

**STATE  
ENDANGERED**

## Golden Eagle

*(Aquila chrysaetos)*



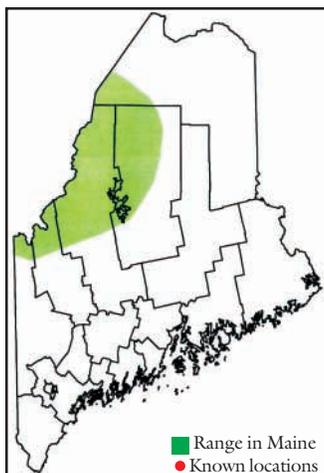
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### Description

It can be safely said that the golden eagle is Maine's rarest breeding bird. For many years, only a single pair nested in the state, and its recent disappearance is distressing. The golden eagle rivals the bald eagle as the largest bird of prey in Maine. Golden eagle wingspans extend up to 6 feet, body length is up to 40 inches, and weight is 8-13 pounds. Females are larger than males, but otherwise the sexes look the same. Golden eagles are uniformly brown-bodied throughout their lives. They get their name from amber or golden-buff highlights on the head and neck. Adults have a black tail with faint gray zigzag banding. The bill is black. Immatures (1-4 years old) have white patches at the base of the primaries and a white tail with a dark terminal band. Golden eagles are easily confused with immature bald eagles. Goldens have shorter hawk-like bills, their lower legs are feathered to the ankles, and they soar with slightly uplifted wings.

### Range and Habitat

Golden eagles are found throughout the northern hemisphere. In North America, a large population is widespread throughout the western Rockies and north into Alaska. In the East, a small breeding population occurs in Maine, Labrador, and Quebec, although its range is greatly reduced from



its former extent down the Appalachians to North Carolina. Golden eagles are traditionally associated with rugged topography and open country including rangelands, tundra, and alpine areas. They often nest on cliffs in mountains, but tree-nesting prevails in forested regions. In Maine, golden eagles have typically been associated with mountainous areas in the western and northwestern portions of the state. Both cliff and tree nests have been documented in Maine.

### Life History and Ecology

In Maine, the nesting season begins in February or March when birds return to nesting areas. Courtship displays include spiraling flights interspersed with aerial dives and talon grappling. During the breeding period, the pair may occupy a home range of 50-100 square miles. Within this area, the pair typically maintains more than one nest, often on separate cliffs. One to two eggs are laid in April. Females perform much of the 6-week incubation. Young birds remain at the nest for 10-12 weeks and are fed by both parents. Fledging occurs in July or August and young birds may remain in the vicinity of the nest for 10-12 weeks and follow adults to feeding areas. They eventually migrate south in September or October.

Wintering areas are from Maine and the Maritime Provinces to the southeastern states, depending on the availability of food. In Maine, food remains at the nest have consisted entirely of wading birds (bitterns and herons). Normal diets elsewhere include ground squirrels, marmots, ptarmigan, and seabirds (at coastal eyries). Maturity is reached at four years of age. Golden eagles remain with the same mate for life. Adults may live 15 to 20 years in

the wild, although they have lived to 46 years in captivity.

## Threats

Marginal habitat conditions (lack of food, open space for hunting prey) limit golden eagles in the East. Historically, shooting, trapping, and poisoning reduced golden eagle numbers. Environmental contaminants, especially DDT, caused reproductive impairment during the post-World War II era. Golden eagle eggs recovered from a Maine nest in 1996 contained lethal concentrations of DDE (a variant of DDT), PCBs, mercury, dieldrin, and mirex. Many of these chemicals have been banned from use for years, but still persist in the birds' bodies. Maine's golden eagles relied heavily on wading birds as prey, which had high levels of contaminants. Five dead goldens have been recovered in Maine since 1985: two died of natural causes, one was trapped, one was shot, and another was killed on a logging road. Like bald eagles, goldens are very susceptible to disturbance during the nesting season.

## Conservation and Management

Golden eagle populations have declined in the East throughout the last century, and were extirpated 20-40 years ago in other eastern states. Golden eagles have always been rare in Maine. Only 10 nesting territories have been documented with certainty, but at least 18 other localities are suspected. Six successful nesting attempts were recorded at three Maine eyries from 1955-1967. Goldens disappeared from Oxford, Franklin, and Somerset Counties during the 1980s. The last known nesting pair lingered in Maine until 1999, then disappeared from an eyrie that had probably been occupied by successive generations of eagles for hundreds of years. This pair was heavily contaminated and had not produced young since 1986. In recent years, sporadic observations of golden eagles have been documented during the nesting season, raising hope that individuals from Canada may reoccupy former eyries. Populations in eastern Canada are poorly documented, but may number 50 or more pairs. Counts of migrating golden eagles at hawk watch sites in the East indicate that the Eastern population is slowly increasing. Reintroduction programs have been conducted in Georgia, North Carolina, and Tennessee with little success. MDIFW monitors historic golden eyries annually with hopes that these majestic birds will once again grace our skies.

## Recommendations:

- ✓ Prior to land development or forest harvesting near eagle nesting areas, consult with biologists from MDIFW to assist with planning.
- ✓ Birders, photographers, and others should stay away from nests during the nesting season. If a golden eagle nest is identified or suspected in an area, suspend activities that potentially disturb nesting eagles during the nesting season (February 1 to August 31). Avoid human activity within ¼ mile of a known nest during the nesting season.
- ✓ Report golden eagle sightings and suspected eagle nest locations to MDIFW.
- ✓ Avoid construction of permanent access roads within ¼ mile of a golden eagle nest, and possibly farther in areas highly visible from cliff nest sites.
- ✓ Forestry is compatible during the non-nesting season after consultation with MDIFW. Single-tree harvest or small patch cuts are acceptable within 660 feet of the nest, as long as the structural character of the area is maintained. Managing for large white pines that extend above the canopy can provide potential nest trees.
- ✓ Avoid applications of pesticides around nesting areas. 🐦