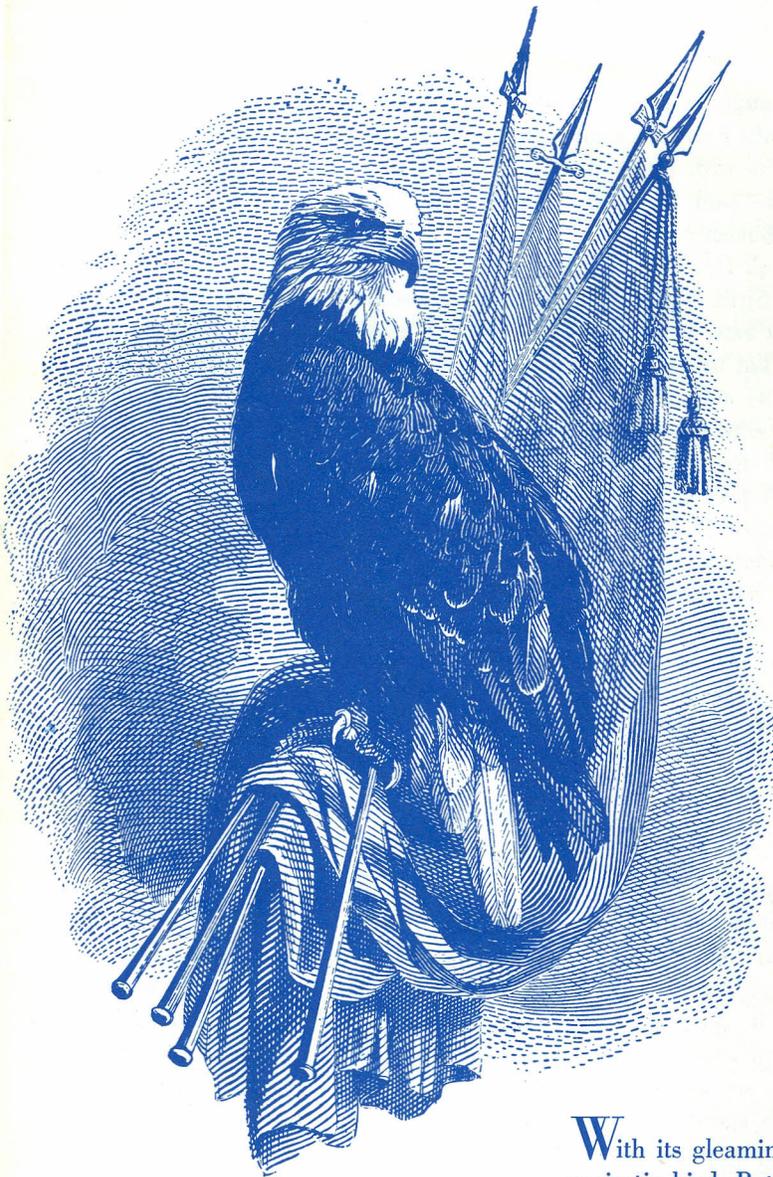




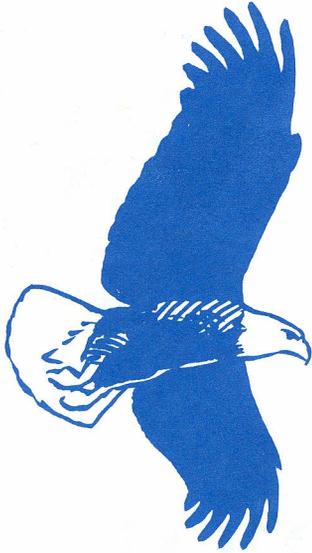
THE BALD EAGLE



With its gleaming white head and dark body, the bald eagle is a majestic bird. But it is tragic that this symbol of the United States has been seen by few Americans. Once common in many States, it is now threatened with extinction in many States.

At least history, if not much else, is on the side of the American eagle. Ben Franklin, John Adams, and Thomas Jefferson were appointed a committee to choose a seal by the Continental Congress, which believed the choice was an urgent matter. However, not until June 20, 1782 was the selection of the Bald Eagle made—a bird that symbolized “a free spirit, high soaring and courageous.”

General George Washington was the first to use the eagle seal on an order arranging exchange of war prisoners with Great Britain. Since then, the bird has been affixed to proclamations, ratifications of treaties, and other official documents signed by the President. It is also on dollar bills, uniform buttons, Federal statuary, and many State documents. The eagle on the seal is always the same—the bird grips an olive branch and 13 arrows (representing the 13 original colonies) in its talons, denoting strength in peace and war, and it carries a streamer with the words *E Pluribus Unum* (“Out of many, one”).



Although most of us have liked the bald eagle as our symbol, Benjamin Franklin wanted the wild turkey. The turkey, he admitted, probably with tongue-in-cheek, was "a little vain and silly" but the eagle, he said, "is a bird of bad moral character; he does not get his living honestly."

But as Dr. J. J. Murray of Virginia has pointed out, most meat-eating birds devour carrion. Just because the eagle is not fussy about what it eats, it is not an evil bird. It preys on smaller animals and birds, but many larger animals prey on those beneath them. Admittedly, its actions do not match the ideals of human behavior; it is merely acting like an eagle.

With the exception of the California condor, this is the largest bird of prey in North America. With its hooked yellow beak, used for tearing flesh, and its long curved talons, which grip and kill prey, its strength is impressive.

Our national symbol is native only to North America, except for a few eagles found in extreme eastern Siberia. There are two subspecies, the larger of which is found in the north, and the smaller found further south. The bird's scientific name, *Haliaeetus leucocephalus*, literally means white-headed sea eagle. All these birds have feathered heads; the Greek word "bald" means white, not bare.

The male eagle, as is the case with all birds of prey, is smaller and more shy than the female. The female stands 42 inches high and weighs 10 to 14 pounds whereas the male is only 35 inches and 8 to 10½ pounds. The male has a 6½ foot wingspread, compared to 8 feet for the female.

Seen in flight, the American eagle is a thrilling sight. With its gleaming head thrust forward and its wings outstretched steady and wide, it can cruise slowly on a level course for a remarkably long time, or soar in wide circles high in the sky. Its vision is amazing—it can see as far as 3 miles. The eagle sights its prey, dives with terrific speed—sometimes 60 mph—levels off, brakes, and snatches its victim in its talons.

Fish comprise 65 to 90 percent of the eagle's diet. It also eats waterfowl, seabirds, grebes, loons, herons, small rodents, grouse, crows, rats, and crabs—some of which are already dead due to other causes. In Alaska and Canada, salmon and herring comprise most of the eagle's diet, and a few are caught on their way to upstream spawning. But most are captured, dead or dying, after spawning.

Bald eagles just do not destroy that many valuable animals. The accusations against the birds nesting around muskrat marches or near lairs of other fur bearers are usually unfounded; the animals attacked are often sick, making the eagle's role an important one in preventing the spread of disease.

The bird often watches the smaller osprey. When the osprey has caught a fish, its larger cousin swoops down on it, flustering it until it drops its victim. The prize then belongs to the eagle. This does not mean that the bald cannot capture its own food; it is only easier for the bird to pick up dead fish from the beach or frighten osprey.

Audubon recalled: "Now and then he takes fish himself in the shallows of small creeks. I saw this occur in the Perkiomen Creek near my Pennsylvania plantation Mill Grove where eagles were catching

red-fins by wading briskly through the water and striking the fishes with their bills.”

The great bird's aloofness and fierce appearance give some people a ridiculous idea about it. They see the eagle as a fierce marauder who swoops down from the sky to kidnap pets, poultry, lambs, and even children. In reality, any object the eagle carries must be very small; the bird itself only weighs 8 to 14 pounds and cannot possibly carry its own weight.

The largest number of eagles are found in Alaska. After this State, the main nesting region of the northern species is in Canada and the Great Lakes States. A diminishing number of the southern variety are found in Florida and the mid-Atlantic coastal region.

Migrations are varied and several factors are involved. Some bald eagles migrate following the nesting season while others do not move at all. Immature birds travel south earlier in the fall, and return later. In addition, the colder the weather, the further south they fly. In Alaska, the birds usually go to the coast in the winter. In the Eastern United States during spring many eagles migrate from Florida to Canada.

Nesting habits are also irregular. In Florida, nesting activities begin in October and continue through winter, while in the Chesapeake Bay region these activities occur from February to May. In the Great Lakes area, the first eggs are laid in March and April; nesting extends from March into August in Canada and Alaska.

Tall sturdy trees are preferred sites for eyries, which are usually built 50 to 100 feet off the ground. The branches determine the nest's shape; it can be cylindrical, bowl-shaped, or an inverted cone. Many eyries are on the tops of dead trees. This is not done purposefully—after many years of use, the fish oils seeping through the bark have stopped the upward flow of sap. Where there are no trees, rocky cliffs or even the bare ground have been used for sites.

The mating of eagles is a serious business. The eagles are together for life, although they do not necessarily breed every year. The parents work together for 4 strenuous days to build a nest. Small sticks, straw, dead grass, and sod go into its making. The nest is usually 4½ feet deep and 5 feet across at first, and because it is used again and again it grows each year with refurbishment. One of the largest eyries ever recorded was in St. Petersburg, Florida—it stood 20 feet deep, 9½ feet in diameter, and weighed 2 tons.

Incubation lasts 34 to 35 days, and angry screams greet the mate who is slow in taking its turn guarding the nest. The nest usually contains one to three eggs, but the most frequent number found recently has been one. It takes approximately 18 hours for the eaglet to hatch, using its egg tooth to cut the shell.

The parents take good care of their young, bring to the nest plenty of food which is then ripped into bit size pieces for the eaglet's consumption. At first, the fledglings have a white head and smoky gray down, but at 3 to 4 weeks a heavy “wool” appears. By the time the first steps are taken during the sixth or seventh week, the dark, juvenile plumage has developed. The eaglet's eyrie is its home, gymnasium, and flying field. The bird practices early by stretching and exercising until it is ready to fly by the twelfth week.



Hesitant eagles are sometimes enticed by their parents who approach the nest with a fish and then veer off, until the young flies after the food. Unlike many other birds who rarely return to the nest after leaving it, eaglets often remain in the vicinity and are fed at the nest site for some weeks more. Once on its own, the eagle may live until it is 30 years old.

Protective legislation was enacted in 1940 which made it unlawful to take, possess, sell, purchase, barter, transport, export or import, or shoot any bald eagle. But if the present rate of decline in the number of eagles continues, this story will merely be fiction as our national bird faces extinction.

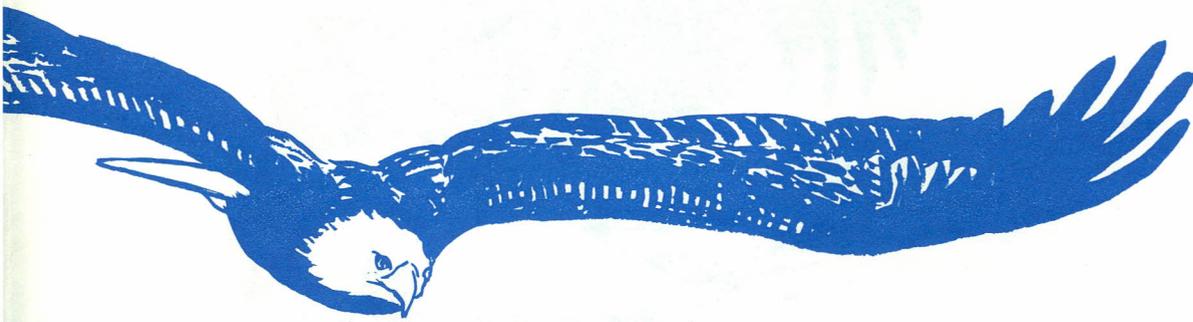
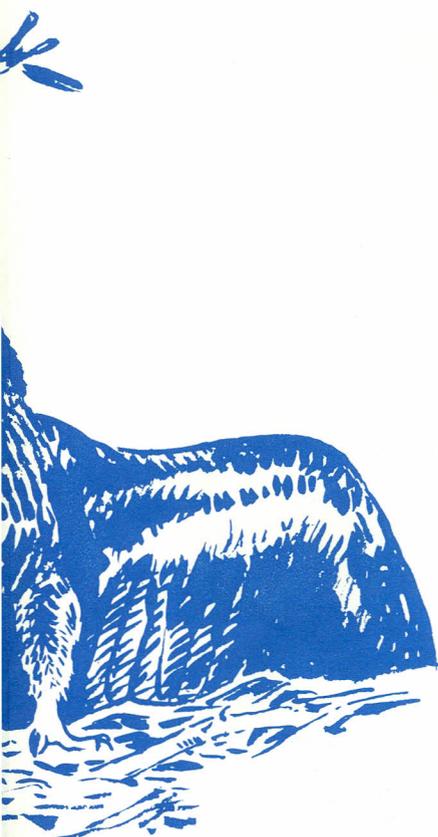
C. L. Broley, who made studies of the bald eagle in Florida, was one of the first to prove a decrease in numbers. This is an area where the bald eagle used to be abundant; in 1943 Broley found an average of one active nest per mile in a 125-mile stretch on the west coast between Tampa and Fort Myers. In 1947 however, he noticed that 40 percent of the nests failed to produce young. He had begun by banding 150 eagles a year, and to his dismay he watched the number dwindle: in 1950 he found 24 young; in 1955, eight; in 1958, just one. Unable to definitely prove it, Broley feared sterility caused by pesticides.

Florida's east coast is also in danger. Dr. J. C. Howell surveyed a mile area in the vicinity of Merritt Island between 1935 and 1956. In 1956 he noticed the environment was drastically altered. Many of the big trees holding eyries had been cut; bulldozers had ripped out wild vegetation to clear a path for orchards, gardens and housing developments; and inland marshes were drained, robbing the eagles of an important food source.

Everglades National Park has avoided similar destruction. There the numbers have risen: in 1959, 24 nests were found of which 11 produced 18 young; in 1964, of the 51 nests, 26 hatched 41 eaglets.

The Hawk Mountain Sanctuary in Pennsylvania confirms conservationists' fears. An average 38 out of every 100 bald eagles migrating over that area between 1935 and 1940 were immature, but between 1953 to 1958 the proportion fell to 21 out of 100, and in 1963 to 1964 the ratio was 10 per 100. Such proportions of young mean productivity is lower, which in turn signals potential extinction.

The story is the same in the Chesapeake Bay region. Jackson Abbott, Virginia conservationist, is finding fewer nesting pairs, and these pairs are breeding less frequently. There are also smaller broods, and fewer immature eagles.



In the past, the great bird's abundance in Alaska incurred the anger of fox farmers who claimed their animals were being attacked. Commercial fishermen also complained that too many migrating salmon and herring were being killed. The result was a bounty on the bald eagle from 1917 to 1952, which continued 12 years after the rest of the United States passed protective legislation. During this time the Alaskan legislature paid more than \$100,000 in bounty payments for the more than 100,000 bald eagles killed. In 1959, Alaska finally came under Federal law. Today it is the only State in which the birds are still plentiful.

Witnessing all these trends, the National Audubon Society began an extensive study of our American bird. It was in its fifth year in January 1967 but had already recorded a decline in all populations with the exception of the Northwest. The greatest damage has been along the Atlantic and Gulf Coasts, particularly in the Chesapeake Bay and Florida areas.

Alexander Sprunt IV reports that only some 600 breeding pairs in the contiguous United States were discovered by the survey as of 1966—approximately half the number that existed 20 years ago. The figures in January leap to a population of about 5,000 due to migrations from Canada and Alaska.

Sprunt gives three reasons for the decrease. Population pressures are destroying nest sites and feeding areas. Shooting continues, particularly of immature birds. And environmental pollution takes a toll, especially pesticides which are affecting reproduction. Although no absolute proof can be leveled against pesticides, Sprunt notes that the decline in reproduction took place while pesticides were used heavily.

The question of our great symbol's future remains. Can it be saved from extinction? Director John Gottschalk of the Bureau of Sport Fisheries and Wildlife thinks hope still exists, although he notes that as of February 1967, the bird's southern race was officially classified as "endangered" by the Federal Government. The answer lies with every American to take pride in and preserve the symbol of our national heritage. It is up to an educated public, aware of the consequences of extinction, to see that greater protection is given the bald eagle.



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