

Morley Nelson Snake River Birds of Prey



National Conservation Area

Barn Owl (*Tyto alba*)

Description/Size

Wing span: 42-47 inches
Length: 12.5-20 inches
Weight: 11-22 ounces

North America's only member of the owl family, Tytonidae. Pale tawny and white plumage, and heart-shaped facial disk are distinctive. Large head lacks ear tufts. Heart-shaped facial disk is white with brown to orange brown border. Long beak is off white; cere pinkish white. Eyes relatively small for an owl. Iris is dark brown to black. Upperparts gold to buff; heavily marked with white, black and gray. Underparts are white with spotting. Females tend to have more and larger spotting on wings and breast than males. Some males are unmarked and some females are dark buff heavily spotted with black. Wings long and rounded. Tail short and square. Legs relatively long. Feathering on lower legs may be sparse. Toes light gray, talons dark gray. Feet extend past end of tail in flight. Juveniles similar to adults except more heavily spotted. Thirty-two subspecies of barn owls recognized across the world and measurements vary greatly throughout its range. Only one subspecies, *T.a. pratincola*, is recognized in North America; found from sw British Columbia south and east through most of the U.S. (except some of the northern-central states), Mexico, south to e. Nicaragua and Hispaniola; also Bermuda. This subspecies is also the largest; nearly twice the mass of the smallest subspecies (*T.a. punctatissima*; Galápagos Is.)

Similar Species

Ashy-faced Owl (*Tyto glaucops*) – only found on the island of Hispaniola; has much darker plumage and darker silvery-gray facial disc.

Habitat/Range



The barn owl is one of the most widespread of all owls and, indeed, is among the most widely distributed of all land birds – living in North, Central and South America; Europe, Africa, India, SE Asia, and Australia. This owl occupies a broad range of open habitats with some trees, urban to rural, favoring lower elevations in most of its range. Not found in most mountainous or heavily forested areas. Its northern range limit is determined by the severity of winter conditions and availability of prey. Breeding numbers seem limited by the availability of nest cavities in proximity to adequate densities of small mammals. The species is generally resident except that northernmost populations in North America are reported to be partly migratory.

Food/Diet

Diet is primarily small mammals: voles, shrews, moles, mice, lemmings, kangaroo rats, flying squirrels, and the young of larger mammals – rats, pocket gophers, muskrats, hares and rabbits. Birds are usually eaten only in small numbers; most are small species that roost in the open. Amphibians, reptiles, fish, insects, scorpions, and crayfish are rarely taken. Most prey is swallowed whole; those too large are eaten piecemeal. Excess prey cached in the nest site during incubation and early brooding.

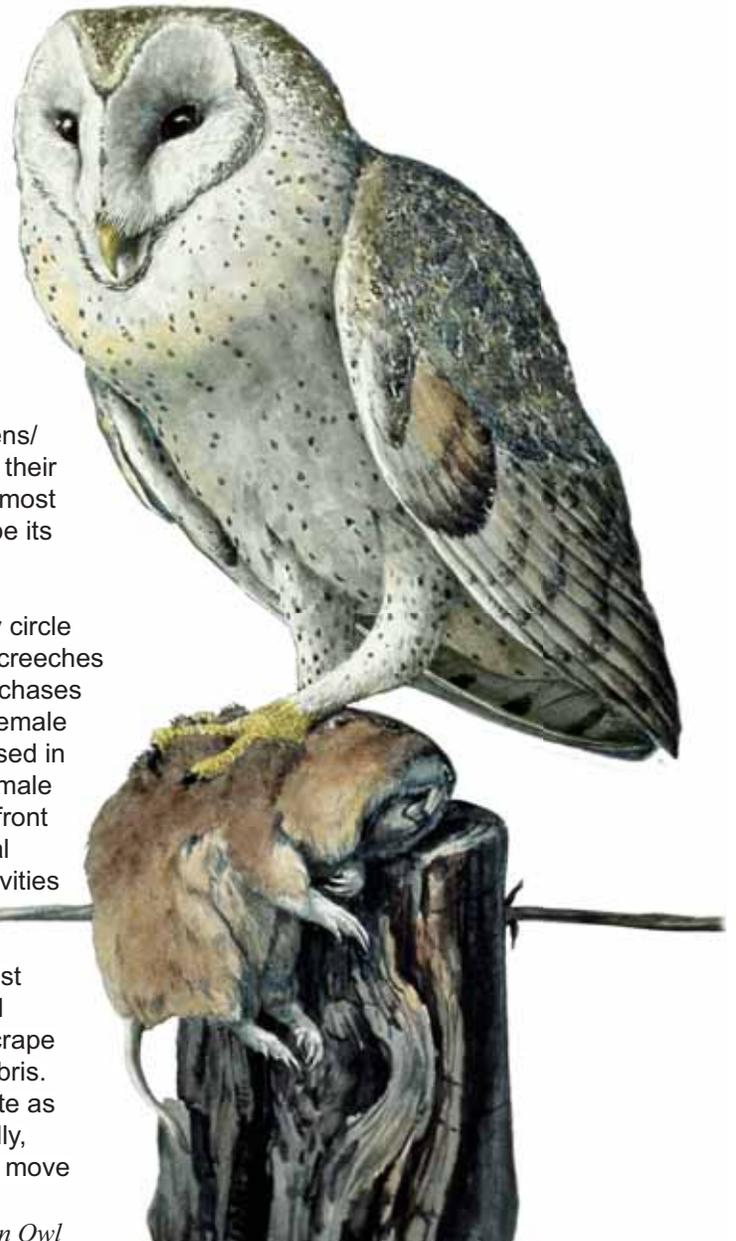
Voice

More vocal during breeding season. Calls can be categorized as screams, snores, hisses, or chirrups/twitters. Screams used to advertise, to warn and given in distress. Hisses used in defensive situations. Snores are non aggressive, self advertising calls given mostly by nestlings and females. Chirrups and twitters include feeding calls, discomfort calls, and greeting and conversational twitters. Common call year-round is simply a long hissing shriek *cssssshhH*. Courtship call of male is a shrill repetitive twittering. Adults returning to nest may give low, frog-like croak. Non vocal sounds: Bill-snap is a defensive sound made when threatened or closely approached by a human

or other large predator; usually associated with hissing and sometimes the distress call. Wing-clap, not frequently made, reported to occur in display flights by males; usually a single clap but occasionally a loud clap followed by a softer one.

Behavior

Although highly nocturnal, can be observed hunting in daylight. Most hunting done in low quartering flights within 15 feet of ground in open habitats. Also hunts from low perches. Often follows a favorite course or returns to favorite hunting areas. Hunts mostly at night, beginning about one hour after sunset and ending about one hour before sunrise. Prey is captured with the feet and usually nipped through the back of the skull with the beak. Can discriminate sounds of appropriate prey by memorizing prey noises. Ability to locate prey by sound is the most accurate of any animal tested, allowing capture of prey hidden by vegetation or snow. In North America, barn owls produce one to two pellets per day. Minimum interval between eating and casting is 6.5 hours. Buoyant; deep, rather slow wingbeats. Hunting flights slow but capable of speeds of 50 mph. Not considered highly maneuverable but can make turns on small radius. Low wing loading permits heavy prey to be carried at slow speeds. Walks on ground with an awkward-looking side-to-side lurch. Runs rapidly, often with aid of wing flapping when pressed. Climbs very well; can scale vertical surfaces (inside of hollow trees, silo walls, etc.) using feet to grip and with the aid of wing flapping. Extent of migration in this species remains unresolved. Reports of migratory movement in some regions of northern U.S. Juveniles commonly disperse in all directions from the natal site; these movements of up to 1180 miles may be mistaken for migration. Individuals habitually use the same roost. Roosting owls sleep, sometimes soundly, standing with head hunched down, eyes closed, and facial disk relaxed. Barn owls often mobbed by other birds, particularly crows/ravens/magpies, when flushed from their roosts in daylight. The owl's most common reaction is to escape its tormentors.



Reproduction/Nesting

Clutch size: 4-7 eggs
Eggs: subelliptical, white, 1.3 x 1.7 inches
Incubation: 29-34 days
Fledge: 7-9 weeks
Disperse: 7-8 weeks

During courtship, males may circle near nest site, giving short screeches and chattering calls. Sexual chases follow where male pursues female with both screeching. Also used in courtship are moth flights -- male hovers with feet dangling in front of perched female for several seconds. Nests in natural cavities in trees, cliffs, and caves or in man-made structures like nest boxes, barns, chimneys, and other structures. Nest is a scrape lined with pellets or other debris. Typically nest at the same site as long as they live. Occasionally, change nest sites but do not move

long distances to do so. Two broods common. Pair may lay a second clutch of eggs when the first young start to leave the area. Can breed year round where climate permits. Generally monogamous, it is sometimes polygamous. Pairs usually remain together as long as both live, but either sex will readily re-mate if its mate disappears. Solitary or in pairs when not breeding. Most individuals appear to breed at one year of age.

Life Span

Longest recorded – 15 years 5 months.

Conservation Status

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 barn owl as a protected non game species for which it is illegal to collect, harm or otherwise remove from its natural habitat. Several states have the barn owl on their threatened or endangered species list or list it as a species of special concern. It is declining in many areas of North America and Europe. Several factors have been implicated: pesticides pose a secondary poisoning threat; reduced availability of nest sites including demolition or alternation of old buildings; loss of foraging areas and/or prey populations due to urban sprawl and changing agricultural practices. Collisions with vehicles are a major cause of mortality. Illegal shooting and electrocution are minor causes.

Viewing in the NCA

Seen in the NCA year round.

Interesting Facts

Spanish name:
Lechuza de campanario

- The scientific name comes from the Greek word *tyto* which refers to an owl, and *alba* the Latin word for white.
- Common name refers to the owl's use of man-made structures, like barns, as roosts and nest sites.
- Other names: monkey-faced owl, white owl, ghost owl, and golden owl.
- Sound of wings muffled by velvety pile on feather surface plus leading wing edges which have a fringe or fine comb which deadens the sound of the wing beats.
- Ear openings are at slightly different levels on the head and set at different angles. This gives the barn owl very sensitive and directional hearing; it can catch prey in complete darkness.
- Barn owls have been associated with omens, witchcraft and death.

Sources

Bird Banding Lab - www.pwrc.usgs.gov/bbl/homepage/long3120.cfm
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The Peregrine Fund – www.peregrinefund.org/Explore_Raptors/owls/barnowl.html
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and www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtintro.html

Illustration: courtesy Alberta Sustainable Resource Development
Map: The Peregrine Fund

Barn Owl
(*Tyto alba*)



Adult



Nestlings



Photos: Know Your Owls, Axia CD ROM