

Accipitridae Aquila

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# Golden Eagle

*Aquila chrysaetos* ⓘ

**LC** Least Concern Names (46) Subspecies (6)

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The Golden Eagle inhabits a wide range of latitudes and habitats throughout the Palearctic and into northern Africa, where it is largely resident. In North America, its breeding distribution includes most of Canada and Alaska, as well as the western half of the United States and northern and western Mexico. Most eagles that nest in northern Canada and interior and northern Alaska migrate thousands of kilometers to wintering grounds. Southern eagles tend to be resident year-round, but some make northward, latitudinal, or altitudinal migrations when not on territory. During the non-breeding season, Golden Eagle occurs in Mexico, every U.S. state, and in the southern parts of Canada. It is most common in western North America, especially near open spaces that provide hunting habitat with ample prey, near cliffs or trees that supply nesting sites, and topography that creates updrafts essential for flight. Recent research has shown that the Golden Eagle is more common than once thought in eastern North America as well as in forested areas continent-wide, and that young individuals may summer in large numbers in the vast and productive wetlands of northernmost North America.

One of the world's largest predatory birds, the Golden Eagle is prominent in modern and ancient human lore and culture, inspiring awe, reverence, and sometimes fear and hatred. Humans kill Golden Eagles, both intentionally and accidentally, by trapping, shooting, poisoning, electrocution, and collision with infrastructure and vehicles. In addition, urbanization, construction of energy production and transmission infrastructure, agricultural development, and wildfires encroach on many traditional foraging and nesting habitats. Likewise, cascading effects of the rapidly warming climate, (i.e., extreme weather events, spread of disease and parasites) are expected to bring many new challenges to the Golden Eagle. Recent modeling suggests that some eagle populations are stable or even increasing, but most North American nesting populations are declining or below carrying capacity due, in part, to anthropogenic related mortality.

A highly efficient flier and effective predator, the Golden Eagle exhibits tremendous variability, speed and maneuverability in flight. This is reflected in the wide variety of habitats it occupies, and the hunting techniques used to capture prey. This species is capable of killing large prey such as cranes, wild ungulates, and domestic livestock, but it subsists primarily on medium-sized birds and mammals, especially rabbits, hares, ground squirrels, and prairie dogs. It scavenges year-round, but especially in winter.

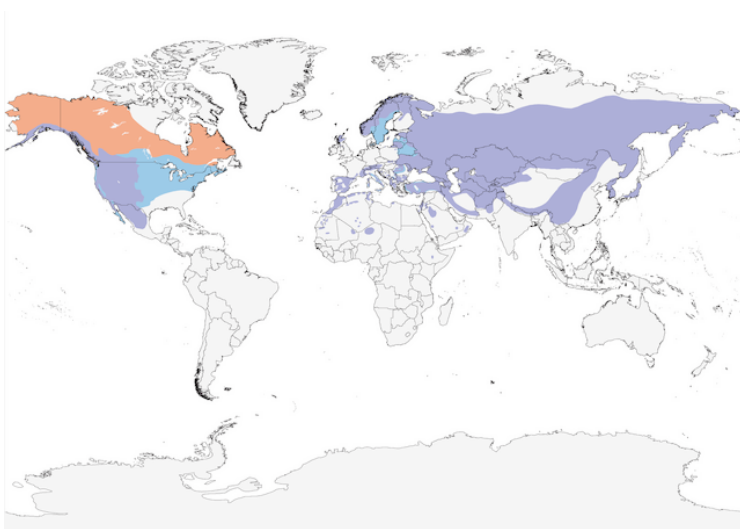
Most Golden Eagles do not acquire a nesting territory until they are at least four years old. Once an individual establishes a territory, it tends to remain there during the nesting season, defending from conspecifics a territory of that generally ranges from 20–30 km<sup>2</sup>, but that can be substantially smaller or larger depending on region, habitat quality and prey availability. This species usually builds and maintains many stick nests within their territories. Some of these are maintained and repaired annually as part of courtship. The nesting cycle, including the post-fledgling dependence period, spans as little as 5 months for migratory individuals, or as long as 12 months for non-migratory birds. Golden Eagle pairs raise 1 to 3 young per year, with an individual potentially producing many more than that over the course of its life (1). Females may refrain from laying eggs in some years, particularly when prey are scarce. The number of young produced each year depends on a combination of weather and prey conditions. For example, in some parts of the eagle's range (Idaho, Scotland), interactions between weather and populations of prey species are known to influence eagle reproductive rates.

Historically, most information on life history came from studies in Europe (2) and the western United States (3). More recently, research has expanded rapidly in Mexico (4), eastern North America (5), and throughout the western United States in response to increased concern about the growth of renewable energy and the demonstrated and potential effects of wind turbines on eagles (6, 7) and other raptors (8). Likewise, important studies are underway in Scandinavia, the Alps, and other parts of mainland Eurasia, northern Africa, and Japan (e.g., 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21). Despite this expanding research, data gaps still exist for the

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many threats the species' faces globally, for winter and migration biology, for the biology of pre-breeding age individuals and adults that do not hold territories, and in many places, for their breeding biology.

[Identification >](#)



Year-round  
Breeding

Migration  
Non-Breeding

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### Distribution of the Golden Eagle



[All Illustrations \(3\)](#)

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