



Bi-annual Newsletter

May 2023

Thank you for joining us at the 12th Annual Auction and meeting of the Nebraska Big Game Society.

2022 Auction Update - The event last year at Hillcrest Country Club was a big success with 175 guests present and over \$134,000 raised to support big game in Nebraska.



The resident elk permit sold for \$91,000 with the successful hunter for 2022 being Kathy Lindsey. The full amount of this permit was returned to Game and Parks.

Overall funds raised – With funds raised at the auction last year, this brings the total to over \$785,000 raised since the organization was formed and \$328,000 specifically from the elk permits at 11 auctions.

Fall event – The board held a fall meeting in October. At that meeting, the board voted to commit \$5,000 to each project with the Nebraska Land Trust. They are at Haymaker Ranch in Dawes County and Buckley Ranch adjoining the Kreman Ranch. Both are in the Hat Creek elk unit.

Aerial project support – The NBGS board also voted to underwrite \$39,800 for the cost of an aerial infrared detection survey of numerous wildlife species (primarily elk and deer).

Big Horn Sheep Update – Two members of the NBGS Board of Directors participated in the 2023 Annual Sheep Capture on Feb 26 – 28.



Chadron State Scholarship – The Board also continued support of NBGS Nebraska Wildlife Scholarship at Chadron State College. The recipient of the \$1500 scholarship for the 2022-2023 academic year is Savannah Solon. Her major field of study is Rangeland Management with an emphasis on Wildlife Management.

2022 Officers, Board of Directors and Members

Officers:

Justin Hertzell, President,
Jim King, Secretary,
Craig Hundt, Treasurer

Board of Directors:

Aaron Baumann, Rick Brandt, Seth Harms, Randy Johnson, Tom King, Jason Muhle, Jim Nachreiner and Michael Westhoff.

Members:

Dick Block, Scott Cassels, Brandon Dirkschneider, Mike Dunlap, Tom Ferry, Matt Firestone, Justin Green, John Hoggatt, Dan Kreitman, Dave and Mary Jo Livingston, Mark Pinkerton, Chris Vincent and Betsy Weedin.



Rocky Mountain Bighorn Sheep Research

In the late 1800s, Rocky Mountain bighorn sheep had been eliminated from Nebraska because of habitat loss, disease, and unregulated harvest. Since bighorn sheep reintroduction efforts began in Nebraska in the 1980s, the Nebraska Game and Parks Commission has partnered with multiple organizations, such as the Nebraska Big Game Society, to help ensure the health and success of this restored population.

During the last week of February 2023, a bighorn sheep capture was conducted at two sites in the Wildcat Hills. The purpose was to take biological samples to assess bighorn sheep health and to mark and fit them with high-tech collars to monitor the population.

Cutting-edge technology was used and Working Dogs for Conservation were on site to quickly provide information about the health of the sheep. The detector dogs are undergoing training that will allow them to relay information to their handler when they detect disease from a sheep's fecal sample.

The use of new and innovative disease sampling techniques, combined with tried-and-true methods, helped the researchers quickly make management decisions on site to further limit the potential for severe disease outbreak in the herd. This ultimately will aid in more efficient and effective bighorn sheep conservation efforts.

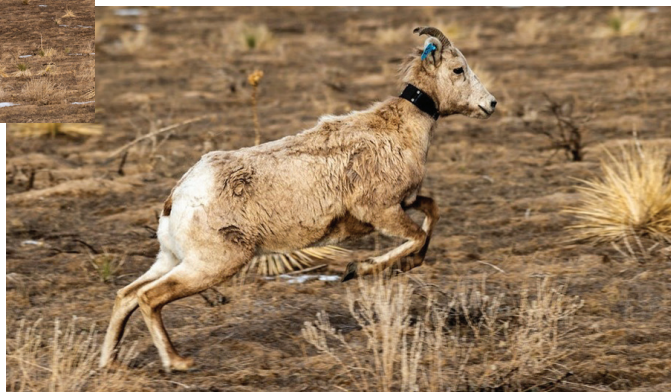
Nebraska's bighorn sheep are adapted to areas with steep, rocky cliffs to help them avoid predation. Because of the rugged terrain, the best way to capture the bighorn sheep was to use a helicopter crew equipped with a net gun and radio telemetry equipment to locate the herds which often are camouflaged in the bluffs.

Despite the cool temperatures, windy conditions and muddy terrain, the crew captured 36 sheep without any serious incidents to person or animal. NBGS Board of Directors members Rick Brandt and Aaron Baumann participated in the capture.

All captured bighorn sheep were safely released on site. Researchers plan to seek opportunities to translocate some of the ewes to the northern Panhandle in the future for the continued enhancement of Nebraska's bighorn sheep.



Rocky Mountain bighorn sheep are securely transported by the helicopter crew and then released on site in the Wildcat Hills. Photos by Justin Haag, Nebraskaland.



Leading the Way with Aerial Infrared Technology to Survey for Elk and Deer

The technological world is ever evolving and allowing for new and improved ways to conduct wildlife surveys.

The Nebraska Big Game Society Board recognized the opportunity to bring new technology to the state and voted to underwrite \$39,800 for the cost of an aerial infrared detection survey of elk and deer. This survey also can opportunistically detect other big game species such as bighorn sheep and mountain lion.

Owyhee Air Research will use infrared cameras and telemetry units attached to fixed-wing aircraft to conduct surveys of multiple species in western Nebraska, with a focus on elk, mule deer, and white-tailed deer, and provide population estimates for these species.

Both standard and infrared videos of every flight will be taken. Heat signatures will be used to verify the species and the numbers of target animals. The imaging system is set up to prevent the plane's vibrations from interfering with the video quality. Combining this with a geo-referencing program allows the operators to prevent double counting of any individuals or surveying the same area twice.

The data, images, and video collected from the survey will be given to big game researchers at the Nebraska Game and Parks Commission. This aerial infrared flight will be especially useful in providing a more accurate and effective count than traditional big game survey methods, particularly for elk that have been difficult to detect when hidden in dense trees and vegetation. This worthwhile project will assist decision-making to manage multiple big game species in Nebraska.

Every dollar NBGS invests in this project will be amplified in terms of its impact by being counted as non-federal match to an existing elk and deer research grant managed by NGPC.

Nebraska is leading the way as one of only a few states realizing the value of this state-of-the-art technology as an investment in the state's big game resources.



The use of aerial infrared technology will be used for the first time to more accurately detect elk and other big game species in Nebraska. Photo by Justin Haag, Nebraskaland.