

# Ferris-Seminole Bighorn Sheep Herd Objective Review

May 2020

## **Presentation Outline:**

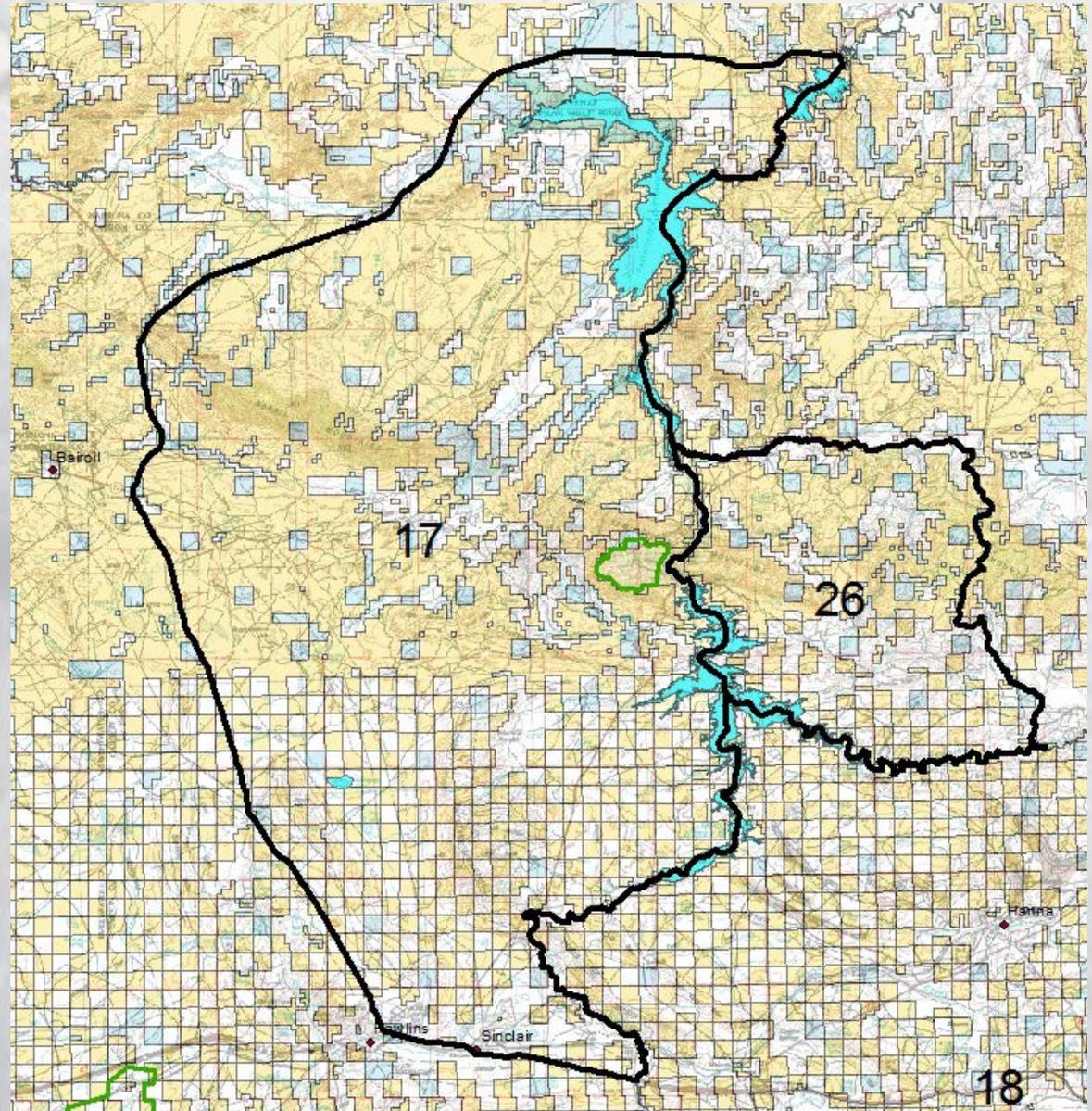
- **Herd History**
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# Ferris-Seminole Bighorn Sheep Herd Objective Review

May 2020

- Consists of Sheep Areas 17 and 26.
- Current Management Objective, first set in 1984, is to have a population of 300 bighorn sheep after the fall hunting season, at the beginning of winter.
- Thanks to transplants and research projects, roughly 35-40 of the animals in the herd are monitored with satellite-uplinked telemetry collars.
- The WGFD is proposing to change to an objective based upon Mid-Winter Trend Counts. The objective would still be 300 bighorn sheep, but would be based on a 3-year running average of actual counts rather than estimates and would probably mean an increase in the number of bighorn sheep in the herd unit.



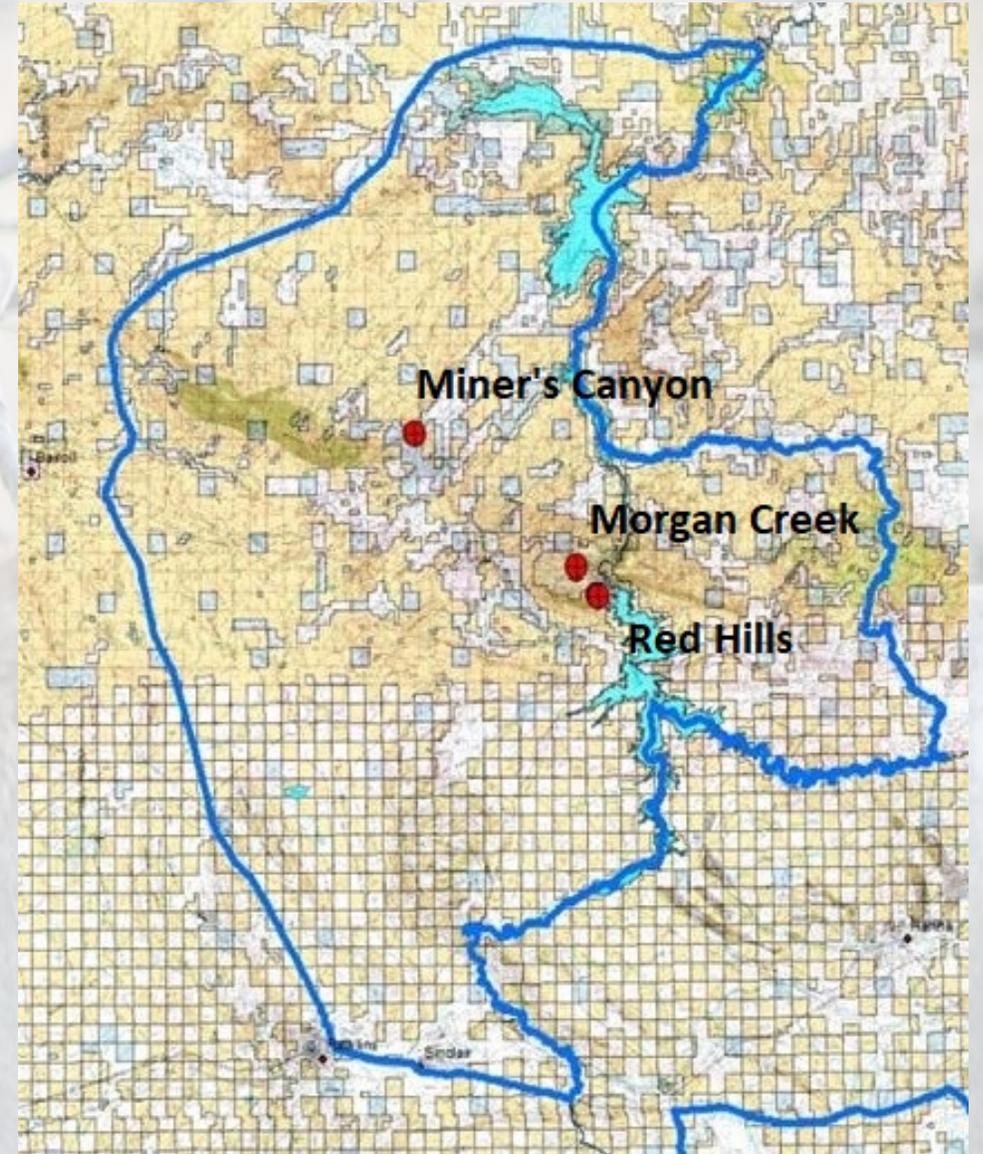
# Herd History

- The first attempt to reintroduce bighorn sheep into this herd was in 1958.
- Several additional transplants were made in the following decades, all using bighorn sheep from the migratory, high elevation Whiskey Mountain herd near Dubois.
- All these transplants failed. Sheep survived well, but lambs did not.
- Beginning in 2009, transplants of low elevation, non-migratory, early-lambing sheep were made from either Oregon or the Devil's Canyon herd near Lovell.
- Sheep from these source herds have their lambs a month or more earlier than Dubois sheep. Use of these early-lambing sheep is intended to increase lamb recruitment by having them born during the local Spring green-up, rather than in June when much of the local vegetation has already dried and cured.



# Recent Transplant History

<u>Date</u>	<u>No.</u>	<u>Source</u>	<u>Release Site</u>
Dec 2009	20	Paisley, Oregon	Morgan Creek, Seminoe Mountains
Jan 2010	12	Devil's Canyon, Wyoming	Red Hills, Seminoe Mountains
Dec 2010	20	John Day, Oregon	Red Hills, Seminoe Mountains
Mar 2015	25	Devil's Canyon, Wyoming	Red Hills, Seminoe Mountains
Feb 2016	24	Devil's Canyon, Wyoming	Miner's Canyon, Ferris Mountains
Feb 2017	22	Devil's Canyon, Wyoming	Miner's Canyon, Ferris Mountains
Dec 2017	20	Devil's Canyon, Wyoming	Miner's Canyon, Ferris Mountains
Feb 2018	<u>23</u>	Devil's Canyon, Wyoming	Miner's Canyon, Ferris Mountains
Total = 166			

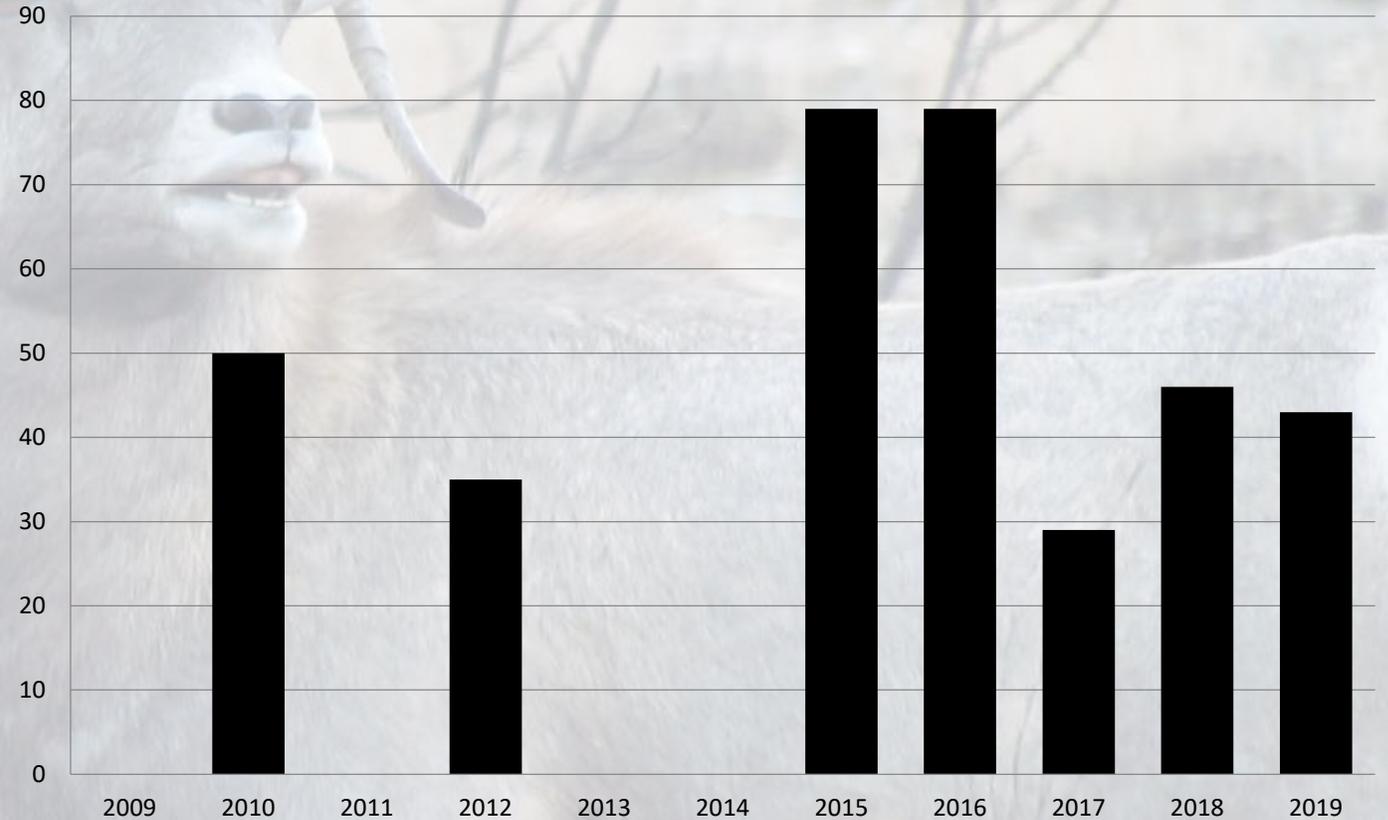


# Lamb Production

- Introduction of bighorn sheep adapted to low-elevation habitats and earlier Spring weather has been successful.
- Lamb recruitment has been good most years, and exceptional in some.
- Like pronghorn and mule deer populations in these low, arid habitats, production of young varies with spring weather and summer moisture.
- Good lamb survival has allowed the herd to grow.
- Most rams harvested in the past seven years have been native-born, not transplanted animals.

## Lamb / Ewe Ratios

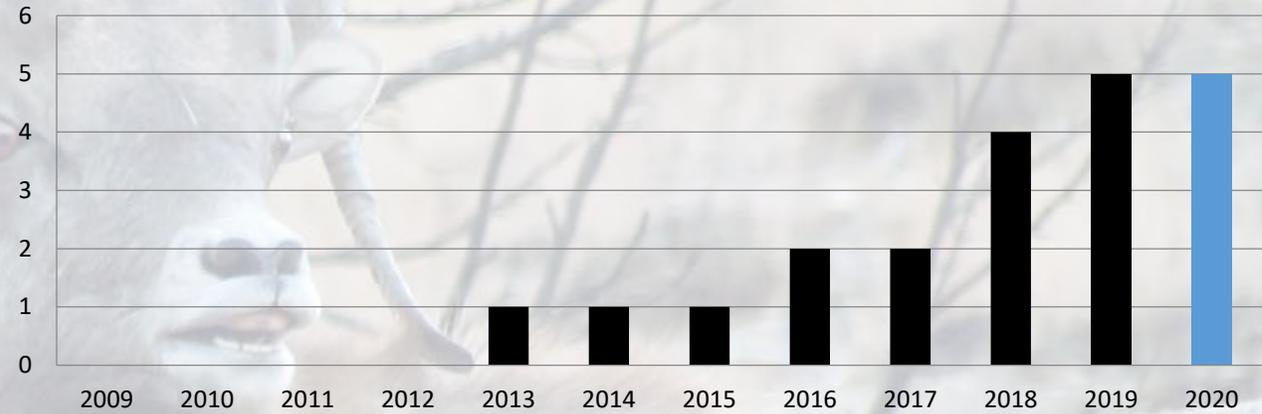
# lambs/100 ewes



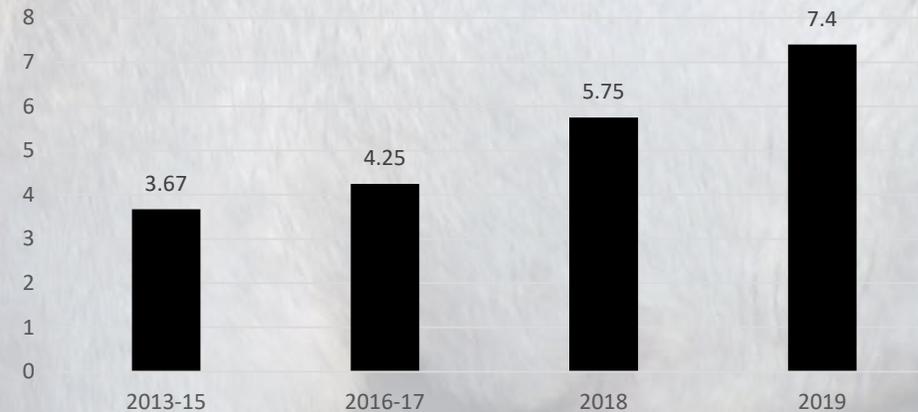
# Harvest

- Harvest from this herd was initiated in 2013, with only one license. License quotas slowly increased as the herd grew in size.
- Five licenses for “any ram” were issued in 2019, and the same number will be available in 2020.
- Age and trophy size of rams harvested from this young herd have increased over time. Average age of rams harvested in 2019 was twice that of the three rams taken from 2013 through 2015.

## Ferris-Seminole Bighorn Sheep Hunters Areas 17, 26



## Average Age of Harvested Rams



# Habitat Treatments

- Large acreages of the Ferris, Seminoe and Bennett Mountains have been burned in the past 13 years.
- Some were burned by the U.S. Bureau of Land Management (BLM) as planned habitat treatments, to benefit a multitude of wildlife species and habitats, not just bighorn sheep.
- The largest fires have been wild fires, resulting from lightning strikes. While often destructive, wild fires also produce habitat changes favorable to many wildlife species, including bighorn sheep.



# Habitat Treatments

## Recent fires:

Summer 2007 – Bennett Mountain wild fire

Spring 2011 - Morgan Creek prescribed burn

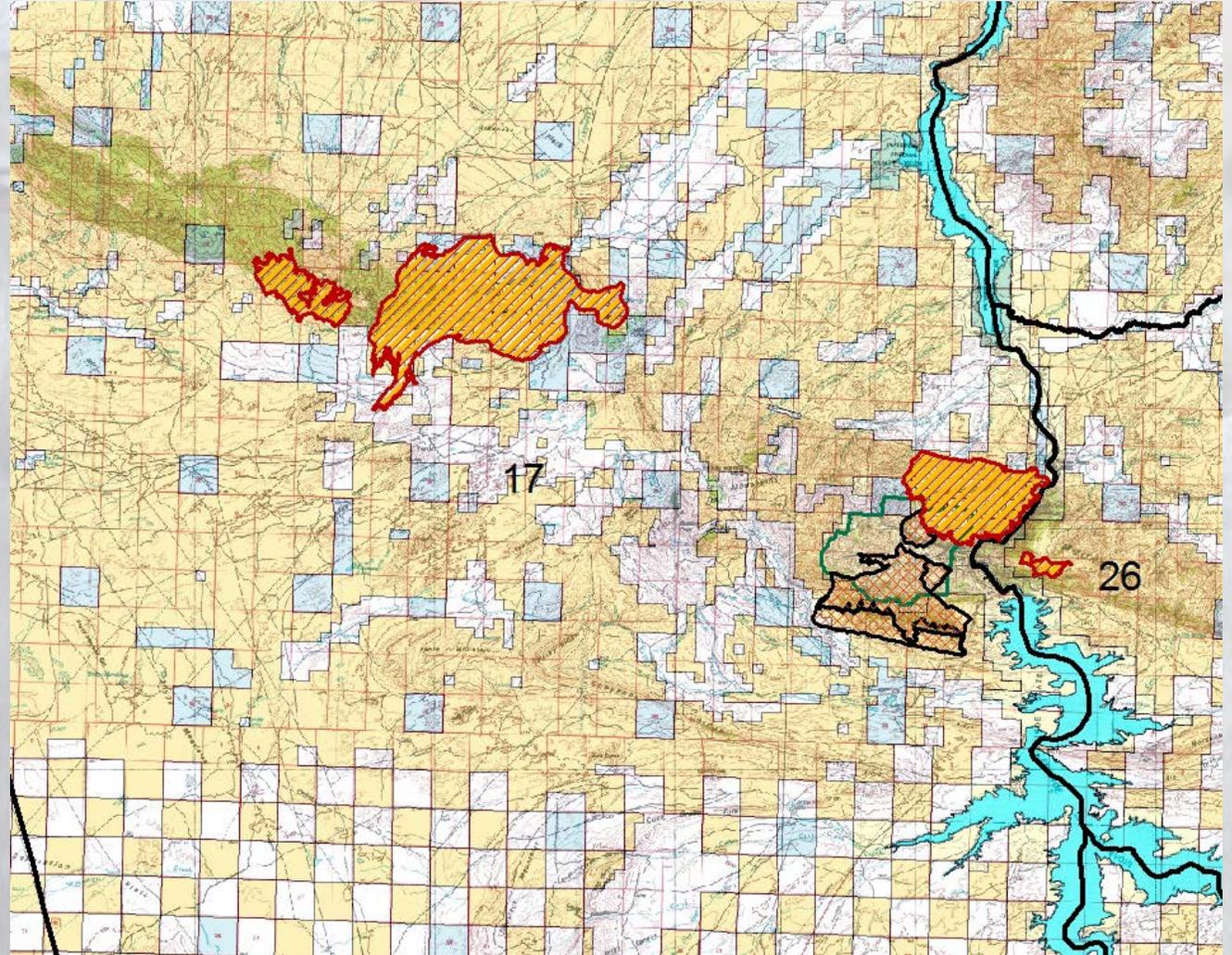
Fall 2011 – Ferris Peak wildfire

Spring 2012 – Morgan Creek prescribed burn

Summer 2012 – Seminoe wild fire

Summer 2012 – Ferris wild fire

2013 – Morgan Creek prescribed burn



# Habitat Treatments

- **Guzzlers are a tool for collecting scarce precipitation and storing it in covered tanks to reduce evaporative loss to provide animals drinking water in remote locations.**
- **Several projects have installed guzzlers in this herd unit to primarily benefit bighorn sheep:**

**2012 – Installed within the 2007 burn scar of top of Bennett Mountains.**

**2016 - Installed at Indian Pass on Morgan Creek WHMA in Seminoe Mountains.**

**2017 – Installed at 4 sites on eastern Ferris Mountains.**



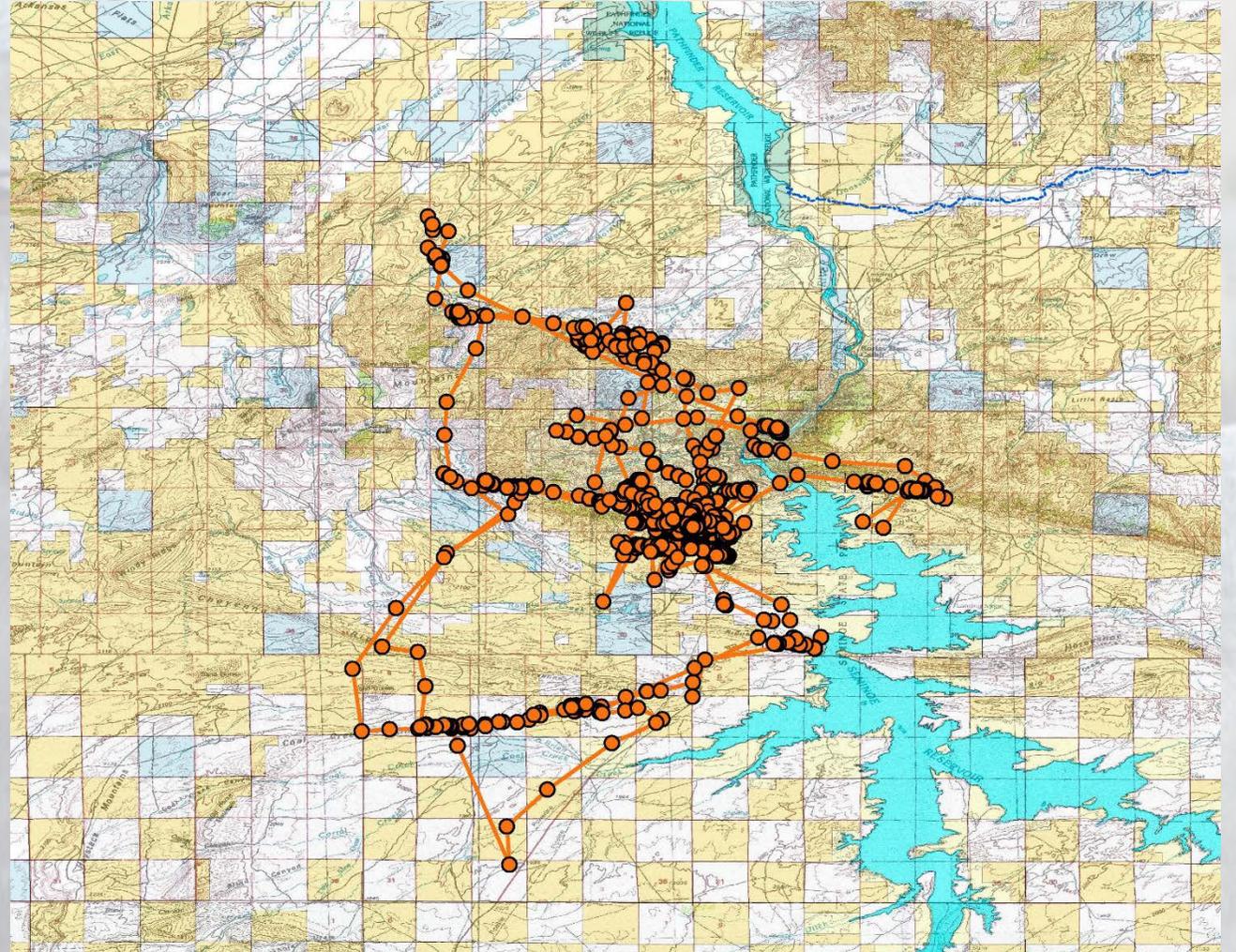
# Future Habitat Treatments

- After decades of fire suppression, there are still expanses within this herd unit where use of prescribed fire could restore more natural, diverse and productive habitats. The BLM, with cooperation of local landowners, the WGFD and interested NGOs are considering several burn projects in the foreseeable future:
- Prescribed burn in upper Markingpen Creek on the Morgan Creek WHMA in the Seminole Mountains planned for 2020-21?
- Prescribed burn east of Young's Pass on Ferris Mountains, currently undergoing environmental review by the BLM.



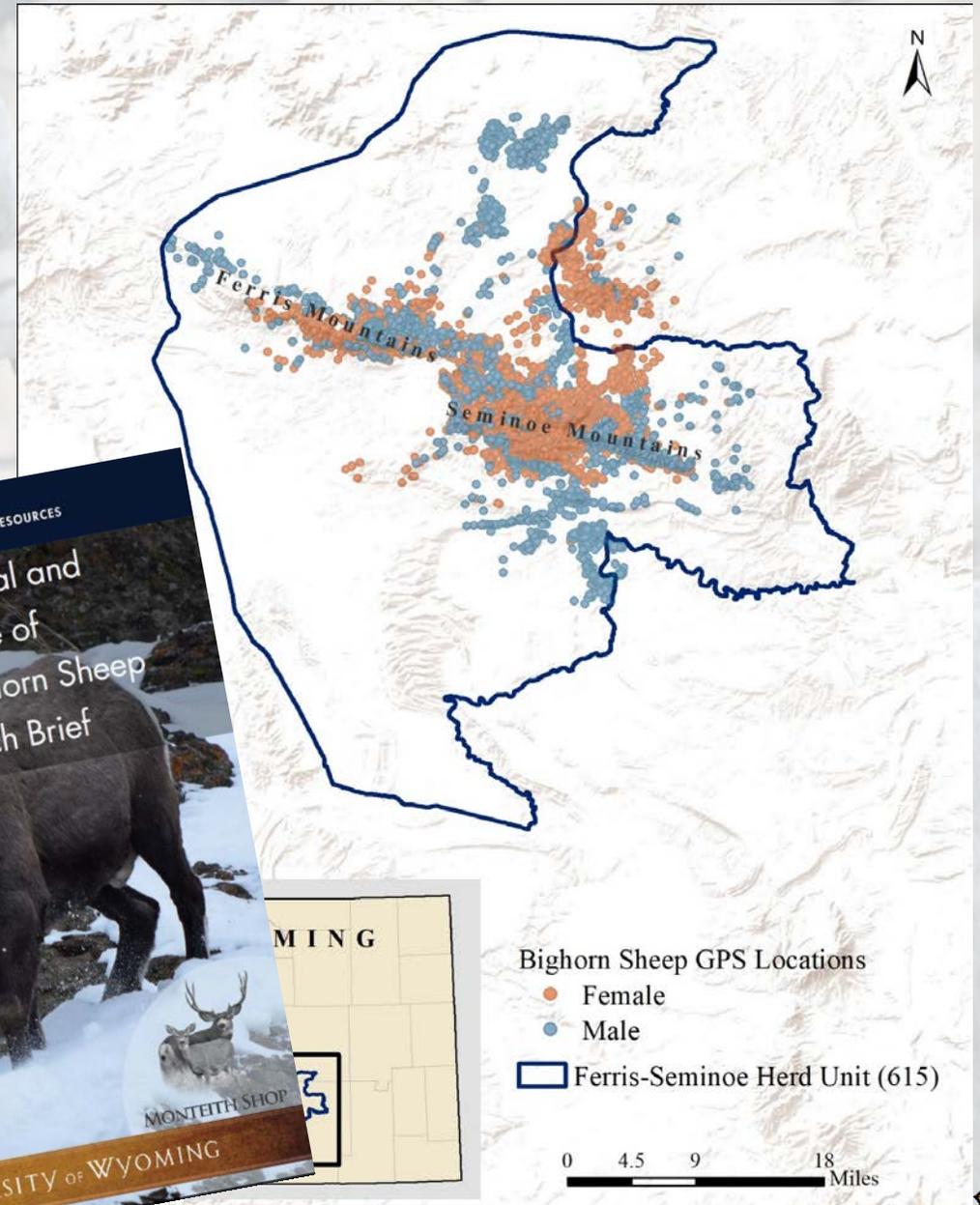
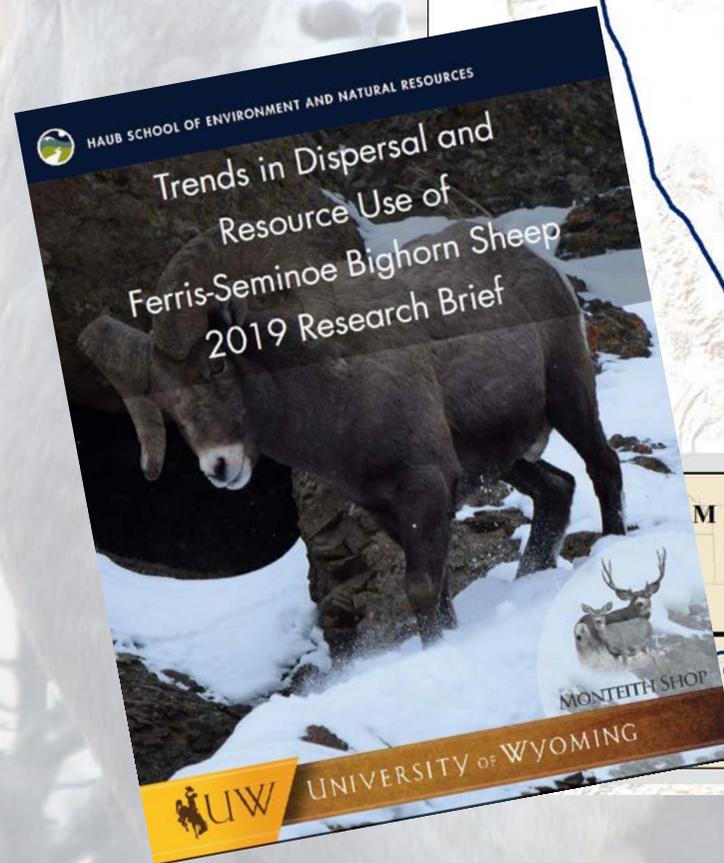
# Telemetry

- Over 100 bighorn sheep in this herd have been marked with GPS telemetry collars over the past 10 years.
- Besides allowing tracking and monitoring survival of these ewes and rams, collar data also allow researchers to monitor habitats selected by these low elevation, non-migratory bighorn sheep.



# Habitat Mapping

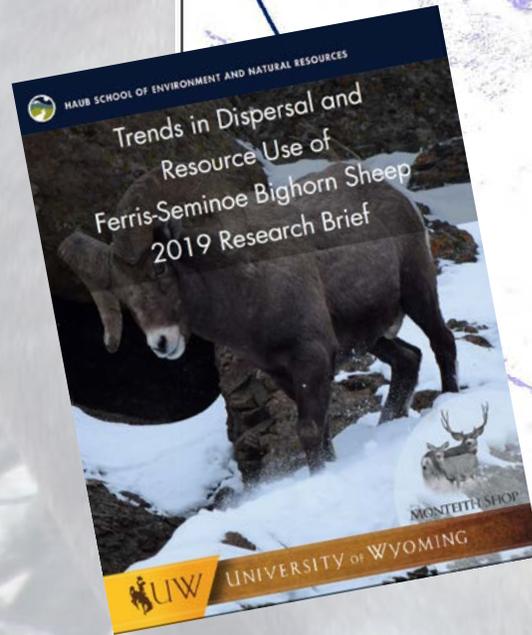
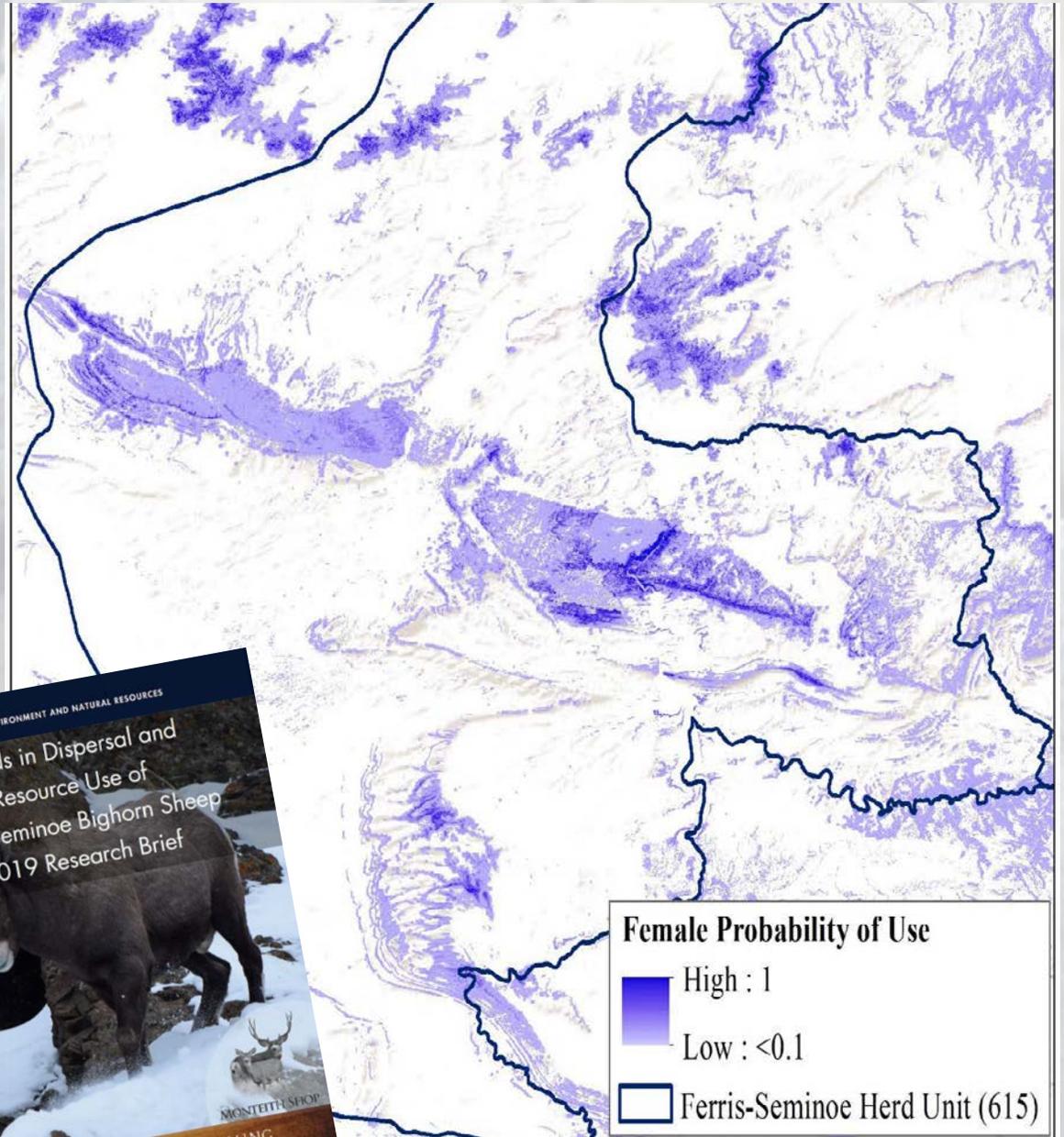
- Researchers from the University of Wyoming used telemetry data from these bighorn sheep and detailed topographic and vegetation maps to identify specifically what habitats these ewes and rams were selecting.
- They were then able to generate maps of current and potential bighorn sheep habitat within this herd unit.



# Habitat Mapping

(continued)

- The University of Wyoming analyses also show there are still suitable bighorn sheep habitats within this herd that are currently unoccupied, or only lightly used, by bighorn sheep, particularly in the western Ferris Mountains in Area 17 and eastern Bennett Mountains in Area 26.



# Population Trend

- With good lamb recruitment, significant habitat treatments and additional transplants to expand the herd into available habitats on the Ferris Mountains, the number of bighorn sheep in this herd has increased.
- As with local mule deer and pronghorn herds, severe weather, as in April 2013 and the 2019-20 winter, have increased losses and produced temporary declines in herd size.
- Estimates of herd size, based upon winter counts with estimates of missed animals added according to telemetry collar locations, indicate the herd should be nearing the 300 objective.



# Current Objective

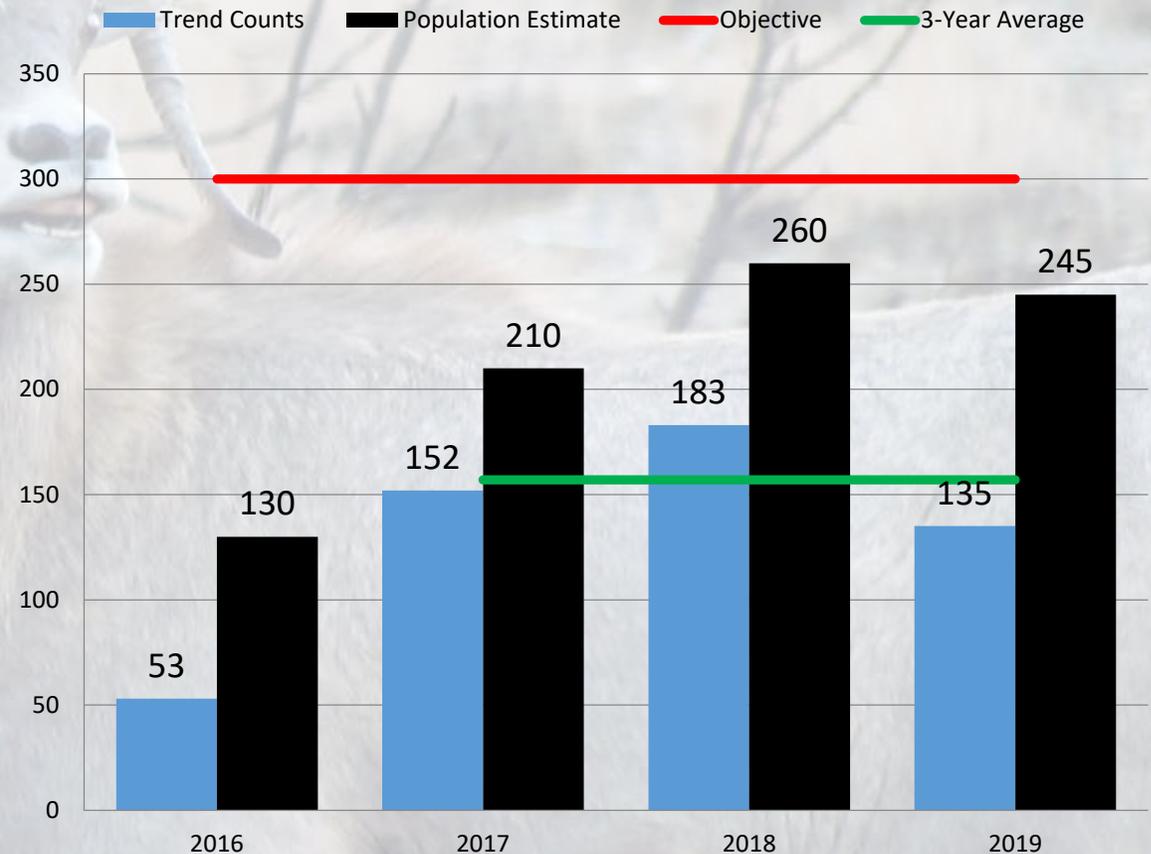
- The current objective for this bighorn sheep herd is to maintain a post-hunt population of 300 animals.
- This objective largely relies on collars to identify which bands of sheep were missed during the winter helicopter counts. Estimates of the sizes of these bands are then added to the count total to yield a best estimate of herd size.
- Transplants and research projects have provided a good representation of collared animals in the herd, but collar batteries only last two to three years. Collaring additional sheep to replace battery failures is prohibitively expensive without research or transplant funding.



# Proposed Objective

- Anticipating the eventual failure of most of the radio-collars on bighorn sheep in this herd, the WGFD is recommending changing to an objective based upon a 3-year running average of the actual number of bighorn sheep seen during the mid-winter helicopter trend counts. The 3-year average for the most recent three trend counts is 157 sheep.
- Retaining the 300 sheep objective but basing it upon the actual number of sheep counted rather than estimates will allow the herd to continue to increase above current levels.
- This increase is desirable and sustainable based upon high lamb production and survival, impressive horn growth on harvested rams, long-term survival of marked animals, extensive habitat improvements that have occurred, and identification of large areas of suitable bighorn habitat in lightly used or unused portions of the herd unit.

## Mid-Winter Trend Counts and Population Estimates



# Questions, Comments or Suggestions

If you have questions, please call or email:  
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Comments and suggestions can  
be submitted online at

<https://bit.ly/FSBHS>

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