



Bald Eagle

Haliaeetus leucocephalus



Jim Hudgins/USFWS

A North American species with a historic range from Alaska and Canada to northern Mexico, the bald eagle is an Endangered Species Act success story.

Forty years ago, our national symbol was in danger of extinction throughout most of its range. Habitat destruction and degradation, illegal shooting, and the contamination of its food source, largely as a consequence of DDT, decimated the eagle population.

The federal government's banning of DDT and related pesticides, habitat protection afforded by the Endangered Species Act, and conservation actions taken by the American public have helped bald eagles make a remarkable recovery.

Bald Eagle Biology

Distinguished in the adult plumage by a white head and white tail, bald eagles are powerful, brown birds that may weigh 14 pounds and have a wingspan of 8 feet. Male eagles are smaller, weighing as much as 10 pounds and have a wingspan of 6 feet. Sometimes confused with golden eagles, bald eagles are mostly dark brown until they are four to five years old and acquire their characteristic coloring. There is a distinction between the two species, though, even during the early years. Only the tops of the bald eagle's legs have feathers. The legs of golden eagles are feathered all the way down.

Bald eagles live near rivers, lakes, and marshes where they can find fish, their staple food. As their populations grow, however, bald eagles are expanding their range, even nesting in urban areas. Bald eagles will also feed on waterfowl, turtles, rabbits, snakes, and other small animals and carrion.

Bald eagles require a good food base, perching areas, and nesting sites. Their habitat includes estuaries, large lakes, reservoirs, rivers, and some seacoasts. In winter, the birds congregate near open water in tall trees for spotting prey and night roosts for sheltering.

Bald eagles usually choose the tops of large trees to build nests, which they typically use and enlarge each year. However, nests have also been found on cliffs, the ground, and even on human-made structures like cell phone towers.

Nests may reach 10 feet across and weigh a half ton. Bald eagles may also have one or more alternate nests within their breeding territory. The birds travel great distances but usually return to breeding grounds within 100 miles of the place where they were raised. Bald eagles may live 15 to 25 years in the wild, longer in captivity.

Breeding bald eagles typically lay one to three eggs once a year, and they hatch after about 35 days. The young eagles are flying within three months and are on their own about a month later. However, disease, lack of food, bad weather, or human interference can kill many eaglets. Recent studies show that approximately 70 percent survive their first year of life.

The Plight of the Bald Eagle

When America adopted the bald eagle as the national symbol in 1782, anecdotal accounts stated the country may have had as many as 100,000 nesting eagles. The first major decline of the species probably began in the mid to late 1800's, coinciding with the decline of waterfowl, shorebirds, and other prey.

Although they primarily eat fish and carrion, bald eagles used to be considered marauders that preyed on chickens, lambs, and domestic livestock. Consequently, the large raptors were shot in an effort to eliminate a perceived threat. Coupled with the loss of nesting habitat, bald eagle populations declined.

In 1940, noting that the species was "threatened with extinction," Congress passed the Bald Eagle Protection Act, which prohibited killing, selling, or possessing the species. A 1962 amendment added the golden eagle, and the law became the Bald and Golden Eagle Protection Act.

Shortly after World War II, DDT was hailed as a new pesticide to control mosquitoes and other insects. However, DDT and its residues washed into nearby waterways, where aquatic plants and fish absorbed it. Bald eagles, in turn, were poisoned with DDT when they ate the contaminated fish. The chemical interfered with the ability of the birds to produce strong eggshells.

As a result, their eggs had shells so thin that they often broke during incubation or otherwise failed to hatch. DDT also affected other species such as peregrine falcons and brown pelicans. Some other pesticides related to DDT are suspected to have caused increased mortality, in addition to the harmful effects on reproduction.

By 1963, with only 417 nesting pairs of bald eagles known to exist, the species was in danger of extinction.

The Road Back

As the dangers of DDT became known, in large part due to the 1962 publication of Rachel Carson's book *Silent Spring*, the Environmental Protection Agency took the historic and, at the time, controversial step of banning the use of DDT and some related pesticides in the United States. That was in 1972, and it was the first step on the road to recovery for the bald eagle.

In 1967, the Secretary of Interior listed bald eagles south of the 40th parallel under the Endangered Species Preservation Act of 1966. Following enactment of the Endangered Species Act of 1973, the Service listed the species in 1978 as endangered throughout the lower 48 states, except in Michigan, Minnesota, Oregon, Washington, and Wisconsin where it was designated as threatened.

The species was not listed as threatened or endangered in Hawaii because it does not occur there, or in Alaska because populations there have remained robust.

Listing the species as endangered provided the springboard for the Service and its partners to accelerate the pace of recovery through captive breeding programs, reintroduction efforts, law enforcement, and nest site protection during the breeding season.

Population Milestones

In July 1995, the Service announced that bald eagles in the lower 48 states had recovered to the point where those populations previously considered endangered could be reclassified to the less critical category of threatened.

Then in 2007, the Service estimated there were at least 9,789 nesting pairs of bald eagles in the contiguous United States. Bald eagles staged a remarkable population rebound and recovered to the point that they no longer needed the protection of the



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Endangered Species Act. Thus, on June 28, 2007, the Service announced the recovery of our nation's symbol and removal from the list of threatened and endangered species.

Continued Population Growth

In 2016, the Service published the bald eagle population status report as part of a Programmatic Environmental Impact Statement. In that report which analyzed data from 2009, the bald eagle population in the lower 48 states was estimated to be 72,434 individuals, including 30,548 breeding pairs.

Then in 2021, the Service published a technical update that provided the newest estimates for the bald eagle population in the lower 48 states for the period 2018-2019, totaling 316,700 individuals, which included 71,467 breeding pairs.

What Lies Ahead

The recovery of the bald eagle is one of the most well-known conservation success stories of all time. The Service continues to work with our partners in state and federal agencies, tribes, non-government organizations and private landowners to ensure that our nation's symbol flourishes.

Although the Service removed the bald eagle from the list of threatened and endangered species under the Endangered Species Act, the bird continues to be protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Both laws prohibit killing, selling or otherwise harming eagles, their nests, or eggs.

The Service developed guidelines to help landowners avoid disturbing eagles and encourage beneficial conservation practices.

For more information on the recovery of bald eagles, please visit <https://www.fws.gov/birds/management/managed-species/eagle-management.php>

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