

Morley Nelson Snake River Birds of Prey



National Conservation Area

Gyrfalcon (*Falco rusticolus*)

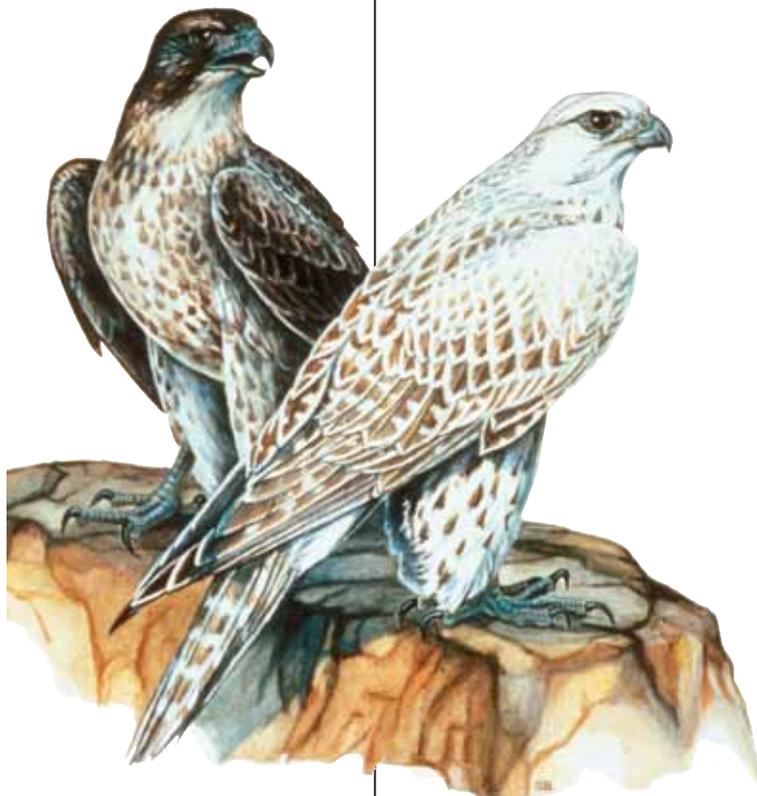
Description/Size

Wing span: 40-52 inches
Length: 19-25 inches
Weight: 1.8-4.4 pounds

Our largest falcon and most northern diurnal raptor. Stocky broad body; broad wings with blunt tips, relatively long-tailed. Wingtips do not reach tail tip. Gyrfalcons exhibit pronounced sexual dimorphism in size (males weigh only about 65% as much as females) but not in plumage. No subspecies are recognized. Three color morphs with many intermediates; majority are gray. Most types found throughout range, but relative frequency of plumage types differs among locations. White morph nests primarily in northern Greenland and Canadian Arctic; dark morph primarily in Labrador; gray morph is widespread. White morphs often lack a malar stripe on the face, are only faintly marked with black flecks below, and moderately barred with black above. The gray morph is a fairly uniform slate-gray above and whitish below with dark barring and usually has a distinct malar stripe. Dark morphs typically have a uniformly gray-brown head and back, and heavy dark streaking below. In all color morphs, juveniles are browner and darker in appearance. Adults have yellow to orange feet, eye-ring and cere; males brighter than females. The bill is blue with a blackish tip in the dark morph; the white morph has a yellow bill sometimes with dark tip. Juveniles more heavily streaked on ventral surface and the feet, eye-ring and cere are bluish gray. Both adults and juveniles have a dark brown iris. Gyrfalcons do not attain their full adult appearance (in terms both plumage and bare parts) until their 3rd or 4th year.

Similar Species

Peregrine falcon – uniformly dark underwing versus gyrfalcon's two toned underwing.
Northern goshawk – pale, barred underwing and heavily banded tail distinguishes this from the gyrfalcon.



Habitat/Range

Gyrfalcon inhabits circumpolar arctic and subarctic regions, with some individuals moving south into northern temperate zones during fall and winter in response to lack of prey. Gyrfalcons live in both tundra (treeless heath plains) and taiga (swampy coniferous areas) habitats with bluffs and cliffs along shorelines, seacoasts, rivers, or mountains.

Food/Diet

Gyrfalcons eat mainly ptarmigan and grouse, but also seabirds, shorebirds, waterfowl, hares, ground squirrels, and lemmings. Gyrfalcons often hunt using a fast, low flight to chase their prey. Just before catching the prey, these falcons typically fly up and then dive straight down onto their prey. Prey can be taken on ground or by a short stoop; prey more likely to be struck or driven to ground than grabbed in air. Kills typically have broken sterna.



Voice

Generally similar to other large falcons; generally more vocal than peregrine falcon. Calls of females are lower in pitch than males. Has a variety of vocalizations that are largely restrict to breeding season. A guttural *kak kak kak* is used by both sexes in territorial behavior and nest defense. A sharp, loud chup is given by both sexes during various courtship displays and at other times during the nesting period. A faster version, called chattering is also given during ledge displays and food passing ceremonies. Chitter is given by both sexes and is featured during copulation. A wail is used in a variety of courtship and other heterosexual situations. A high, harsh, protracted *screee... screee...* is given by the female when food-begging from the male.

Behavior

More at ease on the ground than most falcons. A relatively quick, agile runner, for a falcon. Will run on ground to pursue prey or on nest ledge to displace another bird. Will hop onto rocks and other objects to perch, with aid of wings. Wingbeat slower, deeper and more powerful than other falcons. Flight is generally more buoyant and less maneuverable than a peregrine falcon, but faster and capable of more sustained flight. Diurnal migrant; the extent of migration and destination is believed to be determined primarily by food availability. Hunts from perches with commanding views or flies low over the ground using terrain to camouflage approach and take prey by surprise. Also tail-chases - pursues prey over long distances to exhaust it; hovers in an attempt to flush prey into flight; and flies up at a steep angle to gain altitude on birds with light wing-loading and better soaring abilities.

Reproduction/Nesting

Clutch size: 2 to 5 eggs
Eggs: short elliptical, creamy white spotted with cinnamon, 2.3 x 1.8 inches
Incubation: 34-36 days
Fledge: 6.5 – 7.5 weeks
Disperse: 4-6 weeks

Typically, nests of gyrfalcons are in a depression on a protected ledge on a cliff face. Sometimes they will use an abandoned stick nest of another bird or even man-made structures. Clutch size appears to be linked to current food supply. These falcons become sexually mature at 2 - 3 years old. Pairs do not necessarily attempt breeding every year. Interval between breeding years variable and dependent on food supply.

Life Span

Longest recorded – 13 years 6 months.

Conservation Status

Not on the U.S. Endangered/Threatened Species List. However it is protected by the Migratory Bird Treaty Act. Idaho Fish & Game does not list the gyrfalcon as a species that breeds, winters or migrates through Idaho – it is a very rare visitor. The North American population appears to be stable and fluctuations are tied to the natural cycles of food sources such as ptarmigan. Population estimates for gyrfalcons in North America vary. In the mid 1980s it was estimated that there were 2700 pairs in Alaska and Canada but vast areas had not been surveyed. Worldwide estimate is 15,000 to 17,000 pairs. Remoteness of breeding sites in North America has prevented habitat modification, egg collection and removal of wild birds to commercial markets from negatively impacting population numbers. However, as more roads are built into northern Canada and Alaska to increase mineral extraction more nest sites will be open to exploitation by egg collectors, bird thieves, and vandals. Because most gyrfalcons are resident, live in remote areas, and feed on non-migratory prey, they are generally less susceptible to contamination from pesticides or industrial pollutants, and from other human-related causes of mortality (shooting, poisoning, collisions with cars, oil pollution).

Viewing in the NCA

The gyrfalcon is a very rare visitor to the NCA from November through February. Consider yourself very lucky to see one.

Interesting Facts

Spanish name:
Halcón gerifalco

- The scientific name comes from the Latin word *falx* meaning “scythe”, referring to the shape of the wing and shape of the talons and *rusticolus* coming from *rusticus*, “countryman”; and *incloa*, “inhabitant.” The species name refers to an inhabitant of the countryside, referring to its habitat of open fields and tundra.
- The common name may mean “a greedy falcon”; Gyr coming from the Old High German word *giri*, meaning greedy and *valke*, indicating a falcon.
- Other names: Jerfalcon, Greenland falcon, and Partridge Hawk.

Sources

- Gyrfalcons have been highly regarded by falconers throughout falconry's history. In the Middle Ages, only a king could hunt with a gyrfalcon.
- Gyrfalcons that nest in the arctic regions frequently begin breeding and laying eggs when the temperature is still below zero degrees Fahrenheit.

AXIA CD ROM - Know Your Birds of Prey

Bird Banding Lab - www.pwrc.usgs.gov/bbl/homepage/long3120.cfm

Idaho Fish&Game - <http://fishandgame.idaho.gov/wildlife/nongame/birds/birdspecies.cfm>

National Audubon Society - The Sibley Guide to Birds

The Peregrine Fund - www.peregrinefund.org/Explore_Raptors/falcons/gyrfalcn.html

Birds of North America Online - <http://bna.birds.cornell.edu/bna/species/114>

The Canadian Peregrine Foundation - <http://www.peregrine-foundation.ca/raptors/Gyrfalcon.html>

US Fish and Wildlife Service - www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtintro.html and http://ecos.fws.gov/tess_public/pub/listedAnimals.jsp

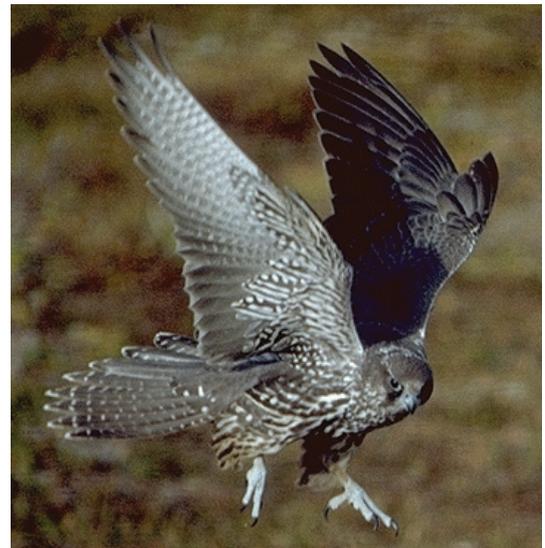
Illustration: courtesy Alberta Sustainable Resource Development

Map: The Peregrine Fund

Gyr Falcon
(*Falco rusticolus*)



Different morphs or color phases



Photos: Know Your Birds of Prey, Axia CD ROM