



Bighorn Sheep Recommendations



August 2025

Bighorn Sheep Summary and Harvest Recommendation

August 22, 2025

Bighorn sheep were extirpated from Nebraska in the early 1900s due to habitat loss, disease, and unregulated hunting. In 1981, with assistance from conservation partners, the Nebraska Game & Parks Commission (NGPC) began a Bighorn Sheep Management Program with the first bighorn reintroduction at Fort Robinson State Park. Four additional reintroductions occurred (2001, 2005, 2007, 2012) resulting in five herds in western Nebraska; three herds in the Pine Ridge (northern panhandle), and two herds in the Wildcat Hills (southern panhandle, Page 11).

With the assistance of conservation partners, NGPC has implemented several bighorn sheep research projects, acquired critical bighorn habitat tracts, improved habitat on public lands, worked with landowners that own domestic sheep, and continued to monitor the health of bighorn sheep herds in Nebraska.

Bighorn sheep are a sensitive and vulnerable species and are listed as a Tier I At-Risk species in the Nebraska Natural Legacy Project, our comprehensive state wildlife action plan. Disease—primarily pneumonia—has reduced population growth and continues to be the greatest challenge in Nebraska and most western states. Today, approximately 279 bighorn sheep (including lambs produced in 2025) occur in Nebraska. Bighorn sheep are considered one of the most majestic big game species in North America. Their presence has created recreational opportunities such as viewing, photography and hunting. With continued assistance from our partners, we can make this a successful venture for all to enjoy in perpetuity.

A status report for each herd follows.

Pine Ridge Bighorn Sheep Herds

Fort Robinson herd:

The Fort Robinson bighorn sheep herd was reintroduced in 1981 beginning with two mature rams and four mature ewes in a captive enclosure. In December 1988, 21 bighorn sheep were released from the enclosure. In January 1993, the remaining 23 bighorn sheep were released, and the enclosure was removed. From 1993-2004, the herd slowly increased, reaching a peak of approximately 130 individuals. However, the population experienced a pneumonia die-off in 2005 and again in 2007. These outbreaks were followed by low recruitment in subsequent years, which substantially reduced population numbers. In 2014, 16 bighorns were translocated from the Wildcat Hills Hubbard's Gap herd to the Fort Robinson herd. However, little to no lamb recruitment has been observed since the most recent die-off (2007) and the population has slowly declined.

From 2017-2020, 44 ewes were captured and marked with radio transmitters, increasing NGPC staff's ability to determine cause-specific mortality of lambs. Research on this herd was completed in September 2021 and found pneumonia to be the primary factor impacting lamb survival. Predation was the leading cause of mortality in adults. This research also involved removing any sheep testing positive for *Mycoplasma ovipneumoniae*, the pathogen associated with fatal pneumonia in lambs, as well as pneumonia outbreaks in adults.

Another research project that began in 2018 examined the interaction between domestic sheep and wild bighorn sheep. Both domestic and wild sheep were tested for disease and landowners were surveyed for their knowledge of the *M. ovipneumoniae* pathogen and its potential impacts to domestic and wild sheep. A risk of contact model is being developed that will calculate areas where wild sheep are less likely to interact with domestic sheep. Based on this research, a focus group was developed with area landowners to discuss methods for mitigating disease transmission between domestic and wild sheep. If these methods are successful at reducing the likelihood of contact between wild and domestic populations, additional wild sheep may be translocated into this area.

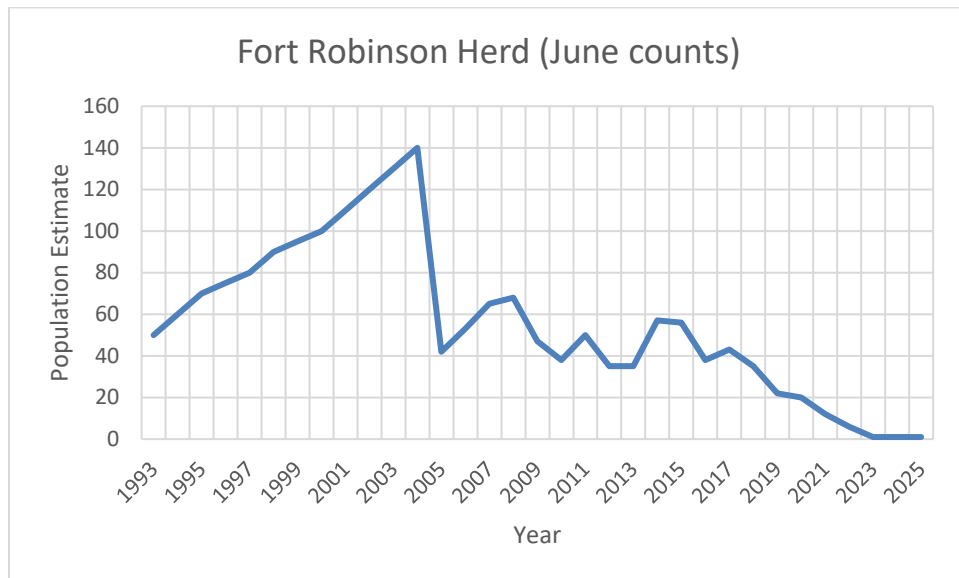


Figure 1. Annual population estimates (based on June counts) of the Fort Robinson bighorn sheep population during 1993-2025.

Barrel Butte herd:

The Barrel Butte herd was established in 2005 when 49 sheep were released on the Bighorn Wildlife Management Area. This herd has expanded its range in the Pine Ridge between Crawford and Chadron. In 2014, 10 bighorn sheep were translocated from the Wildcat Hills Hubbard's Gap herd to the Barrel Butte herd. Since 2015, there has been little or no lamb recruitment in the Barrel Butte herd.

From 2017-2020, 34 ewes were captured via helicopter for collaring and sampling and vaginal implant transmitters were inserted in all pregnant ewes. This allowed NGPC staff to successfully capture and collar lambs in the spring to determine cause-specific mortality. The primary cause of mortality for lambs was pneumonia, while predation was the leading cause in adults. Although population growth was observed in 2021 after removal of chronic disease carriers, Epizootic Hemorrhagic Disease has recently affected the herd, causing substantial adult and lamb mortality. Much like the Fort Robinson herd, a focus group was developed with area landowners to develop ways to mitigate disease transfer between domestic and wild sheep. As the risk of contact models are implemented and mitigation measures are applied, more wild sheep may be translocated into this area. In 2025, one ewe, one lamb from this herd and 5 rams from the various Pine Ridge herds were radio-collared to increase NGPC staff's ability to assess cause-specific mortality of adults. Currently, all 7 of these sheep are within the Barrel Butte range.

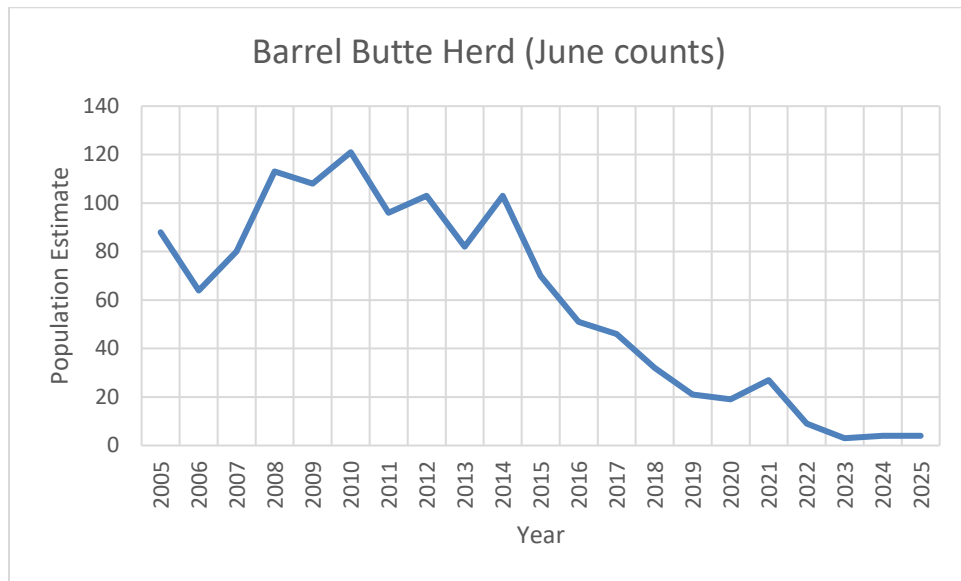


Figure 2. Annual population estimates (based on June counts) of the Barrel Butte bighorn sheep population from 2005-2025.

Sowbelly Canyon herd

In 2012, 41 bighorns were captured in Alberta, Canada and released in the Sowbelly Canyon area northeast of Harrison, Nebraska. The herd reached a peak of approximately 98 individuals in 2014. Due to pneumonia issues that began in 2014, lamb recruitment and adult survival have been poor resulting in a population decline of approximately 90%. Lamb survival has slowly increased since 2021. Extensive overlap of the area occupied by this herd with private lands has limited monitoring of the Sowbelly herd. Staff will continue to monitor adults and lamb in this herd but the population has declined to where recovery is unlikely on its own. Translocation and disease management efforts are being considered for this and all Pine Ridge herds.

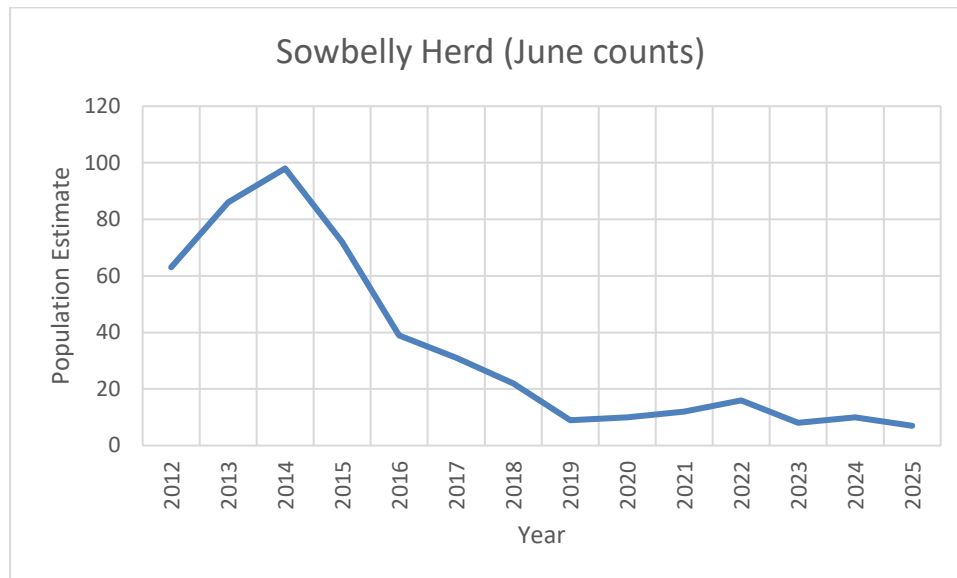


Figure 3. Annual population estimates (based on June counts) of the Sowbelly bighorn sheep population from 2011-2025.

Wildcat Hills Bighorn Sheep Herds

Cedar Canyon herd:

Since the release of 22 bighorn sheep into the Wildcat Hills in 2001, the Cedar Canyon herd has grown and appears to be stable, despite some disease-related setbacks. From 2001-2005, relatively high lamb survival and low adult mortality was observed. In 2005, the herd numbered approximately 64 individuals. However, a pneumonia outbreak occurred during 2006, reducing the population to approximately 32 individuals.

Currently, the Cedar Canyon bighorn sheep population is slowly increasing with an estimated population of approximately 46 animals. During 2022 and 2023, 14 animals were captured and tested for disease. Two *M. ovipneumoniae* positive animals were detected during these captures. Intensive monitoring of lamb health and recruitment allows staff to evaluate the influence of disease in the population. The strain of *M. ovipneumoniae* detected may not be affecting lamb survival as much as strains from other populations associated with relatively poor lamb recruitment, but ongoing monitoring will be required to further clarify this hypothesis. Recent adult mortalities have been due to mountain lion predation and Bluetongue virus infections. If this herd continues to grow and disease prevalence is reduced, it could serve as a source population to augment other Nebraska bighorn

sheep herds.

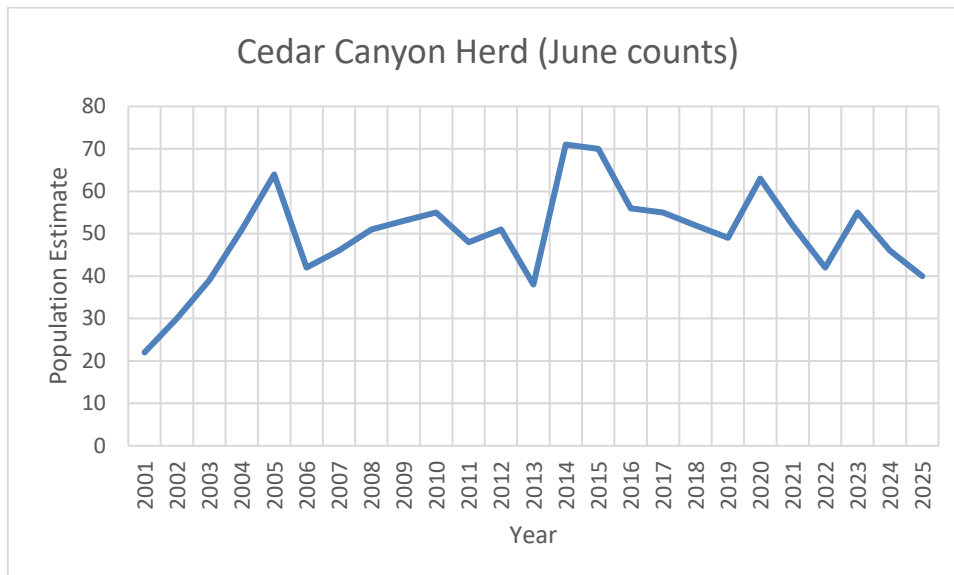


Figure 4. Annual population estimates (based on June counts) of the Cedar Canyon bighorn sheep population during 2001-2025.

Hubbard's Gap herd:

In 2007, 51 bighorns were released on private land in the Wildcat Hills south of McGrew. During 2018-2020, 88 ewes were captured and subsequently tracked to determine survival and cause-specific mortality for adults and lambs. This research concluded in 2021 and there was no evidence of disease impacts to the herd at that time. Eighty additional animals were captured during 2022-2024. During these captures, *M. ovipneumoniae* positive animals were detected. The strain of *M. ovipneumoniae* was the same strain type as the strain detected in the Cedar Canyon population and may not be impacting lamb survival as much as strains associated with poor lamb recruitment in other populations.

During 2024, adult and lamb mortality was higher than in recent years due to disease (Bluetongue virus and pneumonia) and mountain lion predation (only confirmed in radio-collared adults). Survival was most affected from August 2023-January 2024, and most surviving animals appear to be asymptomatic. If disease pathogens can be reduced, this herd could serve as a source population to augment other bighorn sheep herds in Nebraska, as well as an area that is unoccupied by ewes near Scottsbluff Monument.

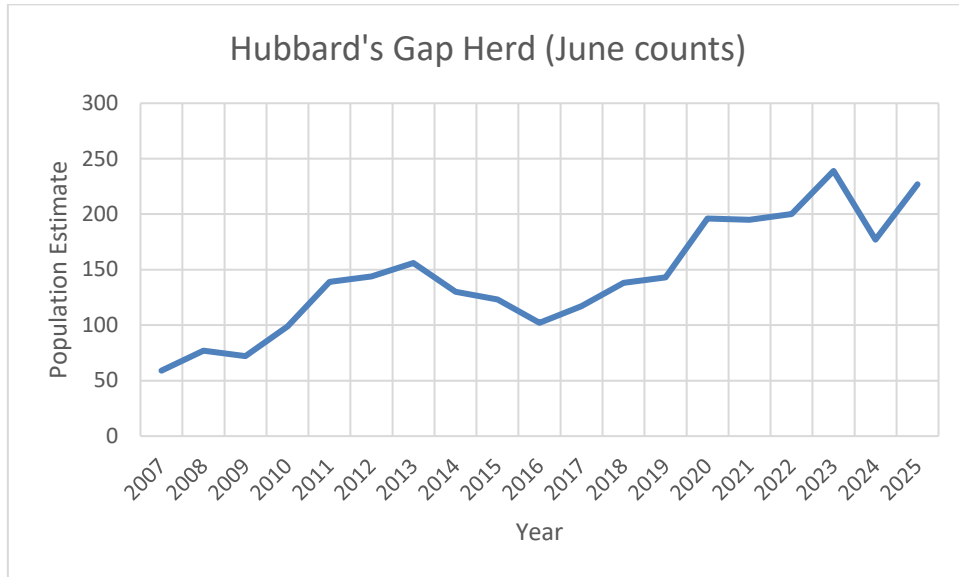


Figure 5. Annual population estimates (based on June counts) of the Hubbard's Gap bighorn sheep population during 2007-2025.

Restoration Facility

Due to the declining populations in the Pine Ridge and lack of available sheep for transplant from other states, a restoration facility is under consideration to utilize bighorn sheep from the Wildcat Hills to restore bighorn populations in the Pine Ridge. The facility design and process are currently under development and review.

Harvest Record

Year	B&C Score	Safari Club Score	Herd	Name	Permit Type
1998	185 7/8	186 7/8	FR	Mr. Stride	Auction
1998	172 3/8	--	FR	Ed Morgan	Lottery
1999	172	--	FR	Tyler Vettles	Lottery
2000	174 1/2	176 3/8	FR	Steve Byers	Auction
2000	Appx. 170-175	--	FR	Andrew Summer	Lottery
2001	179	--	FR	Leon Kriesel	Lottery
2002	179 6/8	--	FR	Burt Kizer	Auction
2002	180	--	FR	Brad Eriksen	Lottery
2003	178 2/8	--	FR	Steve Furley	Lottery
2004	179	--	FR	Brian Newton	Lottery
2005	180 7/8	--	FR	Joe Glover	Auction
2005	Appx. 170-172	--	FR	Jim Milliken	Lottery
2008	Appx. 170	--	FR	David Janssen	Lottery
2009	178 5/8	--	FR	John Marsh	Auction
2009	170 5/8	--	FR	Brett Bollwit	Lottery
2011	182 2/8	--	FR	Thomas Lemmerholz	Auction
2011	177 5/8	--	FR	Tyson Ritz	Lottery
2014	167	--	FR	Johnny Barta	Lottery
2015	173 5/8	--	CC	Barbara Sackman	Auction
2015	190 5/8	--	BB	Terry Bogle	Lottery
2016	165 2/8	--	FR	Brett Roberg	Lottery
2017	Appx. 160s	--	FR	Jack Nemth	Lottery
2017	193	--	HG	Jason Bruce	Auction
2018	182	--	HG	Curt Richardson	Auction
2018	160	--	FR	Dave Hunter	Lottery
2019	180 1/8	--	BB	Frank Tritz	Auction
2019	171	--	CC	Trevor Premer	Lottery
2020	170 2/8 Gross	--	FR	Matt Ogden	Lottery
2021	201 5/8	--	HG	Grant Smith	Auction
2021	177 2/8	--	CC	Tate Knutson	Lottery
2022	186 5/8	--	HG	Kevin Small	Auction
2022	Appx. 170	--	CC	Jerry Fischer	Lottery
2023	Appx. 187	--	HG	Jay Webster	Auction
2023	190 7/8	--	FR	Kiersten Black (Youth)	Lottery
2024	Approx 187		HG	Taylor Raats	Auction
2024	Approx 180		CC	Robin Ward	Lottery

B. Newton and J. Bruce harvested rams with the use of archery equipment. All other harvested sheep have been with firearms. In 2021, the state record ram was taken from Hubbard's Gap scoring 201 5/8.

Thirty-six bighorn sheep (all mature rams) have been harvested in Nebraska since 1998. Due to population fluctuations and changing age structure availability of mature rams for some years had no permit allocations.

In March 2025, a management hunt (1/2 curl or less) was held within the Cedar Canyon herd to address skewed ram/ewe ratios and reduce the disease risk of ram forays. Two permits were allocated and both were filled.

Population Structure By Herd (2025 Spring Survey Data)

Fort Robinson Herd

Total Population	1	Total Population	40
Adult Rams	1	Adult Rams	21
8.5 & older	0	8.5 & older	1
6.5 – 7.5	0	6.5 – 7.5	6
3.5 – 5.5	1	3.5 – 5.5	5
1.5 – 2.5	0	1.5 – 2.5	9
Adult Ewes	0	Adult Ewes	13
Lambs	0	Lambs	6
Lambs per Adult Ewe	0	Lambs per Adult Ewe	0.58
Adult Rams per Adult Ewe	N/A	Adult Rams per Adult Ewe	1.62

Cedar Canyon Herd

Barrel Butte Herd

Total Population	4	Total Population	227
Adult Rams	2	Adult Rams	68
8.5 & older	0	8.5 & older	10
6.5 – 7.5	0	6.5 – 7.5	14
3.5 – 5.5	1	3.5 – 5.5	19
1.5 – 2.5	1	1.5 – 2.5	25
Adult Ewes	1	Adult Ewes	98
Lambs	1	Lambs	61
Lambs per Adult Ewe	1.00	Lambs per Adult Ewe	0.62
Adult Rams per Adult Ewe	2.00	Adult Rams per Adult Ewe	0.69

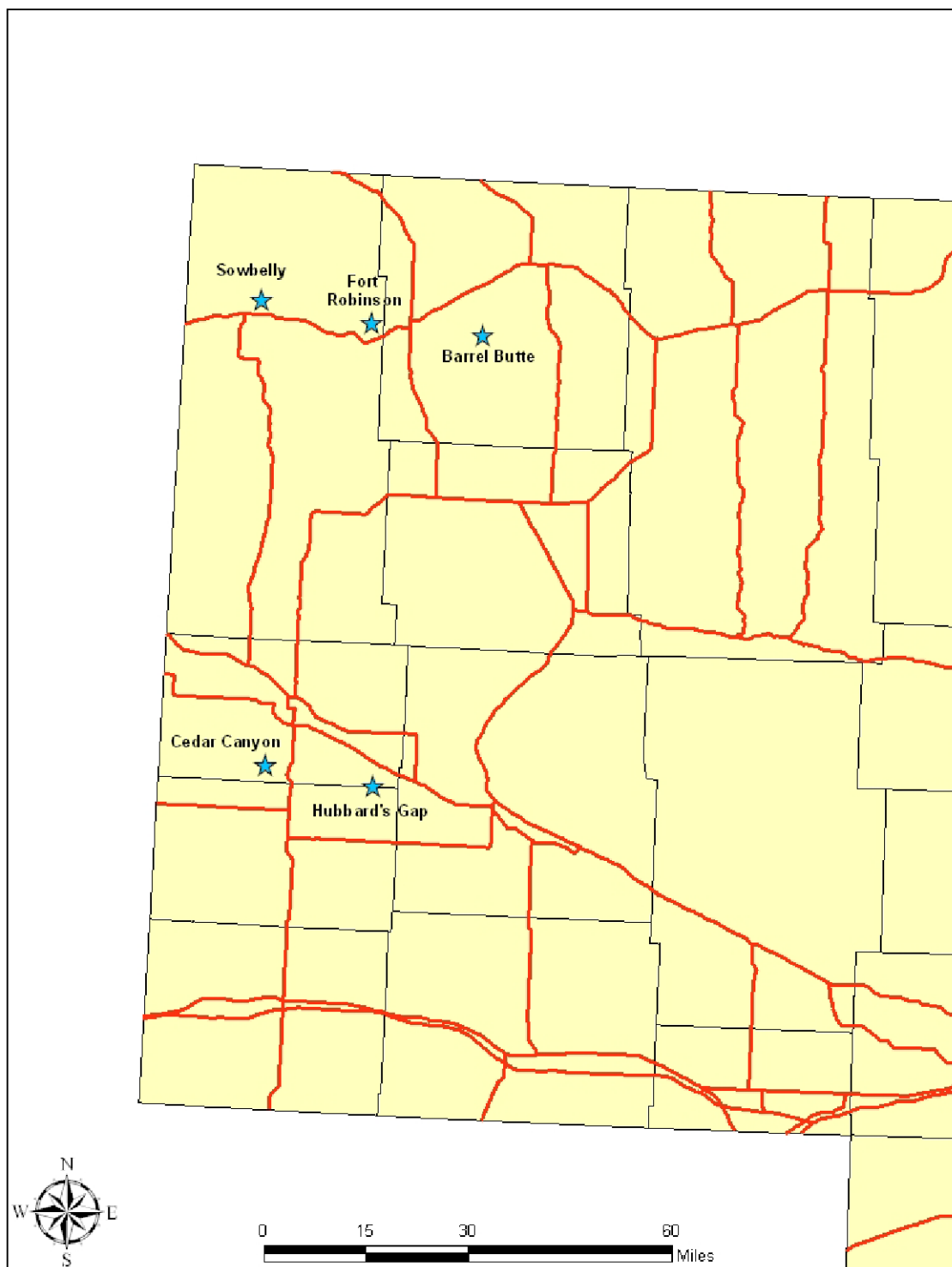
Hubbard's Gap Herd

Sowbelly Canyon Herd

Total Population	7	Total Population	279
Adult Rams	4	Adult Rams	96
8.5 & older	0	8.5 & older	11
6.5 – 7.5	0	6.5 – 7.5	20
3.5 – 5.5	3	3.5 – 5.5	29
1.5 – 2.5	1	1.5 – 2.5	36
Adult Ewes	3	Adult Ewes	115
Lambs	0	Lambs	68
Lambs per Adult Ewe	0.00	Lambs per Adult Ewe	0.59
Adult Rams per Adult Ewe	1.33	Adult Rams per Adult Ewe	0.83

Statewide

Bighorn Herd Locations



2026 Harvest Recommendation

Relative to other western states, Nebraska has harvested relatively few bighorn sheep each year. However, every permit holder has harvested a mature ram. All harvest (36 rams) has occurred from the Fort Robinson, Barrel Butte, Hubbard's Gap, and Cedar Canyon herds. Of the 96 adult rams available for possible harvest (as of July 2025), 11 rams are 8.5 years of age or older; Eight (0 Pine Ridge; 8 Wildcat Hills) are currently considered full curls. Two of these rams are expected to be harvested during the fall 2025 season. Of the current 6.5-7.5 year old rams (20), 5 or 6 are expected to be 8.5 years old by December 2026 with an average of two developing to the trophy class level. Sixty-eight percent of the current ram population is age 5 and under. Based on the Boone & Crockett scoring standard, a few rams are near the trophy score status. Due to population fluctuations and brooming activity, the availability of these rams and their size next season (December 2026) is uncertain. However, the current estimate of ram population sizes and recruitment of mature rams is consistent with data and associated harvest recommendations from past years, which have not affected population growth. Therefore, our recommendation for this year will remain consistent with previous recommendations. Further evaluation and considerations are underway to reduce ram-to-ewe ratios in some herds and reduce disease risk through other management harvest options.

Staff recommend two permits be allocated for the 2026 Bighorn Sheep Season; one resident-only lottery permit and one auction permit available to both residents and nonresidents.

By statute, the first permit must be available to a Nebraska resident via lottery. The second permit can be issued by auction to either a resident or nonresident. In the summer and fall 2026, staff will assess ram availability and age structure in each herd and recommend areas to focus the hunt. As required by regulation, permit holders will be guided by NGPC staff.

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NEBRASKA GAME AND PARKS COMMISSION ORDER

Last Approved Date: October 25, 2024

Order C014: Mountain Sheep

The following Commission Order is prescribed by the Game and Parks Commission, State of Nebraska in accordance with Neb. Rev. Stat. §§ 37-301, 37-303, 37-314, 37-308, 37-308.01, 37-317, 37-404, 37-426, 37-427, 37-451, 37-452, 37-505. For purposes of this Order, unless context otherwise requires, the definitions found in Chapter 37, sections 202 through 247 of the Game Law, are used. This Order is effective fifteen (15) days following enactment by the Commission and posting on the Commission's website.

C14.01 Regular Hunting Season:

C14.01A Season Dates: During years when permits are authorized, the season shall be the Tuesday following Thanksgiving through December 22.

C14.01B Permits authorized:

Year:	20252026
Lottery:	1
Auction:	1

C14.01C Permit Bag Limit: One mountain sheep, as defined in Title 463166, Chapter 414, Section 014.

C14.01D Shooting Hours: 30 minutes before sunrise to 30 minutes after sunset.

C14.01E Area Open: Banner, Box Butte, Dawes, Morrill, Scotts Bluff, Sheridan and Sioux counties.

C15.0114.02 Management Hunting Season:

C15.01A14.02A Season Dates: March 1-31, 2025.

C15.01B14.02B Permit Authorized: 2

C15.01C14.02C Permit Bag Limit: One male mountain sheep, as defined in Title 463166, Chapter 414, Section 014, that is half curl or less. Half curl is defined as having at least one "unbroomed" horn that does not extend past an imaginary line beginning at the point on the animal's forehead where the front of the horn base adjoins the skull, and continuing downwards and in a posterior direction through the posterior edge of the eye. A "broomed" horn is defined as a sheep horn that has been broken, splintered, frayed or rubbed in the wild, thus shortening its length and disrupting its natural taper.

C145.024D Shooting Hours: 30 minutes before sunrise to 30 minutes after sunset.

C145.024E Area Open: Those parts of Scotts Bluff and Banner counties within a line commencing with NE Hwy 71 and Robidoux Road; west to Stegall Road; south to NE Hwy 88; east to NE Hwy 71; north to Robidoux Road.