



**Common Name:** BALD EAGLE

**Scientific Name:** *Haliaeetus leucocephalus* Linnaeus

**Other Commonly Used Names:** American eagle, white-headed eagle, Washington eagle, white-headed sea eagle, black eagle

**Previously Used Names:** *Falco leucocephalus*

**Family:** Accipitridae

**Rarity Ranks:** G5/S2

**State Legal Status:** Threatened

**Federal Legal Status:** Not listed

**Federal Wetland Status:** N/A

**Description:** Adult bald eagles are easily recognized by their familiar dark brown body and contrasting white head and tail. The bill, eyes, legs, and feet are yellow. Immature birds vary

slightly in appearance depending on their age. They are generally dark brown with varying light patches, and the eyes and bill are dark. Full adult plumage is not attained until sexual maturity at about 5 years of age. The total length ranges from 76 to 109 cm (30-43 in), the wingspread from 182 to 249 cm (72-98 in), and the weight from 3.6 to 5.4 kg (8-12 lbs). Females are noticeably larger than males, and the average size of both sexes increases with latitude such that birds nesting in the northern states and Canada are significantly larger than birds nesting in southern states. Although there appears to be a continuous size gradient and no real genetic differences nor distinct breeding ranges, southern eagles are considered to be of the subspecies *H. l. leucocephalus* and northern eagles of the subspecies *H. l. alascensis*.

**Similar Species:** Golden eagles (*Aquila chrysaetos*) can look similar to juvenile and sub-adult bald eagles. Juvenile golden eagles have distinct white patches on the upper and lower wings near the tips and the base of the tail is white on both the upper and lower side with a distinct broad, dark band on the trailing edge. Juvenile and sub-adult bald eagles have varying amounts of white on the undersides of their wings, but it is more mottled in appearance and usually concentrated closer to the body. Sub-adult bald eagles often have white mottling on the breast and often on the back and upper wings near the body as well. The tails of both juvenile and sub-adult bald eagles also have varying amounts of white on the underside and often some white on the upper surface. Usually there is a narrow band of dark brown on the trailing edge of the tail, but this band is much narrower and less distinct than that of the golden eagle. Golden eagles of all ages will have a golden-brown head whereas juvenile and sub-adult bald eagles will have a dark brown head often with various amounts of white mottling.

**Habitat:** Juvenile bald eagles and non-nesting adults can be seen throughout Georgia, but known nesting activity is concentrated mostly along the coast and near major rivers, wetlands, and reservoirs in the southern and central parts of the state. Like other members of the "fish eagle" group, bald eagles almost always nest near open water. The coastal area, including the barrier islands, marsh islands, and nearby mainland, has always provided good eagle nesting habitat historically and still supports the greatest population density. However, construction of reservoirs such as Seminole, Walter F. George, Oconee, Allatoona, Carters, Clarks Hill, Nottley and West Point, has increased suitable inland nesting habitat. Bald eagles prefer isolated sites for nesting but are adapting to the presence of human disturbance in some areas. The nest is usually in a large, open-topped pine near open water, often on high ground if available. Occasionally cypress trees are used.

**Diet:** Fish; waterfowl, particularly coots during the eagle nesting season, and other birds; turtles; small mammals; and carrion.

**Life History:** Eagles form permanent pair bonds, but individuals will find another mate if the original is lost. They construct large stick nests in tall trees near water; used year after year, the nest can become quite large over time. Periodically, an eagle pair might construct and move into a new nest near the original one. In Georgia, courtship and nest-building typically occur in October and November. Two to three eggs are then laid in December or January and incubated for about 35 days. Both parents participate in incubation and caring for the 1-2 (rarely 3) young. The eaglets fledge at about 12 weeks, typically in late March or April, but they remain under parental care for several more weeks. Nesting chronology throughout the state varies by several

weeks and seems to be dependent primarily upon the habits of individual pairs and secondarily upon latitude. Bald eagles do not reach maturity until their fifth year, when they attain their adult plumage characterized by the white head and tail. Sub-adult birds sometimes pair with adults but usually do not nest successfully. Many juvenile eagles from the southeastern U. S. migrate northward during their first summer and return before winter. A smaller proportion of older age-class juveniles head north each season. Adults from Georgia are essentially non-migratory, but they might wander away from the nesting area until the next nesting season.

**Survey Recommendations:** Helicopter surveys of known nesting sites should be conducted in January to determine territory occupancy and second flights in March to determine nest productivity. Additionally, searches for new nest sites should be made in areas reported to have significant bald eagle activity during the breeding season and in other likely areas.

**Range:** Bald eagles are found throughout most of the U. S. and Canada and very northern Mexico. Nesting occurs at scattered sites throughout their range with only a few nests documented in Mexico. Until the last few decades, nesting eagles in Georgia were reported primarily from the coastal area with only one non-coastal nest reported (in the Okefenokee Swamp in 1936). In recent decades their breeding range has spread throughout the state with about one-third of all nests still located in the six coastal counties, but significant numbers scattered across the Coastal Plain and Piedmont. A few nests now occur in the mountains. Inland impoundments have greatly increased the amount of suitable habitat in the state and nesting occurs on almost all major reservoirs. Additionally, eagle nests are now found on several smaller reservoirs, along some stretches of major rivers, on natural ponds in the extreme south-central part of the state, and near some Coastal Plain aquaculture facilities.

**Threats:** Bald eagle populations in the U.S. had apparently begun to decline more than a century ago, probably due to predator control efforts and habitat alteration. During the 1960s, most of the problems suffered by bald eagle populations, as well as several other species, were traced to the impacts of DDT (dichloro diphenyl trichloroethane), a pesticide that was widely used on agricultural and forest lands beginning in 1947. The chemical entered the eagles' food chain and killed some birds directly. Usually, however, it accumulated in the bodies of prey animals, and then in the eagles themselves where it impaired reproduction. Use of DDT was outlawed in the U. S. in 1972, but it is still manufactured here and used elsewhere. Other persistent toxic chemicals such as PCBs, mercury, and other pesticides and herbicides, continue to pose potential threats to eagles and other wildlife. This species is still susceptible to poisoned baits used for predator control and euthanized carcasses containing pentobarbital, and some eagles are still being injured or killed by gunshot. Nesting habitat is also being lost. A recent concern in Georgia and some other southeastern states is the appearance of a mysterious and often fatal neurological disease called avian vacuolar myelinopathy (AVM) that appears to be linked to toxic algae growing on submerged plants. Apparently, eagles are affected when they consume diseased American coots that have incidentally ingested the algae while feeding on plants.

**Georgia Conservation Status:** Ossabaw, St. Catherines, Sapelo, Little Tybee, Wassaw, Cumberland, Blackbeard, Little St. Simons, other islands and isolated marsh hammocks; Army Corps of Engineers land at Seminole, Allatoona, Strom Thurmond, West Point, Carters, and Walter F. George lakes; Oconee National Forest, Ft. Stewart, Ft. Benning, Grassy Pond (Air

Force), Reed Bingham State Park, Dodge County and Big Lazar Public Fishing Areas; Georgia Power Plant Wansley; Blanton Creek WMA; Bond Swamp NWR; and Silver Lake WMA .

**Conservation and Management Recommendations:** In Georgia, bald eagles were apparently fairly common along the coast up until the middle of the 20th century. However, by the 1950s population declines had been detected. The decline continued until the last known successful nest was noted on St. Catherines Island in 1970. It was not until 1981, on Ossabaw Island, that an eagle pair again produced young in the state. A hacking program from 1979-1995 released young bald eagles on Sapelo and Butler Islands on the coast and at Lake Allatoona north of Atlanta to help reestablish the population. By the time this hacking program was discontinued a total of 89 birds had been released. It is unknown how successful these efforts were due to the difficulty in tracking released birds, but at least one of these birds nested in South Carolina. Others might have nested in Georgia or elsewhere. The nesting population has likely grown and expanded primarily as a result of the ban on DDT as well as other conservation and management efforts. By 1994 the Georgia nesting population surpassed the initial recovery goal of 20 occupied territories. In 1995 the eagle was federally down-listed to threatened, and after continuing to experience widespread population recovery was delisted in August of 2007. By 2010 there were 135 known occupied nesting territories in Georgia. Presently, all known eagle nests are monitored each year to determine occupancy, productivity, and management needs. New nests are found through reports from the public and through surveys of likely habitat. As both the human and eagle populations continue to increase, these two species will more frequently come into contact with each other. Continuing public education is necessary to ensure that attitudes and policy will be conducive to eagle survival. Resolution of management conflicts arising from eagle nests on private land will continue to be a high priority. The objective will be to protect the integrity of the nest site such that the pair will continue to produce young, while at the same time recommending as few management restrictions as is necessary to the landowner.

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J. Ozier, 1999: original account

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