

U.S. Fish & Wildlife Service

National Elk Refuge





In late October and early November, thousands of elk begin their traditional migration from high summer range in Grand Teton National Park, southern Yellowstone National Park, and the surrounding National Forests to lower elevation winter range in Jackson Hole. Heavy snows force the animals to lower elevations in search of food, and usually more than 7,500 elk make their way to the National Elk Refuge to spend the winter.

Establishment of the National Elk Refuge

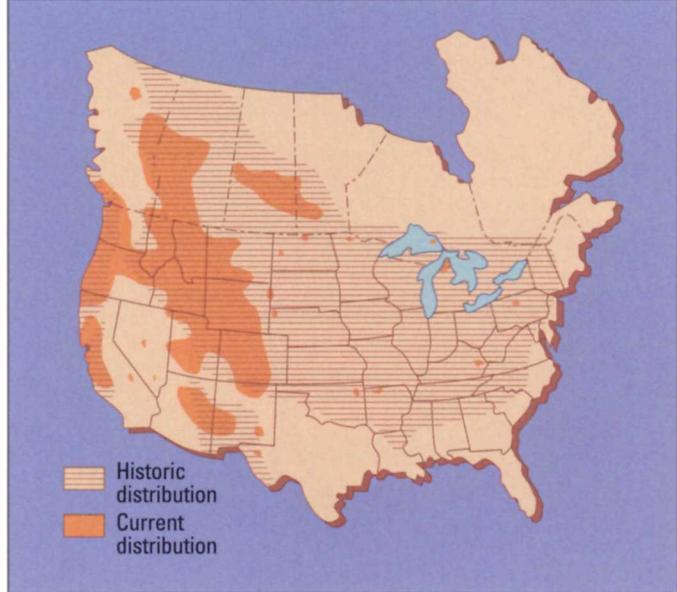


*This blue goose,
designed by J.N.
"Ding" Darling,
has become the
symbol of the
National Wildlife
Refuge System.*

Hundreds of years before settlement of this country, elk ranged from the eastern states through central and western North America. They grazed the open prairies, mountain valleys, and foothills. As settlers pushed slowly westward, the distribution of the elk was rapidly reduced to the western mountains. By 1900, elk had disappeared from more than 90 percent of their original range.

Northwest Wyoming was one of our country's last big strongholds of elk in great numbers. The National Elk Refuge was one of the first big game refuges established and was created as a result of public interest in the survival of large, healthy elk herds. In the late 1800s, people settled in Jackson Hole, and by the early 1900s, homesteads, cattle, fences, and farming had begun to limit elk habitat throughout Wyoming.

Elk distribution



*Bulls sparring
on the Refuge*

© Jackie Gilmore

Traditional elk migration pathways and historical wintering areas were disappearing. This, combined with severe winters and reduced elk forage and habitat, contributed to the starvation deaths of thousands of elk in Jackson Hole. As a result of persistent action by Jackson Hole residents, the State of Wyoming, and the U.S. Congress, the National Elk Refuge was established in 1912 to provide a protected winter elk reserve.

Elk stay on the Refuge for approximately 6 months each winter. An 8-foot high fence along the main highway and along the northern border of town prevents elk from moving through Jackson and onto private lands.

The nearly 25,000-acre National Elk Refuge is administered by the U.S. Fish and Wildlife Service and is one of more than 540 refuges in the National Wildlife Refuge System. This system was established to preserve a national network of lands and waters for the conservation and management of the fish, wildlife, and plants of the United States for the benefit of present and future generations.

Refuge Management



© Jackie Gummere

Refuge staff feed wintering elk when deep or crusted snow covers the natural forage.

Refuge grasslands are managed to produce as much natural forage for elk as possible through extensive irrigation, seeding, prescribed burning, and other practices. These management

practices enhance elk winter habitat and reduce the need for supplemental feeding. However, when deep or crusted snow prevents the elk from grazing, or the natural forage is depleted, Refuge personnel feed the herds

pelletized alfalfa hay. These 2- to 3-inch pellets have higher nutritional value than average baled hay and are easier for Refuge staff to store and distribute to the elk. Elk are usually fed about 7 to 8 pounds per animal per day, which equals about 30 tons per day for a herd of 7,500 elk. The elk receive supplemental alfalfa for approximately 2 1/2 months during an average winter.

The number of elk wintering on the Refuge must be limited to avoid overuse of the range and to avoid the potential spread of diseases common when herd animals are crowded. Refuge staff, in consultation with the Wyoming Game and Fish Department, have determined that a maximum of 7,500 animals (over half the total Jackson elk herd) is optimum for the Refuge. Herd numbers are maintained through a late fall controlled hunt on the Refuge and surrounding public lands.

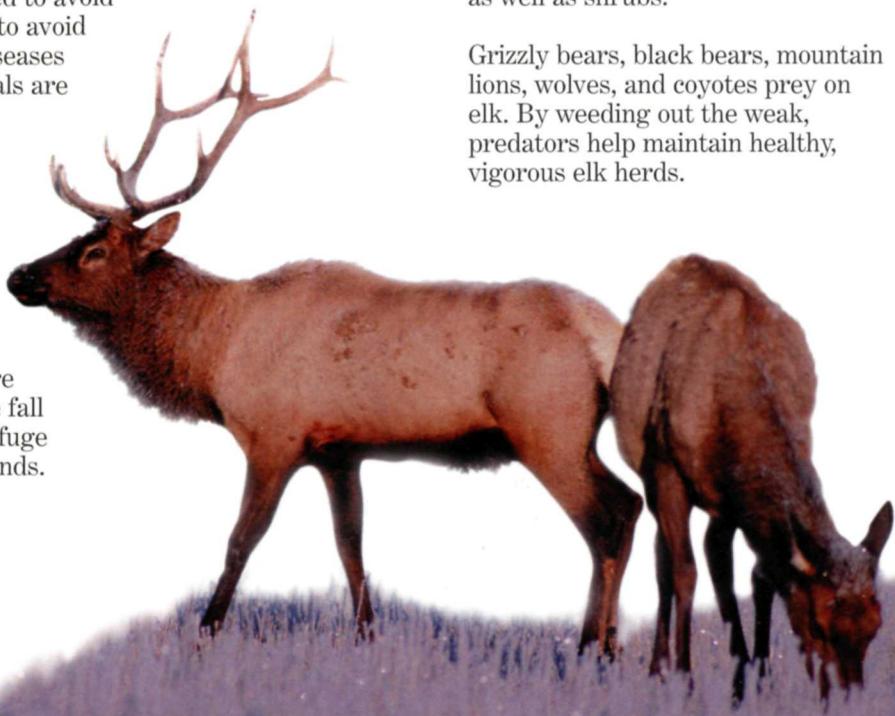
Elk Facts

Elk are the second largest antlered animals in the world; only moose are larger. Bull elk are 4 1/2 to 5 feet tall at the shoulder and weigh 550 to 800 pounds. Cow elk weigh from 450 to 600 pounds. The Refuge elk herd consists of approximately 20 percent bulls, 65 percent cows, and 15 percent calves.

The majority of adult elk on the Refuge are between 3 and 10 years old. The oldest animals in the herd are 15 to 30 years old, but these individuals represent a very small part of the Refuge population. The age of an elk can be determined by examining milk tooth replacement, wear on permanent teeth, and annual dental rings.

While most members of the deer family are primarily browsers (feeding on twigs and leaves of shrubs and trees), elk are both browsers and grazers, feeding extensively on grasses and forbs, as well as shrubs.

Grizzly bears, black bears, mountain lions, wolves, and coyotes prey on elk. By weeding out the weak, predators help maintain healthy, vigorous elk herds.



Bull and cow elk

J. Hogan, USFWS

More Elk Facts

Adult bull elk have large, branched antlers. Contrary to popular belief, there is no exact relationship between age and number of antler points, but the number of points may be used to estimate an animal's age. Bulls between 1 and 2 years old have short, unbranched antlers called spikes. By age 3, bulls usually have antlers with three to four points on each side. Older bulls carry antlers with five, six, or sometimes seven points on each side. Mature bulls with six points per side are called royal bulls, and those with seven points are called imperial bulls. On rare occasions, you might see a bull displaying antlers with eight points on each side; these bulls are referred to as monarchs.



© Jackie Gilmore

Large bulls shed their antlers during March and April every year, while the smaller bulls lose their antlers during April or early May. Mice, squirrels, and other animals chew on the shed antlers to get needed minerals. Antlers dropped on the Refuge are collected by local Boy Scouts, who sell them at an annual public auction to help raise money both for the scouts and for winter elk feed and management. The public may not collect or remove antlers from Refuge lands.

An annual antler auction raises money for local scouts and wintering elk.

New antlers begin to grow as soon as the old ones are lost. They develop throughout the summer and reach maturity by mid-August. By this time, the "velvet" or outer blood-rich skin (found on the outside of the antler) has dried, and the bull rubs the dead velvet off on small trees and shrubs. A bull's antlers are hard and shiny by the fall breeding season.

Developing antlers are covered with blood-rich skin called "velvet."



© Jackie Gilmore



Mature bull elk looking for food under the snow.

© Jackie Gilmore

Seasons of the Jackson Elk Herd

Elk leave the lower elevations in April and May, following the receding snowline back into the cool high country where they spend the summer. These animals travel distances varying from a few miles up to 100 miles during migration from the Refuge to Grand Teton National Park, southern Yellowstone National Park, and national forest lands to

Elk calves are usually born in the high country.



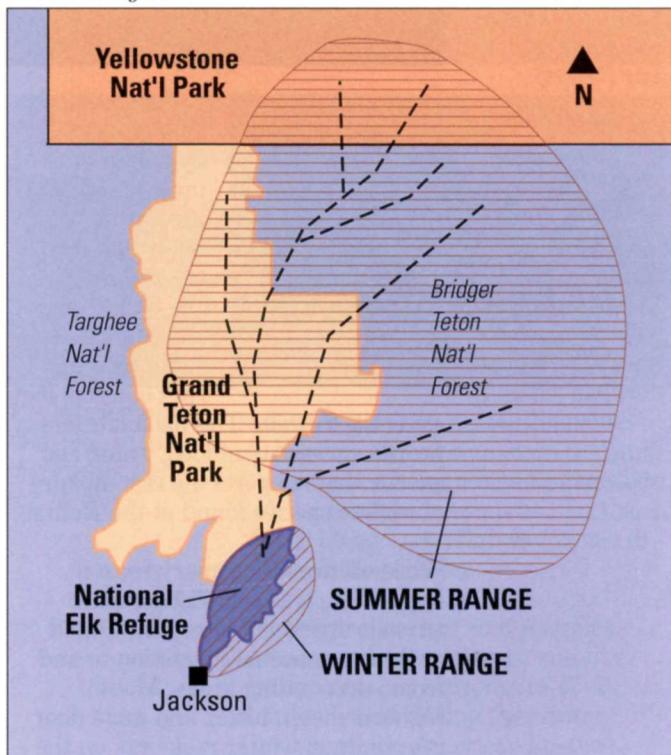
the north and northeast of Jackson Hole. A few elk remain near the wooded areas of the Refuge during the summer months.

From late May to mid-June, cows bear their young in secluded thickets on higher terrain. A cow typically has one calf that weighs 30 to 40 pounds. The calves are reddish colored and spotted at birth. Very few calves are born on the Refuge, since the majority of elk migrate back to the high country before calving occurs.

The breeding season (or "rut") occurs in September and early October, while the elk are in the high country. At this time, the high-pitched "bugling" of the mature bulls can be heard as they gather harems of cows and challenge rival bulls. During the rut, bulls vigorously defend their harems of as many as 15 or more cows.

Elk follow migration routes between their summer and winter ranges.

In late fall, snow begins to fall in the high country, and the elk herds migrate back to their lower elevation winter range.



A variety of habitat types exist on the Refuge (right); bighorn sheep visit the Refuge during the colder seasons of the year (below).



D. Stratton, USFWS

Refuge habitat includes grassy meadows and marshes spread across the valley floor; timbered areas bordering the Gros Ventre River; and sagebrush and rock outcroppings along the foothills. This habitat diversity provides a variety of food, water, and shelter that supports the rich mixture of wildlife species found at the Refuge.

While elk are the primary reason the Refuge was established, other animals are found here year-round or during seasonal migration to and from surrounding areas. Moose, bighorn sheep, bison, and mule deer are common winter residents on the Refuge. Wolves, coyotes, badgers, and Uinta ground squirrels are also seen. Other common wildlife species include muskrat, beaver, porcupine, long-tailed weasel, and voles or meadow mice.



© Jackie Gilmore



© Jackie Gilmore

Trumpeter swans nest and raise their young on the Refuge.

Nearly 175 species of birds have been observed on the Refuge. Waterfowl commonly seen on ponds and in marshes include mallards, northern pintails, gadwalls, Barrow's goldeneyes, buffleheads, green-winged and cinnamon teal, and Canada geese. For a birding highlight, look for trumpeter swans at Flat Creek Marsh along U.S. Highway 26 north of the Visitor Center.

Bald eagles, ravens, and magpies are common winter birds, and like the coyotes, are scavengers of elk that have died during the winter. Hawks include American kestrels, northern harriers, red-tailed hawks, Swainson's hawks, and rough-legged hawks. You may even catch a glimpse of a golden eagle. During summer months, the marsh edges attract marsh wrens, yellow-headed blackbirds, and common yellowthroats, while sandhill cranes and long-billed curlews are found in open marshes and meadows.

Visitor Opportunities

© R.H. Ruschill



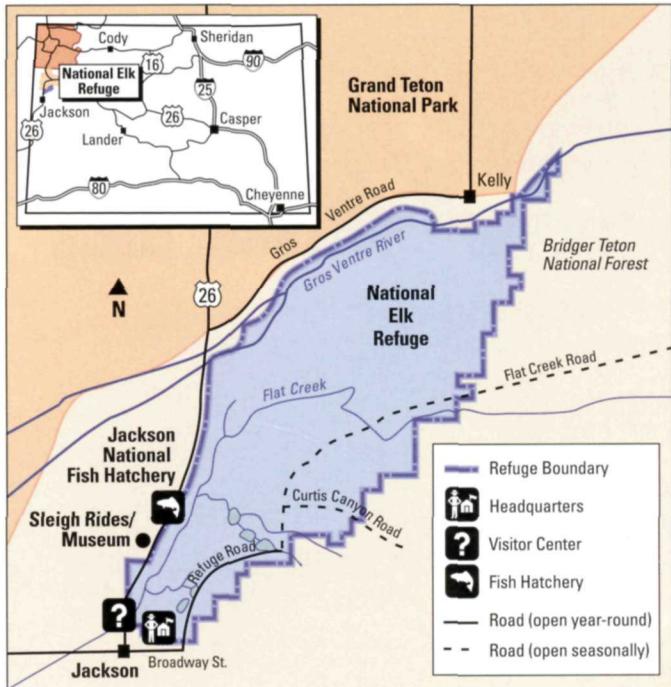
Visitors get a close-up view of the elk herd.

The Refuge lies northeast of the town of Jackson and directly south of Grand Teton National Park. The winter season, between November and April, is the best time to view elk and other wildlife on the Refuge. To protect Refuge wildlife and their habitats, public use activities are primarily confined to the main, unpaved roads on the Refuge. Paved turnouts on the west side of the Refuge along U.S. Highway 26 (leading to Grand Teton and Yellowstone National Parks) are provided for viewing and photographing Refuge wildlife.

From mid-December through late March, daily horse-drawn sleigh rides offer visitors a close-up look at the elk herd. Sleigh rides begin at the National Museum of Wildlife Art, 2 miles north of Jackson on U.S. Highway 26. Visitors to the museum can also learn about elk and management of the Refuge through a slide show, videos, exhibits, and by talking with Refuge personnel. Sleigh riders are encouraged to bundle up, as they are likely to be exposed to very cold temperatures and chilling winds.

Limited hiking opportunities exist on the Refuge, and there is no overnight parking or camping. Camping is available in nearby National Parks and National Forests.

Elk hunting and trout fishing are popular activities on portions of the Refuge during designated seasons. Brochures and pamphlets containing regulations and information on the Refuge and its wildlife are available at the visitor center and at the Refuge headquarters.



Refuge and vicinity

The visitor center is located on the north side of Jackson at 532 N. Cache Street and is open daily, year-round. Visitor center hours vary. The Refuge administrative headquarters is located on Broadway Street, 1 mile east of the Jackson town square. This office is open year-round, Monday through Friday, from 8:00 am to 4:30 pm. The visitor center and the headquarters are closed Christmas Day.

Equal opportunity to participate in and benefit from programs and activities of the U.S. Fish and Wildlife Service is available to all individuals regardless of physical or mental ability. Dial 7-1-1 for a free connection to the State transfer relay service for TTY and voice calls to or from the speech or hearing impaired. For more information or to address accessibility needs, please contact Refuge staff at 307 / 733 9212 or the U.S. Department of the Interior, Office of Equal Opportunity, 1849 C Street, NW, Washington, D.C. 20240.

National Elk Refuge
PO Box 510
Jackson, WY 83001
307 / 733 9212
307 / 733 9729 fax
<http://nationalelkrefuge.fws.gov>

For State transfer relay service
TTY / Voice: 711

U.S. Fish & Wildlife Service
<http://www.fws.gov>

For Refuge Information
1 800 / 344 WILD

March 2005



National Elk Refuge

