

**STATE
ENDANGERED**

Peregrine Falcon

(*Falco peregrinus*)



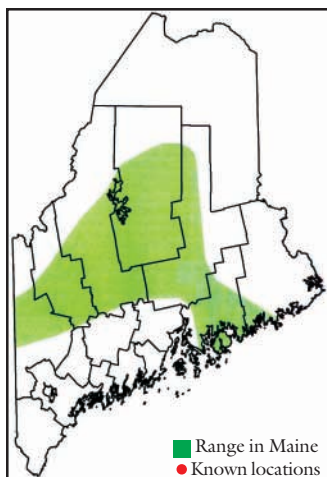
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Description

The peregrine falcon is a sleek, rapid-flying bird of prey. Its wingspan measures 35-46 inches, body length ranges from 13-19 inches, and weight is 20-35 ounces. Females are about 30 percent larger than males; otherwise the sexes are similar in appearance. Adults have uniform blue-gray upperparts that extend as a “helmet” onto the head and face; light barring on the belly; white on the chest and throat; and a rufous wash on the lower chest and belly. The bold, distinct mustache mark is obvious on both adults and immatures. Immature birds have brown upperparts, heavy streaking on the underparts, and buff on the chest and throat. Wings are long and taper to a point. The tundra peregrine (subspecies *tundrius*), which typically is seen during migration in the East, is paler than the *anatum* subspecies. Maine’s reintroduced peregrines are a genetic blend of many subspecies and races from around the world and vary in plumage characteristics.

Range and Habitat

Peregrine falcons are found worldwide and breed on all continents except Antarctica. Although once broadly distributed in North America, they were extirpated throughout much of their historic range. Three subspecies occur in North America. *Falco peregrinus anatum* was native to



the East and bred in Maine. Breeding peregrines were reported in all mountainous and coastal headland regions of the state.

Breeding habitat requires cliffs for nesting and perching and an adequate prey base of small to medium-sized birds. Open water in proximity to cliffs may enhance foraging opportunities. Nests, or eyries, are located on ledges or overhangs that are inaccessible to mammalian predators and provide protection from the elements. More recently, peregrines have adapted to nesting on bridges and buildings in urban environments. Peregrines are coastal migrants. In September and October, many Canadian birds (*tundrius* and *anatum* subspecies from the North) are seen throughout Maine, particularly near offshore islands.

Life History and Ecology

Peregrine falcons generally reach sexual maturity at two years of age. They form permanent pair bonds and remain mated for life. Peregrines breeding in Maine return from wintering areas and establish territories in March or April. Courtship displays include high circling, undulating flights, and figure-eight flights. Both members of the pair engage in high circling and “flight play.”

The nest is a scrape or slight depression in gravel or debris on a cliff ledge. Eggs are laid at 2-3 day intervals, with completed clutches containing 3-4 eggs. Incubation begins with the laying of the last egg and lasts 30-36 days. Both sexes share incubation duties, although the female does the majority. Hatching in Maine occurs in May or early June. The young remain in the nest for about six weeks and fledge in late June or July. Fledglings remain at the nest through August. Both adults feed the young.

Peregrines attack and kill their prey in flight by a sharp blow from a vertical dive. Diving speeds have been estimated at 200 miles per hour. Primary prey items include shorebirds, seabirds, rock doves, and a variety of other small birds. Peregrines migrate in the fall, primarily to coastal areas in the Southeast or Central and South America. However, some adults breeding in the Northeast may remain year-round.

Threats

Shooting and collection of peregrines or their eggs were infrequently documented in Maine during the early 1900s. Increased use of pesticides after World War II, especially DDT, caused drastic declines in peregrine populations worldwide. Organochlorine compounds like DDE, a by-product of DDT, resulted in shell thinning, egg breakage, and reproductive failure. After peregrines were completely extirpated from the eastern United States by the early 1960s, DDT was banned in the U.S. in 1972. Although no longer used here, this chemical persists in our environment and is still used in South America where peregrines winter. Habitat is not limiting in Maine, where cliffs adjacent to large open areas are in good supply. Human disturbance (e.g., hiking and rock climbing) during the nesting season can cause nest failure.

Conservation and Management

There is little information on past populations of the eastern peregrine (subspecies *anatum*) in Maine. Only 16 eyries are referenced in the historic literature, but this likely is an underestimate. An eyrie occupied by peregrines during 1962 in Acadia National Park was among the last known active nests in the East.

Maine joined other states in a large-scale reintroduction program. Young, captive-reared peregrines were slowly released at former nest sites in a process called "hacking." A total of 144 birds were successfully released at eight different locations in Maine from 1984-1997. Peregrines began to nest in Maine in 1987. The first successful nesting of reestablished peregrines in Maine occurred in Oxford County. In 1988, the last site occupied by eastern peregrines in Acadia National Park was reoccupied. From 1988-2001, 5-8 pairs nested in the state at 13 different sites. Young have been produced at normal rates. The population dramatically increased to 15 pairs in 2002. Reintroduced peregrines have been successful in New Hampshire, Vermont, and New York, and undoubtedly young produced there have established eyries in Maine. With recovery of the species nationwide, the peregrine falcon was taken off the federal

endangered species list in 1999, but its breeding population remains listed as endangered on the Maine list, as its numbers here are still low.

Recommendations:

- ✓ Prior to land development near peregrine falcon eyries, consult with a biologist from MDIFW to assist with planning.
- ✓ Use voluntary agreements, conservation easements, conservation tax abatements and incentives, and acquisition to protect important habitat for threatened and endangered species.
- ✓ Prohibit climbing on the cliff and hiking near the cliff rim within ¼ mile of peregrine eyries during the March 15 to August 15 nesting season. Falcons are especially disturbed by nearby activity on the cliff or on trails that are line-of-sight from the nest or perches. (Where falcon nests are already established in proximity to humans, these recommendations can be relaxed, unless the birds show evidence of disturbance from human activity.)
- ✓ Maintain trail closures until five weeks after the last bird has fledged (usually late July to mid-August).
- ✓ Avoid construction of permanent roads within 660 feet of a known peregrine site.
- ✓ Avoid logging within ¼ mile of an active eyrie during the nesting season.
- ✓ Aircraft should not approach closer than 1,500 feet above a nest. Closer approaches may cause peregrines to attack planes or may cause a frantic departure from the nest. Falcons startled from the eyrie have been known to damage eggs or injure nestlings.
- ✓ Route powerlines and other wires away from eyries to avoid collisions and electrocution hazards.
- ✓ Avoid applications of pesticides around occupied eyries during the breeding season.
- ✓ Wetlands, especially intertidal mudflats, estuaries, and coastal marshes, are key feeding areas. Protect wetlands used regularly by peregrine falcons at any time of the year from filling, development, or other disturbances that could alter prey abundance and habitat quality.
- ✓ Maintain large trees and snags in areas where peregrines nest and feed. These perches are important for roosting and hunting. Leave snags and debris on mud flats for perching and roosting. 🦅