

Liberty Wildlife Rehabilitation Foundation



Liberty Wildlife

Education Program's Natural History



Barn Owl

Barn Owl (*Tyto alba*)

Range: Barn owls are one of the most widespread of all owls and are among the most widely distributed of all land birds. They will be found on every continent except Antarctica. In the new world, barn owls will be found from northern United States and southwestern British Columbia through Central America and South America. In Europe, barn owls range from southern Spain to southern Sweden and east to Russia. They are also found throughout Africa, across central and southern Asia, and throughout Australia. Their northern range is generally limited by the severity of winter weather and availability of prey. Generally there is little to no major migration. Residents remain during the winters.



Barn Owl
Tyto alba



LEGEND
■ Year Round
■ Summer (breeding)
■ Winter (non-breeding)
■ Migration
Map by Cornell Lab of Ornithology
Range data by NatureServe

Habitat: The Barn Owl lives in a wide variety of habitats including grasslands, deserts, marshes, and farming areas. They prefer open areas at low elevations and require cavities for nesting such as trees, cliffs, caves, church steeples, barn lofts, and other out buildings, hay stacks and nest boxes.

Description: These medium-sized owls can be readily distinguished from other owls by their unique shape, color and voice. Barn Owls have nearly pure white under parts and a distinctive heart-shaped facial disk surrounding dark eyes. Their backs and heads are light brown with numerous fine dark lines and scattered pale spots on the feathers. The head is round with no ear tufts and the eyes are black. The heart-shaped disk is white with brown edges. They have rounded wings with a short tail and sparse feathering on their long legs. Barn Owls will weigh between .9 and 1.4 pounds. The female will be larger with an average weight of 1.3 pounds while the average male will weigh about 1 pound. They are between 12.6 and 15.75 inches in length with a wingspan of 43 inches. The female will have a slightly longer body length and wingspan



Adults use a variety of vocalizations, including the advertising call, a drawn-out gargling scream that is probably the best known



call. The distress call is a series of drawn-out screams. Defensive hissing is used to intimidate predators. Typical calls may be heard at:

http://www.allaboutbirds.org/guide/Barn_Owl/sounds

<http://www.owlpages.com/owls.php?genus=Tyto&species=alba>

Hunting/Prey: Barn Owls are nocturnal hunters that prefer small mammals such as mice, voles, shrews and small rats. Barn owls begin hunting alone after sunset beginning about one hour after sunset and ending about one hour before sunrise. Generally, they have three primary hunting periods: the first about dusk, the second around midnight, and the third around dawn. In some areas, the presence of Great Horned Owls, a predator of the Barn Owl, may restrict these periods to the latter hours of darkness.

As an aid for detecting movement in grassland, the Barn Owls have developed highly sensitive low-light vision. When hunting in complete darkness, however, the owl relies on its acute hearing to capture prey. Barn owls are the most accurate birds at locating prey by sound. They can locate prey hidden by vegetation or snow. Barn owls hunt primarily by low quartering flights in which they fly over each section of an open field or grassy field. They may also hunt from a perch. Once prey is located, they capture it with their feet and nip through the back of the skull with the bill. Barn Owls are able to discriminate the sounds of appropriate prey by memorizing prey noises.

Another trait that adds to their hunting success is their downy feathers, which help to muffle the sound of their movement. An owl can approach its prey virtually undetected. Their long legs also allow them to penetrate into long vegetation and snow. Attached is a link to a BBC production “Experiment! How Does an Owl Fly So silently?” demonstrating how quietly a barn owl flies.

https://www.youtube.com/watch?v=d_FEaFgJyfA

Most prey is eaten whole. Those too large to eat whole, they will eat piecemeal, usually discarding the head.

The following websites provide some typical Barn Owl behaviors:

<http://www.youtube.com/watch?v=RHkGE7ERaE>

<http://www.arkive.org/barn-owl/tyto-alba/video-08.html>

<http://www.youtube.com/watch?v=QjEld1kYzOA>

<http://vodpod.com/watch/3105970-short-video-clip-of-baby-barn-owls-waiting-for-mom-to-return-with-dinner-today>

Breeding/Nesting: Barn owls can breed almost any time of the year, depending upon food supply and usually breed once per year, but will breed rapidly in response to mouse plagues. They usually raise one brood per year, though some pairs have been observed raising up to three broods in one year. Most individuals begin breeding at 1 year old and are usually monogamous.

Clutch sizes are highly variable ranging from 2 to 18 eggs with the normal size numbering from 5 to 7 eggs. Eggs are laid in two- to three-day intervals. Incubation lasts between 29 and 34 days. The young fledge from 56 to 70 days. Fledglings will return to the nest to roost for an additional 7 to 8 weeks.

For nests, Barn Owls use existing cavities in trees, cliffs, caves, church steeples, barn lofts and other out buildings, hay stacks and nest boxes. In western United States, they have been



known to dig burrows in soft soil of river or arroyo banks. The female will line the nest with shredded pellets.

Lifespan: The limited research on Barn Owls indicates their life span is short with from 65 to 80% dying within the first year. Some studies report the life span to be between 1 and 2 years, with others reporting as much as 12 years.

Threats: Collisions with cars and change in agricultural practices are the major threats. Traditional farms with many small structures favored Barn Owl populations. With today's farming, there are fewer structures for nesting. Secondary poisoning from eating poisoned rodents remains a possible threat to the populations. Barn Owls have few natural predators. Young may be taken by Great Horned Owls or snakes.

Other Barn Owl Facts:

- The scientific name *Tyto alba* comes from the Greek word *tyto* referring to an owl and *alba*, the Latin word for white.
- The Barn Owl has also been called Monkey-faced Owl, White Owl, Ghost Owl, Church Owl, Hobgoblin or Hobby Owl, Golden Owl, and Night Owl.
- Up to 46 different races of the Barn Owl have been described worldwide. The North American form is the largest, weighing more than twice as much as the smallest race from the Galapagos Islands.
- The Barn Owl is the only North American owl with a heart-shaped facial disk and the only one in which the claw of the middle toe is pectinated (shaped like a comb). (Johnsgard)
- Because eggs are laid in two- to three-day intervals, there may be as much as three weeks difference in hatching times between the youngest and oldest hatchlings. (Johnsgard)
- Because of the secretive nature of Barn Owls and improved human attitudes towards them, shooting and trapping are not significant threats to their population.
- Versatility in the use of nest sites and in selection of prey and an ability to use human modified habitats are significant factors in the wide range of the Barn Owl.
- When faced with an intruder, Barn Owls spread their wings and sway their heads back and forth. This behavior is accompanied by hissing and "bill popping."
- The ability of barn owls to locate prey by sound is the most accurate of any animal tested. Their amazing ability to locate prey using sound is aided by their asymmetrically placed ears. This asymmetry allows these owls to better localize sounds generated by prey. Their ears are extremely sensitive and can be closed by small feathered flaps if the noise level is too disturbing.
- Since it stores so little fat on its body, the Barn Owl is unusually vulnerable to cold winter temperatures. (Johnsgard)
- The Barn Owl is probably the most widely distributed of all Mexican owls, found in all 31 states.
- The comb-like extension on its middle toe is used to clean its facial feathers which aid its acute sense of hearing in locating prey.
- Barn Owls will eat 1.5 times their weight in food, mostly mice and meadow voles each day. That's like a 100-pound person eating 150 pounds of food every day! A barn owl family of two adults and six young may eat as many as 1,000 rodents during the nesting period.



- In the course of a year, a breeding pair of Barn Owls needs roughly 4,000 prey items (4/night x 2 adults x 365 days + 4/night x average brood of 3.5 x 70 days)
- The Barn Owl's conservation status is "least concern." However populations in Midwest and inland East dropped dramatically between 1970 and 2000. In some states, the Barn Owl is listed as Endangered. Nest box programs have helped increase populations in some areas.



Soren

Soren arrived as a nestling at Liberty Wildlife on June 10, 2011. He had been transported from an animal clinic in Bullhead City. His stay at that clinic had been over a month. Soren was found to be imprinted when he arrived.

Consequently, he became a member of the Education team, thrilling kids and adults as only a "Ghost Owl" can.



Henry

Henry arrived at Liberty as a nestling in April 2014 suffering from a severe head trauma, cause unknown. After a month of care, the only remaining sign of his injury was a slight head-tilt. He was placed with other barn owls in preparation for release where live prey was available. He showed demonstrated inadequate skills to hunt and survive in the wild. He was transferred to the Education Team where he has become a valuable member despite his remaining head tilt.

Nyx Owl (*Nyx* is the Greek goddess (or personification) of the night.)

Nyx was found by a Liberty Wildlife volunteer left at the drop-off window on April, 2020. An attached letter explained that her she had been found several months earlier, but as a result possible Covid exposure, they remained home bound for several months, causing her to become imprinted. They subsequently brought her to Liberty and left her unattended. As a result of her imprinted nature, she was determined to be unreleasable.

Sources: Cornell Lab of Ornithology, The Peregrine Fund, University of Michigan Museum of Zoology. [North American Owls](#), 2nd ed by Paul Johnsgard, The Owl Pages, The Barn Owl Trust, Wisconsin Department of Natural Resources

Compiled by Max Bessler

