



**Common Name:** PEREGRINE FALCON

**Scientific Name:** *Falco peregrinus* Tunstall

**Other Commonly Used Names:** Great-footed hawk, American peregrine, duck hawk, wandering falcon

**Previously Used Names:** None

**Family:** Falconidae

**Rarity Ranks:** G4/S1

**State Legal Status:** Rare

**Federal Legal Status:** Not listed

**Federal Wetland Status:** N/A

**Description:** This raptor is 38-53 cm (15-21 in) in length with long pointed wings and a wingspan of up to 112 cm (44 in). The tail is long and narrow with alternating light and dark lateral banding. Adult birds are slate gray on the back and have a light breast and abdomen with dark horizontal markings. The cap and nape are black, and a black mustache extends below the eye forming a distinctive dark helmet. Females are noticeably larger than males. Immature birds are browner and heavily marked with vertical streaking on the breast.

**Similar Species:** The Merlin (*Falco columbarius*) can be very similar in appearance to the peregrine, but is substantially smaller (25 cm vs. 40 cm in length), and tends to be darker in overall color. Its "mustache" stripe is much fainter than that of the peregrine and can be absent in some birds. The American kestrel (*Falco sparverius*), while similar in shape and overall

appearance, is much smaller (23 cm in length) and is much lighter in color than the peregrine with a reddish-brown back with dark horizontal barring, white to buff breast with brown to gray markings or streaking, a white vent area, gray to blue-gray cap, and whitish face with two black vertical stripes. Male kestrels have bluish-gray upper wings while females have reddish-brown streaking on the wings. Kestrel flight is rather weak and buoyant, unlike the fast and direct flight of the peregrine, and kestrels often hover several meters above the ground before diving to the ground to catch a mouse. Both the sharp-shinned hawk (*Accipiter striatus*) and Cooper's hawk (*Accipiter cooperii*) are often mistaken for a peregrine falcon due to their overall appearance and rapid and direct flight. These hawks are easily distinguished from the peregrine by their relatively short, rounded wings versus the long pointed wings of the falcon. Adults also differ from the peregrine by having a buffy-colored breast and immature and adult birds have yellow, orange, or red eyes, unlike the dark eyes of the peregrine.

**Habitat:** Natural nest sites, known as eyries, are normally located on inaccessible cliff ledges where the young are safe from predators. In recent decades peregrines have adapted to new habitats provided by cities, and many pairs now nest on city buildings, bridges, and smokestacks and forage in surrounding urban areas for pigeons and other birds. There have been no documented cases of peregrines nesting on cliffs in the state since the early 1940s, but there are two sites in Atlanta where they nest on buildings. During migration this species can be found almost anywhere in the state, but birds tend to concentrate along the coast. A few individuals that migrate through Georgia winter along our coast while most move further south, some as far as southern South America.

**Diet:** Birds caught on the wing, including pigeons, shorebirds, various songbirds, and occasionally waterfowl.

**Life History:** The peregrine's nest is usually a shallow depression on a cliff ledge that is scraped in the substrate (i.e., dirt, sand, gravel, or other loose material), but they also nest in nest boxes, on platforms, and in other places on buildings, bridges, and smokestacks. Normally 2-4 eggs are laid in this depression and incubated by both adults for 33-35 days before they hatch. The adults share in caring for the young, which leave the nest at about 35 days. Young remain dependent upon their parents for several more weeks as they develop flight and hunting skills. Peregrines usually do not attempt to nest during their first year of life and may wait until they are 3 or 4 years old. They typically mate for life, but will find a replacement if a mate is lost. The nesting season in Georgia may start as early as late February and young usually fledge by late May. When feeding, these falcons commonly take their prey by swift pursuit or a very fast "stoop" ending in a powerful punch from the talons that sends the prey tumbling to the ground. These stoops have been estimated at nearly 320 kilometers per hour (200 mph), giving the peregrine the distinction of being the fastest bird in the world.

**Survey Recommendations:** Helicopter surveys of suitable cliff habitat in the mountains from March through May to identify any nesting activity. Also, the two nest sites on buildings in downtown Atlanta should be monitored and nesting success tracked. This can be done with one or two site visits, remote cameras, and by using observations of people who work in these buildings.

**Range:** This species is one of the most widely distributed of all birds occurring sporadically as a breeder throughout all major regions of the world except Antarctica, the Amazon Basin, the Sahara Desert, and most of the steppes of central and eastern Asia. In North America breeding peregrines are found in the Canadian tundra and Alaska, sporadically throughout the contiguous U.S., and in mountainous areas of northern Mexico. The peregrine's historic nesting range in Georgia was in the extreme northern part of the state, with the last known wild nest at Cloudland Canyon (Dade County) in the early 1940s. Georgia is the southern limit of the historic breeding range of this species in the eastern U. S. Two nest sites on buildings in Atlanta have been active for the past several years.

**Threats:** The U.S. peregrine falcon population suffered a precipitous decline from the late 1940s through the early 1970s when the U.S. Fish and Wildlife Service placed this bird on the endangered species list. Although shooting, egg collection, and nest disturbance were detrimental to this species, population declines were primarily due to the effects of DDT (dichloro-diphenyl-trichloroethane) and other related organochlorine chemicals that were ingested by the peregrines through their avian diet. These chemicals interfered with calcium transfer from the female to the eggs leading to eggshell thinning. The thinner eggshells were unable to support the weight of adult birds during incubation leading to loss of the eggs. Lack of successful reproduction caused the peregrine falcon population to crash. Historically, an estimated 400 pairs of peregrines nested in the eastern U.S. The eastern population was probably extirpated by the late 1950s or early 1960s. Although DDT was banned in North America in 1972, peregrines continue to encounter this and other deadly toxins south of the U.S. border during migration and winter. Successful nesting occurs today, though some populations continue to have eggshells thinner than those found prior to widespread use of DDT. Tissue samples of birds overwintering in Latin America indicate high levels of DDT compounds. In addition to these continued problems, the primary threat to peregrine falcons today is the expanding human population and the associated loss of suitable undisturbed natural nesting and foraging areas. Large plate glass windows, wires, and other city hazards also take their toll on young birds learning to fly and hunt in urban areas.

**Georgia Conservation Status:** The last and only documented natural nesting site in the state was Cloudland Canyon (State Park).

**Conservation and Management Recommendations:** Several hundred peregrines have been released at numerous sites in the eastern United States since 1972, and the population has been partially restored. Successful nesting resumed in 1980. The eastern U.S. population is now estimated to number more than 450 pairs. Between 1987 and 1998, about three dozen young peregrines were released at Mt. Yonah, Bell Mountain, and Tallulah Gorge in northeastern Georgia; at Cloudland Canyon in northwestern Georgia; and in downtown Atlanta from the Georgia Power building. A male peregrine released at the Georgia Power building in 1989 established a territory at the Marriott Marquis Hotel in Atlanta in 1992, but interference from a third adult disrupted the nesting attempt. The next known nesting attempt at this same site, in 1996, was successful. In 1997 this pair nested on the nearby Suntrust Tower. This building has been used as a nest site each year since. In 2003, a second nest site was discovered on the Four Seasons Hotel about 2.5 km to the north. This second site also continues to be used. It is likely that additional nest sites will be identified in Atlanta, and conservationists eagerly await the reoccupation of the cliffs of northern Georgia.

The North American peregrine falcon population has recovered to the point that in 2009 the U.S. Fish and Wildlife Service, in cooperation with the Flyway Councils and state wildlife agencies, resumed very limited legal take of peregrines for falconry. The trapping season is structured to heavily favor the take of migrating yearling birds from the northern population (northern Canada, Alaska, Greenland), which numbers several thousand pairs. In 2009, a single bird was captured in Georgia for falconry.

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**Date Compiled or Updated:**

E. J. Williams, 1999: original account

J. Ozier, 2010: Breeding Bird Atlas species account

T. M. Schneider, July 2010: modified and edited text

K. Owers, July 2010: updated status and ranks, added picture