

Peregrine Falcon ***(Falco Peregrinus)***



Photo by bill@schmoker.org



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Physical Description:

There are 19 regional variants (subspecies) of peregrine falcon worldwide. They vary considerably in size and color. Like all falcons, peregrine falcons have long, tapered wings and a slim, short tail. In North America they are roughly crow sized, ranging in length from between 36 and 49 cm in males and 45 to 58 cm in females. Wingspan varies from 91 to 112 cm. They weigh an average of 907 g. Like most birds of prey, female peregrine falcons are slightly larger than males. They are typically 15-20% larger and 40-50% heavier than males. Peregrine falcons have slate and blue-gray wings, black bars on their backs and pale underbellies. They have white faces with a black stripe on each cheek and large, dark eyes. Young birds tend to be darker and browner, with streaked, rather than barred, underparts. Plumage doesn't vary seasonally.

Identification:

Falcons are characterized by long, narrow wings and streamlined bodies. The endangered Peregrine Falcon is the same size as the more common Prairie Falcon. Adult peregrines are slate-gray above; the underparts are cream-colored with dark barring. The head is dark with a broad black mustache below the eye. Immatures are dark brown with heavy streaking on the breast and belly. A peregrine ranges from 14 to 20 inches in length and has a wingspan of up to 41 inches. The male is only about two-thirds as large as the female. This species normally ranges in weight from one and one-half to two pounds.

Hunting Strategies:

Peregrine falcons prey almost exclusively on birds, which make up 77 to 99% of prey items. Birds include mourning doves, pigeons, shorebirds, waterfowl, ptarmigan, grouse, and relatives, and smaller songbirds. They will also eat small reptiles and mammals. Most frequent mammal prey are bats (*Tadarida*, *Eptesicus*, *Myotis*, *Pipistrellus*), followed by arvicoline rodents (*Arvicolinae*), squirrels (*Sciuridae*), and rats (*Rattus*). The most important set of prey, by biomass, is

Columbidae.

Peregrine falcons most frequently hunt from a perch with a high vantage point, taking flight once prey have been detected. This is most frequently a cliff or tall tree. They may also fly or hover to search for prey. In some areas, where they may have to rely on insects, lizards, or mammals for prey, peregrine falcons hunt on foot on the ground.

Peregrine falcons are most successful in capturing prey if they have more height from which to initiate a stoop onto a prey animal. Although peregrine falcons capture their prey with their talons, they generally kill with their beak by severing the cervical vertebrae. Prey are then typically carried to an eating perch, where they are plucked and consumed, or cached for later use. Small prey (such as bats) may be eaten in flight.

Habitat & Range:

Peregrine falcons prefer open habitats, such as grasslands, tundra, and meadows. They are most common in tundra and coastal areas and rare in sub-tropical and tropical habitats. They nest on cliff faces and crevices. They have recently begun to colonize urban areas because tall buildings are suitable for nesting in this species, and because of the abundance of pigeons as prey items. They have been observed breeding as high as 3600 meters elevation in the Rocky Mountains of North America.

Peregrine falcons are found worldwide, except for rainforests and cold, dry Arctic regions. They are one of the most widespread, terrestrial vertebrate species in the world. Most southern Palearctic and island populations of peregrine falcon are resident, and do not migrate.

Peregrine falcons migrate long distances between breeding and winter ranges. Northernmost populations, which breed in the tundra of Alaska and Canada, migrate to central Argentina and Chile. They typically migrate along sea coasts, long lake shores, barrier islands, mountain ranges, or at sea.

Reproduction:

Peregrine falcons form monogamous pair bonds that often last throughout many breeding seasons. Both males and females have a strong attachment to previous nesting sites, which may explain monogamy over multiple breeding seasons, rather than attachment between individuals. Males display at nest ledges to attract females and advertise ownership to other falcons. The development of a pair bond is first indicated by the male and female roosting near each other. Eventually they sit at the nest ledge side by side. Individuals may also peep at each other, preen, nibble their mate's toes, or "bill" (gently grab the other bird's bill in their own). Both sexes may then engage in "ledge displays", centered on the area of their nest, or scrape. Prior to egg-laying, the pair will engage in incredible aerial displays, involving power dives, tight cornering, high soaring, and body rolls during a dive. Once the pair has formed, they begin to hunt cooperatively and females begin to beg for food from the male.

Peregrine falcons breed between March and May, depending on how far north they are breeding. Females usually lay their eggs in mid-May and they usually hatch in mid-June. Peregrine falcons lay one egg every 48 hours, for a total of from 2 to 6 eggs. Eggs are laid in a nest high on cliffs, tall trees, or tall buildings. Falcons make nests that are called 'scrapes', or simple small depressions dug into the sand or dirt and lined with fine materials. They may sometimes use nests that were built by other birds. Eggs hatch in 33 to 35 days. Young birds learn to fly 35 to 42 days after hatching. It typically takes 3 years for the young to reach adulthood and be able to breed. Females most frequently breed earlier than males.

Both parents incubate eggs and care for the young. Females generally incubate the eggs for greater proportions of the time than do males. Young are brooded almost continuously until they are 10 days old. Young birds remain dependent on their parents for several weeks after fledging. As the young become more adept at flying, parents begin to deliver prey to them by dropping them in the air. The young then pursue and capture this already-dead prey in the air. In migratory populations, young become independent at the onset of migration, usually around 5-6 weeks post-fledging. Young in non-migratory populations may be dependent for slightly longer.

Lifespan / Longevity:

Though most peregrine falcons do not live to be 1 year old, a healthy falcon who survives lives an average of 13 years. Survival rates through the first year of life are estimated at 40%. Adult survivorship is estimated at 70%. Maximum longevity records for wild birds is from 16 to 20 years old. The longest known lifespan for a captive peregrine falcon is 25 years.

Behavior:

Peregrine falcons are active during the day. When not breeding they are primarily solitary and establish and defend territories. Territory sizes vary with the density of food resources. In northern populations, with the highest population densities, the distance between nests averaged between 3.3 and 5.6 km in different areas.

Communication:

Peregrine falcons use a wide variety of vocalizations at different stages of life, but primarily during breeding seasons.

Most vocalizations are either between mated individuals, parents and offspring, or in antagonistic interactions.

Young beg for food with a call similar to: "screea, screea, screea."

"Cack" calls are usually used in alarm and nest defense. They are highly individual specific, with individual recognition possible in 72 to 90% of calls. The call is characterized as "kaa-a-aack, kaa-a-ack."

"Chitter" calls are used in several contexts and are a rapid succession of "chi chi chi chi's."

Similarly, the eechip call occurs in a variety of contexts. It is characterized as "kee-u-chip", but the "chip" portion contains the highest energy and the "kee-u" portion is often left out.

When hunting, peregrine falcons will often give sharp, territorial calls in quick succession, "kee, kee kee...".

Postures are used to communicate aggression and appeasement. Raising the feathers and bill gaping are typical of aggressive posturing. Submission is indicated by the feathers being held tight to the body and the head held down, with beak averted.

Peregrine falcons have extraordinarily keen vision. They can see small objects from very far away and accurately fly at high speeds to capture them.