

# Morley Nelson Snake River Birds of Prey



## National Conservation Area

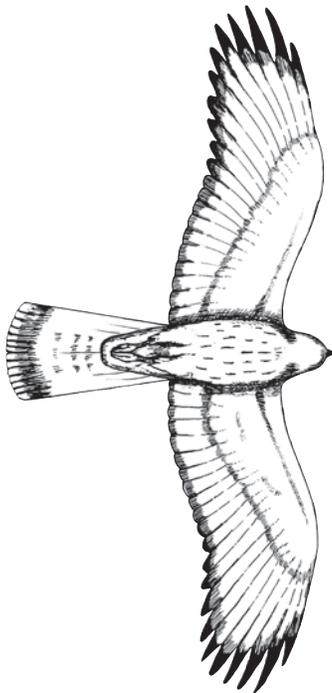
### Northern Harrier (*Circus cyaneus*)

#### Description/Size

Wing span: 41-50 inches

Length: 17-21 inches

Weight: 0.8-1.1 pounds



The northern harrier is one of the most widespread and easily recognized diurnal raptors in North America. There are two subspecies with one occurring in North America – *C. c. hudsonius*. This is a medium-sized, slender bird with long wings, long tail and white upper tail coverts (white rump patch). The face has a facial ruff similar in structure and function to the facial disk found in most owls. Though the northern harrier has no color morphs, it is a strongly sexually dimorphic hawk. The male is light to medium gray above, and whitish below, with black wing tips, while the female is dark to blackish brown above and buffy with brown streaks below. Females are about 50% heavier and 12% larger than males. Juveniles are similar to adult female but darker brown above and russet below. Juvenal plumage is retained for 9–14 months. Bill is dark, becoming bluish basally. Cere is yellow, sometimes with a greenish tinge. Iris changes from brown at hatching to yellow by the second or third year. Legs and feet are pale to vivid orange-yellow.

#### Similar Species

Rough-legged Hawk (light morph) – black rectangle on the bend of each underwing, fairly heavy dark belly band, and either a broad subterminal band or series of narrower dark bands on tail. Turkey Vulture – larger, broad wing, two tones on underwing, no white rump, darker underparts.

#### Habitat/Range

The northern harrier is most commonly associated with open wetlands, including marshy meadows; wet, lightly grazed pastures; old fields; freshwater and brackish marshes; also dry uplands, including upland prairies, grasslands, drained marshlands, croplands, cold desert shrub-steppe, and riparian woodland. Tends to avoid areas of continuous forest. Densest populations typically associated with large tracts of undisturbed habitats dominated by thick vegetation growth. In North America, breeds from Alaska and Canada south to n. Baja Peninsula, Mexico and east along a rough line from Nevada, to Pennsylvania. Rare breeder or summer resident south of this line. Winters primarily from s. Canada south through the U.S., Central America, and Caribbean islands. Usual southern limit is Panama, rarely Andes Mtns. of Colombia and Venezuela. It also occurs throughout Europe and Asia (*C. c. cyaneus*); breeds in Eurasia from Portugal to Lapland, east to China, Russia, and Siberia. Winters south to n. Africa and tropical Asia.



#### Food/Diet

Opportunistic hunter. Diet varies according to annual, seasonal and local abundance of prey. Across much of its range it depends heavily upon voles, its primary prey. In fact vole populations can have a strong effect upon mating systems and reproduction success. This raptor also preys upon fledgling grassland and marsh songbirds and small waterfowl. Will exploit other temporarily abundant and vulnerable prey such as young ground squirrels and cottontail rabbits. Reptiles, amphibians and invertebrates make up a minor part of the diet. Occasionally will feed on carrion; especially during a hard winter. This raptor forages on the wing, capturing prey while coursing low over the

*Raptor Information Sheet - Northern Harrier*

ground. Most pursuits are short, temporally and spatially, and close to ground. Sometimes uses the cover of vegetation and terrain to surprise prey. Frequently follows distinct routes, e.g., ditches. Is known to subdue large prey by drowning. Unlike other hawks, it frequently relies heavily on auditory cues, as well as visual ones, to capture prey. Owl-like facial ruff and facial structures facilitate prey detection by sound, even in absence of visual cues. Breeding males and females are known to cache and retrieve supplemental food.

### Voice

Most vocal during breeding season and mostly quiet the rest of the year. In courtship display, both sexes utter *kek*, *quik*, or *ek* notes in rapid series. Distress (or Threat) Call is a more urgent, high-pitched *kek* or *ke*, again uttered in rapid succession. This call occurs when female is disturbed at the nest by ground predators, raptors, humans, or approaching ungulates, and often attracts her mate, which joins in calling. Females issue Food Call, a piercing, descending scream, *eeyah eeyah*, apparently in an effort to induce food transfers, hunting by the male, or to "solicit" copulation. Prey-carrying males emit a barely audible, chuckling *purrduk* when passing low over their nest, which solicits the female from the nest. Upon arriving with food at the nest, female utters a soft, high-frequency Feeding Chuckle Call, which appears to summon and orient nestlings for feeding bout. Young nestlings have several Begging Calls, including a weak, but monotonous peep and a rather variable, but shaky, *preeeii*. Nestlings produce a series of chit notes, referred to as a "pain" or "discomfort chitter", which become more emphatic with increasing age.

### Behavior

Harriers hunt by slowly flying low over open ground with a series of heavy flaps and distinctive buoyant, tilting glides, with wings held in a shallow "V"; sometimes hovers briefly. Occasionally soars. Males tend to fly lower and faster than females. Perches both on the ground and on low perches like posts, stumps and rocks. Hunts all day long; with peak in early morning and the hour before dusk. A harrier's grasp is relatively weak so prey is killed with the beak while the bird feeds. Robs prey from other raptors; robbed themselves as well. Northern and central populations migrate, often long distances; southern populations are generally nonmigratory. Travel singly or in small groups throughout day and sometimes at night. Will cross water readily except for

huge expanses like the Great Lakes and Gulf of Mexico. Occasionally soars on migration, but usually engages in active flapping flight. Hunts on migration. Unlike most raptors, migrating northern harriers will fly in light rain and snow. In breeding season, not strongly territorial, except near the nest. In winter, individuals roost communally on the ground. Primary courtship display is called sky-dancing which is performed primarily by males. This aerial display is a series of steep dives and pull-ups, or "U", with the bird turning sideways at the apex of each "U" in a barrel roll. Tumbling may also occur. The "U" can cover a distance of up to 0.6 miles at an average height of 65 feet.



## Reproduction/Nesting

Clutch size: 4-6 eggs  
Eggs: Short subelliptical, white with some brown spotting, 1.8 x 1.4 inches  
Incubation: 29-31 days  
Fledge: 30-35 days  
Disperse: 3-7 weeks

## Life Span

## Conservation Status

## Viewing in the NCA

## Interesting Facts

Spanish name:  
*Aguilucho pálido*  
*Gavilán rastrero*,  
*Gavilán sabanero*

## Sources

Harriers can be monogamous or polygynous, with male having up to five mates who each build a nest and raise young. Polygyny occurs in dense populations where voles are abundant. Larger clutches (up to 10 eggs) are also laid when voles are abundant. Only one brood per season. Replacement clutches are rarely laid. Northern harriers nest on the ground in treeless habitats, usually in tall, dense clumps of vegetation, either alone or in loose colonies. Nests built of sticks and grass. Generally located in wet areas apparently because of reduced predation. Harriers mature in 2-3 years but may be able to breed their first year.

Longest recorded – 15 years 4 months.

Not on the US Fish and Wildlife's Endangered or Threatened Species List. However it is protected by the Migratory Bird Treaty Act. Idaho Fish & Game lists the northern harrier as a protected non game species for which it is illegal to collect, harm or otherwise remove from its natural habitat. Although population trends vary regionally, overall the species appears to be declining globally. At least eight states have listed it as endangered, four as threatened, and three as a species of special concern. Main factor is loss of habitat through extensive draining of wetlands, conversion of native grasslands for monotypic farming, and the reforestation of farmlands. Mortality factors: predation by great horned owls, red-tailed hawks; predation of nest by several mammals and crows, trampling of nests by livestock, destruction of nests by haying and other mechanized agricultural practices, illegal shooting, and collisions with vehicles.

The northern harrier is seen in the NCA year-round.

- The scientific name comes from the Greek word *kirkos* meaning circle and *kyaneous* meaning dark blue and refers to this bird's habit of flying in circles and the colors of the male's upperparts.
- Harrier is from the Old English word *hergian* and means to harass, ravage or plunder.
- Other names: Marsh hawk, Blue Hawk, Frog Hawk, White-rumped Harrier.
- Only North American hawk with an owl-like facial disk which enables harriers to hunt by sound as well as sight; at least 4 times more acute than other hawks and is able to locate prey by sound alone.
- In various European cultures, harriers have been considered omens of good luck, specifically for marriage and financial affairs.

AXIA CD ROM - Know Your Birds of Prey

Bird Banding Lab - [www.pwrc.usgs.gov/bbl/homepage/long3120.cfm](http://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/hawks/nharrier.html](http://www.peregrinefund.org/Explore_Raptors/hawks/nharrier.html)

Birds of North America Online - <http://bna.birds.cornell.edu/bna/species/210>

US Fish and Wildlife Service - [http://ecos.fws.gov/tess\\_public/pub/listedAnimals.jsp](http://ecos.fws.gov/tess_public/pub/listedAnimals.jsp)  
and [www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtintro.html](http://www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtintro.html)

Illustrations - courtesy of Alberta Sustainable Resource Development

Map - The Peregrine Fund

**Northern Harrier**  
*(Circus cyaneus)*



Female



Male

