

2013 - JCR Evaluation Form

SPECIES: Bighorn Sheep

PERIOD: 6/1/2013 - 5/31/2014

HERD: BS516 - DOUGLAS CREEK

HUNT AREAS: 18

PREPARED BY: LEE KNOX

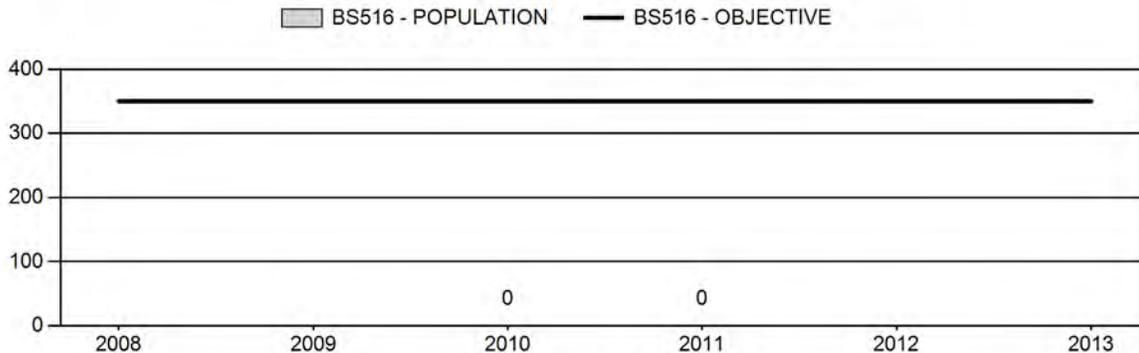
| | <u>2008 - 2012 Average</u> | <u>2013</u> | <u>2014 Proposed</u> |
|---------------------------|----------------------------|-------------|----------------------|
| Population: | 0 | N/A | 75 |
| Harvest: | 1 | 0 | 1 |
| Hunters: | 1 | 0 | 100 |
| Hunter Success: | 100% | 0% | 1% |
| Active Licenses: | 1 | 0 | 1 |
| Active License Percent: | 100% | 0% | 100% |
| Recreation Days: | 2 | 0 | 10 |
| Days Per Animal: | 2 | 0 | 10 |
| Males per 100 Females | 29 | 68 | |
| Juveniles per 100 Females | 32 | 74 | |

| | |
|---|---------|
| Population Objective: | 350 |
| Management Strategy: | Special |
| Percent population is above (+) or below (-) objective: | N/A% |
| Number of years population has been + or - objective in recent trend: | 20 |
| Model Date: | None |

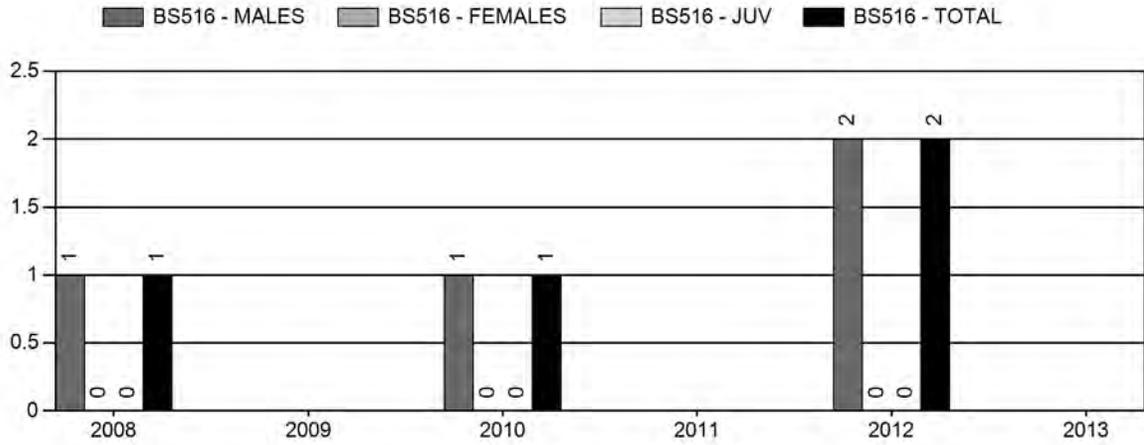
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

| | <u>JCR Year</u> | <u>Proposed</u> |
|--|-----------------|-----------------|
| 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% |

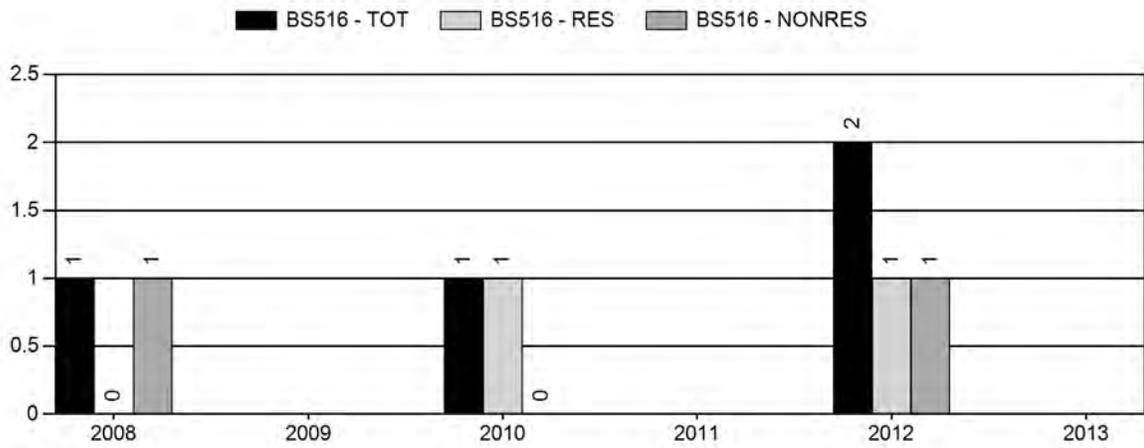
Population Size - Postseason



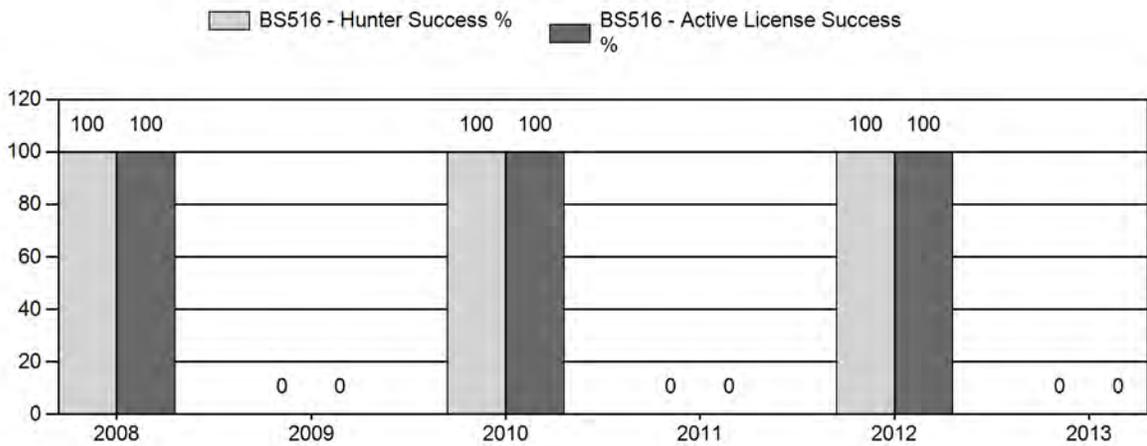
Harvest



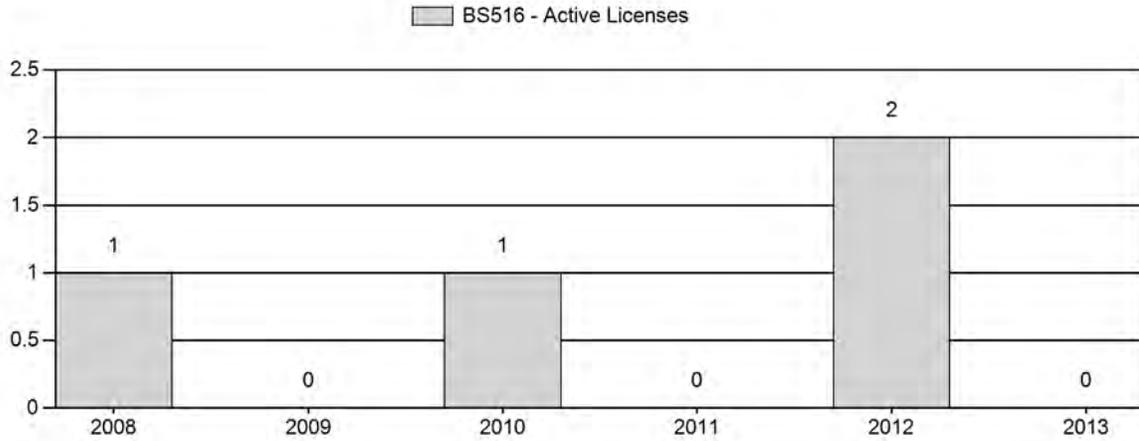
Number of Hunters



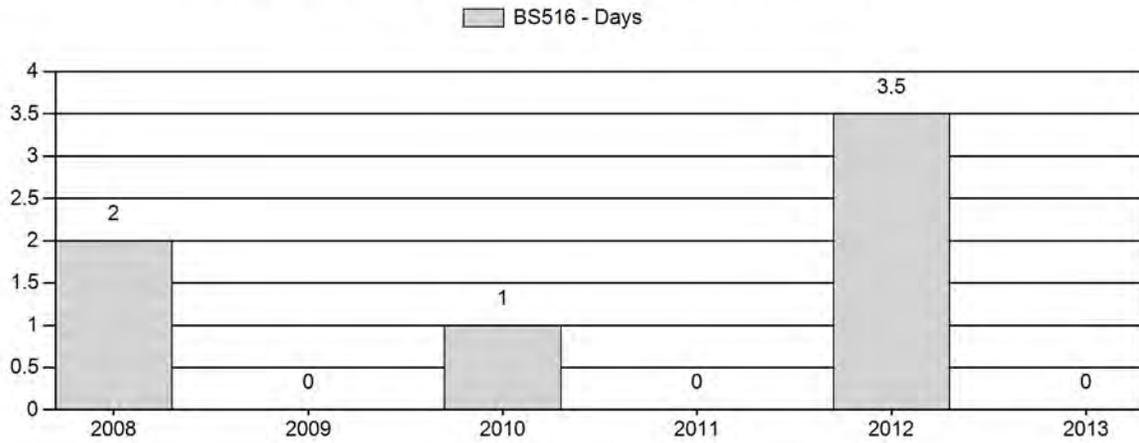
Harvest Success



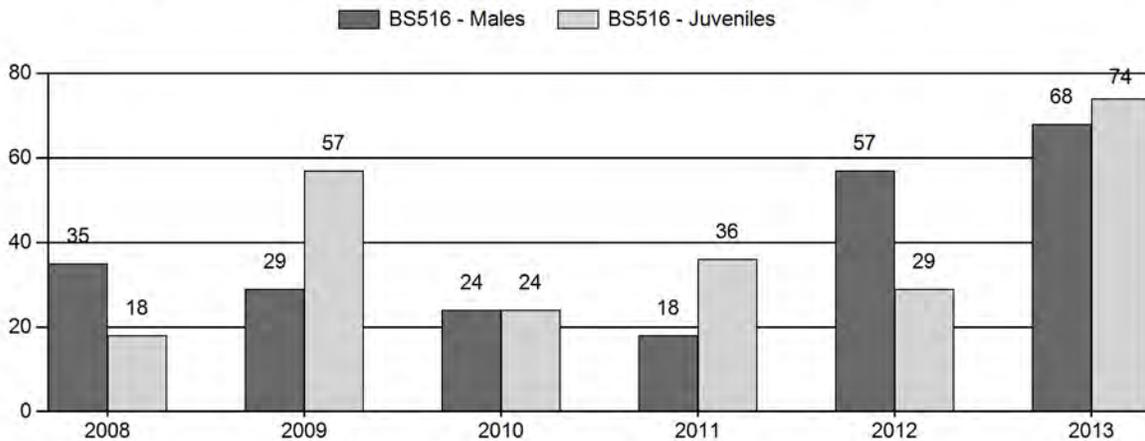
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2008 - 2013 Postseason Classification Summary

for Bighorn Sheep Herd BS516 - DOUGLAS CREEK

| Year | Post Pop | MALES | | | | FEMALES | | | | JUVENILES | | | | Males to 100 Females | | | | Young to | | |
|------|----------|-------|-------|-------|-----|---------|-----|-------|-----|-----------|----------|-----|-------|----------------------|-----|------|---------|----------|-----------|--|
| | | Ylg | Adult | Total | % | Total | % | Total | % | Tot Cls | Clis Obj | Ylg | Adult | Total | Int | Conf | 100 Fem | Conf Int | 100 Adult | |
| 2008 | 0 | 1 | 5 | 6 | 23% | 17 | 65% | 3 | 12% | 26 | 0 | 6 | 29 | 35 | ± 0 | 18 | ± 0 | 13 | | |
| 2009 | 0 | 0 | 4 | 4 | 15% | 14 | 54% | 8 | 31% | 26 | 92 | 0 | 29 | 29 | ± 0 | 57 | ± 0 | 44 | | |
| 2010 | 0 | 1 | 3 | 4 | 16% | 17 | 68% | 4 | 16% | 25 | 74 | 6 | 18 | 24 | ± 0 | 24 | ± 0 | 19 | | |
| 2011 | 0 | 0 | 4 | 4 | 12% | 22 | 65% | 8 | 24% | 34 | 0 | 0 | 18 | 18 | ± 0 | 36 | ± 0 | 31 | | |
| 2012 | 0 | 1 | 3 | 4 | 31% | 7 | 54% | 2 | 15% | 13 | 0 | 14 | 43 | 57 | ± 0 | 29 | ± 0 | 18 | | |
| 2013 | 0 | 6 | 7 | 13 | 28% | 19 | 41% | 14 | 30% | 46 | 0 | 32 | 37 | 68 | ± 0 | 74 | ± 0 | 44 | | |

2014 HUNTING SEASONS

DOUGLAS CREEK BIGHORN SHEEP (BS516)

| Hunt Area | Type | Dates of Opens | Season Closes | Quota | Limitations |
|-----------|---------|----------------|---------------|-------|--|
| 18,21 | 1 | Sept. 1 | Oct.31 | 2 | Limited quota licenses; any ram; (two resident licenses issued). |
| 18,21 | Archery | | | | Refer to Section 3 of this Chapter |

| Area | Type | Change from 2012 |
|--------------------|----------|------------------|
| 18 | 1 | +2 |
| Herd Totals | 1 | +2 |

Management Evaluation

Current Postseason Population Management Objective: 350

2013 Postseason Population Estimate: ~ 75

2014 Proposed Postseason Population Estimate: ~ 75

The management objective for the Douglas creek Bighorn Sheep Herd Unit is a post-season population objective of 350 bighorn sheep. The management strategy is special management which maintains for a mean age of harvested rams between 6 and 8 years old. The objective and management strategy were last revised in 1986 and will be reviewed in 2016.

Herd unit Issues

The Douglas Creek Herd Unit is located primarily in the Savage Run and Platte River Wilderness areas in the Snowy Range Mountains on the Medicine Bow National Forest. The herd is under special management guidelines which require the mean age of harvested rams to be between 6-and 8 years old. This direction was taken to provide trophy opportunity to the public and allow this herd to grow. Pine Beetles have dramatically changed the landscape in the Medicine Bow National Forest where a large percentage of mature pines have died and starting to fall over. The impacts from the beetle kill are unclear but could improve sheep habitat as the forest becomes more open. Area 18 was closed from 2004 through 2007 and then again in 2009, 2011, and 2013 because this population has remained well-below desired levels due to low lamb recruitment. Hunt Area 18 and Area 21 of the Encampment River Herd were opened to provide some limited opportunity for two residents to hunt bighorn sheep.

Weather

Weather during the spring and summer of 2013 remained extremely dry. The Palmer Drought Severity Index (PDSI) ranked drought conditions in SE Wyoming as extreme through the month of August. However the fall of 2013 was extremely wet with September 2013 being the wettest September recorded in Laramie. For specific weather information please refer to the following link: <http://www.ncdc.noaa.gov/>.

Habitat

Turnover in personnel, changes in individual job responsibilities of employees, and evolving WGF D agency priorities have resulted in some issues with consistent habitat data collection and interpretation of data. Some transects, years after their initial establishment, have been identified as being in “non-representative” locations. Site selection was often influenced by terrain and/or land ownership status (i.e public access). Changing land uses (wind turbines, roads, fence construction, other developments, etc.) have influenced habitat use by wildlife in some locations, and in some instances have resulted in major shifts in animal usage of the area being monitored. Department personnel are currently evaluating shrub transects and the types of information being collected, and will be looking for ways to improve efficiency of data collection, types of data being collected, and refining criteria for site selection for future transects. The reader is referred to the Strategic Habitat Plan Annual Report for further background information on shrub transects.

Field Data

We have very little data on this population. The general public provides a few reports during the summer and hunting seasons. Our field personnel make some effort to document the status of segments of the herd during other big game surveys and an annual winter ground survey. Our observation data consistently documents low post-weaning lamb survival. Poor habitat conditions, the lack of well-defined seasonal migrations, and perhaps lingering effects of Pasteurellosis or some other disease may be stagnating this population.

Harvest Data

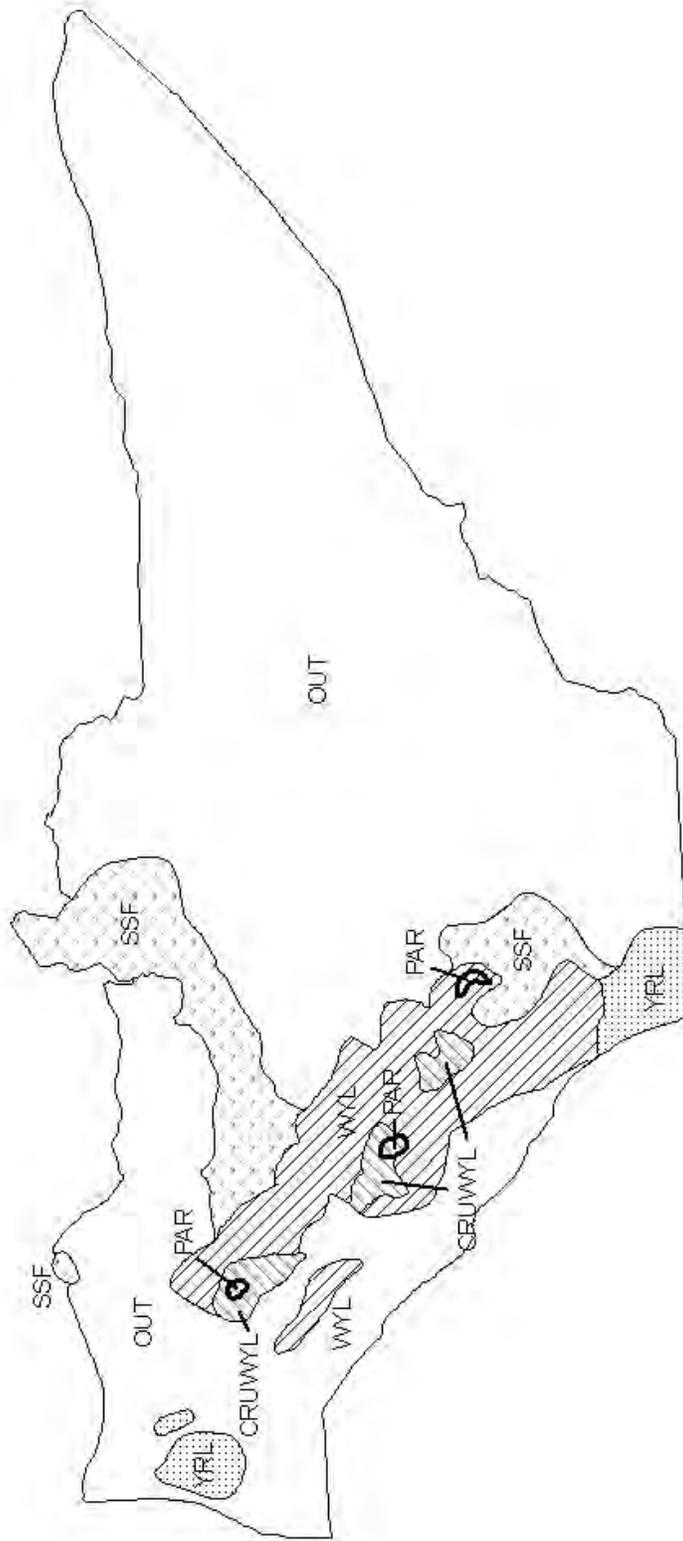
Hunters typically harvest seven year old rams when the season is open so there is adequate opportunity for the limited number of licenses.

Population

There isn't a model for a variety of reasons including: little data available, considered highly biased because of poor sample sizes or an inability to survey the entire area;; model does not run; results not biologically defensible. During 2013 fall classifications personnel accounted for 46 different sheep. These included 13 rams, 19 ewes and 14 lambs. The season was closed in 2013.

Management Strategy

In 2014 Hunt Area 18 and Area 21 of the Encampment River Herd will be opened to provide some limited opportunity for two residents to hunt bighorn sheep.



BHS516 - Douglas Creek
 HA 18
 Revised 7/02



2013 - JCR Evaluation Form

SPECIES: Bighorn Sheep

PERIOD: 6/1/2013 - 5/31/2014

HERD: BS517 - LARAMIE PEAK

HUNT AREAS: 19

PREPARED BY: MARTIN HICKS

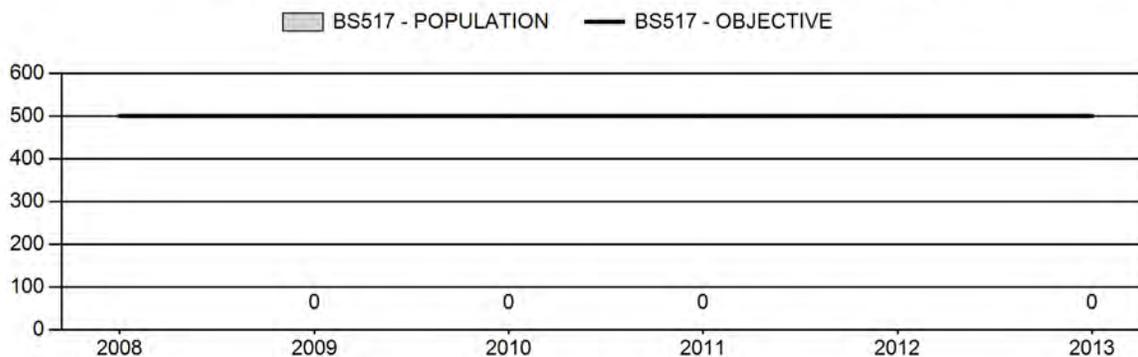
| | <u>2008 - 2012 Average</u> | <u>2013</u> | <u>2014 Proposed</u> |
|---------------------------|----------------------------|-------------|----------------------|
| Population: | 0 | N/A | N/A |
| Harvest: | 7 | 5 | 8 |
| Hunters: | 8 | 6 | 8 |
| Hunter Success: | 88% | 83% | 100 % |
| Active Licenses: | 8 | 6 | 8 |
| Active License Percent: | 88% | 83% | 100 % |
| Recreation Days: | 76 | 76 | 75 |
| Days Per Animal: | 10.9 | 15.2 | 9.4 |
| Males per 100 Females | 52 | 34 | |
| Juveniles per 100 Females | 38 | 38 | |

| | |
|---|---------|
| Population Objective: | 500 |
| Management Strategy: | Special |
| Percent population is above (+) or below (-) objective: | N/A% |
| Number of years population has been + or - objective in recent trend: | 0 |
| Model Date: | None |

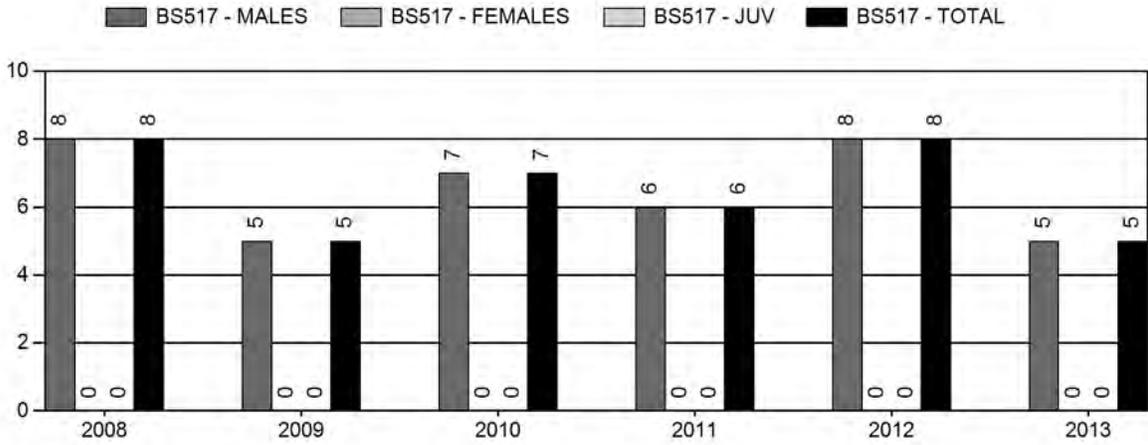
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

| | <u>JCR Year</u> | <u>Proposed</u> |
|--|-----------------|-----------------|
| Females ≥ 1 year old: | na% | na% |
| Males ≥ 1 year old: | na% | na% |
| Juveniles (< 1 year old): | na% | na% |
| Total: | na% | na% |
| Proposed change in post-season population: | na% | na% |

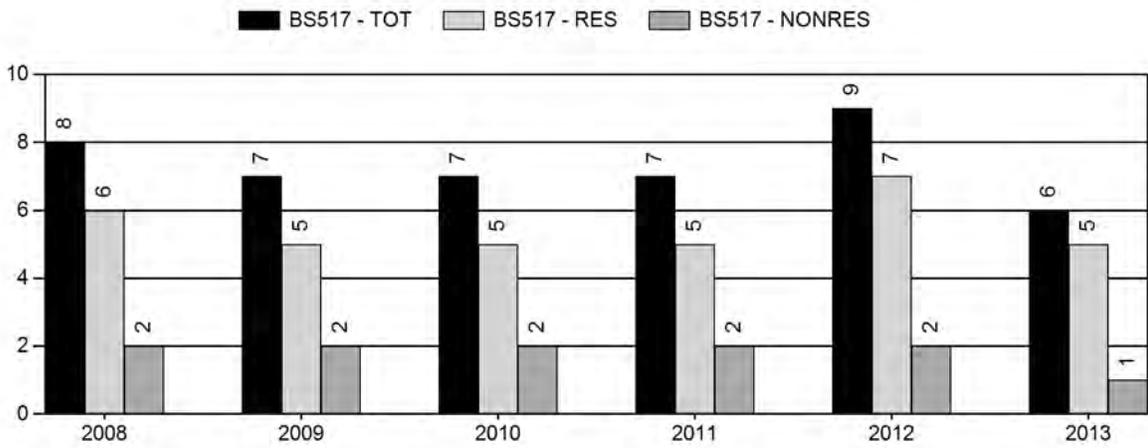
Population Size - Postseason



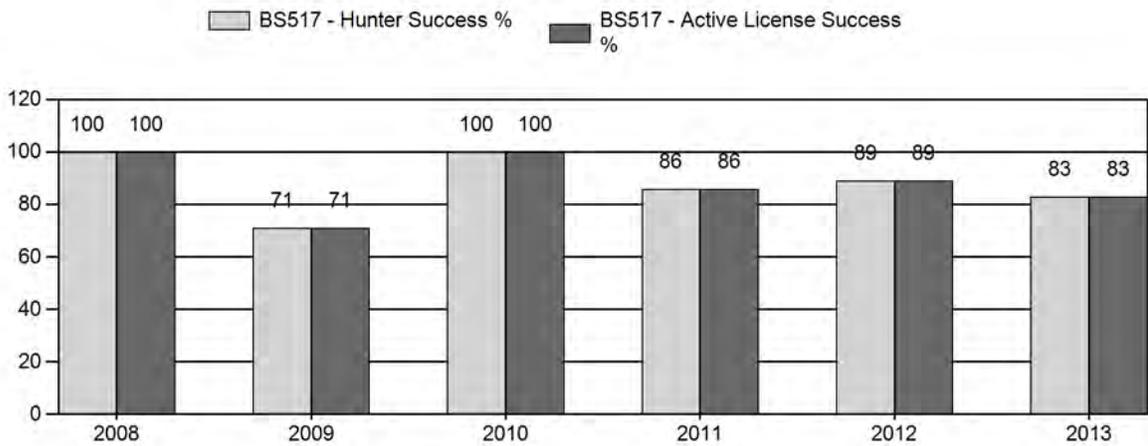
Harvest



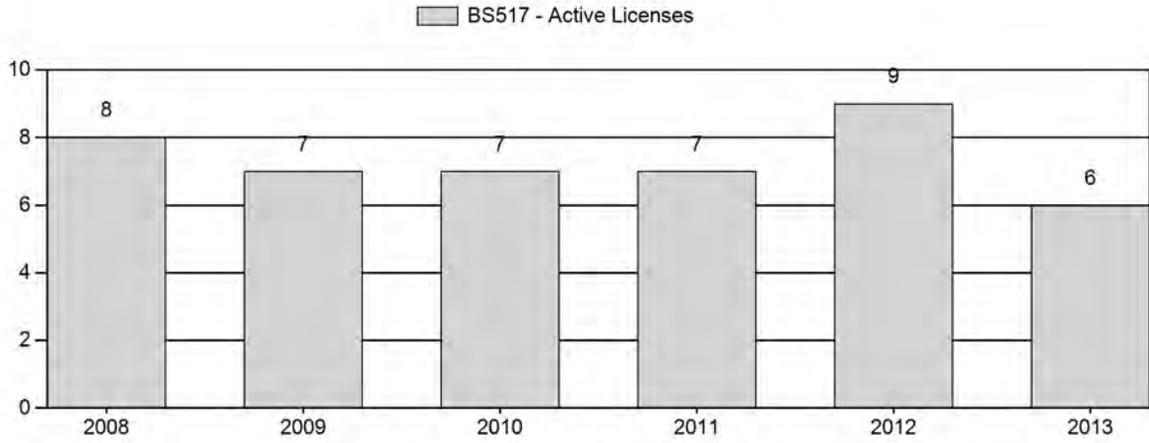
Number of Hunters



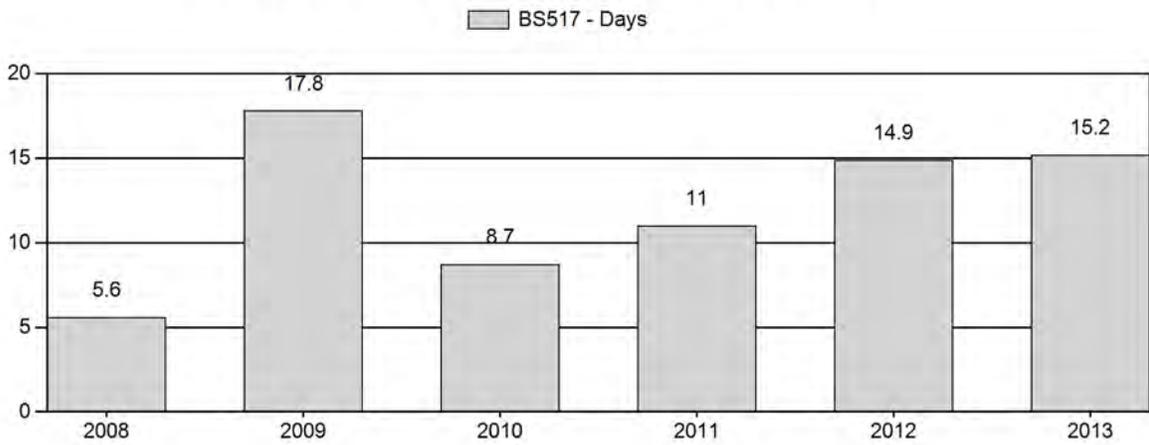
Harvest Success



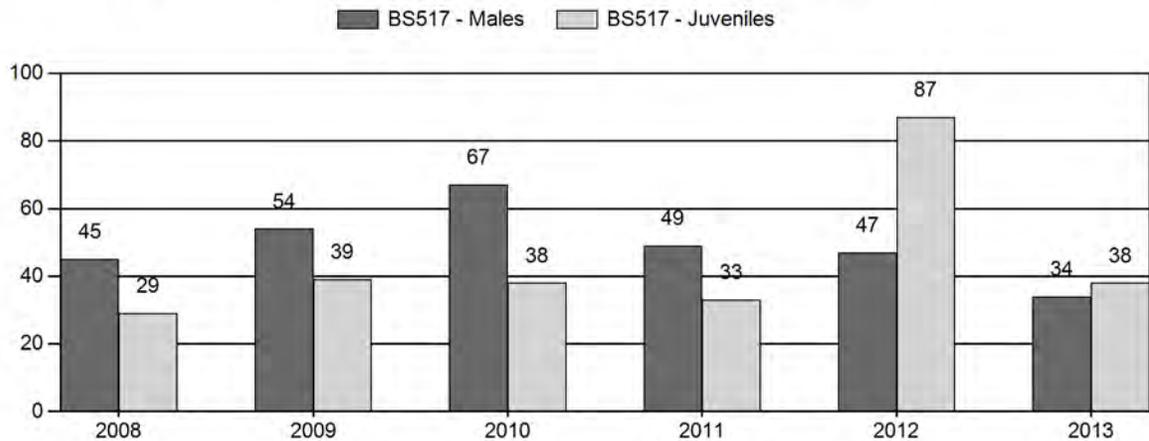
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2008 - 2013 Postseason Classification Summary

for Bighorn Sheep Herd BS517 - LARAMIE PEAK

| Year | Post Pop | MALES | | | | FEMALES | | JUVENILES | | Tot Cls | Cls Obj | Males to 100 Females | | | | Young to | | |
|------|----------|-------|-------|-------|-----|---------|-----|-----------|-----|---------|---------|----------------------|-------|-------|----------|----------|----------|-----------|
| | | Ylg | Adult | Total | % | Total | % | Total | % | | | Ylng | Adult | Total | Conf Int | 100 Fem | Conf Int | 100 Adult |
| 2008 | 0 | 3 | 26 | 29 | 26% | 65 | 58% | 19 | 17% | 113 | 0 | 5 | 40 | 45 | ± 0 | 29 | ± 0 | 20 |
| 2009 | 0 | 3 | 33 | 36 | 28% | 67 | 52% | 26 | 20% | 129 | 0 | 4 | 49 | 54 | ± 0 | 39 | ± 0 | 25 |
| 2010 | 0 | 3 | 23 | 26 | 32% | 39 | 49% | 15 | 19% | 80 | 0 | 8 | 59 | 67 | ± 0 | 38 | ± 0 | 23 |
| 2011 | 0 | 4 | 20 | 24 | 27% | 49 | 55% | 16 | 18% | 89 | 0 | 8 | 41 | 49 | ± 0 | 33 | ± 0 | 22 |
| 2012 | 0 | 0 | 7 | 7 | 20% | 15 | 43% | 13 | 37% | 35 | 0 | 0 | 47 | 47 | ± 0 | 87 | ± 0 | 59 |
| 2013 | 0 | 7 | 16 | 23 | 20% | 68 | 58% | 26 | 22% | 117 | 0 | 10 | 24 | 34 | ± 0 | 38 | ± 0 | 29 |

**2014 HUNTING SEASONS
LARAMIE PEAK BIGHORN SHEEP HERD (BHS517)**

| Hunt Area | Type | Dates of Seasons | | Quota | Limitations |
|-----------|------|------------------|---------|-------|------------------------------------|
| | | Opens | Closes | | |
| 19 | 1 | Sep. 1 | Oct. 31 | 8 | Limited quota licenses; any ram |
| Archery | | Aug. 15 | Aug. 31 | | Refer to Section 3 of this Chapter |

| Hunt Area | Type | Quota change from 2013 |
|-----------|------|------------------------|
| 19 | 1 | 0 |

Management Evaluation

Current Postseason Population Management Objective: 500

Management Strategy: Recreational

2013 Post-season Population Estimate: ~250

2014 Post-season Population Estimate: ~250

Herd Unit Issues

The management objective for the Laramie Peak Bighorn Sheep herd is a post-season population objective of 500 wild sheep. The management strategy is recreational management. The objective and strategy were last revised in 1978. The population objective was reviewed during the winter/spring of 2014. Based on department staff, landowner, and public comments the following population management alternative objectives have been proposed for Commission approval at their June meeting. If the alternative objective is approved it will go into effect for the 2014 biological year. Below are the criteria for the alternative objective:

- 1) 5-year running average of $\geq 75\%$ hunter success
- 2) 5-year running average age of harvested rams between 6 and 8 years of age
- 3) Documented occurrence of adult rams in the population

The Laramie Peak Herd Unit is comprised of 70% private land. The southern portion (south of WY Hwy 34) is over 90% private land. Hunters can expect to pay a trespass/trophy or outfitter fee to hunt on private land. There are two state sections that hunters can access that hold sheep throughout the season and have produced adult rams in past hunting seasons. A portion of occupied sheep habitat was within the 2012 Arapahoe fire that burned over 98,000 acres. This affected sheep distribution post-fire, but above average summer/fall precipitation in 2013 and spring precipitation in 2014 resulted in increased vegetation production for pre-winter diets and early spring green up that will benefit parturition areas for pregnant ewes. The fire will have long-term benefits for wild sheep, but initially there has been a flush of noxious weed (e.g. cheatgrass, Canada thistle) that land managers will need to address. A majority of wild sheep are harvested within the northern portion of the herd unit. The Laramie Peak Wildlife Habitat Management Unit is essential for sheep habitat and harvest where 200 plus sheep inhabit.

In 2007 forty-two sheep were released in this area from the Perma-Paradise Herd in Montana. These sheep have thrived and improved the overall genetics and health of the existing herd.

During the winter of 2014 the WGFD gathered biological samples for disease surveillance, with a target goal of 150 bighorn sheep across Wyoming through the use of drop nets, free-darting, and aerial captures. The goal of this effort is to obtain information on each herd and its overall health. Some animals will be fitted with GPS radio-collars to increase our understanding of movements and habitat use. The goal for the Laramie Peak Herd Unit was to collect samples from 15 wild sheep between Sybille Canyon and Iron Mountain. Three bighorn sheep were darted in February and disease samples were collected. In addition, 3 mule deer were caught via drop net and sampled to determine if there is overlap of pathogens associated with wild sheep. There is very little known about the different bacterial pathogens existing sheep state-wide, and this will provide base-line data that will be invaluable to sheep managers. Sampling efforts will continue through March and then resume in December 2014, to avoid parturition.

Weather

Weather during 2013 and into 2014 was wetter and colder than normal. Ungulates went into the winter in good body condition as a result of the fall moisture. Winter conditions were somewhat mild with low snowpack but with periods of extreme cold temperatures, followed up with above freezing periods. A high winter mortality rate is not expected for this wild sheep herd. Spring precipitation has been above normal with expected flooding events on the Laramie and North Laramie Rivers. Refer to the following websites for weather data: <http://www.ncdc.noaa.gov/temp-and-precip/time-series/> and <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html>.

Habitat

There are currently no habitat transects specifically for wild sheep. Eighteen transects have been established within the Laramie Range looking at mixed mountain shrub communities as they relate to mule deer use. Since dietary needs for wild sheep differ from mule deer it is hard to correlate any similarities. Precipitation dictates vegetation production. In 2010 and 2011 there was ample forage available due to above average moisture. In 2012 there was very little vegetation available, resulting in wild sheep going into the winter in poor body condition. In 2013 increased precipitation resulted in increased grass, forb and shrub leader production. Habitat transects are in the process of a thorough review to determine what data to collect and how to interpret it, and ultimately apply results to big game management. Above normal spring moisture in 2014 will result in high sediment loads into the North Laramie River and Cottonwood Creek watersheds due to wild fire events in 2010. Overall this will improve riparian habitat since the ash increase the nutrients within the soils. Improved riparian habitat has already been observed in spring of 2014.

Field Data

The 2013 post-season estimate of 250 sheep is based on pre and post-season herd composition data, along with field personnel and hunter observations. There is not a reliable working model for this herd unit. This is a smaller herd unit that provides limited

hunting opportunities, and for various reasons, does not lend itself to efficient collection of population monitoring data.

Since 1964 there have been a total of 228 wild sheep released from two herd sources: Whiskey Mountain in Wyoming and Perma-Paradise in Montana (Table 1). These transplants have helped to supplement the herd and improve overall herd health.

Table 1. Transplant release data for the Laramie Peak Bighorn Sheep Herd.

| Year | Number | Release Location | Source Herd |
|--------------|---------------|----------------------------|-----------------------|
| 1964 | 40 | North Laramie River Canyon | Whiskey Mountain Herd |
| 1965 | 36 | Labonte Canyon | Whiskey Mountain Herd |
| 1966 | 21 | Labonte Canyon | Whiskey Mountain Herd |
| 1973 | 42 | Duck Creek Canyon | Whiskey Mountain Herd |
| 1982 | 27 | Marshall | Whiskey Mountain Herd |
| 1989 | 20 | Marshall | Whiskey Mountain Herd |
| 2007 | 42 | Hay Canyon | Perma-Paradise- MT |
| Total | 228 | | |

Lamb recruitment continues to improve compared to ratios prior to the 2007 release. There was a total of 117 wild sheep classified in 2013. The majority of those sheep came from the Duck Creek sub-herd (n=69). The rest of the wild sheep were surveyed in the North Laramie, Sybille Canyon, and Iron Mountain sub-herds. Following this augmentation classification ratios were 33 rams:100 ewes and 38 lambs:100 ewes, which was a significant increase in lamb production compared to pre-transplant surveys. Ram ratios remain at adequate levels for adult harvest.

In 2013, 5 out of 8 sheep licenses were successful. Two licenses will carryover to 2014 due to medical hardships. The average age was 6 years, a decrease from the long-term average of 8 years. There were two five-year old rams harvested that brought the average age down. The harvest does not reflect the overall age of rams within the population. Field personnel and hunters observed 30-40 rams that varied in age classes on Reese and Collins Peak during the season. Three sheep were harvested from the Duck Creek sub-herd, one from the Sybille Canyon sub-herd and one from the Iron Mountain sub-herd.

Harvest Data

Success has reached $\geq 75\%$ four out of the five years. This last year active license hunters harvested 5 out of 6 rams, with a success rate of 83%. Hunters who pre-scout or hire an outfitter typically harvest their ram within 3-5 days. This year the average hunter effort was 15 days, which is slightly higher than the ten-year average of 12 days per harvest. Hunters that chose to not use an outfitter spend more time scouting and hunting. There is limited public land within occupied wild sheep habitat. Overcrowding is an issue that results in pushing bighorn sheep onto private land, where there is no access. To maintain high harvest success no more than 8 licenses are issued. In the past when the quota increased to 12, success decreased drastically.

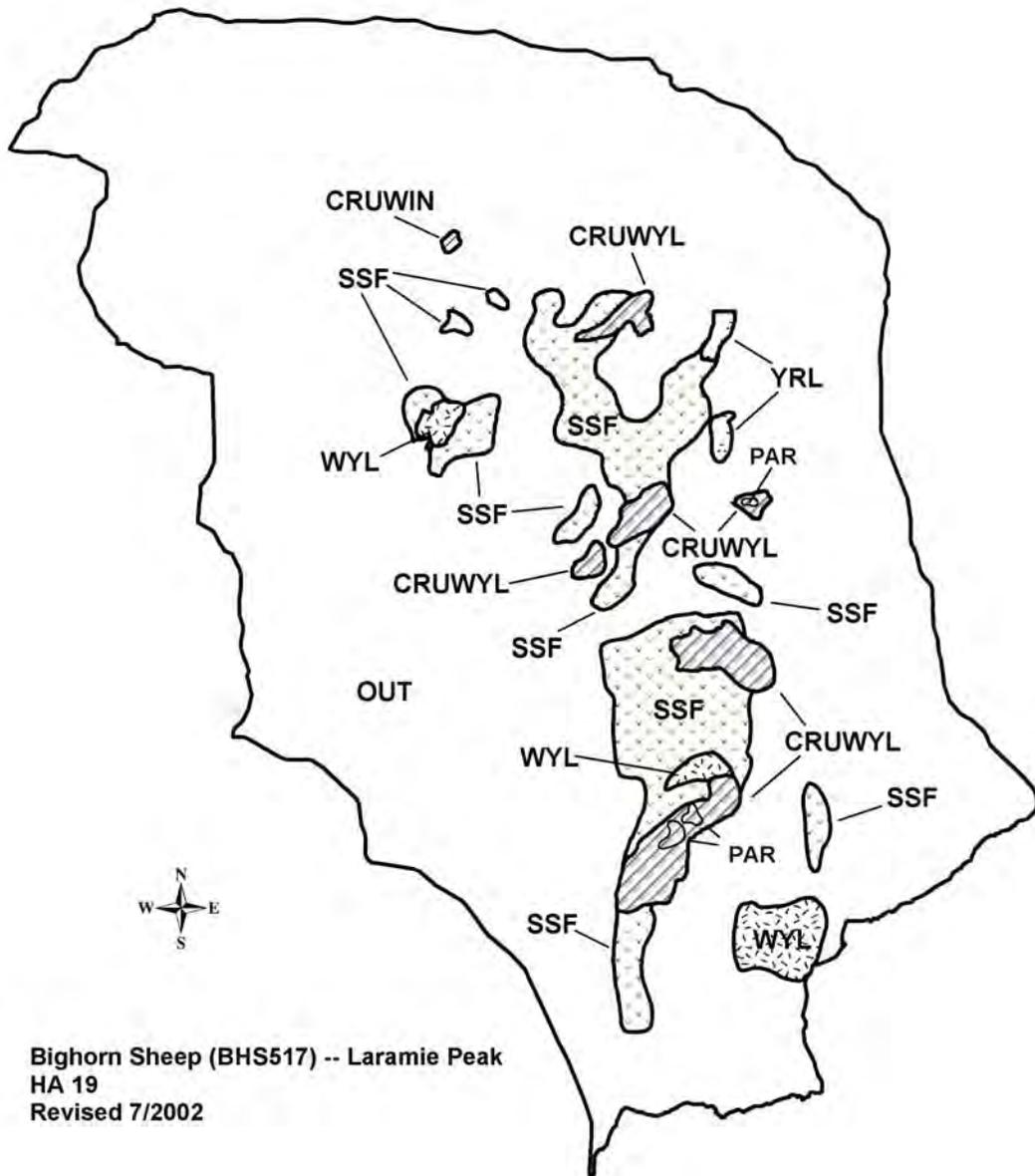
The Laramie Peak bighorn sheep season has been September 1-October 31 for the past 24 years. Prior to that, the season ran from September 1- October 14. The increased season

length appears to provide adequate opportunity to harvest a ram, given this is typically a once in a lifetime license.

In 2012 there were several fires that burned within bighorn sheep occupied habitat. The Arapahoe, Cow Camp and Russell's Camp fires burned over 112,000 acres, with the Arapahoe fire the largest (98,000 acres). Throughout the area there is observed recovery in vegetation. Photo points have been established throughout the fire to document plant succession. Perennial forbs and grasses along with aspen have re-established post-fire.

There is not a reliable working model for this herd unit due to limited population data collected on an annual basis.

For the 2014 season, 8 licenses will be offered for any ram along with 2 carryover licenses for a total of 10. Hunters should have a high probability of harvesting a mature ram. There is some concern with ten hunters going to the field that success will be compromised. To improve harvest success hunters will need to put more time into scouting and hunting if they are accessing public lands.



Bighorn Sheep (BHS517) -- Laramie Peak
 HA 19
 Revised 7/2002

2013 - JCR Evaluation Form

SPECIES: Bighorn Sheep

PERIOD: 6/1/2013 - 5/31/2014

HERD: BS519 - ENCAMPMENT RIVER

HUNT AREAS: 21

PREPARED BY: WILL SCHULTZ

| | <u>2008 - 2012 Average</u> | <u>2013</u> | <u>2014 Proposed</u> |
|---------------------------|----------------------------|-------------|----------------------|
| Population: | 0 | N/A | N/A |
| Harvest: | 0 | 0 | 1 |
| Hunters: | 0 | 0 | 1 |
| Hunter Success: | 0% | 0% | 100 % |
| Active Licenses: | 0 | 0 | 1 |
| Active License Percent: | 0% | 0% | 100 % |
| Recreation Days: | 1 | 0 | 1 |
| Days Per Animal: | 0 | 0 | 1 |
| Males per 100 Females | 73 | 30 | |
| Juveniles per 100 Females | 25 | 50 | |

| | |
|---|---------|
| Population Objective: | 200 |
| Management Strategy: | Special |
| Percent population is above (+) or below (-) objective: | N/A% |
| Number of years population has been + or - objective in recent trend: | 20 |
| Model Date: | None |

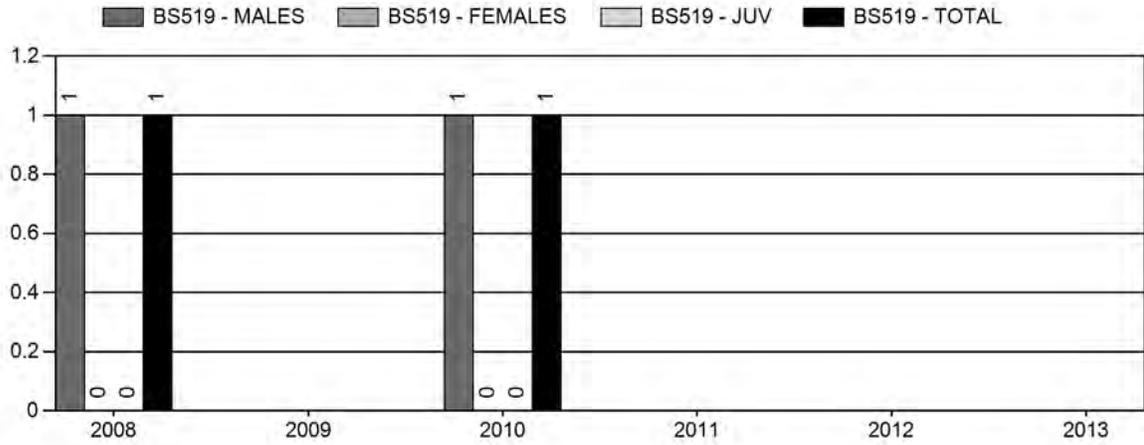
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

| | <u>JCR Year</u> | <u>Proposed</u> |
|--|-----------------|-----------------|
| Females ≥ 1 year old: | NA% | NA% |
| Males ≥ 1 year old: | NA% | NA% |
| Juveniles (< 1 year old): | NA% | NA% |
| Total: | NA% | NA% |
| Proposed change in post-season population: | NA% | NA% |

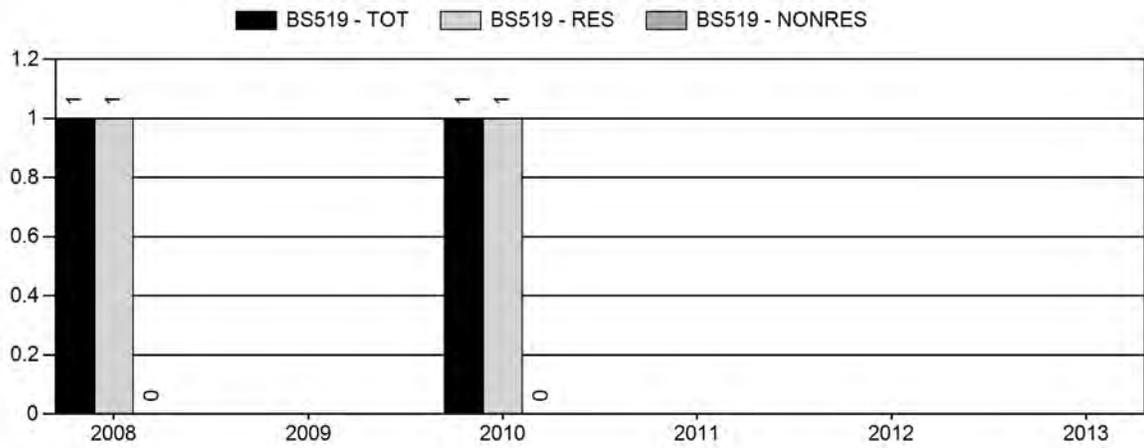
Population Size - Postseason



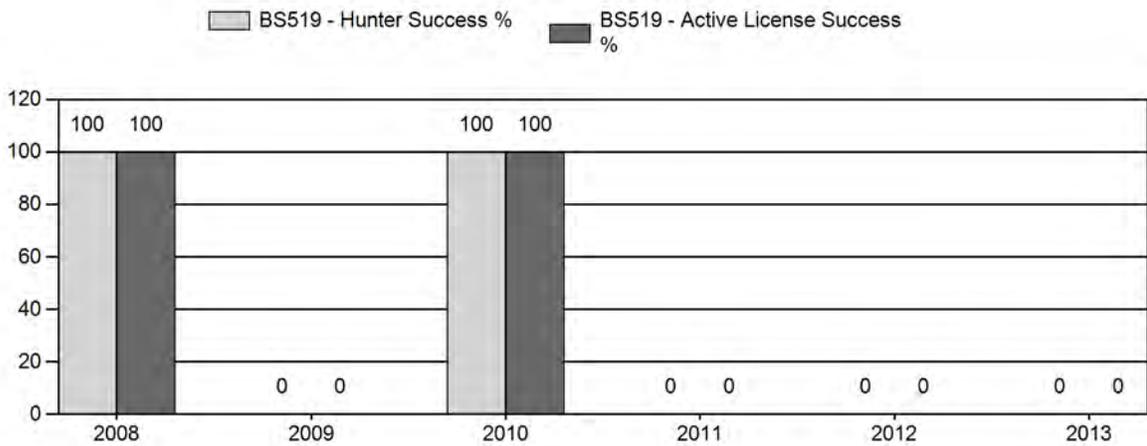
Harvest



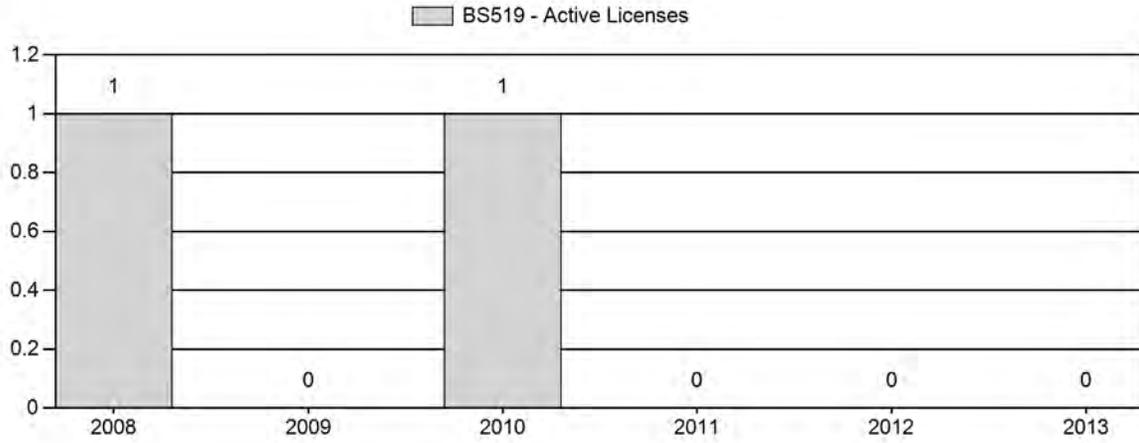
Number of Hunters



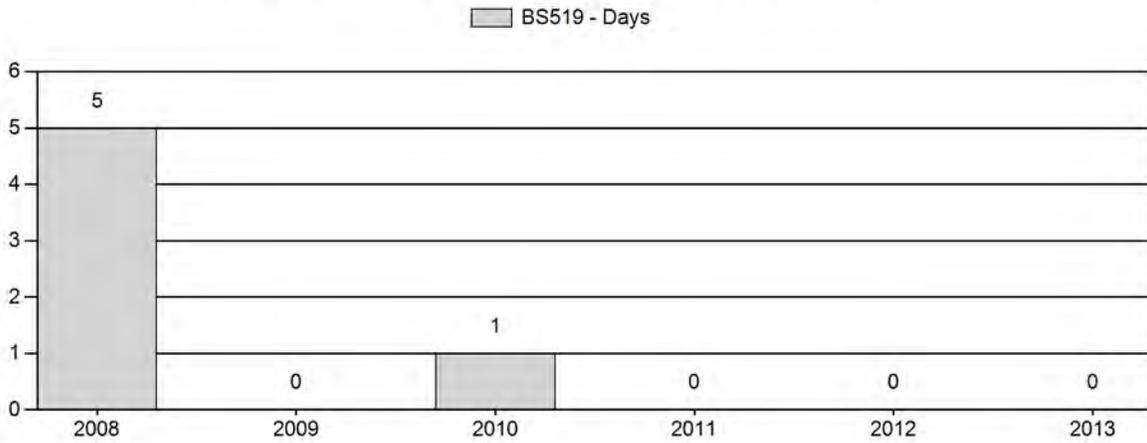
Harvest Success



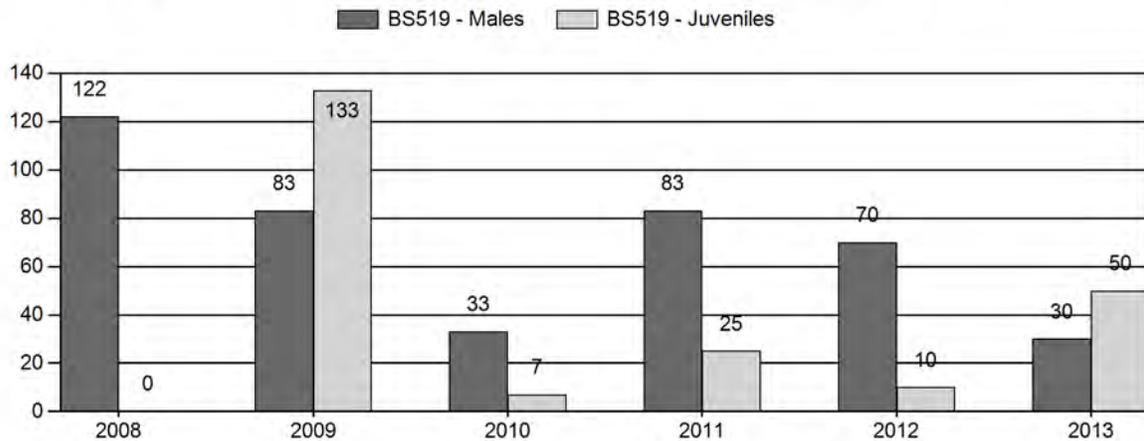
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2008 - 2013 Postseason Classification Summary

for Bighorn Sheep Herd BS519 - ENCAMPMENT RIVER

| Year | Post Pop | MALES | | | | FEMALES | | JUVENILES | | Tot Cls | Cls Obj | Males to 100 Females | | | | Young to | | |
|------|----------|-------|-------|-------|-----|---------|-----|-----------|-----|------------|------------|----------------------|-------|-------|-------------|------------|-------------|--------------|
| | | Ylg | Adult | Total | % | Total | % | Total | % | | | YIng | Adult | Total | Conf Int | 100 Fem | Conf Int | 100 Adult |
| 2008 | 0 | 1 | 10 | 11 | 55% | 9 | 45% | 0 | 0% | 20 | 46 | 11 | 111 | 122 | ± 0 | 0 | ± 0 | 0 |
| 2009 | 0 | 0 | 5 | 5 | 26% | 6 | 32% | 8 | 42% | 19 | 0 | 0 | 83 | 83 | ± 0 | 133 | ± 0 | 73 |
| 2010 | 0 | 0 | 5 | 5 | 24% | 15 | 71% | 1 | 5% | 21 | 0 | 0 | 33 | 33 | ± 0 | 7 | ± 0 | 5 |
| 2011 | 0 | 0 | 10 | 10 | 40% | 12 | 48% | 3 | 12% | 25 | 0 | 0 | 83 | 83 | ± 0 | 25 | ± 0 | 14 |
| 2012 | 0 | 0 | 7 | 7 | 39% | 10 | 56% | 1 | 6% | 18 | 0 | 0 | 70 | 70 | ± 0 | 10 | ± 0 | 6 |
| 2013 | 0 | 0 | 3 | 3 | 17% | 10 | 56% | 5 | 28% | 18 | 0 | 0 | 30 | 30 | ± 0 | 50 | ± 0 | 38 |

**Encampment River Bighorn Sheep (BS519)
 Hunt Area 21
 2014 Hunting Season**

| Hunt Area | Type | Dates of Seasons | | Quota | License | Limitations |
|-----------|------|------------------|---------|-------|---------------|-----------------------|
| | | Opens | Closes | | | |
| 18, 21 | 1 | Sep. 1 | Oct. 31 | 2 | Limited quota | Any ram (2 residents) |

| Hunt Area | Type | Quota change from 2013 |
|------------------------|----------|------------------------|
| 18, 21 | 1 | +2 |
| Herd Unit Total | 1 | +2 |

Management Evaluation

Current Management Objective: 200

Management Strategy: Special

2013 Postseason Population Estimate: NA

2014 Proposed Postseason Population Estimate: NA

Bighorn sheep in the Encampment River herd unit are managed toward a numeric objective of 200. A population model has not been constructed for the herd unit. The herd is managed under the bighorn sheep special management strategy. The objective was last reviewed in 1987.

Herd Unit Issues

Bighorn sheep numbers in this herd unit appeared to peak in the late 1970s, not long after reintroduction efforts. Bighorn sheep numbers have been in decline since the early 1980s. This decline has been attributed to decadent habitat. Domestic sheep in grazing on the west slope of the Sierra Madres also poses a disease concern for managers. The population is now at such a low number it is assumed natural recovery is not possible. Limited harvest opportunities have been offered in past years, in combination with the Douglas Creek bighorn sheep herd unit.

The State of Wyoming, and thus Wyoming Game and Fish Department, has intervened on behalf of the U.S. Forest Service, in the U.S. District Court case, BIODIVERSITY CONSERVATION ALLIANCE vs. BUTCH BLAZER, et al. This case is currently awaiting a ruling, and may affect future management of bighorn sheep in this herd unit.

Weather

Weather in this herd unit was relatively normal during the past bio-year. This weather pattern most likely had a neutral to positive influence on bighorn sheep. For specific

meteorological information for the Encampment River herd unit the reviewer is referred to the following link:

<http://www.ncdc.noaa.gov/cag/>

Habitat

Habitat conditions improved in 2013 with an increase in timely spring and fall precipitation. However, much of the transition and winter ranges were severely impacted by the drought conditions experienced in bio-year 2012. No bighorn sheep habitat production/utilization data was available for this herd unit. However, annual production rates should have improved from the previous year, while utilization rates on winter ranges likely continued to be high.

The limited number of habitat transects that have been established throughout the Laramie Region have not provided sufficient data to make reliable assumptions of habitat quantity or quality and consequently heavily influence population management for any particular big game specie.

Shrub communities within the Laramie Region that are annually assessed by game wardens, wildlife biologists, and terrestrial habitat biologists, include: true mountain mahogany, antelope bitterbrush, skunkbrush sumac, big sagebrush, and four-wing saltbush. A majority of these transects were established approximately 12–13 years ago. Transects were established for several different reasons, including: measuring habitat response prior to or following treatments (i.e. prescribed fire, wildfire, mowing), concern over historic or current domestic livestock or wild ungulate utilization levels, selection of “representative habitats” utilized by wildlife on identified winter ranges, and to compare present results with historic data sets.

Field Data

Adequate classification data for this herd has been difficult to collect. 2013 postseason classification observations were obtained while conducting mule deer and elk surveys from a helicopter in December of 2013. The classification results were 3 adult rams, 10 ewes, and 5 lambs. Past postseason classification efforts returned similar results. Based on the trend of this classification data, a reasonable population estimate of 20-40 bighorn sheep should be considered for this herd unit.

Population

A population model has not been constructed for this herd unit due to limited classification and no annual survival information. A review of the management objective, currently at 200 bighorn sheep, will be evaluated within the next 2-years.

Harvest Data

The hunting season in Hunt Areas 18 and 21 was closed in 2013.

Management Summary

There will be an open hunting season for this bighorn sheep in this herd unit in 2014. Two (2) resident licenses will be offered for the combination of Hunt Areas 18 and 21.

Bibliography of Herd Specific Studies

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