

Where the West Begins

The Great American West was seen as a land of new opportunity for many during the nineteenth century. Among this undiscovered land was our great state. Stretching from the towering bluffs of the Missouri River to the towering buttes of Fort Robinson, Nebraska provides abundant opportunity across the state. But our state is known to be where the west begins and for a good reason. Unlike its eastern counterpart, western Nebraska is home to buttes and rocky escarpments- the perfect conditions for bighorn sheep.

Nebraska's bighorn sheep, Rocky Mountain bighorn sheep, are the largest type of wild sheep inhabiting North America. A large ram also known as a male sheep can weigh over 300 pounds and stand over 42 inches tall at the shoulder. They have a dark gray to brown color with a white rump patch, muzzle and back legs. Their coats appear considerably lighter in spring before their winter coat is shed revealing the darker summer coat beneath. Rams have horns that are massive and curled close to the face. A ewe also known as a female sheep has smaller shorter horns that curve only slightly. Ewes typically weigh half that of a ram.

Those early travelers through Nebraska remember very well bighorn sheep in northwestern Nebraska, but this hasn't always been the case. In the early 1900s, Audubon bighorn sheep were wiped out from the state. The Wildcat Hills, the Pine Ridge, sections of the North Platte River to eastern Lincoln County and along the Niobrara River were left empty of their herds. Many years later in 1981, the Nebraska Game and Parks Commission released a dozen bighorn sheep in Fort Robinson State Park in hopes of restoring the species. Over the years, the Nebraska Game and Parks Commission have released subsequent bighorn sheep in the Wildcat Hills and Pine Ridge of Nebraska's panhandle.

Today, there are approximately 300 to 350 bighorn sheep spread out amongst five wild herds in Nebraska, but recent outbreak of disease has put the herds in trouble yet again. The three wild bighorn

sheep herds in the Pine Ridge of northwest Nebraska produced only two surviving lambs in 2015 and 2016 combined. *Pasteurella pneumonia*, a respiratory ailment is to be the blame.

Several times this past summer, a team of wildlife biologists took to the hills and canyons of northwest Nebraska to help the species survive the ongoing outbreak. “We have staff that monitor and track the bighorn sheep through the use of radio telemetry collars attached to some of the sheep, and we also collect data when we capture these sheep including disease samples and evaluation of their overall health,” says Todd Nordeen, big-game research and disease program manager for the Nebraska Game and Parks Commission. The expandable collar equipped with a transmitter was placed around the neck of bighorn sheep. The sheep’s nostrils and throats were swabbed for evidence of pathogens and a few hairs were plucked for DNA analysis before plopping them into a plastic grocery bag to hang from a scale to determine their weight. After finally letting the lambs loose, biologists were left to wait.

When a lamb died this summer, the transmitters gave biologists a good chance at finding the carcass and identifying the pathogen or other cause of death. The project is the first time Nebraska Game and Parks Commission biologists have specifically attempted to capture lambs to outfit them with transmitter collars and take samples to determine what diseases and pathogens the newborns may already carry. Many of the lambs that biologists captured and processed were born to pregnant ewes from the Fort Robinson and Barrel Butte herds which were implanted with vaginal transmitters. Ewes ejected the devices as their lambs were born. Biologists monitored the transmitters’ frequency signals and attempted to pinpoint the ewe and lamb.

“Attempting to treat wild free-ranging animals is difficult but science is working on it,” Todd Nordeen reassures. Currently, there are yet to be any developments in successfully curing the disease with a vaccine. Similar to early settlers of Nebraska, there are difficulties with survival at every turn. Bighorn sheep also face potential habitat loss and other forms of disease.

Todd Nordeen and his 18 years of experience with bighorn sheep says, “The goal for Nebraska’s bighorn sheep herds is for a self-sustaining, viable, huntable population of bighorn sheep in Nebraska. Our conservation efforts have stayed the same with a focus on that goal, but management practices change based on the available science.” While bighorn sheep are greatly affected by natural causes, Nordeen is optimistic herds in Nebraska will be thriving in the future.

It may seem strange that a species that struggles so much that biologists must go to extreme efforts to protect is permitted to be hunted. Nordeen says, “Bighorn sheep are classified as a game animal and like other species, if sufficient numbers are in a population, recreational opportunity can be considered. Bighorn sheep have not been hunted every year in Nebraska, but they can be hunted when the population allows for it.” The Nebraska Game and Parks Commission allows the harvest of two bighorn sheep when permitted. Permits were made available for the 2017 hunting season.

One can go about receiving a permit in two ways. A resident hunter may apply for a lottery where one individual is selected from a pool to receive a permit while the other permit is auctioned to the highest bidder. The lottery system is the most likely way a resident will be awarded a permit, unless they’re willing to pay a pretty penny. In 2011, Thomas Lemmerholz of Heiligenhaus, Germany made the winning bid for a bighorn permit at the Grand Slam Club/Ovis Hunter Outfitter Convention in Las Vegas. His bid of \$117,500 was the largest dollar amount paid for a permit in the Nebraska Game and Parks Commission’s history. Efforts to return bighorn sheep to Nebraska would not be possible without the proceeds from these auctions. All funds brought in from the bighorn lottery and auction are put toward the state’s bighorn sheep management program.

Northwest Nebraska is home to some of the most beautiful landscapes in the entire state. Nineteenth century travelers just the same as bighorn sheep know this quite well, but their future in the start of the west, they do not. Through the efforts of biologists like Todd Nordeen and his team, the

Nebraska Game and Parks Commission is putting its best efforts out front to combat disease and other conditions with hopes of a strong and prosperous population.

