

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. But 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 2010 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 wingspans of 6 to 7 feet.

Eagles have excellent vision with eyes that are 5 to 8 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 weigh less than 21 ounces. The average flight speed of an eagle is about 40 miles per hour, but they can reach speeds in excess of 100 miles per hour 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 up to 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 one 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 1 to 3 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 1 to 2 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 70 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.

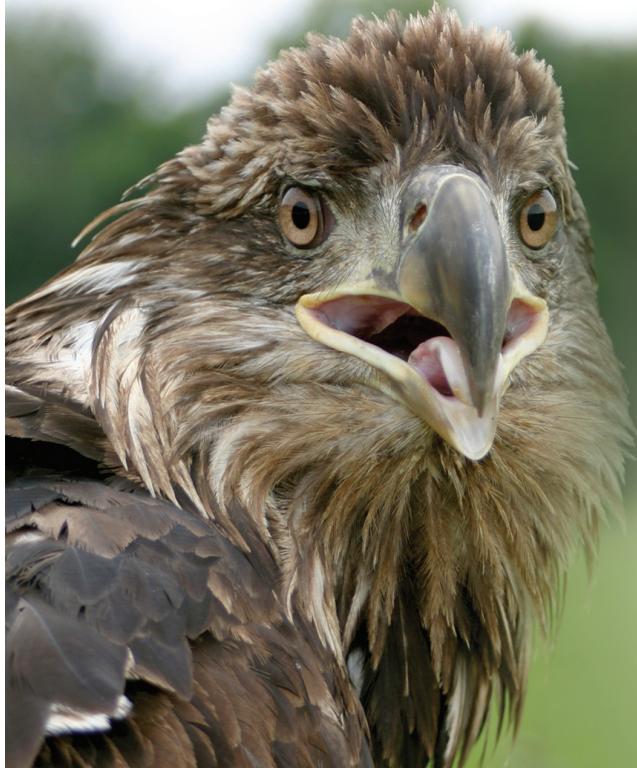


Kansas City District Lakes

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 40 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 2010, 173 juvenile eagles have been banded in Kansas. Seven 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.

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

Twelve lakes in the district have had active bald eagle nesting territories, and eight have more than one. Truman Lake, Mo. has the most active nest sites in the district and set a record in 2010 when 21 nesting territories produced young.

In 2010, 74 eaglets were fledged from 26 nesting territories. From 1989 to 2010, more than 650 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.

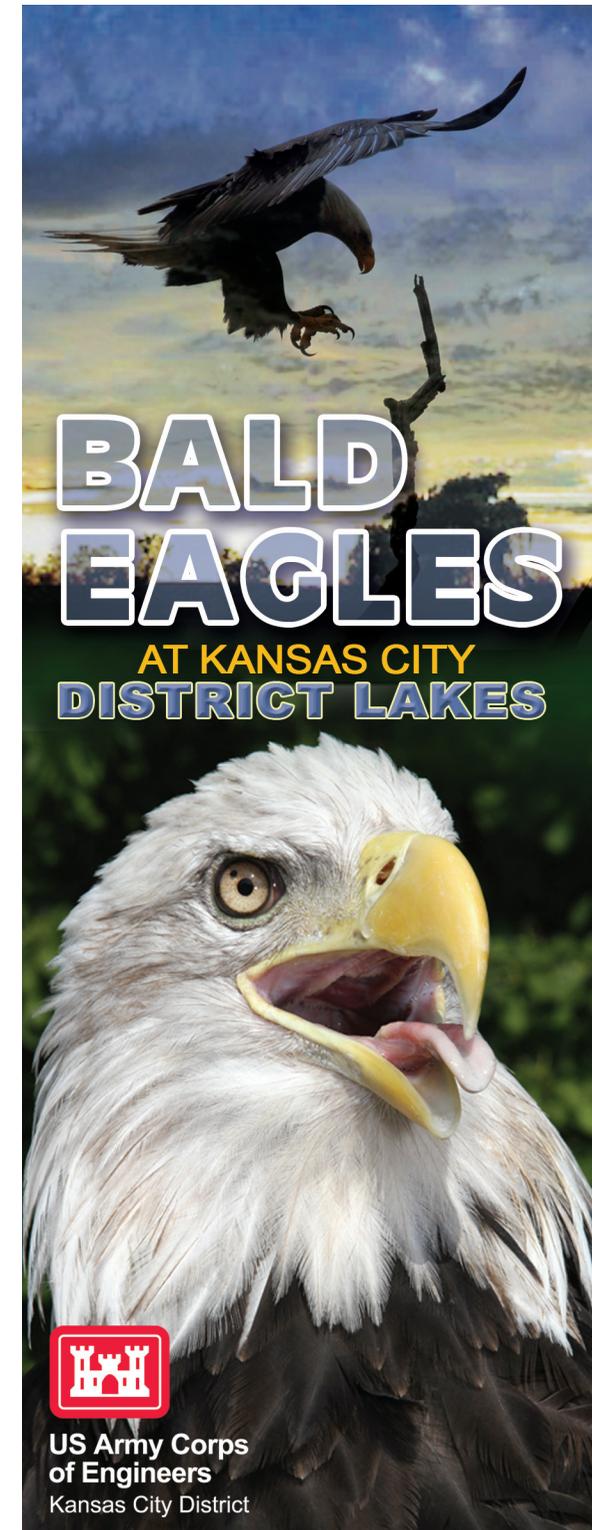
Viewing Information

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

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"



US Army Corps
of Engineers
Kansas City District