



I am the eagle,  
I live in high country  
in rocky cathedrals  
that reach to the sky.

And all those who see me,  
and all who believe in me  
share in the freedom  
I feel when I fly.

John Denver  
"The Eagle and the Hawk"

## General Information

Scientific Name: *Haliaeetus leucocephalus*  
(Which is Latin, meaning "white-headed sea eagle") –The bald eagle received its common name from North American colonists when bald or "ballede" meant white, not hairless.

Bald eagles are only found in North America. They are considered raptors or birds of prey, and primarily eat fish, waterfowl, small mammals and carrion.

Experts believe there were as many as 50,000 nesting pairs of bald eagles in the lower 48 states when the bird was adopted as our national symbol in 1782. Habitat destruction, contamination of its food source (mostly due to the pesticide DDT) and illegal shooting caused a significant reduction in the bald eagle population. By 1963, their numbers had decreased to about 2,000 with only 417 nesting pairs.

The number of bald eagles has rebounded significantly since it was placed on the original federal endangered species list on March 11, 1967.

The eagle was listed as threatened or endangered in every state where they exist, except Alaska.

In 2014, there were more than 10,000 nesting pairs of bald eagles in the lower 48 states according to the U.S. Fish and Wildlife Service. This increase can be attributed to improved habitat quality, a reduction in the use of toxic pesticides, and the enactment of federal legislation to protect the species. In response, the bald eagle was removed from the endangered species list on August 8, 2007.

The bald eagle population in Alaska remains healthy with more than 50,000 eagles and a substantial number of nesting pairs.



## Physical Characteristics

The male and female have identical plumage. The adults have a uniform dark brown body (appearing almost black) with a contrasting white head and tail. Immature birds have brownish plumage with irregular, white mottling. They do not develop their characteristic white head and tail until they are about 5 years of age.

Juveniles also have brown beaks and eyes. As they mature, their beaks turn yellow and their eyes change to a golden color. Immature bald eagles are often confused with golden eagles, the only other eagle found in North America.



The female eagle is larger than the male. Females weigh 10 to 14 pounds and have a wingspan of 6.5 to 7.5 feet. Males weigh 8 to 10 pounds and have a wingspan of 6 to 7 feet.

Eagles have excellent vision with eyes that are five to eight times more powerful than human eyes. Biologists believe they can see small mammals up to two miles away. They have sharp claws, called talons, for catching and killing their prey. Their hooked beaks are used for tearing food into small bite-sized pieces.

Eagles have more than 7,000 feathers that are very lightweight, and collectively weigh less than 21 ounces. The average flight speed of an eagle is about 40 mph, but they can reach speeds in excess of 100 mph when diving for prey. Scientists believe they can hit their prey with twice the force of a .22-caliber bullet.

## Life History

Bald eagles have been documented to live up to 50 years in captivity and more than 30 years in the wild. Average life expectancy in the wild is about 25 years. Eagles usually mate for life, but if one dies, the other will accept a new mate.

Bald eagles build the largest nest in the avian world, called an aerie. A pair will return to the same nesting territory year after year, often

refurbishing and adding to the same nest. The average nest is 5 to 6 feet in diameter, 8 to 10 feet deep and weighs approximately 1 ton.

According to the Guinness Book of World Records, a pair of bald eagles in St. Petersburg, Fla., built the largest bird nest in the world, measuring 9.5 feet across and 20 feet deep. It weighed more than 2 tons.

Eagles lay from one to three eggs, usually 2. They are about the size of a large chicken egg, 2 inches by 3 inches. The eggs are a dull, white color and are laid one to two days apart. It takes approximately 35 days of incubation before the eggs hatch. The young fledge (fly) from the nest when they are 70 to 80 days old.

Hatching is a difficult task for an eagle chick. It takes approximately 15 hours for a chick to peck a hole in the egg. It uses a special egg tooth on the end of its beak. It may take an additional 35 to 40 hours to break out of its shell completely.

Adult eagles have few natural enemies, but about 75 percent of the juveniles die within their first year. Most die from starvation, diseases, human interference or bad weather. Human interference and electrocution are the main causes of death among adults.



## Kansas City District Lakes

The 18 lake projects in the Kansas City District have played a critical role in the resurgence of the bald eagle in the Midwest. For more than 45 years, district lake projects have provided habitat for several thousand wintering birds in portions of Iowa, Kansas, Missouri and Nebraska.

Eagles that nest in the northern states and Canada migrate south when the weather becomes severe and food becomes scarce. They follow migrating waterfowl, feeding on injured and weak birds. Early migrants arrive by the beginning of November and generally return north by mid to late March.

Wintering birds concentrate around aquatic environments in search of food. They perch in large trees along the shorelines of rivers, lakes and wetland areas and often can be observed plucking fish from the edge of the ice or feeding on ducks and geese. At night during the winter, eagles frequently assemble in a communal roost, some containing more than 300 birds.



### Historical Data

Prior to settlement, bald eagles probably nested along some of the major rivers in the Midwest. John J. Audubon noted the existence of eagles and their nests along the Kansas River Valley in the mid-1800s, but no eaglets were observed. The town of Lecompton, Kan., was originally named Bald Eagle, re-enforcing the notion that eagles frequented the region in the 1850s.

It wasn't until 1989 that the first successful bald eagle nest in the district was documented at Clinton Lake near Lawrence, Kan. This pioneering pair fledged two male eaglets that first year. This was fortunate, as males select the nesting territory and generally return to nest within 100 miles from where they fledged.

The U.S. Fish and Wildlife Service banded the first two offspring fledged at Clinton Lake with purple visual identification leg bands. Both eagles have returned to nest in Kansas. They have been identified by their leg bands, A and B. Eagle B returned to nest at Hillsdale Lake in 1993 and Eagle A began nesting at Perry Lake in 1994.

As of 2014, 227 juvenile eagles have been banded in Kansas. Nine of the banded males have returned to nest in the state including a second generation bird, Eagle 3S (an offspring of Eagle A) who established a nest on the Kansas River in 2004.

Four banded females have returned to nest in the district, two on the Kansas River and two at Truman Lake, Mo.

Fifteen lakes in the district have had active bald eagle nesting territories, and 12 have more than one. Truman Lake, Mo., has the most active nest sites in the district and set a record in 2014 when 24 nesting territories produced young.

In 2014, approximately 130 eaglets were fledged from 64 nesting territories. From 1989 to 2014, more than 1,000 eagles have been fledged from nesting territories at Kansas City District lake projects.

### Conservation Ethics

When viewing and photographing bald eagles, be careful not to get too close. Repeated disturbances could drive the birds from desirable feeding, perching or roosting areas. Not only is this unethical, it is illegal.

Bald eagles are protected by several federal laws including the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act and the Lacey Act. Anyone who disturbs or harms a bald eagle may be assessed a maximum penalty of a \$250,000 fine and/or given a two-year jail sentence.

### Viewing Information

Winter viewing areas November thru March: Contact Kansas City District lake project offices by clicking on "Lakes Sites" on the district's web page at:

[WWW.NWK.USACE.ARMY.MIL](http://WWW.NWK.USACE.ARMY.MIL)

Adrift in the wind  
Gallant monarch of the sky  
A symbol of strength and freedom  
Whose spirit will never die. . .

Michael Watkins  
"The Bald Eagle"

