

Tyto alba (Barn Owl)

Family: Tytonidae (Barn Owls)

Order: Strigiformes (Owls)

Class: Aves (Birds)



Fig. 1. Barn owl, *Tyto alba*.

[<http://aviary.owls.com/owls/barn-owl.html>, downloaded 11 November 2012]

TRAITS. There are approximately twenty different names used for this owl, each of which describes a particular feature of the owl or the owl's appearance. For example, the monkey Faced owl is another name used for the barn owl because it sorts of resembles a monkey and rat owl because its main diet consists of rodents. Some other names include the white owl, ghost owl, screech owl, church owl, and night owl and so on (The Owl Pages, 2003). The scientific name "alba" means white and "tyto" means owl. The males are slightly smaller than the females. The female adult size ranges from 13.5-15.5 inches. The females also have a wing span of 43 inches and weigh 20 oz, whereas the male adult size ranges from 12.5-15 inches, a wing span of 42

inches and weighs 15.5 oz. These birds have distinct heads and white heart shaped faces which are outlined by a brownish colour (Harris, 2002). They do not have any ear tufts. The feathers at the upper surface of their body appear to be mostly golden with fine greyish streaks and dark spots. There are fewer dark spots on the breast and flanks on the underneath of the owl. Males have less spots below their body than the females. They have long, rounded wings and their tails are short and square. The irises of their eyes are black and their eyes are outlined by brown. Their beaks are very small or hooked and off-white and they have long, featherless feet which are white to brownish in colour. Their toes are grey. Overall, they have medium sized buffed bodies which are white in colour (Harris, 2002).

ECOLOGY. There are numerous subspecies of the barn owl found throughout the world except for polar regions such as Antarctica, desert regions, the Pacific Ocean and most of Indonesia. The subspecies *Tyto alba hellmayri* is found in Trinidad and Tobago and also in Venezuela and Guyana. They are found in large areas of open land such as farmlands, grasslands, marsh, heaths, moors, mixed agriculture fields and woodlands. However, they prefer to hunt along the edge of woods or in woodlands. Their average home range is estimated to be 7.17 square kilometres. For nesting and roosting, they prefer quite cavities in tree hollows or man-made structures such as barns or silos but they have also been found in caves, out-buildings, wells and thick foliage (Harris, 2002; The Owl Pages 2003).

SOCIAL ORGANIZATION. Barn owls are monogamous, nocturnal, migratory, sedentary and solitary birds. Barn owls are solitary (live alone before they meet their mate) or they live in pairs. They are never seen in large groups even when foraging. The only time barn owls are seen in a group is with their chicks in their nest and this is usually for a short period of time until the chicks become independent. The male and female barn owls create a pair-bond relationship. Barn owls are faithful to their mate or monogamous, that is, they only have one mate for their entire life. If another male comes around the female that is in a relationship already, the male mate defends the female by physical displays such as by squinting its eyes, spreading its wings or jerking its head back and forth. Also, barn owls are migratory, that is, they make seasonal movement between breeding and wintering grounds (Harris, 2002). And, they can be sedentary, that is, they remain in the same area for a long time, depending on the habitat, as in tropical regions. They communicate using vocalization such as drawn-out gargling scream which indicates that the owl is distressed and physical displays (Harris, 2002).

ACTIVITY. Barn owls are quite active throughout the year. During the spring they are busy nesting. During the summer they rear their young ones. In the autumn their young ones are dispersed and in the winter season they go through hardship finding food. If there is heavy snowing or thunderstorms this makes it difficult for the birds to hunt. And as of this, many birds die from starvation (Taylor, 2004). Sometimes daylight hunting does occur but the majority of the times between dusk to dawn are the main peaks of hunting activity. They are active all night catching rodents to feed themselves as well as their family. They usually hunt alone or sometimes in pairs but during hunting there are not much social interactions.

FORAGING BEHAVIOUR. Barn owls are known as nocturnal hunters of ground animals and their main diet consists of rodents. They feed on pocket gophers, voles (field mice), mice, rats, shrews, hares, rabbits, small birds, bats, insects and frogs. They begin hunting alone just before

sunset and continue throughout the night. They locate their prey by sound and sight (Harris, 2002). However, they use sound more than sight to find their prey. They are known to have the sharpest hearing compared to any other bird because they have asymmetrical ear opening, that is, their ears are not evenly placed. The right ear is lower than the left ear and this gives them the ability to detect the slightest bit of sound coming from any direction of their prey that is hidden under vegetation or snow. They also have very good vision in the night time. This is because they have low-light intensity vision. Barn owls fly very low, about 1.5-4.5m above the open ground and they use lookouts such as fence posts to ambush the prey. The prey is then captured with their feet and the back of the skull of the prey is nipped with the bill of the barn owl. The birds swallows the prey whole or return it to the nest to feed their young. Barn owls can eat more than one rodent a night. They also do cache or store extra food, during the breeding season. They place their food in a special place to be eaten later. This is also known as hoarding (Harris, 2002).

COMMUNICATION. Barn owls are mainly acoustic, that is, they communicate using sounds (Harris, 2002). The advertising call is the drawn-out gargling scream which is used often. A series of drawn-out gargling scream indicates that the owl is distressed. Some other vocalizations are a twitter when feeding and during courtship, an explosive yell in response to a mammalian predator and a defensive hissing sound. When they are not breeding they are less vocal (Taylor, 2004). The young one also uses several distinct vocalizations which include a twitter during discomfort, attention seeking and a snoring food call. The barn owl also shows visual communication to its predator. When attacked it squints its eyes, spread its wings, jerks its head back and forth, falls on its back and strikes at the intruder with its feet.

SEXUAL BEHAVIOUR. Barn owls are monogamous, that is, they have only one mate. They breed once per year, anytime of the year, depending on food supply. The breeding season starts from March and ends by December. The longest lifespan of a wild Barn Owl is 34 years (Taylor, 2004). The female barn owl lays 4-7 eggs at a rate of one every 2-3 days in her old nest that she used before that is lined with shredded pellets. Display flights by the males, advertising calls and chasing of the female which involves screeching indicates courtship. Copulation takes place very often, almost every few minutes but it decreases as incubation and nesting starts. The owls get into their positions by crunching down in front each other and the males mounts the female. During this process he grasps the female owl's neck and spread his wings for proper balance.

JUVENILE BEHAVIOUR. After hatching, the chicks are fed and brooded by the female for about 25 days. In the nest the young ones use several distinct vocalizations to communicate. The most commonly used vocalization is a 'twitter' to express discomfort and when they need attention from their mother. They also 'twitter' when quarrelling with nest mates. About 70 days after hatching, they leave the nest for their first flight. However, they return to the nest to roost. About 3-5 weeks after they began flying, they then become independent (Taylor, 2004). By one year old they are ready to mate.

ANTIPREDATOR BEHAVIOUR. In the ecological food web the barn owls are predated by large american opossums, common raccoon, carnivorous mammals, red kites, goshawks, hawks, eagles, some snakes, humans and their pets, particularly house cats and feral cats. Barn owls are also predated by other owls, for example, the great horned owl (Harris, 2002). Also, the nestlings

can be eaten by snakes and stoats. When an adult barn owl is attacked by a predator, it squints its eyes, spread its wings, jerks its head back and forth and hisses (Taylor, 2004). These physical displays sometimes scare away the intruder. In cases where the intruder is not scared away, the owl falls on its back and strikes at the intruder with its feet. Sometimes the owl successfully defends itself and sometimes the predator defeats the owl.

REFERENCES

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Fig. 2. Barn owl during flight.

[<http://www.barnowl.co.uk/page12.asp>, downloaded 15 November 2012]