Wildlife Notes

Rocky Mountain Bighorn Sheep

(Ovis canadensis canadensis)

Once, an estimated two million Rocky Mountain bighorn sheep roamed the western United States and Canada, but due to diseases from domestic livestock, overgrazing and unregulated hunting only a few thousand remained by the early 1900s.

Rocky Mountain bighorn sheep in New Mexico weren't as prevalent as farther north, but historically sizable populations once inhabited the Manzano–Los Pinos Mountains and White Rock Canyon and what now forms the Wheeler Peak Wilderness and Pecos Wilderness.

By the late 1800s, Rocky Mountain bighorn in New Mexico were hard to find, and by 1906 nonexistent in the state.

In 1932, the New Mexico Department of Game and Fish began a Rocky Mountain bighorn sheep reintroduction program with six bighorn transplanted into the Pecos Wilderness. This first attempt was unsuccessful, and additional transplants made at Wheeler Peak, Latir Wilderness, Fort Wingate and Cimarron Canyon.

These too failed, and two primary causes determined—too few bighorn released and infectious diseases from large herds of domestic sheep allowed to graze in the same habitat areas.

After domestic sheep grazing was prohibited. Rocky Mountain bighorn sheep were successfully established in the Pecos Wilderness, Wheeler Peak Wilderness and Latir Peak Wilderness.

Further transplants introduced Rocky Mountain bighorn populations at lower elevations in the Sandia Mountains and Manzano Mountains near Albuquerque, and the San Francisco River and Turkey Creek in the Gila National Forest.

Unfortunately, the Sandia population did not survive and only a small population in the Manzano Mountains remains.

More recently, transplants at the Rio Grande Gorge near Taos and the Dry Cimarron in northeastern New Mexico appear successful.

Description

Unlike domestic sheep, Rocky Mountain bighorn do not produce wool, but instead grow a thick coat with hollow hairs to insulate and protect them from extreme temperatures. The color of the coat may vary from light to dark brown which contrasts with a white belly, rump, muzzle and back of the legs.

Rams (adult males) weigh approximately 200–300 pounds and grow huge curling horns. Horns are permanent, typically measuring 35–40 inches long and weighing up to 30 pounds (sometimes as much as the animal's entire skeleton).

Ewes (adult females) weigh between 130–200 pounds and grow much smaller, shorter and slender horns that curve slightly.

Amazingly agile and able to traverse sheer cliff faces, Rocky Mountain bighorn sheep can jump spans more than 20 feet apart and effortlessly balance on ledges only 2-inch wide. Bighorn hooves are cupped in the middle to prevent slipping, and shock absorbing elastic pads enable them to securely grip slippery surfaces.

Keen eyesight enables them to judge distances accurately and spot predators far away. This keen eyesight, combined with their speed and agility, make Rocky Mountain bighorn especially elusive and difficult to track.

Diet

Rocky Mountain bighorn are herbivores, grazing primarily on grasses, sedges and forbs (flowering plants). If forage is scarce, the diet may include willows and shrubs in winter and the tender new leaves of trees in early spring. Regurgitating a cud, bighorns repeatedly chew food before fully swallowing. When fresh water is limited or unavailable, bighorn derive moisture from dew settling on vegetation at dawn and dusk or by eating snow.

Breeding

Social animals, Rocky Mountain bighorn travel and forage in bachelor bands of adult rams and herds of females, lambs and adolescents.

However, during the rut (breeding season) bachelor bands and female herds combine to form large herds.

Male dominance and mating rights are often determined simply by age and horn size. When rights are disputed, ritualized contests of strength result in which males butt horns by rearing upon hind legs and charging one another at speeds of 30 mph or more.

Usually bouts are short, but can sometimes last for hours when rights are more fiercely contested. Often, the resounding clashes can be heard for miles, echoing through the adjacent canyons. Although bouts may appear brutal to us, Rocky Mountain bighorn have double-layered reinforced skulls, and serious injuries are rare.

In early October at lower elevations and later in December at higher alpine elevations, the dominant ram begins mating with a harems comprised of several ewes. If a dominant male is inattentive or preoccupied, less dominant rams will often encroach to surreptitiously breed.

Females begin breeding at about two years of age. Gestation lasts approximately six months, and a single lamb born at higher elevations between June–July, when climate and forage are most favorable. After only a few days, newborns are able to follow mothers over the rocky terrain.

Conservation

At higher elevations in New Mexico, Rocky Mountain bighorn sheep are extremely well adapted and face few challenges. The combination of quality habitat with limited threat from predators has enabled bighorn to establish sizable populations. However, lack of predators can be a mixed blessing. With inadequate predation to maintain balance, populations can increase beyond available resources and result in large-scale dieoffs.

At lower elevations, bighorn populations are less well adapted and face more challenges, including habitat encroachment by humans, more predators in woodland areas and disease from domestic livestock.

Therefore, the New Mexico Department of Game and Fish continually monitors populations, conducts managed hunts and strictly enforces hunting regulations and laws preventing poaching.

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Conserving New Mexico's Wildlife for Future Generations

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