



Elk

Arizona's elk population ranges from the sub-alpine zones of the San Francisco Peaks and White Mountains during summer, across the ponderosa pine forests, and down to the pinyon-juniper stands during winter. According to the Arizona Game and Fish Department, the current elk population in Arizona is nearly 35,000 animals. Many of these animals are harvested each year through regulated hunts designed to manage populations. These hunts are absolutely necessary to manage population numbers and maintain quality habitat. While these beautiful animals benefit Arizonans in many ways, elk can also have negative impacts.

Arizona's current elk herd is made up of Rocky Mountain elk (*Cervus elaphus nelsoni*). The Merriam elk (*Cervus elaphus merriami*), were once the indigenous elk in Arizona, New Mexico, and Mexico prior to European settlement. However, this elk subspecies was extirpated from Arizona by around 1900 and is now extinct. By 1922, North America's entire elk population had been reduced to an estimated 90,000 animals with 40,000 of these being in and around Yellowstone National Park. Rocky Mountain Elk were reintroduced to Arizona in 1913 when 83 animals were brought by rail and released in Cabin Draw near Chevelon Creek. Arizona's current elk herd expanded from these animals and others released similarly in neighboring states.



Rocky Mountain elk, *Cervus elaphus* adult. Photo by Alfred Viola, Northeastern University, Bugwood.org.

Elk have distinct summer and winter coats, which they shed in late summer and spring, respectively. In winter; the head, belly, neck and legs are dark brown; the sides and back are grayish brown; and the rump patch is yellowish bordered by a dark brownish stripe. While the female is usually somewhat lighter, both sexes have heavy dark manes. In summer, the coat becomes deep reddish brown. There is little to no undercoat, giving the animals a sleek, muscular appearance.

The breeding season (rut) begins in late summer when dominant bulls herd cows together for breeding. Calves are born from late May to early June after an 8 to 8 and a half month gestation. Twins are extremely rare. Calves average nearly 30 lbs. with males averaging 4 lbs. more than females. The calf is dark russet colored with white spots on the back and sides.



Elk damage to aspen trunk. Photo by Thomas E. Hinds, USDA Forest Service, Bugwood.org

The elk's annual antler growth cycle begins in late winter or early spring when a new antler begins to grow from the pedestal, from which the previous year's antler recently fell off. The antlers grow until midsummer or early fall. During this time the antler is a live bone, covered with velvet. Once antler growth stops, the bull or buck starts to rub the velvet off of the now-dead antler on the bark of trees. After the antlers are rubbed, they remain unchanged until they once again fall off in late winter or early spring, and the cycle starts over.

The Arizona elk herd is owned by the State of Arizona and managed by Arizona Game and Fish Department. Similarly, native tribes in Arizona manage elk on their lands for trophy hunts. These big game animals provide revenue to the state/tribe of which some is reinvested to enhance elk habitat, mitigate damage, and conduct research. Elk hunting also supports businesses that outfit and equip hunters. Ranchers in elk country must share livestock forage with resident elk herds. Elk grazing cannot be controlled as easily as livestock. Elk often negatively impact riparian areas and damage fences. Elk can also cause damage to crops and orchards when they feed, trample, and rub trees with their antlers.

Elk damage on small plantings can be reduced by caging individual plants or groups of plants. Larger areas must be fenced to exclude elk from the entire area. Elk fences generally fall into two different designs: woven wire combined with strands of wire above 6 feet and high tension electric fences. In both designs, posts should be at least eight feet above ground level. Woven wire should be at least 6 feet tall with two smooth wires stretched above it. Some woven wire enclosures can be seen around aspen stands in the high country. High tension electric fences should consist of eleven wires stretched starting at ground level with the first two wires spaced 6 inches apart, the second two spaced 8 inches, the third two spaced 10 inches, and the remaining spaced 12 inches. The electrical current should alternate between positive and negative with each strand.

Frightening is generally effective only for short durations as the elk will habituate to the location of the device. Propane exploders are typically used for this purpose. Moving the device every couple of days should increase the effectiveness. Repellents can also be effective when elk pressure is low or some crop damage is acceptable. It is illegal to shoot elk without a hunting license/tag issued by the Arizona Game and Fish Department. In addition, if you are an outdoor recreation enthusiast, be aware that elk hunting season is between August and the end of December depending on the geographic area.

Elk also create hazardous conditions along our highways. Accidents occurring between vehicles and elk can sometimes be fatal. The portion of Highway 260 between Payson and Christopher Creek was modified to include elk underpasses to reduce the probability of accidents caused by wildlife.

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