

2.0 SPECIES INFORMATION

LISTING STATUS

The bald eagle was listed as endangered on February 14, 1978, in all of the conterminous United States with the exception of Minnesota, Wisconsin, Michigan, Oregon, and Washington, where it was classified as threatened (USFWS 1978). On July 12, 1995, USFWS reclassified the bald eagle from endangered to threatened throughout its range in the lower 48 states (USFWS 1995). Most recently, on July 6, 1999, the bald eagle was proposed for delisting (USFWS 1999). This proposal has not been finalized or withdrawn to date.

DESCRIPTION

The bald eagle is a large, long-lived bird of prey. Adults have dark-brown bodies, white heads, and white tails. Characteristic adult plumage is not achieved until at least 4 years of age. Juveniles exhibit a series of plumages before they achieve adult coloration; in some plumages, the young may resemble adult golden eagles (*Aquila chrysaetos*).

HABITAT USE

Nesting Habitat

Bald eagles typically nest in forested areas adjacent to large bodies of water. Nests are most often constructed in the tops of large trees but can be built on cliffs or the ground in treeless areas. Besides the distance to nearest water, other features that influence nest location can include diversity, abundance, and vulnerability of prey base; presence and proximity of shallow water; and absence of human development and disturbance (Buehler 2000). In Wyoming, groves of mature cottonwoods found along streams and rivers are typically used as bald eagle nesting habitat. Conifers are also commonly used for nesting. Known active nests that occur throughout Wyoming are discussed in the Environmental Baseline section of the FO where they occur.

Communal Winter Roosting Habitat

Wintering bald eagles occur throughout the country but are most abundant in the West and Midwest. Abundant, readily available food supplies in conjunction with one or more suitable night roost sites are the primary characteristics of occupied winter habitat. The majority of wintering bald eagles are found near open water where they feed on fish and waterfowl, often taking those that are dead or vulnerable. When suitable conditions exist, particularly lack of human disturbance, wintering bald eagles will forage in terrestrial habitats capturing small and medium sized mammals (such as prairie dogs and rabbits). They also may scavenge carrion of roadkill, winter mortalities of big game or livestock, or livestock associated with ranching (USFWS 1983). The majority of bald eagle wintering range occurs along major river systems and large bodies of water in the Midwestern states, the Chesapeake Bay region, the Pacific Northwestern states, and the states of the intermountain west, including Wyoming, Utah, Colorado, New Mexico, and Arizona. Roosts are commonly situated in riparian forests (cottonwoods or conifers) and upland conifer forests, particularly northeast facing ponderosa pines. Known communal winter roosting areas that occur throughout Wyoming are discussed in the Environmental Baseline section of the FO where they occur.

Foraging Habitat and Behavior

The bald eagle typically hunts from perches or while soaring over suitable prey habitat. Prey is often taken off the wing and can include snatching fish from surface waters, snaring waterfowl on the wing, and pouncing on small mammals. When it is available, carrion is also eaten. General foraging habitats include nearly all upland and aquatic habitats that support sufficient prey species. In Wyoming, suitable general foraging habitats can include grasslands, shrublands, streams, rivers, lakes, and reservoirs. Concentrated foraging habitats typically support high densities of prey species and can often be a reliable source of prey for wintering bald eagles. In Wyoming, concentrated foraging habitats can include big game crucial winter ranges, ice-free water bodies that support fish and waterfowl during the winter, cattle and sheep stockyard operations, and big game roadkill.

DISTRIBUTION

Bald eagles occur year-round in Wyoming. Wintering bald eagles generally occur in areas associated with large, ice-free water bodies and near winter concentrations of ungulates, livestock, waterfowl, or fish. The distribution of bald eagle nesting and communal winter roosting areas is associated with habitat availability and amount of human disturbance. Most open habitats with sufficient prey base in Wyoming can be utilized for foraging by bald eagles. Eagles are also sensitive to disturbances within foraging areas and their distribution patterns may be affected by human activity.

The largest nesting concentration of bald eagles in Wyoming is in the northwestern corner of the state, in the Greater Yellowstone area. Bald eagle nesting has also been documented along several major drainages throughout the state (WGFD 2000). Results of annual surveys indicate bald eagle populations within the state are increasing and have exceeded management goals since 1987. In 1999, 97 bald eagle pairs produced 85 young in Wyoming (WGFD 2000).

THREATS

The decline of nesting bald eagle populations in the lower 48 states during the last century has been attributed to several factors, including habitat loss or alteration, environmental contamination, poisoning, shooting, and collisions and electrocutions.

Habitat loss includes the physical disturbance associated with development and with human activities that can deter eagles from otherwise suitable habitats. Bald eagles are particularly sensitive to human activities near active nests and communal winter roosting areas. Unfamiliar or new activities near active nests can be harmful during egg incubation and brooding periods. Disturbance can flush adults from nests and expose eggs or young to adverse weather conditions or deprive them of food, and thus decrease hatch rates and young survivability (USFWS 1995). Human activities near active communal winter roosting areas can cause eagles to abandon these habitats and expend energy finding other suitable roost areas. The additional energy used and the added stresses can lead to general deterioration in health and possibly affect survivability and reproductive success.

Before the use of organochlorine-based pesticides, including dichloro-diphenyl-trichloroethane (DDT), was banned in the U.S. in 1972, bald eagle populations declined significantly. The use of regulated pesticides and poisons still accounts for bald eagle deaths in many of the western states, where these chemicals are used to control rodent pests and coyotes (USFWS 1995).

Long-term exposure to environmental contaminants is also a concern in the recovery of this species. Lead can poison bald eagles when they ingest prey that contains lead shot or fragments, or where the prey has assimilated lead into its own tissues. Mercury exposure is also a concern in some parts of the country. Exposure to high levels of mercury can result in neurological problems that affect flight and other motor skills and can alter and reduce hatching success in bald eagle eggs (USFWS 1995).

Illegal shooting still poses threats to individual bald eagles. Increased law enforcement and public awareness have reduced shooting deaths to a small fraction of the number of mortalities that once occurred in the early 1900s (USFWS 1995).

Eagles are also susceptible to collision with and electrocution from aboveground utility lines. In open habitats, eagles may collide with new or unfamiliar support structures or electrical lines. Eagles are also susceptible to electrocution from contact with utility lines while they fly or perch on poles that are not equipped with devices intended to minimize electrocution risks. In addition, eagles often scavenge carcasses from roadways. This behavior can lead to increased risks of vehicle collisions with bald eagles.