

Liberty Wildlife Rehabilitation Foundation



Liberty Wildlife

Education Program's Natural History



Merlin



Merlin (*Falco columbarius*)

Range: Merlins are found worldwide; throughout North America, Europe and Asia from sea-level to the tree line. They breed in the northern latitudes of their range and migrate south into Mexico and South America, the Mediterranean, the Middle East and southern China. In the U.S., they are rare in the Midwest and eastern seaboard states. The current world population is estimated at 100,000 to 1 million individual birds.



Figure 1. Breeding and nonbreeding (wintering) distribution of the Merlin in North America.

Habitat: The Merlin prefers forests, prairies and scrublands broken up by open areas in which to hunt.

- **Description:** Worldwide there are 10 Merlin subspecies. Three of those subspecies occur in North America:
 - the Black Merlin (*Falco columbarius suckleyi*) of the Pacific Northwest
 - the Prairie Merlin (*Falco columbarius richardsonii*) of the northern prairies,
 - the Taiga Merlin (*Falco columbarius columbarius*) of the northern forests.

Prairie Merlins are lighter and Black Merlins are darker than the Taiga Merlins (Snake River Birds of Prey National Conservation Area).

Like all falcons, Merlins have large heads, notched beaks, and heavy shouldered, streamlined bodies. Slightly larger than kestrels, Merlins appear uniformly dark in the field. Males are brighter than females, with slate blue wings and back, dark head, and dull facial markings. The underside is rufous with dark streaks. Females are uniformly brown with light, brown streaked undersides. Both sexes have a conspicuously banded tail, with 2 - 4 lighter bands and a terminal band. Most Merlins lack the characteristic mustache mark that is typical of most other North American falcons. Immature Merlins resemble the female.

The Merlin is 10 to 13 inches in length with a 20 to 26 inch wingspan and weighs 5 to 8½ ounces. The female will be larger and heavier than the male. Like other falcons, the Merlin has a tooth-like projection on its short beak that it uses to break the neck of the prey it captures with its talons.

The most common vocalization is that of the alarm/territorial call, described as a shrill “ki-ki-ki” or “kree-kree-kree,” higher in pitch than the Peregrine Falcon’s call. The female’s call is generally deeper and harsher. The call may be heard at



<http://www.allaboutbirds.org/guide/Merlin/sounds>

Hunting/Prey: An opportunistic hunter, Merlins primarily will hunt small to medium birds, but they will also hunt insects, reptiles, amphibian and small rodents. They have been known to take birds as large as pigeons but more often they take small passerines or shorebirds weighing less than 50 grams. Bats are often hunted at the entrance to their caves.

Merlins prefer to hunt in the open rather than in forests. They usually catch their prey in the air after a swoop from a perch or while flying low over the ground. The prey is sometimes captured after a speedy pursuit. If the initial attack fails, the Merlin will often pursue the prey in a series of short stoops (tail-chasing). Some prey will attempt to out fly the attacking Merlin, which results in rising aerial chases (ringing flights) in which both species fly in circles as they climb in flight. Rarely will it execute a high speed stoop from any great heights like the Peregrine Falcon.

Merlins have been known to hunt cooperatively, generally a mated pair. One Merlin flies down a tree corridor beneath the canopy and climbs to flush prey. The other will fly behind and will initiate the attack (Cornell).

Breeding/Nesting: Merlins breed from April to July, depending on the latitude. From 3 to 6 eggs may be laid in 2-day intervals and incubated primarily by the female from 27 to 32 days. The young fledge about 1 month later. They remain together after fledging and may migrate south together. Merlins are able to breed at 1 year of age. Breeding pairs winter separately and return in the spring to form a new pair or reestablish the old mating bond. Like other falcons, Merlins do not build their own nests, but instead use the old stick nests of crows or magpies or hawks. On rare occasions they will nest in tree cavities or on cliffs where a scrape will be made by the female.

Lifespan: The average lifespan is about 8 years (Cornell, Snake River). The longest recorded age is about 12 years.

Threats: Like the Peregrine Falcon, the Merlin experienced serious decline in numbers as a result of the use of DDT from the 1950 – 1970's. Following the banning of DDT in 1972, the population has experience a substantial increase. Within the past 30 years, breeding populations have colonized an increasing number of urban centers, particularly in the northern Great Plains. Currently, the Merlin is listed as a species of Least Concern (Cornell). Collisions with vehicles and windows, shootings, poisonings and predation by cats account for losses. Natural predation by large hawks and owls occur.

Other Merlin Facts:

- A group of Merlins has many collective nouns, including a "brace", "leash", and "illusion" of Merlins.
- The scientific name comes from the Latin words *falco*, meaning hook-shaped (falcate) and may refer to the beak or claws, and *columbarius*, pertaining to pigeons. This may refer to the Merlin's supposed resemblance to the pigeon in flight.
- The common name "Merlin" derives from "esmerillon," the Old French word for the species.
- Merlins are also known as Pigeon Hawks, Bullet Hawks, Black Pigeon Hawks, Richardson's Pigeon Hawks, Suckley's Pigeon Hawks, and Little Blue Corporal.



- In the sport of falconry during the Middle Ages, the Merlin was flown in spectacular ringing flights in pursuit of Skylarks by the ladies of the court. It became popular as a “lady’s hawk.”
- Catherine the Great and Mary, Queen of Scots, were avid enthusiasts of the ringing flights of the Merlin at the Skylark.
- Falconers call the male Merlin a jack.
- Merlins are readily distinguished from the American Kestrel by their lack of rufous coloration on the back and tail.
- In North America, dragonflies make up a portion of the Merlin’s diet.
- The Merlin’s proportion of food consists of 80% birds, 5% mammals, and 15% insects.
- Uneaten prey may be cached for later consumption.
- In Europe, Merlins will roost communally in winter, often with hen Harriers. This is rare in North America where it is known for fiercely attacking any birds of prey it encounters.
- Merlins are most active hunting in early morning and late afternoon
- Although not as large or fast as the other more popular falcons, the Merlin is still used by a small number of falconers.
- Urban nesting began after the American Crows and Black-billed Magpies began nesting in urban areas (Wheeler).





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Merlin

Falco columbarius | Order FALCONIFORMES – Family FALCONIDAE

Merlin nestlings, Alberta, Canada, June.

Merlins typically use old nests built by other large birds, such as hawks, crows, and jays.



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Merlin
Falco columbarius | Order FALCONIFORMES – Family FALCONIDAE

Adult male Prairie Merlin, subspecies richardsonii; Colorado, February.



Merlin
Falco columbarius | Order FALCONIFORMES – Family FALCONIDAE

Adult female or juvenile Prairie Merlin, subspecies richardsonii, Toole Valley, Utah, December 2002.

The **Merlin** is a mid-sized member of the falcon family. The **Taiga or Boreal Merlin** (*right, female*) is the most widespread of the three subspecies found in North America. Unlike most birds of prey, Merlins vary in color by both sex and age. The backs of adult males range from pale blue-gray in the Prairie Merlin to blackish slate in Black Merlin of the Pacific Northwest, while females and juvenile males are shades of sandy brown to chocolate. A winter resident of southeastern Arizona, Merlins make their living off small songbirds such as sparrows and Horned Larks plus the occasional dove (they were once known as the Pigeon Hawk here in North America). Between forays, they often hide in trees, as this female is doing while she dines on her most recent catch. The wizard of Arthurian legend took his name from the bird, not vice versa.

photo © 2002 Tom Wood





Galahad

Galahad was transferred to Liberty Wildlife on June 2, 2009 as an adult from another local rehabilitation facility where he had been treated for significant tissue damage and fracture to his left wing. Following a year of rehabilitation with them, they determined that he would never be fully flighted and transferred him to Liberty as part of our education program.





Viviane

In June 2007, juvenile Viviane was discovered at the Florence Prison, injured hiding in a pile of steel beams. You might say she is a true “jail bird.” Arriving at Liberty Wildlife, she was found to have compound fracture of her right wing. Despite extensive treatment, the fractured bone failed to heal correctly, leaving her unable to fly well enough to be released. She and Galahad now make up Liberty’s team of Merlin educators.

Compiled by Max Bessler

Sources: Raptors of Western North America by Brian Wheeler, Hawks, Eagles & Falcons of North America by Paul Johnsgard, The Peregrine Fund, Cornell Lab of Ornithology, University of Minnesota Raptor Center, University of Michigan Museum of Zoology, Snake River Birds of Prey National Conservation Area, Hawkwatch.

