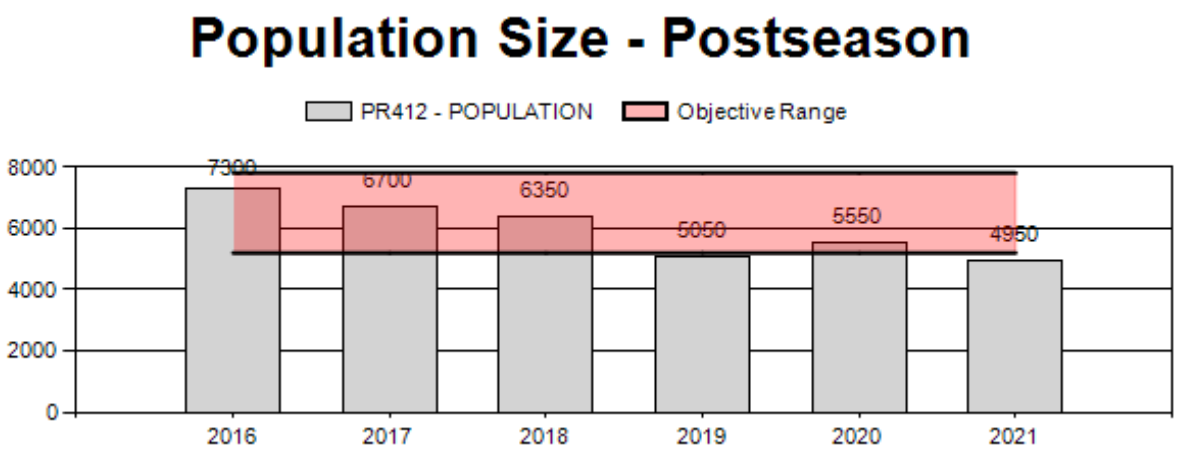
HUNT AREAS: 59, 112
PREPARED BY: PATRICK BURKE

	2016 - 2020 Average	2021	2022 Proposed
Population:	6,190	4,950	4,800
Harvest:	392	312	285
Hunters:	428	352	300
Hunter Success:	92%	89%	95%
Active Licenses:	450	355	300
Active License Success:	87%	88%	95%
Recreation Days:	1,475	954	900
Days Per Animal:	3.8	3.1	3.2
Males per 100 Females	45	36	
Juveniles per 100 Females	40	49	

Population Objective (± 20%) :	6500 (5200 - 7800)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-23.8%
Number of years population has been + or - objective in recent trend:	4
Model Date:	2/27/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	1.4%	1.3%
Males ≥ 1 year old:	35.9%	35.3%
Proposed change in post-season population:	-5%	-4%



2022 Hunting Seasons
South Rocks Springs Pronghorn Herd (PR412)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
59	1	Aug. 15	Sept. 19	Sept. 20	Oct. 31	225	Any antelope
59	6	Aug. 15	Sept. 19	Sept. 20	Oct. 31	25	Doe or fawn
112	1	Aug. 15	Sept. 19	Sept. 20	Oct. 31	75	Any antelope
112	6	Aug. 15	Sept. 19	Sept. 20	Oct. 31	25	Doe or fawn

2021 Hunter Satisfaction: 88.2% Satisfied, 8.8% Neutral, 2.9% Dissatisfied

2022 Management Summary

1.) **Hunting Season Evaluation:** The 2022 hunting season for the South Rock Springs pronghorn herd maintained the same season structure that has existed in the herd in the past, but reduced the number of Type 1 licenses available in both hunt areas that make up the herd unit. Following extremely low fawn ratios observed in 2019, which caused the population estimate to dip below its objective range, doe harvest was reduced significantly in 2020 in order to help the population recover. That reduction in doe harvest, along with improved fawn ratios observed during the 2020 and pre-season classification surveys did allow this population to recover somewhat, and increase back into the low end of its objective range. However, the dry conditions seen in 2021 caused this herd to decline slightly again to just below its population objective range. The modeled post-season population estimate for the South Rock Springs pronghorn population was approximately 4,950 animals, which is 23% below its population objective of 6,500 pronghorn. A deviation in modeled pre-season buck ratios from observed ratios however, suggest that the model may be slightly under estimating the population size. The fact that the model may be underestimating the true population size suggests that leaving a few doe licenses available in the herd unit was probably still appropriate and would have a negligible impact on the potential for population growth in this herd. Observed buck ratios have been at the lower end of the recreational management range and have been showing a declining trend. Because of this, the number of Type 1 licenses was reduced by 25 licenses in both Hunt Area 59 and Hunt Area 112. On average, 31% of the estimated preseason buck population has harvested over the last three years, so reducing the number of Type 1 licenses should allow for the proportion of bucks harvested to stay above 25% of the preseason male population. Given the projected harvest and fawn recruitment rates, the model predicts that this herd should still be near the lower end of its objective range after the 2022 season.

2.) **Population Modeling:** The bio-year 2021 postseason population estimate for this herd unit from the WGFD spreadsheet model was approximately 4,950 pronghorn. In 2021, WGFD managers also began using PopR integrated population models (IPM) to estimate population indices for mule deer and pronghorn. The 2021 postseason population estimate for this herd unit from the PopR IPM was approximately 4,800 (CL = 4,000 – 5,500) pronghorn. Postseason population estimates from both models for 2021 were reported here to allow for comparison during this transitional year.

2021 - JCR Evaluation Form

SPECIES: Pronghorn
PERIOD: 6/1/2021 - 5/31/2022

HERD: PR414 - BITTER CREEK

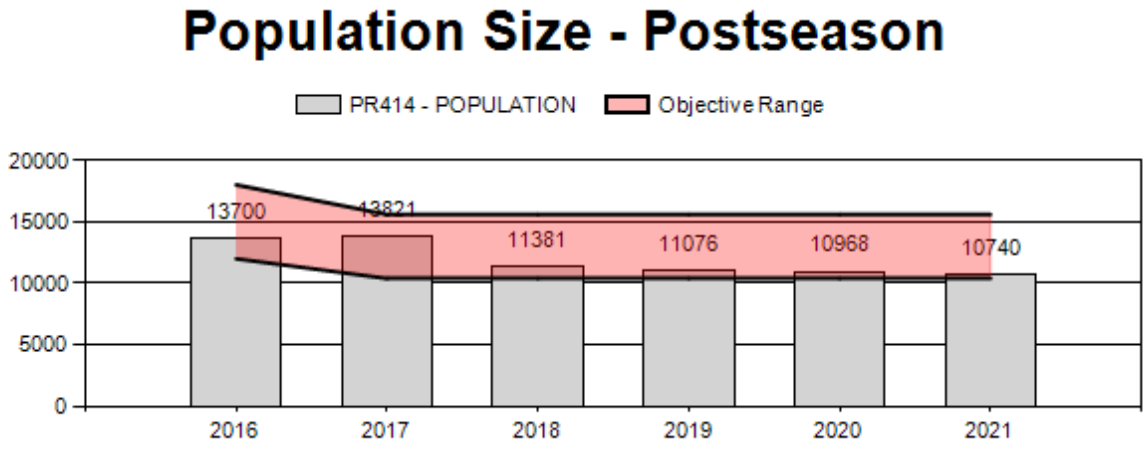
HUNT AREAS: 57-58
PREPARED BY: PHILIP DAMM

	2016 - 2020 Average	2021	2022 Proposed
Population:	12,189	10,740	10,158
Harvest:	494	439	400
Hunters:	524	518	450
Hunter Success:	94%	85%	89%
Active Licenses:	564	549	425
Active License Success:	88%	80%	94%
Recreation Days:	1,924	1,752	1,600
Days Per Animal:	3.9	4.0	4
Males per 100 Females	57	59	
Juveniles per 100 Females	36	36	

Population Objective (± 20%) :	13000 (10400 - 15600)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-17.4%
Number of years population has been + or - objective in recent trend:	0
Model Date:	02/18/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	1%	1%
Males ≥ 1 year old:	14%	16%
Proposed change in post-season population:	-2%	-5%



2022 Hunting Seasons
Bitter Creek Pronghorn Herd Unit (PR414)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
57	1	Aug. 15	Sep. 19	Sep. 20	Oct. 31	400	Any antelope
57	2	Aug. 15	Sep. 19	Sep. 20	Oct. 31	25	Any antelope valid west of Sweetwater County Road 23S and BLM Road 3310, and north and east of BLM Roads 4411 and 4409.
57	7	Aug. 15	Aug. 31	Sep. 1	Oct. 31	25	Doe or fawn valid on private land within one (1) mile of Carbon County Road 603.
58	1	Aug. 15	Sep. 19	Sep. 20	Oct. 31	100	Any antelope

2021 Hunter Satisfaction: 80% Satisfied, 12% Neutral, 8% Dissatisfied

2021 Management Summary

1.) Hunting Season Evaluation:

Hunters in 2021 continued to experience difficulty in finding larger horned bucks, likely due to drought limiting horn growth. As has been the trend, hunters in HA58 seemed to have had more difficultly than in HA57, as buck ratios and probably overall buck numbers were lower in that HA. Harvest success in 2021 was similarly low to 2020's, as a direct result of hunters not finding the quality of buck they have come to expect from this herd. Though, the harvested bucks aged using cementum annuli combined for both HAs for an average age of harvest of 5.1, which was the same as in 2020. In addition, only 1 of the aged bucks was less than 3.5 years old. These metrics suggest that, although hunters are having a difficult time finding large-horned bucks, bucks in this herd are still reaching ages of maximum potential. Horn quality was likely to improve for the 2022 hunting season, as temperatures were above average and snowfall was below average during winter 2021-22. Also, herbaceous productivity in spring 2022 was excellent, so that good horn growth continued.

The Bitter Creek pronghorn herd was modeled within the objective range since its establishment at 13,000 in 2015; although, it was at the low end from 2018-2021. Fawn productivity was abysmal again in 2021, with populations seemingly only sustaining through high adult survival and two below average winters in regards to severity. Low fawn productivity was likely due to drought, invasive plants, and competition for forage from animals such as feral horses. A feral horse gather was completed in 2021, but removals centered around Adobe Town and may not have had a large scale impact on this pronghorn herd. Annual weather patterns, and thus limitations in availability and quality/quantity of habitat, were driving this population for the last 3 years, not harvest.

During 2021, managers were in the process of transitioning to a new type of population model, a "PopR integrated population model." That "new" model's estimate for the Bitter Creek pronghorn herd (8,971; 95% CI from 7,572-10,818) was not used in 2021. Rather noteworthy, it was only 84%

of the current spreadsheet model's estimate (10,740). The disparity between the two models' estimates suggested that an objective review may be needed as a result of the change in modeling methods; although, current management of the herd would be unlikely to change much. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022.

The herd wide buck ratio increased from 53 to 59 bucks per 100 does; however, disparity in buck ratios continued to be apparent between the two hunt areas. Buck ratios in western portions of the herd (HA58) were lower at 50 than the eastern portions (HA57) at 65, although both increased from 2020 observations. Past years of very low fawn productivity combined with lower buck ratios in HA58 led to the continued lower relative license allocation for that HA. Still no doe/fawn licenses were allocated for this hunt area. Although not at a level that affects population grouth, the relatively low numbers of Type 6 doe/fawn licenses in HA57 were removed in 2022 due to the population being at the bottom of the objective range. However, Type 1 and 2 licenses in HA57 were proposed to be consistent in number due to the continued higher buck ratio in HA57. Although the proportion of bucks harvested in 2021 was only 14%, and fewer than 16% of bucks were proposed for harvest in 2022, the buck ratio objective for this herd (minimum of 60) was not being met. Therefore, managers did not propose increases to those Type 1 or 2 licenses. In addition, a line-transect estimate to ground population models had not occurred since 2014, which limited managers' confidence in population estimates and their derivatives.

2021 - JCR Evaluation Form

SPECIES: Pronghorn | PERIOD: 6/1/2021 - 5/31/2022

HERD: PR419 - CARTER LEASE

HUNT AREAS: 94, 98, 100 | PREPARED BY: JEFF SHORT

	2016 - 2020 Average	2021	2022 Proposed
Population:	5,939	7,488	6,707
Harvest:	1,371	1,091	1,300
Hunters:	1,466	1,217	1,400
Hunter Success:	94%	90%	93 %
Active Licenses:	1,647	1,351	1,500
Active License Success:	83%	81%	87 %
Recreation Days:	5,255	4,535	5,000
Days Per Animal:	3.8	4.2	3.8
Males per 100 Females	56	39	
Juveniles per 100 Females	58	57	

Population Objective (± 20%) : 6000 (4800 - 7200)

Management Strategy: Recreational

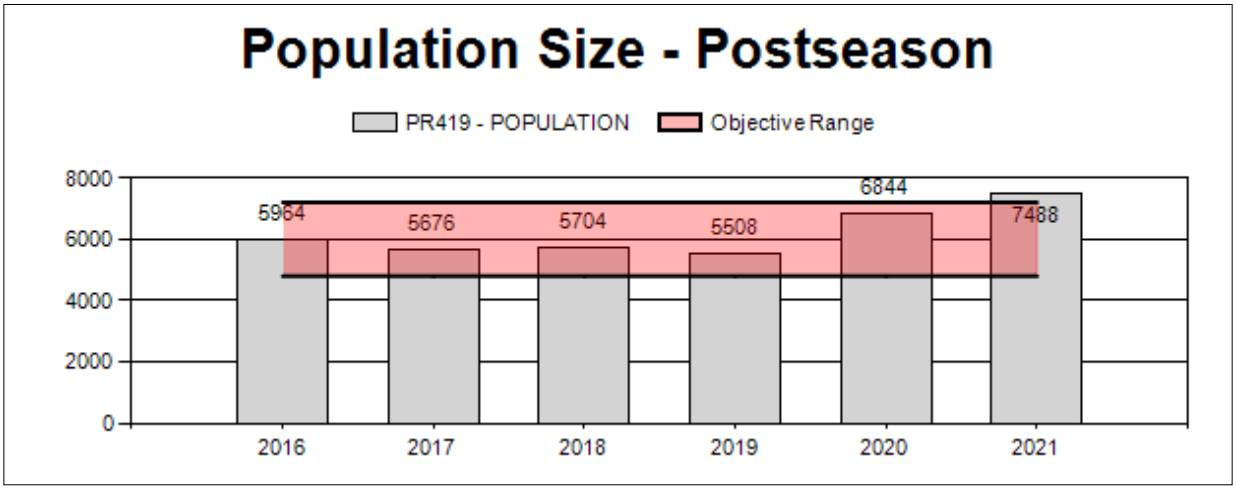
Percent population is above (+) or below (-) objective: 25%

Number of years population has been + or - objective in recent trend: 1

Model Date: 02/21/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	6.7%	12.7%
Males ≥ 1 year old:	19.1%	25.1%
Proposed change in post-season population:	-4.2%	-12.0%



2022 HUNTING SEASONS

Carter Lease Herd Unit (PR419)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
94	1	Aug. 15	Sept. 9	Sep. 10	Oct. 31	525	Any antelope
94	6	Aug. 15	Sept. 9	Sep. 10	Oct. 31	300	Doe or fawn
94	7			Aug. 15	Oct. 31	200	Doe or fawn valid on or within one (1) mile of irrigated land
98	1	Aug. 15	Sept. 9	Sep. 10	Oct. 31	100	Any antelope
98	6	Aug. 15	Sept. 9	Sep. 10	Oct. 31	100	Doe or fawn
98	7	Aug. 15	Sept. 9	Nov. 1	Nov. 30	25	Doe or fawn valid within the Smiths Fork drainage
100	1	Aug. 15	Sept. 9	Sep. 10	Oct. 31	200	Any antelope
100	6	Aug. 15	Sept. 9	Sep. 10	Oct. 31	200	Doe or fawn

2021 Hunter Satisfaction: 86.6% Satisfied, 8.6% Neutral, 4.8% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: In this herd unit, we are typically able to provide a significant amount of hunting opportunity. In hunt area 94, we propose to slightly increase the type 1 licenses to increase hunter opportunity and keep the buck harvest level at 25%. We propose to increase doe/fawn hunting opportunity to reduce the population. According to a recent line transect survey and the model; we are above the population objective range in Hunt Area 94.

In hunt areas 98 and 100, we strive to maintain relatively low antelope densities. This is an effort to reduce browse competition for wintering mule deer. The area is a primary winter range for the Wyoming Range mule deer herd. We hunt antelope very aggressively in these hunt areas to try to keep numbers low. We are seeing reduced hunter success on some license types in those hunt areas so we are proposing reductions to improve success and maintain some hunter satisfaction. The minimum male harvest goal of 25% has been met in this herd for several years. We provide a high amount of opportunity in this herd unit with both type 1 and type 6 hunts.

2.) Winter Severity: We have had three severe winters in this herd over a four year period (2016-17, 2018-19, and 2019-20). Typically, pronghorn are less affected by winter conditions than deer due to their ability and willingness to move to areas of more moderate conditions. Pronghorn in the eastern part of this herd generally have the ability to migrate to lower elevation flats during severe winters, but this is increasingly challenging. These crucial winter range movements become more difficult as human development and disturbance impedes those migration routes. Fencing and highways are particularly problematic especially in the western part of this population during winter.

3.) Line Transect Surveys: Population estimates with the Line Transect survey technique are very important for providing adequate data to model antelope herd populations. Without

performing these surveys, it is unlikely that the population models can perform reliably. We were able to fly a Line Transect survey in May of 2021. This is an end of bio year 2020 population estimate. Previously we have not had the budget to conduct line transect surveys in this herd since 2013. In the future, we will need to the fly these surveys more often to effectively model this herd. The most recent estimate was 5,764. This was a higher estimate than what was being previously modeled and results in the herd being over objective. However, the SE and confidence interval on the estimate are high. This is due to an effort to be more efficient with survey money by reducing sampling intensity. The result was a less precise estimate that is not as useful. In the future, it is advised that we go back to the previous sampling scheme.

4.) Population Modeling: A total Herd Unit model is not feasible in this herd. This is due to much different harvest and population parameters in Hunt Areas 98 and 100 compared to Hunt Area 94. Additionally, the line transect survey method does not fit well with the terrain and animal densities found in hunt areas 98 and 100. The hunt areas are also separated by a highway that is very restrictive to pronghorn movements. For these reasons, we only fly line transect surveys and model the population in Hunt Area 94. The Hunt Area 94 population model is used for JCR reporting. Herd unit population estimates are reported as the model plus 1,000 animals to account for the populations we are unable to model in HA 98 and 100.

The spreadsheet model predicts a Hunt Area 94 post-season population of 6,488 pronghorn in 2021. We have some confidence in this model since we flew a Line Transect Survey in 2021. WGFD managers have also began using PopR integrated population models (IPM) to estimate population indices for mule deer and pronghorn. The Hunt Area 94 PopR IPM is not yet available. We hope to have this model available soon so that postseason population estimates from both models can be compared during this transitional year. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022. In the future it will be imperative that obtain reliable line transect population estimates periodically to check the status of the herd and anchor any model.

2021 - JCR Evaluation Form

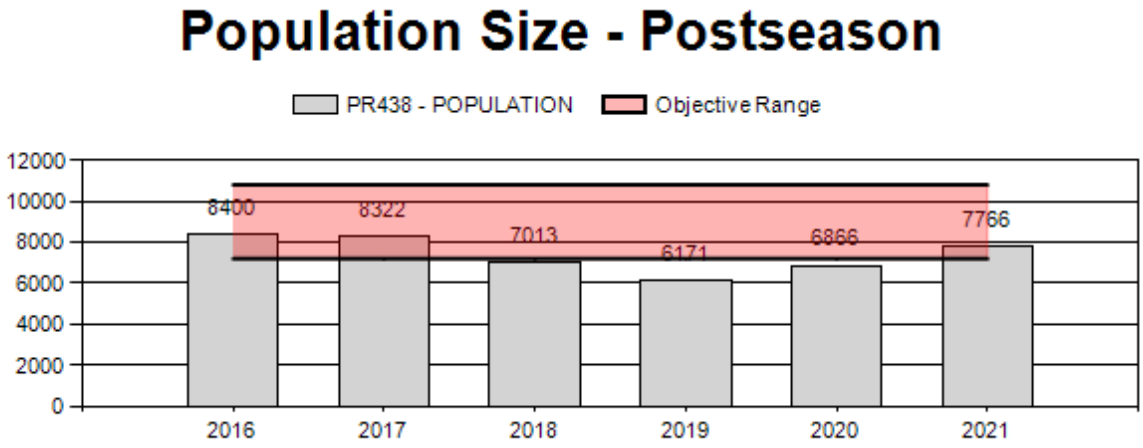
SPECIES: Pronghorn
PERIOD: 6/1/2021 - 5/31/2022
HERD: PR438 - BAGGS
HUNT AREAS: 53, 55
PREPARED BY: PHILIP DAMM

	2016 - 2020 Average	2021	2022 Proposed
Population:	7,354	7,766	8,600
Harvest:	548	306	345
Hunters:	524	312	340
Hunter Success:	105%	98%	101 %
Active Licenses:	607	332	350
Active License Success:	90%	92%	99 %
Recreation Days:	1,548	1,166	1,200
Days Per Animal:	2.8	3.8	3.5
Males per 100 Females	61	53	
Juveniles per 100 Females	52	71	

Population Objective (± 20%) :	9000 (7200 - 10800)
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-13.7%
Number of years population has been + or - objective in recent trend:	0
Model Date:	02/16/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	1%	1%
Males ≥ 1 year old:	14%	16%
Proposed change in post-season population:	13%	11%



2022 Hunting Seasons
Baggs Pronghorn Herd Unit (PR438)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
53	1	Aug. 15	Sep. 19	Sep. 20	Oct. 31	200	Any antelope
53	6	Aug. 15	Aug. 31	Sep. 1	Oct. 31	25	Doe or fawn valid south of WY Highway 70 and west of Carbon County Road 601
53	7	Aug. 15	Aug. 31	Sep. 1	Oct. 31	25	Doe or fawn valid on private land
55	1	Aug. 15	Sep. 19	Sep. 20	Oct. 31	175	Any antelope

2021 Hunter Satisfaction: 82% Satisfied, 12% Neutral, 6% Dissatisfied

2021 Management Summary

1.) Hunting Season Evaluation:

Hunters in 2021 experienced difficulty finding larger horned bucks in HA53 due in at least in part to severe drought, but also lower observed buck ratios. Hunters in HA55 seemed to be more able to find larger horned bucks due to higher buck ratios, though drought persisted there too. The disparity in hunters' experience and in buck ratios in the 2021 hunt was the inverse of 2020, where HA55 was more difficult than HA53. Based on the relative distributions of pronghorn across both areas, pronghorn may have not fully migrated back to summer ranges in HA55 in 2020, which resulted in less than ideal hunting conditions. Despite these difficulties, of buck harvest checks in 2021, hunter's still harvested 90% and 88% 3.5 year old and older bucks in HA53 and HA55, respectively.

The Baggs pronghorn herd was modeled within the low end of the objective range in 2021, but has been below objective for the three consecutive years prior with a low in 2019. Managers' subjective estimates for 2021 were lower than model estimates, regardless of survival constraints applied for winters of 2019 and 2020. In 2020, managers suspected that pronghorn in HA55 bore the brunt of the population decline, but distributions in 2021 suggested the inverse to be true. Regardless, fawn productivity hit a 10 year high in 2021 of 71 fawns per 100 does. This higher fawn productivity, along with above average productivity in 2020 and light winters in both of the last two years, helped drive the population increase.

A line-transect estimate to hopefully ground population models occurred at the end of biological year 2020 (May 2021), which resulted in an estimate of 6,521, with a 95% confidence interval of 4,279-9,938. At quick glance, the estimate appeared close to the modeled estimate of 6,866 for 2020, but that modeled estimate was for after the hunting season that did not yet account for overwinter mortality. The end of the biological year estimate was a more appropriate comparison, but was lower by almost 1,000 individuals at 5,650 than the line-transect estimate. With such wide confidence in the line-transect estimate, managers had difficultly emphasizing its result; although, it should be beneficial in future population modeling efforts.

During 2021, managers were in the process of transitioning to a new type of population model, a "PopR integrated population model." Although, that "new" model's estimate for the Baggs pronghorn herd (7,322; 95% CI from 6,256-8,439) was not used in 2021, it was comparable to the "old" spreadsheet model's estimate of 7,766. The similarity between the two models suggested that an objective review, which has been needed after past years' model changes, may not be needed for the change this time. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022.

Because of improvements to buck ratios and a population trending upward, managers proposed a modest increase to Type 1 licenses in HA55. Because of lower observed buck ratios and lower relative populations in HA53, no increases were proposed. Around 15% of bucks were harvested in 2021, and about 16% were proposed to be harvested in 2022. Even with the increase in HA55, the proportion of bucks to be harvested in 2021 still would not equal 25% for a recreationally managed herd. The HA53 Type 6 license was proposed to be restricted to the southwest corner of the unit to address damage concerns specific to that area where public and private lands are mixed, and where the existing Type 7 private land only license had not been effective. Damage issues in this area have been exacerbated by unorthodox movements of pronghorn into that area during heavy snows in winter of 2019-2020. These pronghorn were unable to cross the highway and river bottom to the north to get back into traditional summer ranges post-winter, and instead have stayed permanently.

2021 - JCR Evaluation Form

SPECIES: Mule Deer | PERIOD: 6/1/2021 - 5/31/2022

HERD: MD423 - UINTA

HUNT AREAS: 132-133, 168 | PREPARED BY: JEFF SHORT

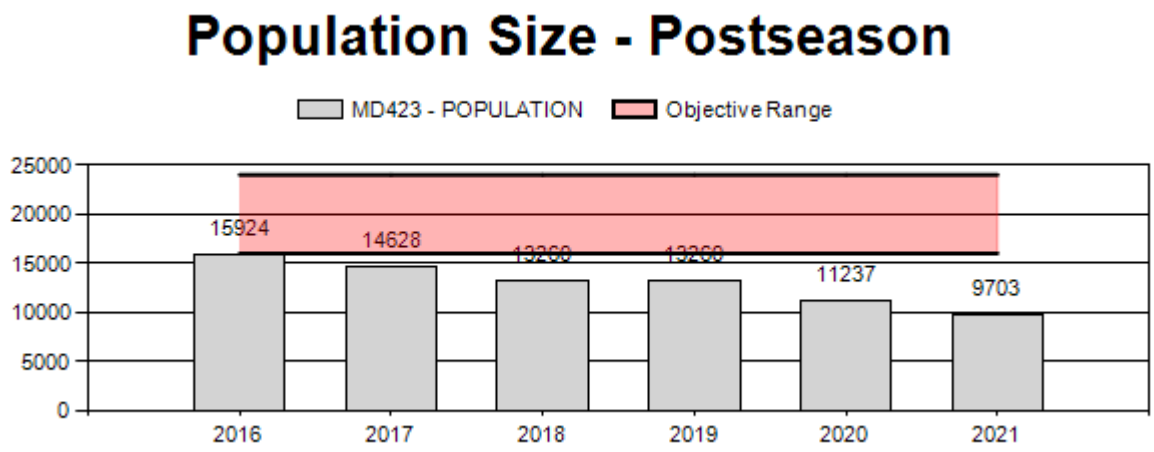
	2016 - 2020 Average	2021	2022 Proposed
Population:	13,662	9,703	9,519
Harvest:	819	365	400
Hunters:	2,167	1,414	1,400
Hunter Success:	38%	26%	29 %
Active Licenses:	2,179	1,426	1,400
Active License Success:	38%	26%	29 %
Recreation Days:	11,177	6,967	7,000
Days Per Animal:	13.6	19.1	17.5
Males per 100 Females	27	23	
Juveniles per 100 Females	58	56	

Population Objective (± 20%) : 20000 (16000 - 24000)

Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-51.5%
Number of years population has been + or - objective in recent trend:	0
Model Date:	02/20/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	.01%	.01%
Males ≥ 1 year old:	17%	18%
Proposed change in post-season population:	-1.3%	-1.8%



2022 HUNTING SEASONS

Uinta Mule Deer Herd Unit (MD423)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
132	Gen	Sept. 1	Sept. 30	Oct. 1	Oct. 11		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
133	Gen	Sept. 1	Sept. 30	Oct. 1	Oct. 11		Antlered mule deer four (4) points or more on either antler or any white-tailed deer
168	Gen	Sept. 1	Sept. 30	Oct. 1	Oct. 11		Antlered mule deer four (4) points or more on either antler or any white-tailed deer

2022 Region K nonresident quota: 250 licenses

2021 Hunter Satisfaction: 34.4% Satisfied, 24.1% Neutral, 41.5% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: Due to requests from the general public, we typically try to offer a season that includes 2 weekends with 14 days of general deer hunting opportunity. This season is very conservative and the population is not limited by this level of hunting. Continuing to offer this type of hunting opportunity in light of having lower deer survival during past winters is still biologically appropriate. Changes in hunting seasons will not resurrect deer that died in past winters. This type of season will also not limit future growth of the herd. However, there is a push from a vocal segment of the public for us to have a season length shorter than 14 days. In response to that, we reduced the season from 14 days to 11 days in 2020 and 2021. We propose to continue this in 2022.

Season length is a social issue rather than a biological one. Season length changes in this herd unit have not affected harvest or hunter effort. In an analysis of season length data from 2010 to 2020 we found that season length does not correlate with average days hunted, harvest or hunter days. The average hunter hunted for 5.04 days over that period, regardless if the season was 10 days or 14 days. Shorter seasons do create more hunter crowding by forcing those hunters to participate in the hunt over a shorter time instead of spreading out in time when the season is longer. This season will still offer two full weekends of hunting opportunity in 2022. Hunting seasons offered for mule deer in this area have no biological effect on the herd.

The buck:doe ratio has rebounded from a low in 2020. It is now back up into the objective range at 23:100 indicating that hunter opportunity should not be reduced. As buck ratios are within objective range we should remove the point restrictions to avoid any negative genetic influences and to provide more hunter harvest opportunity. Barring another negative weather event, we should push to remove the restriction and lengthen the season next year. Antlerless hunting in this herd is restricted to youth hunting which does not result in a female harvest level of any biological significance.

The Region K nonresident license quota is at an all time low. We lowered the quota several times in recent years and again in 2021 to 250. There is a history in this herd of significant public complaints about nonresident hunter numbers. It is very close to Utah and most nonresident hunters come from the Salt Lake City area. When they hunt here, they come repeatedly throughout the season. They often bring large family groups and leave their camps for the entire deer season. This is unpopular with local hunters. In recent years several private ranches that allowed public hunting through the WGFD PLPW program have become leased by outfitters. This has reduced the amount of land we have for hunters to recreate in the herd unit. This, along with severe impacts to the deer herd from recent bad winters led us to recommend reducing the nonresident quota.

2.) Chronic Wasting Disease Management: This is a Tier 1 surveillance herd that was prioritized for CWD sampling in 2019. Prevalence estimates and sample sizes are presented below (Table1). No positives were found. For this surveillance period, we were not able to obtain the sampling goal of 200 adult male mule deer as male harvest was reduced due to more conservative season limitations, which resulted in a wide 95% confidence interval. Sample distribution of mature males was reasonable. Historically, the herd has had two positive test results from targeted samples both taken within the city limits of Green River on the extreme eastern edge of the herd unit. To date, no CWD management actions have occurred in this herd unit.

Table 1. CWD prevalence for hunter-harvested mule deer in the Uinta Mule Deer Herd, 2019 - 2021.

Year(s)	Percent CWD-Positive and (*n*) – *Hunter Harvest Only*		
	Adult Males (CI = 95%)	Yearling Males	Adult Females
2019-2021	**0% (0-3.1%, n=117)**	0% (12)	0% (17)

3.) Winter Severity: This herd commonly experiences difficult winter conditions for deer survival. Winter ranges are at high elevations and severe winters can be very detrimental to deer populations. This usually occurs once every three to five years. Prior to the 2016/17 winter, conditions were mild for five straight winters in this herd unit creating a situation where fawn and adult survival was high and populations were able to grow even with relatively low fawn production. The winter of 2016/17 was severe in most areas and the population in the western part of the herd unit declined drastically due to it. A mild winter followed in 2017/18. This helped the herd rebound slightly but in 2018/19 we had another very difficult winter. Then in the winter of 2019/20 we again had very tough winter conditions. Mortality surveys at the LeRoy winter range complex in spring showed high fawn and adult doe mortality over this period. It was also verified in very poor yearling buck:doe ratios in the years following the bad winters. This was very harmful to the population to have three tough winters in the span of four years. In reviewing JCR data, I cannot find a time with three bad deer survival winters over four years. This has been an unprecedented impact to deer numbers and buck recruitment in this herd.

4.) Antler Point Restrictions: Antler point restrictions have been used in Hunt Area 132 since 2007, and a 3-point or more antler restriction has been in place in the entire herd unit since 2014. This has been at the request of a highly vocal segment of the public. Other members of the public oppose the restriction. The use of antler point restrictions for limited periods can be warranted when an area is below the buck:doe ratio objective or in areas where buck security cover and fawn productivity is lacking. However, many portions of this herd unit do not typically require this type of management based on historically observed buck ratios. Once weather conditions improve for deer survival we need to remove the point restrictions to avoid potential negative genetic influences and to provide more hunter harvest opportunity.

5.) Population Modeling: The spreadsheet model predicts a post-season population of around 11,237 mule deer in 2021. This is a decrease in the modeled population from levels prior to 2017. This reduction is substantiated by Hunter comments, winter mortality surveys, ratio data and field observations. This supporting information gives us some confidence in model results. However, the reduction from pre-2017 modeled levels is not very realistic considering the severity of winter mortality observed on the western winter ranges where the vast majority of the deer herd winters. The reduction should have been greater than what is modeled.

In 2021, WGFD managers also began using PopR integrated population models (IPM) to estimate population indices for mule deer and pronghorn. The 2021 postseason population estimate for this herd unit from the PopR IPM was 7,915 (CL = 6,716-9,150) mule deer. This is a significant difference from the spreadsheet model estimate. Postseason population estimates from both models for 2021 are reported to allow for comparison during this transitional year. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022.

2021 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2021 - 5/31/2022

HERD: MD424 - SOUTH ROCK SPRINGS

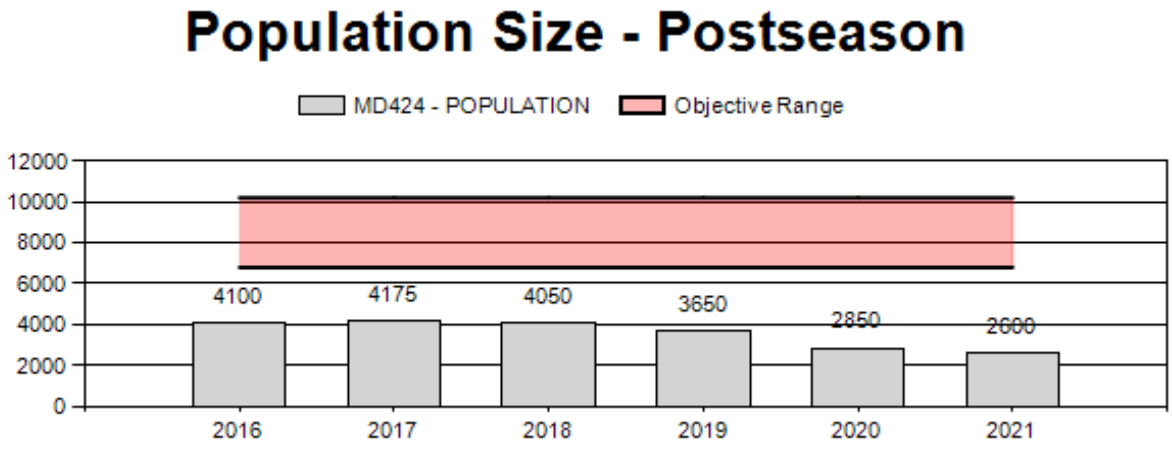
HUNT AREAS: 101-102
PREPARED BY: PATRICK BURKE

	2016 - 2020 Average	2021	2022 Proposed
Population:	3,765	2,600	2,600
Harvest:	194	175	140
Hunters:	237	207	175
Hunter Success:	82%	85%	80 %
Active Licenses:	237	207	175
Active License Success:	82%	85%	80 %
Recreation Days:	1,434	1,285	1,250
Days Per Animal:	7.4	7.3	8.9
Males per 100 Females	34	22	
Juveniles per 100 Females	41	39	

Population Objective (± 20%) :	8500 (6800 - 10200)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-69.4%
Number of years population has been + or - objective in recent trend:	10
Model Date:	2/27/2022

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:	33%	26%
Proposed change in post-season population:	-7%	0%



2022 Hunting Seasons
South Rock Springs Mule Deer (MD424)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
101	1	Sept. 1	Sept. 30	Oct. 15	Oct. 31	25	Antlered deer
102	1	Sept. 1	Sept. 30	Oct. 15	Oct. 31	150	Any deer

2021 Hunter Satisfaction: 67.1% Satisfied, 16.5% Neutral, 16.5% Dissatisfied

2022 Management Summary

1) **Hunting Season Evaluation:** The 2022 hunting season for the South Rock Springs mule deer herd maintained conservative seasons for both hunt areas in the herd unit, but did see a reduction in the number of licenses issued in HA 102. This reduction in the number of licenses offered starting in 2020 and continuing into 2022, when license numbers were reduced even further. Low fawn production and survival rates observed during several of the past years has resulted in the pool of bucks hunters typically select for being reduced beginning in 2020. Observed buck ratios following the 2020 and 2021 hunting seasons declined significantly from what was observed in earlier years. In the years preceding 2020, the observed buck ratios were well above the minimum ratios required for special management at 37 bucks per 100 does. The buck ratios observed during the last two winters was only 22 bucks per 100 does, which is well below the minimum threshold of 30 bucks per 100 does for a special management herd. This reduction in the observed buck to doe ratios, along with overall lower deer numbers in the herd necessitated a reduction in license numbers. While overall deer numbers are down and buck ratios appear to be declining, hunters were still able to select for older age class bucks, with the average age of harvested bucks in 2021 being 5.6 years old.

2) **Chronic Wasting Disease Monitoring & Management:** This is a Tier 3 surveillance herd. To date, no meaningful CWD prevalence data is available within this herd unit and no CWD management actions have occurred. This herd has not been prioritized for CWD surveillance because of the herd's small size and low number of licenses issued in the herd unit, it would not be possible to obtain an adequate number of samples in the herd to determine CWD prevalence.

3) **Population Modeling:** The bio-year 2021 postseason population estimate for this herd unit from the WGFD spreadsheet model was approximately 2,600 mule deer. In 2021, WGFD managers also began using PopR integrated population models (IPM) to estimate population indices for mule deer and pronghorn. The 2021 postseason population estimate for this herd unit from the PopR IPM was approximately 2,800 (CL = 2,100 – 3,300) mule deer. Postseason population estimates from both models for 2021 were reported here to allow for comparison during this transitional year. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022.

2021 - JCR Evaluation Form

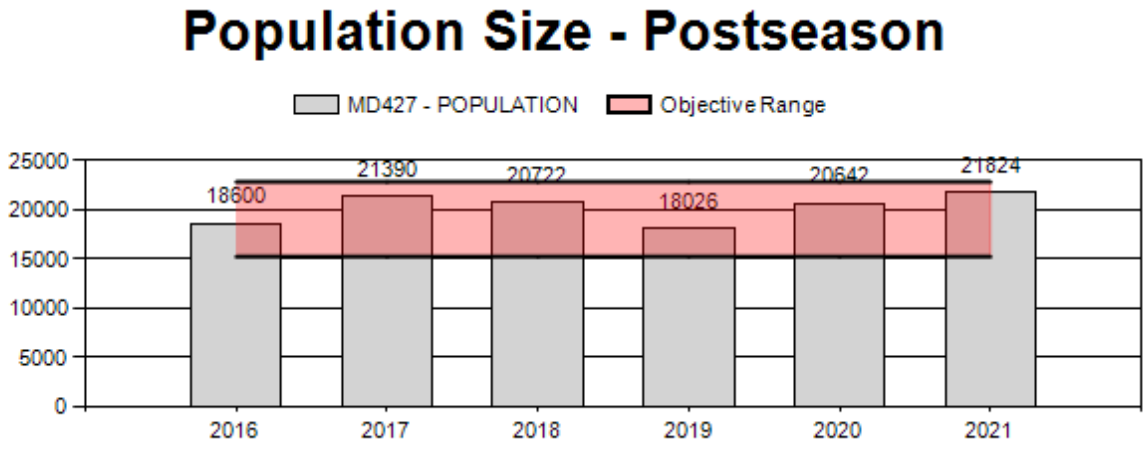
SPECIES: Mule Deer
PERIOD: 6/1/2021 - 5/31/2022
HERD: MD427 - BAGGS
HUNT AREAS: 82, 84, 100
PREPARED BY: PHILIP DAMM

	2016 - 2020 Average	2021	2022 Proposed
Population:	19,876	21,824	22,239
Harvest:	1,767	650	1,180
Hunters:	3,193	2,471	3,000
Hunter Success:	55%	26%	39 %
Active Licenses:	3,291	2,484	3,010
Active License Success:	54%	26%	39 %
Recreation Days:	15,837	13,663	12,000
Days Per Animal:	9.0	21.0	10.2
Males per 100 Females	27	27	
Juveniles per 100 Females	61	60	

Population Objective (± 20%) :	19000 (15200 - 22800)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	15%
Number of years population has been + or - objective in recent trend:	0
Model Date:	02/20/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	1%	1%
Males ≥ 1 year old:	15%	25%
Proposed change in post-season population:	6%	2%



2022 Hunting Seasons
Baggs Mule Deer Herd Unit (MD427)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
82		Sep. 1	Sep. 30	Oct. 1	Oct. 12	General	Antlered mule deer three (3) points or more on either antler or any white-tailed deer
82		Sep. 1	Sep. 30	Oct. 1	Oct. 14	General youth license	Any deer
82	6	Sep. 1	Sep. 30	Oct. 1	Oct. 20	25	Doe or fawn
82	7	Sep. 1	Sep. 30	Oct. 1	Oct. 20	25	Doe or fawn valid south of Wyoming Highway 70 or east of Carbon County Road 503 and south of Carbon County Roads 752 and 754 (Savery Stock Drive)
82, 100	8	Sep. 1	Sep. 30	Nov. 1	Jan. 15	25	Doe or fawn white-tailed deer valid on private land
84	1	Sep. 1	Sep. 30	Oct. 1	Oct. 14	50	Antlered mule deer or any white-tailed deer
100		Sep. 1	Sep. 30	Oct. 1	Oct. 5	General	Antlered mule deer four (4) points or more on either antler or any white-tailed deer
100		Sep. 1	Sep. 30	Oct. 1	Oct. 7	General youth license	Any deer

2022 Region W nonresident quota: 750 licenses

2021 Hunter Satisfaction: 37% Satisfied, 22% Neutral, 41% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: The Baggs mule deer herd was modeled at objective in 2021 and had been for six consecutive years. Not surprisingly, buck harvest decreased considerably in 2021 (562) and was also considerably lower than the previous 5-year average (1,501). This decrease was due to warm, dry weather, a four point antler restriction, and perceived lack of opportunity from general season hunters. Satisfaction followed with more hunters being neutral or dissatisfied than not. Participation in the hunt declined 31% for residents and 19% for non-residents, though overall hunter participation was very similar to the last four point antler restriction in 2017. HA84 hunters continued to have good success and were on average more satisfied than general season hunters; although, mature bucks continue to be more difficult to find there than past years.

Public concern for the herd due to winter severity in 2018-19 and 2019-20 persisted from 2020 into 2021. Two reasonably mild winters in the last two years foretold well above average over-winter survival of both fawns and adults. High (74) fawn ratios during December 2020 classification flights combined with the easy winter indicated a high number of yearlings would be recruited to the buck population for 2021. This was indeed observed during December 2021 classification with a doubling of the yearling buck ratio to 12. These bucks were in most part not vulnerable to harvest in 2021 due to the antler point restriction.

The buck ratio observed in the December 2021 classification flight (27) was very similar to the five-year average. As expected after an antler point restriction and light harvest, the proportions of Class II and III bucks increased from the previous year. However, hunter, landowner, and outfitter comments generally still indicated they observed a reduction in the numbers of more mature (Class II and III) bucks. However, comments heard throughout the season were disparate in terms of overall population size and status but many indicated they observed good numbers of does and fawns. The lower Class II/III ratios over the last couple years were primarily caused by adult bucks becoming vulnerable to harvest in 2018 due to two early-October snowstorms, and also as a result of winter severity in the two years following. However, lower post-winter (2018 and 2019) fawn recruitment into the buck population did play some role as well.

Given that the Baggs herd is managed for special management buck ratios in conjunction with heavy pressure to provide opportunity for general season hunters, a balance was struck in 2021 with the four point antler restriction but maintained hunt duration of 12 days. With buck ratios having increased but still under objective, managers proposed to reduce the antler point restriction to a three point or better for HA82 for the 2022 season. The four point or better restriction would still apply for HA100 due to the drought and low fawn productivity in that HA. Though not a perfect solution, APRs have been used in this herd in the past to increase buck ratios by relieving pressure on yearlings and other younger bucks. However, the downside to the APR was realized in 2018 when early migrations led to high harvest of mature bucks, or "high grading" the buck population. Weather issues aside, if left in regulation too long, APRs tend to result in degrading overall antler quality anyway. Finally, the additional 2 days of youth-only hunting in both HAs 82 and 100 provided great opportunity at a diminutive cost to moving the herd toward its buck ratio objective.

Though the Baggs herd produced fawns at a higher rate in 2020 than it had since 2012 (and since 1997 prior to 2012), the herd produced fawns at an average rate in 2021. Although the population was modeled well within objective and increasing, constituents generally continued to perceive lower overall populations. To alleviate public concerns, managers continue to be pressured to maintain both Type 6 and 7 licenses at 25 each. The Type 8 whitetail-deer doe/fawn license allocation was decreased from 75 to 25 due to very limited demand for damage management on private lands.

During 2021, managers were in the process of transitioning to a new type of population model, a "PopR integrated population model." That "new" model's estimate for the Baggs mule deer herd (13,785; 95% CI from 12,795-15,483) was not used in 2021. Rather noteworthy, it was only 63% of the current spreadsheet model's estimate (21,824). The disparity between the two models' estimates suggested that an objective review may be needed as a result of the change in modeling

methods. However, additional runs of the "new" model using the exact same parameters resulted in wildly variable estimates, including one very close to the "old" model's 2021 estimate of 21,824. This lack of consistency in model runs did not seem as apparent for Baggs and Bitter Creek pronghorn herds. The "new" model may have had trouble dealing with harvest data resulting from general seasons with only buck harvest that are managed by season length and antler point restrictions, as opposed to quotas and fixed season lengths. The Department intends to replace the WGFD spreadsheet model with the PopR IPM in bio-year 2022, so an intensive sightability population estimate for the Baggs mule deer herd may be necessary to ground these models to reality.

2.) Mule Deer Initiative Habitat Information: Managers for the Baggs herd concluded their first 5-year analysis of Rapid Habitat Assessments (RHAs) in 2019, which can be found in that year's JCR. Assessment results from 2020-2024 will be able to be compared to this analysis to determine the trajectory of Baggs herd habitats. Due to changeover in personnel, only a couple RHAs were completed in 2021 for the Baggs herd.

As has been the trend, growing season 2021 precipitation was below average, with many lower elevation water sources drying out prior to the hunting seasons, if ever being filled at all. Spring 2022 showed much better moisture, along with excellent herbaceous vegetation productivity through the end of the biological year. Middle to higher elevations in this herd seemed much more resilient to drought conditions due to much higher overall precipitation than the desert areas. Managers noticed some bucks harvested from drier areas of the herd displayed evidence of chronic EHD in the form of sloughing hooves, though no specimens were confirmed and mortalities in the field were not observed.

3.) Chronic Wasting Disease Monitoring & Management: The Baggs Mule Deer Herd was a Tier 1 surveillance herd and prioritized for CWD sampling in 2023. This herd was not sampled for a CWD prevalence estimate in 2021; but, mule deer prevalence was estimated in 2018 at 8.4% with 22 positives out of a sample of 263. This estimate was similar to or perhaps slightly higher than the pooled estimate from 2014-2017. This estimate was also similar to the pooled estimate from 2018-2021 (8.6%), which added 74 samples over 3 years. Positive harvested mule deer have originated from nearly all portions of the unit where deer occur during hunting seasons. To date, no meaningful CWD management actions have occurred in this herd unit.

2021 - JCR Evaluation Form

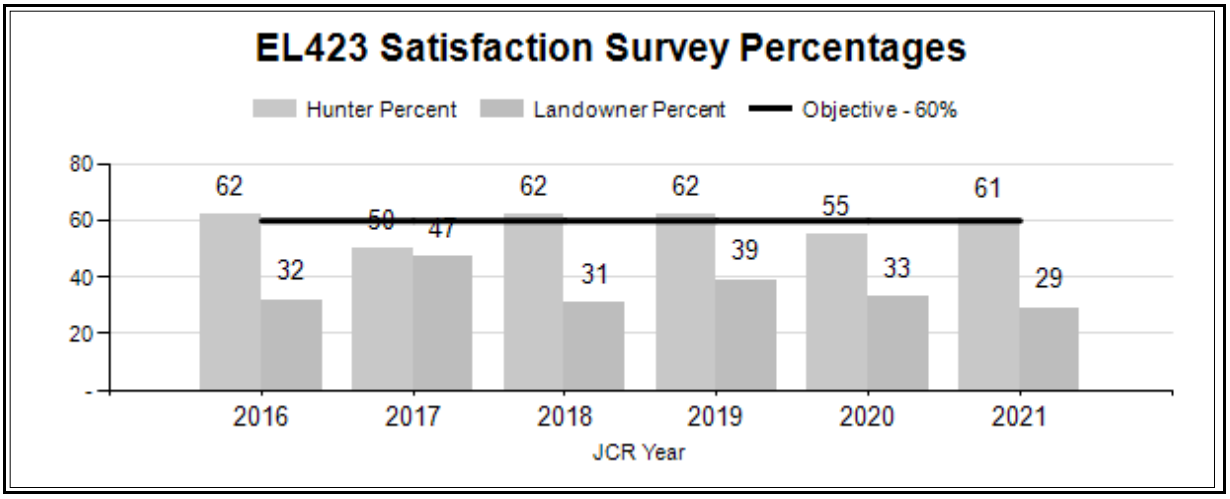
SPECIES: Elk
PERIOD: 6/1/2021 - 5/31/2022

HERD: EL423 - UINTA

HUNT AREAS: 106-107
PREPARED BY: JEFF SHORT

	2016 - 2020 Average	2021	2022 Proposed
Hunter Satisfaction Percent	58%	61%	60%
Landowner Satisfaction Percent	37%	29%	60%
Harvest:	587	657	700
Hunters:	1,637	1,648	1,700
Hunter Success:	36%	40%	41 %
Active Licenses:	1,709	1,742	1,750
Active License Success:	34%	38%	40 %
Recreation Days:	11,519	11,018	11,500
Days Per Animal:	19.6	16.8	16.4
Males per 100 Females:	0	0	
Juveniles per 100 Females	0	0	

Satisfaction Based Objective	60%
Management Strategy:	Recreational
Percent population is above (+) or (-) objective:	-15%
Number of years population has been + or - objective in recent trend:	7



2022 HUNTING SEASON

Uinta Herd Unit (EL423)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
106	Gen	Sept. 1	Sept. 30	Oct. 15	Oct. 31		Any elk
106	Gen			Nov. 1	Nov. 14		Antlerless elk
106	1	Sept. 1	Sept. 30	Nov. 15	Jan. 31	50	Any elk valid west of the Black's Fork River or north of Wyoming Highway 410; also valid in Area 105 west of the Bear River
106	4	Sept. 1	Sept. 30	Oct. 15	Dec. 31	100	Antlerless elk
106	4			Jan. 1	Jan. 31		Antlerless elk valid on private land or west of the Black's Fork River or north of Wyoming Highway 410
106	7			Aug. 15	Jan. 31	350	Cow or calf valid on private land or west of the Black's Fork River or north of Wyoming Highway 410
107	Gen	Sept. 1	Sept. 30	Oct. 15	Oct. 31		Any elk
107	Gen			Nov. 1	Nov. 14		Antlerless elk
107	4	Sept. 1	Sept. 30	Oct. 15	Dec. 31	150	Antlerless elk
107	4			Jan. 1	Jan. 31		Antlerless elk valid off national forest within the Henry's Fork River drainage
107	7			Aug. 15	Aug. 31	50	Cow or calf valid in Sweetwater County
107	7	Sept. 1	Sept. 30	Dec. 15	Jan. 31		Cow or calf valid off national forest within the Henry's Fork River drainage

2021 Hunter Satisfaction: 62.9% Satisfied, 21.5% Neutral, 15.5% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: In the seventh year of a satisfaction based objective, we are not meeting the landowner satisfaction objective. We are hovering right around the hunter satisfaction objective depending on the year. Hunter satisfaction is highly correlated to hunter harvest success, which correlates to weather conditions affecting migration and elk vulnerability in the fall. Even though landowner satisfaction is below objective, the 2021 landowner survey shows 78.6% of landowners are either satisfied with the current season structure or would like us to be more conservative. We are meeting the secondary objective with 79% of the bull harvest being branch-

antlered bulls. We have one proposed change for 2022. This is to increase the 106 type 7 license numbers from 300 to 350. This is due to an outfitter meeting that was held in Evanston to address elk numbers on private properties south of Evanston. At the meeting, the outfitter committed to opening up some large properties to antlerless harvest after December 1st. This will make accessing elk much easier for hunters and would help greatly with our efforts to harvest more elk in that area.

Hunters would like to see more elk in accessible public land areas in HA 106 and 107, so late antlerless hunts are designed to avoid these areas. For 2022 we will continue liberal hunt timing and license allocation to maximize elk harvest and target elk causing damage problems. It appears that these season structures are reducing this elk herd. The August 15 – 31 portion of the area 106 and 107 type 7 hunts is to address specific damage issues on private lands.

The HA 107 antlerless licenses are used to maintain pressure on elk on the Wyoming side of the state boundary during a hunt on the Utah side. Damage complaints on the HA 107 side of the herd unit are typically low even during severe winters. A few ranchers will complain about elk numbers. We will maintain license quotas in 2022 to address those complaints.

The Area 106 Type 1 hunt had 62% hunter success in 2021. Over the last five years, the hunt has averaged 62% success. Hunter success is influenced yearly by winter severity. The hunt is in addition to general season hunts in September, October and November so significant elk hunting opportunity is currently offered. This hunt is in place to help deal with late damage where Utah elk are migrating into Wyoming and damaging stored hay. The area is mostly private land and hunters have very limited places to hunt.

2) Chronic Wasting Disease Management: This is not a tiered surveillance herd. To date, no meaningful CWD prevalence data is available within this herd unit and no CWD management actions have occurred. This herd has not been prioritized for CWD surveillance.

3.) Aerial Counts: Elk surveys are flown in conjunction with Utah DWR, most recently in January of 2019. Utah funds the surveys and we participate. No classification data is available with the way Utah conducts their surveys. The count numbers in Wyoming vary drastically with flight funds and weather conditions. High count numbers are typically the result of severe winter weather and higher numbers of elk migration into Wyoming. The 2019 count showed a decrease in elk numbers. This is likely correct since both Utah and Wyoming have been running liberal hunting seasons to increase cow elk harvest.

4.) Damage Concerns: This is an interstate herd shared with Utah. There are elk that summer in Wyoming but many elk that summer in the Uinta Mountains in Utah come to Wyoming to winter. Limited public land winter range is an issue for this herd. With winter range in short supply, conflict with agriculture producers becomes an issue. Damage complaints occur on bad winters. Summer damage also occurs on crops in limited areas. Significant efforts have been made by field personnel to alleviate these problems. The strategy in this herd unit has been to minimize elk damage problems through harvest and hunting season structure.

2021 - JCR Evaluation Form

SPECIES: Elk
HERD: EL424 - SOUTH ROCK SPRINGS
HUNT AREAS: 30-32

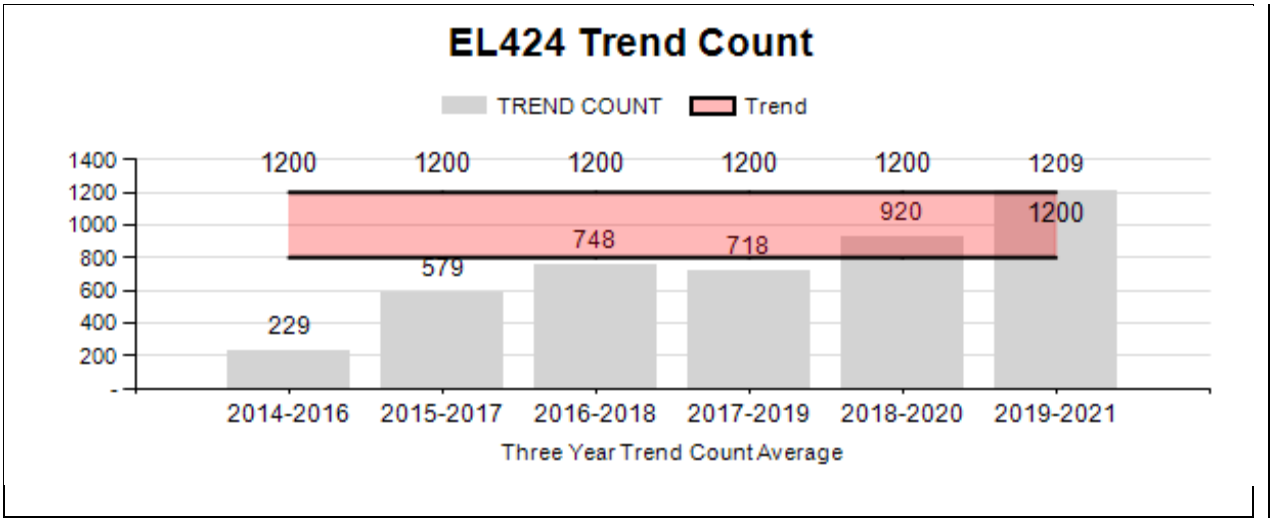
PERIOD: 6/1/2021 - 5/31/2022
PREPARED BY: PATRICK BURKE

	2016 - 2020 Average	2021	2022 Proposed
Trend Count:	899	1,374	1,000
Harvest:	291	303	400
Hunters:	418	405	500
Hunter Success:	70%	75%	80 %
Active Licenses:	418	405	500
Active License Success	70%	75%	80 %
Recreation Days:	3,368	2,827	4,000
Days Per Animal:	11.6	9.3	10
Males per 100 Females:	33	26	
Juveniles per 100 Females	42	32	

Trend Based Objective (± 20%)	1,000 (800 - 1200)
Management Strategy:	Special
Percent population is above (+) or (-) objective:	37%
Number of years population has been + or - objective in recent trend:	1

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%
Juveniles (< 1 year old):	0%	0%
Total:	0%	0%
Proposed change in post-season population:	0%	0%



2022 Hunting Seasons
South Rock Springs Elk Herd (EL424)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
30	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	50	Any elk
30	4	Sept. 1	Sept. 30	Oct. 8	Nov. 15	100	Antlerless elk
31	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	75	Any elk
31	4	Sept. 1	Sept. 30	Oct. 8	Nov. 15	200	Antlerless elk
32	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	50	Any elk
32	4	Sept. 1	Sept. 30	Oct. 8	Dec. 31	75	Antlerless elk
32	9	Sept. 1	Sept. 30			25	Antlerless elk, archery only

2021 Hunter Satisfaction: 83.6% Satisfied, 9.2% Neutral, 7.2% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: The 2022 hunting season saw changes in license numbers, or license numbers and season dates for every hunt area in the herd unit. In general, Type 1 license numbers were decreased across the herd unit, while Type 4 license numbers were increased in every hunt area. Those changes were made to help improve bull ratios while simultaneously reducing the elk population. The bull to cow ratio observed in this herd in 2021 was 26 bulls per 100 cows, and the classifications conducted in 2020 resulted in a bull ratio of 24 bulls per 100 cows. This makes for three years in a row where observed bull to cow ratios have been at the very minimum or below the bull ratio objective for this herd. Since the South Rock Springs elk herd is designated a special management herd, the target bull ratio range for this herd is 30 to 40 bulls per 100 cows post hunting season. The reduction in the Type 1 licenses across the herd unit will hopefully help bring the bull ratios back into the objective range for this herd.

As no dedicated mid-winter trend count flight was conducted in 2021, the number of elk classified during the December classification flight was used as a surrogate trend count number. A total of 1,374 elk were classified during that December flight. The number of elk observed during the 2020 and 2021 post-season classification flights were significantly higher than what is typically seen during these flights. The number of elk seen during post-season classification flights vary significantly from year to year, but are generally around 600 to 800 elk classified each year. The increase in the number of elk observed in 2020 and 2021 can be attributed to a large group of 600 elk that was encountered in HA32 within 200 yards of the Utah state line in 2020, and to a group of about 500 elk observed in the southern portion of HA32 near the Colorado state line in 2021. This group of elk residing in the tristate region regularly moves between Colorado, Utah, and Wyoming, and was a large part of the reason that a mid-winter trend count objective was chose for this herd, as these elk are only sometimes in the state and are rarely in the state during hunting season. Given the number of elk seen in 2020 and 2021, the three year trend count average for this herd moved

to 1,209 elk, which is at the upper end of its objective of 800 to 1200 elk. Because of this, Type 4 licenses were increased across the herd unit. Also, in order to help target the group of elk residing in the tristate area, the Type 4 season in HA32 was extended until the end of December. Since those elk have been encountered in Wyoming during the last two Decembers, allowing hunters to pursue those elk longer may help to increase harvest rates in that segment of the herd.

It is important to note that the three year trend count average for this herd has been increasing since the 2014-2016 average. This increase can be attributed to an increased sampling effort and more regular flights, rather than necessarily an increase in the actual number of elk on the ground.

Based on hunter submitted tooth samples, the average age of harvested bulls in 2021 was 5.4 years old, which is down from the usual age of harvested bulls which is typically above 6 years old.

The below objective bull ratios, increased effort, age of harvested bulls, and hunter complaints suggest that Type 1 licenses in this herd should not be increased. Given the open nature of the landscape, abundance of public lands and roads where this elk herd lives, and the publics willingness to put in as much effort as it takes to harvest an elk when they draw a license in this area; a goal of only 60% harvest success is probably not realistic for this herd unit, and would probably not be accepted by the public for this special management herd.

2.) Chronic Wasting Disease Monitoring & Management:

This is a Tier 3 surveillance herd. To date, no meaningful CWD prevalence data is available within this herd unit and no CWD management actions have occurred. This herd has not been prioritized for CWD surveillance because of the relatively small size of this herd obtaining the necessary sample size to accurately determine prevalence would be unlikely.

2021 - JCR Evaluation Form

SPECIES: Elk
PERIOD: 6/1/2021 - 5/31/2022
HERD: EL425 - SIERRA MADRE
HUNT AREAS: 13, 15, 21, 108, 130
PREPARED BY: PHILIP DAMM

	2016 - 2020 Average	2021	2022 Proposed
Trend Count:	0	7,604	6,000
Harvest:	1,952	2,341	2,500
Hunters:	5,286	5,343	5,500
Hunter Success:	37%	44%	45 %
Active Licenses:	5,530	5,585	5,700
Active License Success	35%	42%	44 %
Recreation Days:	38,656	38,735	40,000
Days Per Animal:	19.8	16.5	16
Males per 100 Females:	35	40	
Juveniles per 100 Females	40	30	

Trend Based Objective (± 20%)	5,000 (4000 - 6000)
Management Strategy:	Recreational
Percent population is above (+) or (-) objective:	52%
Number of years population has been + or - objective in recent trend:	1

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%
Juveniles (< 1 year old):	0%	0%
Total:	0%	0%
Proposed change in post-season population:	0%	0%

2016 - 2021 Postseason Classification Summary

for Elk Herd EL425 - SIERRA MADRE

		MALES				FEMALES		JUVENILES				Males to 100 Females				Young to		
Year	Post Pop	Ylg	Adult	Total	%	Total	%	Total	%	Tot Cls	Cls Obj	Yling	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2016	6,700	480	610	1,090	21%	2,835	56%	1,149	23%	5,074	0	17	22	38	± 1	41	± 1	29
2017	9,644	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	± 0	0	± 0	0
2018	0	551	572	1,123	19%	3,456	58%	1,352	23%	5,931	0	16	17	32	± 1	39	± 1	30
2019	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	± 0	0	± 0	0
2020	0	22	37	59	17%	193	56%	92	27%	344	0	11	19	31	± 0	48	± 0	37
2021	0	501	513	1,073	24%	2,670	59%	797	18%	4,540	0	19	19	40	± 0	30	± 0	21

***Note: Since this year's February 2022 trend count was the first since the objective's inception, and since the assessment is of a three year average, that bar graph was not included here as there is no meaningful information contained on it.

2022 Hunting Seasons
Sierra Madre Elk Herd Unit (EL425)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
13		Sep. 1	Sep. 30	Oct. 15	Oct. 31	General	Any elk
13	6	Sep. 1	Sep. 30	Oct. 1	Nov. 14	100	Cow or calf
13	6			Nov. 15	Dec. 31		Cow or calf valid off National Forest
15		Sep. 1	Sep. 30	Oct. 15	Oct. 31	General	Any elk
15	6	Sep. 1	Sep. 30	Oct. 1	Nov. 14	150	Cow or calf
15	6			Nov. 15	Dec. 31		Cow or calf valid off National Forest
12, 13, 15, 110	7			Aug. 15	Jan. 31	300	Cow or calf valid on private land
21		Sep. 1	Sep. 30	Oct. 13	Oct. 31	General youth license	Any elk
21				Oct. 15	Oct. 17	General	Antlered elk
21		Sep. 1	Sep. 30	Oct. 18	Oct. 31	General	Any elk
21				Nov. 1	Nov. 15	Gen	Antlerless
21	6	Sep. 1	Sep. 30	Oct. 15	Nov. 15	300	Cow or calf
21	7			Aug. 15	Dec. 31	25	Cow or calf valid on private land
108	1	Sep. 1	Sep. 30	Oct. 11	Oct. 31	100	Any elk
108	1	Sep. 1	Sep. 30	Nov. 1	Jan. 31		Antlerless elk
108	4	Sep. 1	Sep. 30	Oct. 11	Jan. 31	75	Antlerless elk
108	6	Sep. 1	Sep. 30	Oct. 11	Dec. 31	250	Cow or calf

108	6	Sep. 1	Sep. 30	Jan. 1	Jan. 31		Cow or calf valid west of the Twentymile Road (Carbon County Rd 605 N)
130		Sep. 1	Sep. 30	Oct. 1	Oct. 23	General	Any elk

2021 Hunter Satisfaction: 77% Satisfied, 8% Neutral, 15% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation:

Success for the herd increased in 2021 to 44% compared to a five year average of 37%; although a couple hundred fewer hunters participated. That additional success seemed to be a result of early rifle elk season snowstorms that caused elk to migrate down out of higher elevations and become more vulnerable to harvest, particularly in HA21. Another contributing factor was significantly higher yearling bull harvest than previous years. This yearling harvest was likely largely due to phenomenal productivity in 2020 (and the successful hunt), as yearling bull ratios were higher than ever recorded for this herd in the post-hunting season classification flight. In general for the herd, harvest trends in 2021 followed 2020 when those quotas and season structures were similar.

The mid-winter trend count objective for Sierra Madre Elk Herd (SMEH) was assessed during late February to early March of 2022. Elk were counted via helicopter in Hunt Areas 13, 15, 21, 108, and 130 for this trend assessment, and 7,604 elk were counted in 2022. Due to flight budget constraints, this is the first time the trend count objective was assessed since its inception in mid-2019. Although, 5,931 elk were classified (plus 220 unclassified) in the herd during the late February flight of 2019, with a similar area flown to the trend count in 2022. To smooth errors due to sampling bias, the trend objective averages the number of counted elk over the previous three years. As such, the count in the standard trend count output table normally contained on page one of this document provided no useful information. As a result, classification numbers were presented in its place for this year.

The only changes proposed for the 2022 hunting season that concerned antlered elk hunting were a decrease in the duration of the “bull only” season at the start of the general HA21 rifle hunt, and an increase to the number of Type 1 licenses proposed for HA108. The decrease in the “bull only” portion of HA21 was to help address potentially high yearling bull harvest in 2020 that could affect recruitment to adult age classes, but also still help distribute hunting pressure to other units at the start of the general season on October 15. The increase in Type 1 licenses in HA108 was to afford extra opportunity in a highly successful limited quota area (84% in 2021, 5 year average of 77%). Although, managers were concerned with the extremely limited access in HA108 due to the true checkerboard land ownership, and would be keeping a close eye on success and comments during future seasons.

Although the trend count objective should really only be assessed using three year averages, managers felt counts in February 2022 were reflective of higher than desired populations at least to some degree. As such, managers proposed increases to Type 6 licenses in HA21 and HA108 by 50 each and Type 4 licenses in HA108 by 25. In addition, the general season in HA21 was proposed to be extended 15 days into November for antlerless elk only as a secondary mechanism to increase harvest on cows. Type 7 licenses were increased for private lands in HA13 and HA15 to help

address increased damage in those areas.

2.) Chronic Wasting Disease (CWD) Monitoring & Management:
The SMEH is a Tier 2 surveillance herd that was prioritized for CWD sampling in 2021. Managers for this herd across three regions sampled 264 adult elk for CWD to estimate current prevalence, and well over 300 total elk were sampled. Of those 264 adults, only one was positive for CWD for a prevalence estimate of 0.4% and a 95% confidence interval of 0.1%-2.3%. To date, no meaningful CWD management actions have occurred in this herd unit.

2021 - JCR Evaluation Form

SPECIES: Elk
PERIOD: 6/1/2021 - 5/31/2022

HERD: EL426 - STEAMBOAT

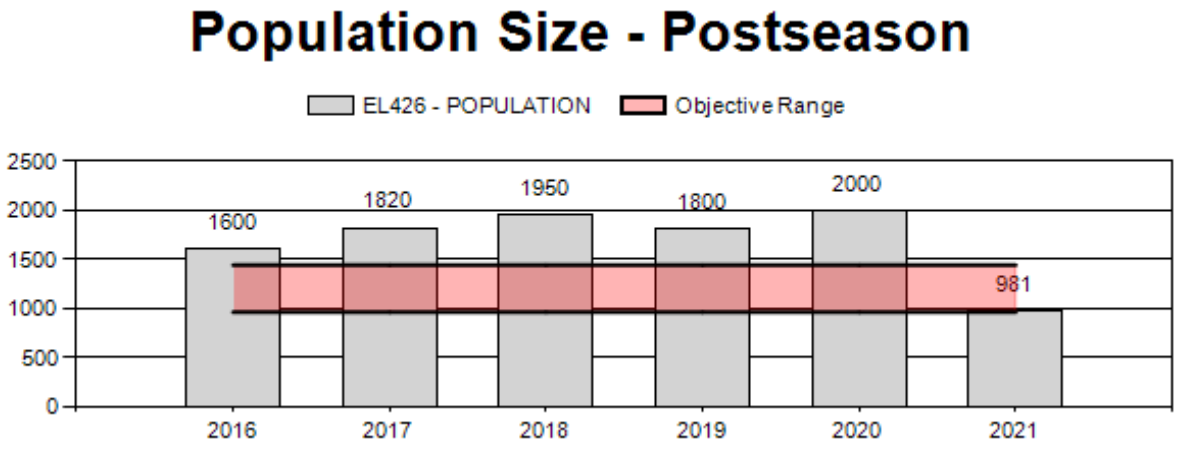
HUNT AREAS: 100
PREPARED BY: PATRICK BURKE

	2016 - 2020 Average	2021	2022 Proposed
Population:	1,834	981	150
Harvest:	528	769	630
Hunters:	658	1,002	775
Hunter Success:	80%	77%	81 %
Active Licenses:	675	1,019	775
Active License Success:	78%	75%	81 %
Recreation Days:	2,740	5,062	4,500
Days Per Animal:	5.2	6.6	7.1
Males per 100 Females	59	57	
Juveniles per 100 Females	39	30	

Population Objective (± 20%) :	1200 (960 - 1440)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-18.2%
Number of years population has been + or - objective in recent trend:	0
Model Date:	2/27/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	48%	69%
Males ≥ 1 year old:	56%	139%
Proposed change in post-season population:	-51%	-84%



2022 Hunting Seasons
Steamboat Elk Herd (EL426)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
100	1	Sept. 1	Sept. 30	Oct. 8	Oct. 31	200	Any elk
100	2	Sept.1	Sept. 30	Oct. 22	Nov. 11	100	Antlered elk five (5) points or less on either antler; any elk valid within the Farson-Eden Irrigation Project
100	2			Nov. 12	Jan. 31		Any elk valid within the Farson-Eden Irrigation Project
100	4	Sept. 1	Sept. 30	Oct. 15	Nov. 11	175	Antlerless elk
100	5	Sept. 1	Sept. 30	Nov. 12	Dec. 31	200	Antlerless elk
100	6	Sept. 1	Sept. 30	Oct. 15	Nov. 30	25	Cow or calf valid east of Sweetwater County Road 19, south of Sweetwater County Road 82, east of Sweetwater County Road 21, and south of Sweetwater County Road 20
100	7	Sept. 1	Sept. 30	Oct. 1	Oct. 31	100	Cow of calf valid east of U.S. Highway 191, south of Sweetwater County Road 17, and Sweetwater County Road 15, and west of Sweetwater County Road 19

2021 Hunter Satisfaction: 83.4% Satisfied, 8.0% Neutral, 8.7% Dissatisfied

2022 Management Summary

1.) **Hunting Season Evaluation:** After several years of radically increased license issuance rates in the Steamboat herd, the 2022 season saw a slight reduction in some license types. Starting in 2015, classification flights conducted in the HA100 saw significantly more elk than had been seen before in the herd unit. The number of elk classified from 2015 to 2020 average around 1,600 elk, which was above the herd's objective of 1,200 elk. Because of this license numbers were significantly increase and new license types were offered to reduce the herd back down to its objective. License numbers were increased year after year until 2021, when 1,125 licenses were issued in the herd. Those increased license issuance rates resulted in over 3,000 elk being harvested in the herd unit in the last five years. After six years of increasing license issuance rates, the 2022 season saw a slight reduction in the number of licenses issued from the 2021 levels. The number of licenses issued in 2022 was

similar to what was issued in the herd unit in 2018 and 2019, and was still drastically higher than what had been issued in the herd prior to 2016.

A classification flight conducted in the herd unit in December 2021 resulted in a total of 665 total elk being classified. This number is down significantly from the numbers that had been seen in the herd during the preceding years. Part of this reduction in the number of elk classified can probably be explained by six years of drastically increased license numbers, but weather conditions present during the classification flight were possibly also partly responsible for the numbers seen. Warm temperatures and open snow conditions experienced during the classification flights possibly allowed for elk to be more scattered and widely distributed than during typical years.

Some of the changes that were implemented for the 2020 season was an elimination of the Type 6 license type. This license type was originally implemented to address landowner concerns over elk numbers in the southeastern portion of the hunt area. After several years of this license type being in place, landowners in the area felt that elk numbers had been addressed to the point that the license was no longer needed. Another significant change to the 2022 season structure was the liberalized limitation for the Type 2 license. In 2021, the Type 2 license was only valid for the Farson-Eden Irrigation Project area. In 2022, the Type 2 license was also valid for antlered elk with four or fewer points on either antler. This change was implemented to help with high numbers of young bull elk present in the herd that influence bull ratios while easing pressure on the mature bulls that are expected by the public. In some years, yearling bulls make up 30 to 40% of the total number of bulls classified in the herd, however yearling bulls are almost never harvested by hunters with a Type 1 license. Allowing Type 2 hunters to harvest young bulls will help reduce bull ratios in this herd while still maintaining hunter satisfaction levels.

Assuming that harvest rates remain consistent with what has been observed in the past, the 2022 season should harvest near 650 elk. This level of harvest should move this population significantly closer to, or even below its population objective. It should be noted that hunter comments about cows being particularly difficult to locate this last year suggest that several years of increased harvest rates may have started to reduce the size of this elk population. It is also important to note that given the extremely open nature of the landscape that this herd lives in with abundant public land and high road density that this elk herd will always exhibit harvest statistics more commonly observed in pronghorn herds, than what is typically seen in elk herds. Since this elk population lives in open sagebrush country with no real refuge areas, elk are extremely visible and vulnerable to harvest. Therefore, hunter success rates in this elk population will always be above 60%.

2.) Chronic Wasting Disease Monitoring & Management:

This is a Tier 3 surveillance herd. To date, no meaningful CWD prevalence data is available within this herd unit and no CWD management actions have occurred. This herd has not been prioritized for CWD surveillance because of the relatively small size of this herd obtaining the necessary sample size to accurately determine prevalence would be unlikely.

2021 - JCR Evaluation Form

SPECIES: Elk | PERIOD: 6/1/2021 - 5/31/2022

HERD: EL428 - WEST GREEN RIVER

HUNT AREAS: 102-105 | PREPARED BY: JEFF SHORT

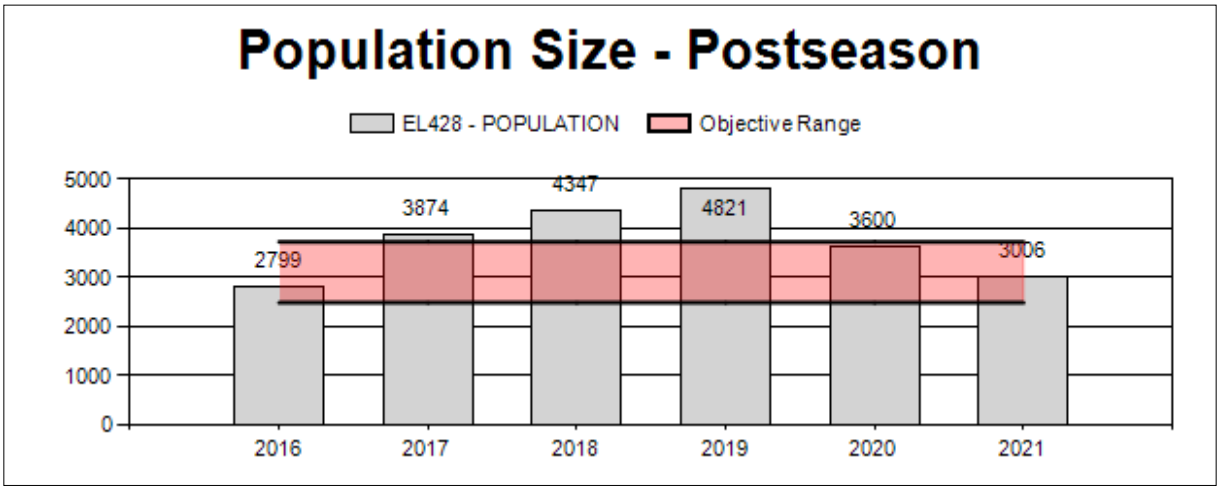
	2016 - 2020 Average	2021	2022 Proposed
Population:	3,888	3,006	3,000
Harvest:	1,147	1,413	1,400
Hunters:	3,392	3,664	3,600
Hunter Success:	34%	39%	39%
Active Licenses:	3,543	3,875	3,900
Active License Success:	32%	36%	36%
Recreation Days:	22,257	25,477	25,000
Days Per Animal:	19.4	18.0	17.9
Males per 100 Females	22	0	
Juveniles per 100 Females	32	0	

Population Objective (± 20%) : 3100 (2480 - 3720)

Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-3.0%
Number of years population has been + or - objective in recent trend:	1
Model Date:	02/28/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	18%	20%
Males ≥ 1 year old:	30%	30%
Proposed change in post-season population:	0%	0%



2022 HUNTING SEASON

West Green River Herd Unit (EL428)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
102	Gen	Sept. 1	Sept. 30	Oct. 15	Oct. 24		Any elk
102	Gen			Oct. 25	Oct. 31		Antlerless elk
102	6	Sept. 1	Sept. 30	Oct. 15	Nov. 30	200	Cow or calf
102	7	Sept. 1	Sept. 30	Dec. 15	Jan. 31	100	Cow or calf
103	Gen	Sept. 1	Sept. 30	Oct. 15	Oct. 24		Any elk
103	Gen			Oct. 25	Oct. 31		Antlerless elk
103	6			Aug. 15	Aug. 31	150	Cow or calf valid on or within one-quarter (1/4) mile of irrigated land
103	6	Sept. 1	Sept. 30	Oct. 15	Oct. 31		Cow or calf
103	6			Dec. 15	Jan. 31		Cow or calf
104	Gen	Sept. 1	Sept. 30	Oct. 15	Oct. 24		Any elk
104	Gen			Oct. 25	Oct. 31		Antlerless elk
104	6	Sept. 1	Sept. 30	Oct. 15	Nov. 30	300	Cow or calf, also valid in Area 105 in Lincoln County
104	7			Aug. 15	Aug. 31	150	Cow or calf valid on or within one-quarter (1/4) mile of irrigated land
104	7	Sept. 1	Sept. 30	Dec. 15	Dec. 31		Cow or calf, also valid in Area 105 in Lincoln County
104	7			Jan. 1	Jan. 31		Cow or calf valid west of U.S. Highway 30 and east of Lincoln County Road 207 or east of Rock Creek within the Twin Creek drainage
105	Gen	Sept. 1	Sept. 30	Oct. 1	Oct. 31		Any elk

2021 Hunter Satisfaction: 70.2% Satisfied, 19.7% Neutral, 10.1% Dissatisfied

2022 Management Summary

1.) Hunting Season Evaluation: For 2021 season setting, we have no changes proposed for West Green River elk. Following an elk sightability survey in January of 2020 we devised a harvest strategy to get the herd to objective over a 3 year period. We are on year three of that strategy. We will reevaluate our havest plan after we get new aerial survey data next year. We have Type 7 licenses valid in August to address Elk damage in Hunt Areas 103 and 104. These licenses are only good on or within ¼ mile of irrigated lands. Considerable numbers of elk have been wintering close to Highway 30 in Nugget Canyon. Several groups of elk have crossed into Hunt Area 105. There is concern that more elk may get pushed across the highway during late season hunts. We do not want large numbers of elk in Hunt Area 105 due to potential competition on extensive mule

deer winter ranges and lack of support for elk with private landowners in the area. To address this we allow segments of 104 type 6 and type 7 seasons to also be valid in the northern portion (within Lincoln County) of Hunt area 105.

In Hunt Area 105 we open the either sex general season on October 1st. This allows general hunting during the second half of the rut and provides a long season of 31 days. This season overlaps the general deer hunt allowing combination hunts. This intentionally puts more hunting pressure on elk in the area to address landowner complaints and increasing elk numbers there.

2.) Chronic Wasting Disease Management: This is a Tier 3 surveillance herd that was prioritized for CWD sampling in 2020. Prevalence estimates and sample sizes are presented below (Table1). No positives were found. For this surveillance period, we were not able to obtain the sampling goal of 200. It is difficult to get samples from elk in this herd as many harvested elk are quartered or deboned in the field. To date, we collected 158 samples during the focal period. No positives have been found. Sample distribution was reasonable. Historically, the herd has had no positive test results.

Table 1. CWD prevalence for hunter-harvested elk in the West Green River Elk Herd, 2019 - 2021.

Year(s)	Percent CWD-Positive and (*n*) – *Hunter Harvest Only*
	All Adult Elk (CI = 95%)
2019-2021	0% (0-2.3%, n=158)

3.) Fossil Butte National Monument: In recent years, the number of elk moving onto Fossil Butte National Monument (FBNM) during the fall has increased, and is estimated to be around 600-800 animals. Radio collar data suggests a significant number of animals move onto the Monument in early September, immediately after the opener of the archery season. As with most lands administered by the National Park Service, FBNM is closed to hunting. As the number of elk on FBNM has increased, it has become increasingly difficult to manage this herd to objective while providing huntable numbers of elk for sportsmen.

4.) Sightability Aerial Aurveys: Elk aerial surveys are scheduled to be conducted every three years in the West Green River Elk Herd. Classification data is also collected during these flights. All known occupied elk winter range is flown in Hunt Areas 102, 103 and 104. Some small parts of Area 105 are flown but not all of Area 105 is flown due to the large geographic area and very low elk densities. The survey was most recently flown in January 2020. Total numbers of elk observed were 4,647. The Idaho sightability model was used to estimate a total population for the area flown. That estimate was 4,721 elk with a standard error of 21.12. Good coverage of occupied elk winter habitat was achieved in the survey. However, there are some peripheral habitats that were not flown due to budget constraints. For population modeling we have added 100 animals to the estimate and enlarged the SE to account for those areas. This is a very low sightability correction. On these surveys a low sightability correction factor is normal and is produced due to large groups of elk in high snow cover and open environments. This creates survey conditions where very few elk are missed during helicopter surveys.

5.) Population Modeling Issues: The population model no longer functions in this herd unit. The model cannot reconcile data on the population estimate, bull:cow ratios and bull harvest. We do not know if this is a data issue or a model issue but it has been the case for over 7 years, and the model is currently unable to track observed numbers. There are many elk herd units in

Wyoming where spreadsheet models are not functioning. We rely largely on the aerial survey population estimates for population management in the West Green River herd unit.

6.) Comingling with Livestock: Conflict with agriculture producers can be an issue for this elk herd. Damage complaints occur during bad winters, but are less common during "normal" winters. Unfortunately, three of the past four winters have been worse than average in regards to snowfall and temperatures. Elk comingling with livestock during winter is relatively uncommon, and only in limited areas, but is considered an issue. Past problems have typically been dealt with successfully if the Department was notified. The area is in the brucellosis surveillance area, despite the fact that there is extremely low brucellosis prevalence, and has never had a positive brucellosis test in elk near wintering livestock. Regardless, brucellosis concerns occur among livestock producers throughout the herd unit, especially in the areas near Cokeville (Areas 103 and 104).

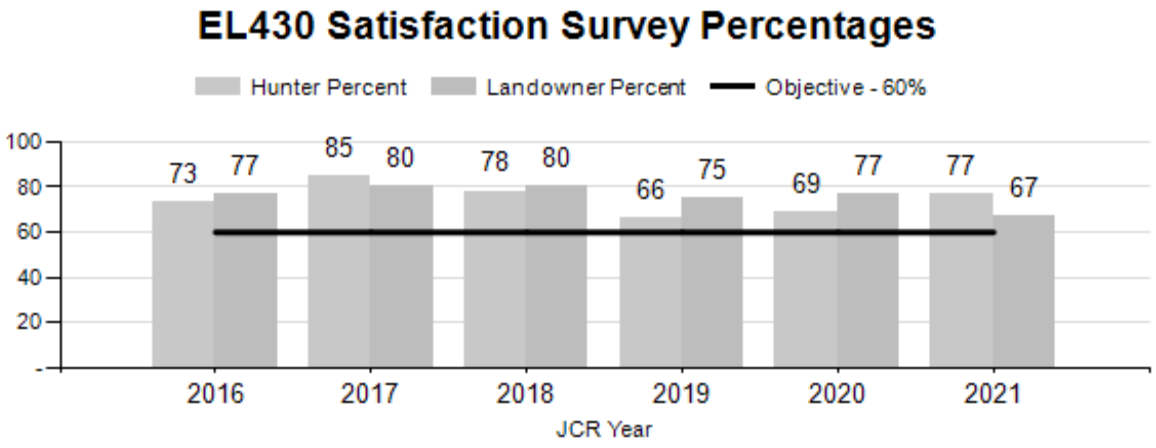
2021 - JCR Evaluation Form

SPECIES: Elk
HERD: EL430 - PETITION
HUNT AREAS: 124

PERIOD: 6/1/2021 - 5/31/2022
PREPARED BY: PHILIP DAMM

	2016 - 2020 Average	2021	2022 Proposed
Hunter Satisfaction Percent	74%	77%	75%
Landowner Satisfaction Percent	78%	67%	75%
Harvest:	124	95	95
Hunters:	197	149	150
Hunter Success:	63%	64%	63 %
Active Licenses:	197	149	150
Active License Success:	63%	64%	63 %
Recreation Days:	1,437	1,146	1,200
Days Per Animal:	11.6	12.1	12.6
Males per 100 Females:	0	0	
Juveniles per 100 Females	0	0	

Satisfaction Based Objective	60%
Management Strategy:	Recreational
Percent population is above (+) or (-) objective:	12%
Number of years population has been + or - objective in recent trend:	0



2022 Hunting Seasons
Petition Elk Herd Unit (EL430)

Hunt Area	Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
124	1	Sep. 1	Sep. 30	Oct. 15	Nov. 30	70	Any elk
124	4	Sep. 1	Sep. 30	Oct. 15	Nov. 30	100	Antlerless elk
124	4			Dec. 1	Dec. 31		Antlerless elk valid east of Sweetwater County Road 19, and north and east of BLM Roads 4409 and 4411, and west of BLM Road 3310 and Sweetwater County Road 23S

2021 Hunter Satisfaction (Obj.=60%): 77% Satisfied, 8% Neutral, 15% Dissatisfied
2021 Landowner Satisfaction (Obj.=60%): 67% At Desired Levels, 0% Above, 33% Below
2021 3-year Average Age of Bull Elk Harvested: 6.1

2021 Management Summary
1.) Hunting Season Evaluation: Landowner satisfaction, hunter satisfaction, and average age of bull elk harvested (established 2013) all indicated management objectives were being met. As always, changes in numbers and distribution of elk were not estimable due to the size of and relatively low elk density across the herd unit. Landowners who were not satisfied thought populations were too low, though landowner reports and observations indicated relatively high elk numbers along the Little Snake River where much of the private land occurs. With the slight decrease in Type 4 licenses for 2021 came a corresponding increase in success for that license type from 36% to 55%. Managers also received fewer complaints about hunters not being able to find cow elk to hunt. Hunter effort and the proportion of juveniles in the harvest in 2021 better aligned with 10-year averages. The 36% rate may not sound low for Wyoming elk hunting, but elk in this herd are generally more susceptible to harvest due to mostly open habitat types. Type 1 success was consistent with the last few years at around 80%.

Absolute averages for age of harvested bull elk continued to be problematic; however, relative ages over time were still assessed for season setting. Low sample sizes were observed, but biased sample sizes were the main concern. Little to no participation by landowner license holders within the herd unit likely artificially decreased averages, as information garnered on these harvested bulls indicated they were of older age classes. The average age of bulls harvested in this herd for 2021 was 5.6, while the running 3-year average used for the objective was 6.1. These ages indicated phenomenal existing opportunity to harvest mature bulls in Petition, which was only managed under more liberal recreational objectives. However, with the average age of bulls harvested decreasing, managers anticipated complaints in the future.

Feral horse HMAs across the unit continued to be significantly above AMLs, and horse numbers outside of HMAs, particularly around the Flat Tops, were abhorrent as well. These feral horses

affected elk distribution and populations through exclusion from water and other resources and habitat degradation. Feral horse removal did occur in 2021; however, it was apparently restricted to the Adobe Town area and would not result in any measurable changes to the elk herd wide.

With more appropriate harvest having occurred on Type 4 licenses in 2021 in terms of both success and proportion of calf elk in the harvest, managers proposed no changes for the 2022 hunt after the decrease in allocation for 2021. Due to continued high success on Type 1 licenses, maintenance of high average ages of harvest, and apparent high bull ratios, managers proposed a 17% increase to Type 1 licenses from 60 to 70 for 2022. This increase led to the highest Type 1 allocation in this herd's history. Managers agreed that achieving no more than 60% success for Type 1's in this herd would never be palatable to the public, but they would continue in future years to assess the ability to provide continued additional opportunity.

2021 - JCR Evaluation Form

SPECIES: Moose | PERIOD: 6/1/2021 - 5/31/2022

HERD: MO415 - UINTA

HUNT AREAS: 27, 35, 44, 901-902 | PREPARED BY: JEFF SHORT

	2016 - 2020 Average	2021	2022 Proposed
Population:		N/A	N/A
Harvest:	18	18	18
Hunters:	19	18	18
Hunter Success:	95%	100%	100 %
Active Licenses:	19	18	18
Active License Success:	95%	100%	100 %
Recreation Days:	194	146	150
Days Per Animal:	10.8	8.1	8.3

Limited Opportunity Objective:

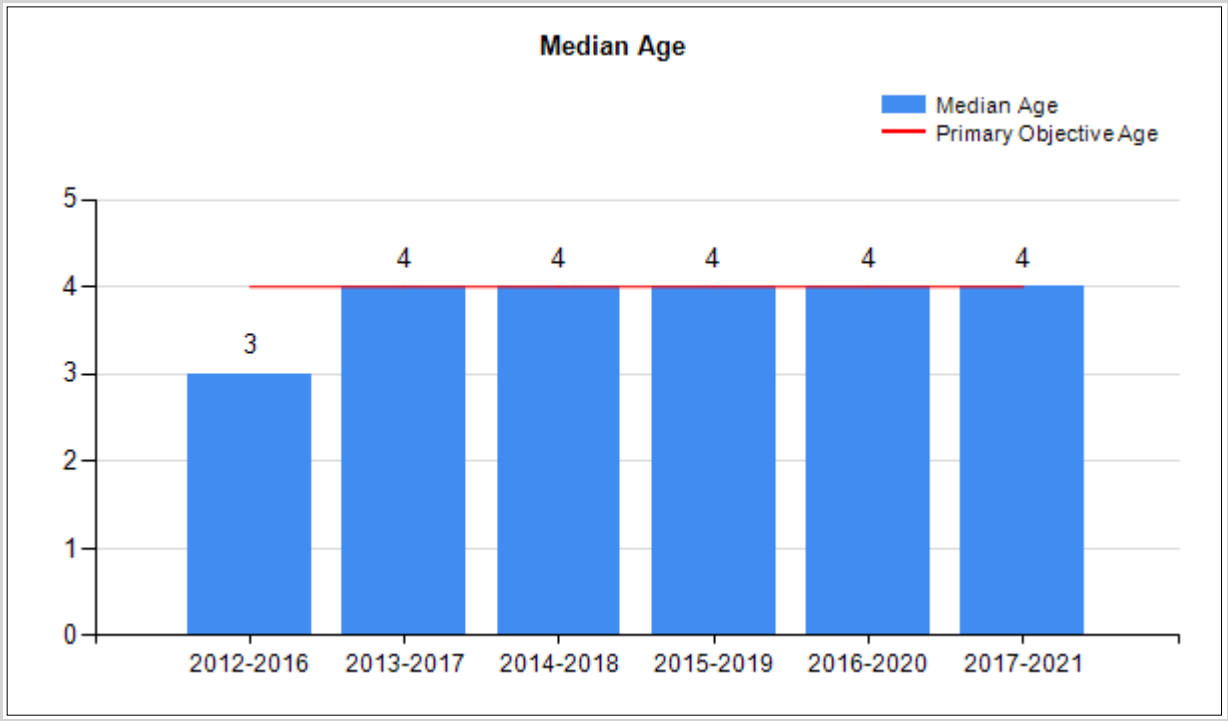
5-year median age of > 4 years for harvested moose

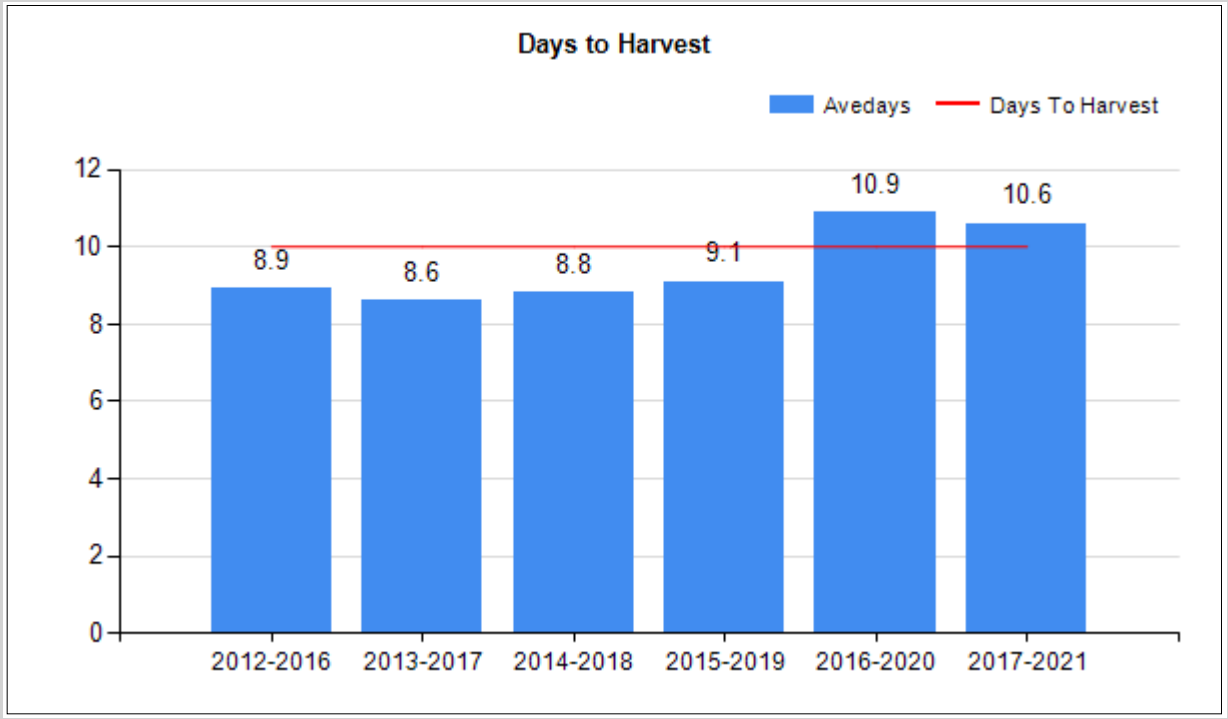
5-year average of <= 10 days/animal to harvest

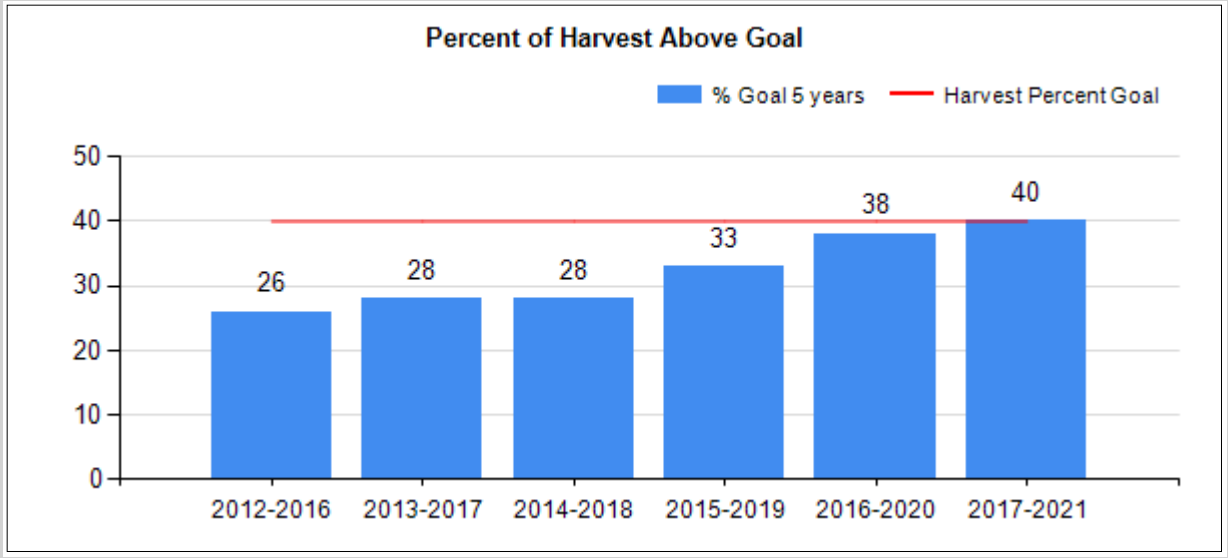
Secondary Objective:

5-year average of 40% of harvested moose are > 5 years of age

Management Strategy: Special




Days to Harvest
Avedays
Days To Harvest
12
10
8
6
4
2
0
8.9
8.6
8.8
9.1
10.9
10.6
2012-2016
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021


Percent of Harvest Above Goal
% Goal 5 years
Harvest Percent Goal
50
40
30
20
10
0
26
28
28
33
38
40
2012-2016
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021

2022 HUNTING SEASONS

Uinta Moose Herd Unit (MO415)

Hunt Area	Hunt Type	Archery Dates		Season Dates		Quota	Limitations
		Opens	Closes	Opens	Closes		
27	1	Sept. 1	Sept. 30	Oct. 1	Nov. 20	15	Antlered moose
35	1	Sept. 1	Sept. 30	Oct. 1	Nov. 20	5	Antlered moose

2021 Hunter Satisfaction: NA

2022 Management Summary

1.) Hunting Season Evaluation: The Uinta Moose Herd has a limited opportunity type objective. The objective is based on harvest data and has two parts. The primary objective is to have a median age of Harvest $\geq$ 4 years and have an average days per harvest of $\leq$ 10 days. The secondary objective is to have 40% of the male harvest $\geq$ 5 years of age. For these we use 5 year average timelines for better sample sizes.

Based on recent harvest data, we believe we can offer the same opportunity for hunters as the previous year. We are at objective for the median age of harvest. In recent years we have had several retired hunters spending many days hunting and passing up bulls. This has put our average days to harvest data out of objective but does not appear to indicate it is difficult to find moose to harvest. If anything, it appears that the hunt is improving and hunters are getting more selective. We are at objective for the secondary objective criteria of percent of harvested moose that are greater than or equal to five years of age. Average age of harvest and antler spread in 2021 were very good at 6.1 years and 35.05 inches.

Hunt Area 44 is hunted in conjunction with Hunt Area 33. The hunt is listed as 33,44 and in the Lincoln Moose Herd document. The hunt is a Type 1 and good for any moose, except cow moose with calf at side. It will offer 3 licenses (2 residents, 1 nonresident). No antlerless harvest will be allowed in the rest of herd unit. This is an effort to allow maximum growth of the herd. However, hunting is not likely to be the limiting factor for this herd.

2021 - JCR Evaluation Form

SPECIES: Moose | PERIOD: 6/1/2021 - 5/31/2022

HERD: MO417 - LINCOLN

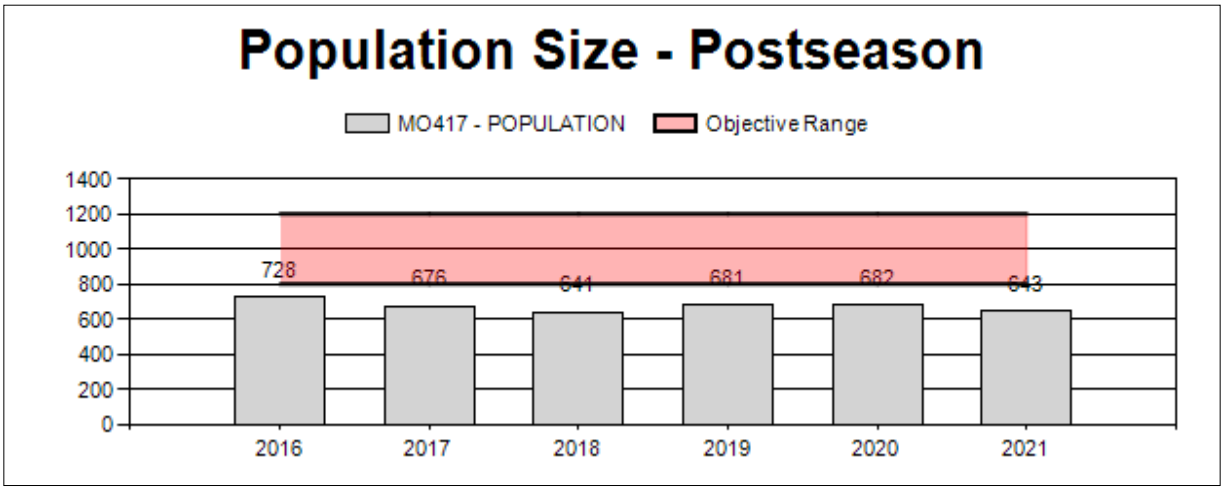
HUNT AREAS: 26, 33, 36, 40 | PREPARED BY: JEFF SHORT

	2016 - 2020 Average	2021	2022 Proposed
Population:	682	643	558
Harvest:	41	50	54
Hunters:	43	53	57
Hunter Success:	95%	94%	95%
Active Licenses:	43	53	57
Active License Success:	95%	94%	95%
Recreation Days:	313	401	425
Days Per Animal:	7.6	8.0	7.9
Males per 100 Females	58	0	
Juveniles per 100 Females	36	0	

Population Objective (± 20%) :	1000 (800 - 1200)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-35.7%
Number of years population has been + or - objective in recent trend:	6
Model Date:	02/27/2022

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

	JCR Year	Proposed
Females ≥ 1 year old:	0%	1.4%
Males ≥ 1 year old:	24.1%	31.0%
Proposed change in post-season population:	-6.9%	-16.1%



2022 HUNTING SEASONS

Lincoln Moose Herd Unit (MO417)

Hunt	Hunt	Archery Dates		Season Dates			
Area	Type	Opens	Closes	Opens	Closes	Quota	Limitations
26	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	39	Antlered moose; (32 residents, 7 nonresidents)
26	4	Sept. 1	Sept. 30	Oct. 1	Oct. 31	5	Antlerless moose, except cow moose with calf at side; valid on private irrigated land
33,44	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	3	Any moose, except cow moose with calf at side; (2 residents, 1 nonresident)
33	4	Sept. 1	Sept. 30	Oct. 1	Oct. 31	2	Antlerless moose, except cow moose with calf at side; (2 residents)
36	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	5	Antlered moose
40	1	Sept. 1	Sept. 30	Oct. 1	Oct. 31	3	Antlered moose; (3 residents)
40	4	Sept. 1	Sept. 30	Oct. 1	Oct. 31	3	Antlerless moose, except cow moose with calf at side; (2 residents, 1 nonresident)

2021 Hunter Satisfaction: NA

2022 Management Summary

1.) Hunting Season Evaluation: Harvest data is collected on a voluntary check basis for moose. The data collected includes tooth age and antler spread data. As the check is voluntary, data is not complete. Harvest data from 33, 36 and 40 does not provide much information about each individual hunt area given the low sample sizes. Harvest from Area 26 results in a good sample size due to higher license numbers. Total herd unit harvested bull age data suggests an average age of harvest of 4.70 years old for 2021. Average antler spread was 37.64 and % male harvest ≥ 5 years was 56% for 2021.

Harvest opportunity has been much more limited in this herd unit over the past 12 years. In the late 2000s we dramatically reduced the number of licenses due to a population crash related to habitat issues and the parasite *Elaeophora schneiderii*. Since then, populations have stabilized and started to grow slowly. Hunts have very good success rates. Hunt Area 26 is considered a very good quality moose hunt with potential for trophy animals. Area 26 has ample public access and a variety of places to hunt moose. Hunts in areas 33, 36 and 40 are considered good hunts with good success rates but require more time to find low numbers of moose spread out over large areas. Public access can be more challenging in these areas but access to moose hunting is available. Those areas are not typically considered trophy areas but mature animals do exist and are harvested occasionally.

We are proposing to add a type 4 hunt in Areas 26 to address problem moose and overall moose numbers on agricultural lands. In Hunt Areas 33, 36 and 40 we will keep the same number of license as last year. We also have a type 4 hunt in Areas 33 and 40 to address problem moose and overall moose numbers on agricultural lands. Hunt Area 33 has a very limited amount of moose habitat. Moose habitat primarily occurs within cottonwood and willow habitats associated with the Green River, including Seedskadee National Wildlife Refuge. Area 33 is hunted in conjunction with Area 44 for the type 1 hunt.

2.) Sightability/Modeling: Moose aerial population estimation surveys now are scheduled to be conducted every three years in Hunt Area 26 concurrent with West Green River Elk surveys. Classification data is also collected during these flights. Areas 33, 36 and 40 are not flown due to the large geographic area and very low moose densities. The joint elk and moose survey was last flown in January 2020. Total numbers of moose seen were 404. The Idaho sightability model was used to estimate a total population for the area flown. That estimate was 547 moose with a standard error of 6.63. Good coverage of occupied moose winter habitat was achieved in the survey. However, there are some peripheral habitats that were not flown due to budget constraints. For population modeling we have added 50 animals to the estimate and enlarged the SE to account for those areas.

There is a functioning model for moose in this herd unit. This is the only functioning moose population model in the state. It only functions due to the availability of sightability based population estimates. However, since it has been over two years since the last sightability survey was conducted we have little confidence in the model at this time. The model is showing a reduction in the population but our field observations and hunter comments indicate the population is doing well. We will fly another survey next winter and will have more information. The model infers only to the core population in Hunt area 26. That portion of the herd resides in classic high quality moose habitat. The other hunt areas in the herd unit have very low numbers of moose and scattered low density moose occupancy. Across those three hunt areas we estimate there are approximately 120 moose. Total herd unit estimates in the JCR are reported as model estimates plus 120 animals to account for the overall objective.