

Megascops choliba (Tropical Screech Owl)

Family: Strigidae (True Owls)

Order: Strigiformes (Owls)

Class: Aves (Birds)



Fig. 1. Tropical screech owl, *Megascops choliba*.

[<https://www.flickr.com/photos/celiaurora/14167296053/>, downloaded 20 November 2014]

TRAITS. A small, polymorphic owl; they are usually grey-brown in colour. Polymorphism means that more than one type may be observed within a population and brown as well as rufous colour morphs are also known to occur. The upper parts most commonly are a dark brown, whilst the under parts are a lighter brown in colour with “herringbone” patterns on the feathers (Fig. 1). The eyes have a yellow iris and the beak and talons are greenish-grey and grey in colouration respectively, the feet being grey-brown. The tarsus (foot) is feathered. The facial disk is clearly defined by a prominent black outline and the species has small ear-tufts which are not always visible. The chicks are covered in white down feathers until about day 16 when they change to a

neutral grey colour (Thomas, 1977). There are nine currently recognized subspecies. Typical measurements are a total length of 21-23 cm (Schulenberg et al., 2007), wing length of 148-180 mm, tail 86-104 mm and weight from 97-160 g (Konig et al., 1999; del Hoyo et al., 1999).

ECOLOGY. Utilises a wide range of habitats; they are most commonly found in areas of lighter woodland, forest borders, clearings with trees and suburban areas with trees (Hilty and Brown, 1986). They are rarely found in humid montane forests or the interior of humid lowland forests. Their range is spread across much of South America and they also occur in Trinidad and Tobago. In Trinidad, the subspecies *Megascops choliba crucigerus* can commonly be observed in suburban residential areas where trees are present. There is little information about these owls' social interactions but, they are presumably solitary although they have been observed roosting in pairs at times.

ACTIVITY. Non-migratory, these owls can be found throughout the year within their range. Small and darkly coloured as they are, they are more commonly heard than seen. Their calls may be observed from dusk till dawn and this is when peak hunting activity happens. By day, these owls roost in dense foliage or in trees near to their trunks.

FORAGING BEHAVIOUR. Tropical screech owls hunt by perching on low branches and catch food on the ground, lower branches or in the air. Prey are located by hearing and sight. They, like most owls, are primarily nocturnal and have excellent low-light intensity vision. According to Motta-Junior (2002), vertebrates comprise 34% of the diet, with invertebrates making up the other 66%. Prey items include small reptiles, amphibians, rodents, and other birds, arachnids, such as spiders and scorpions, and a wide variety of insects (Thomas 1977, Motta-Junior, 2002). Many of the prey items were found to be terrestrial which suggests that prey is often taken from the ground. Prey are captured with the talons. They are also known to hunt along roadsides as this presumably makes prey very easy to spot. Sometimes as a result of their diet and foraging habits, they suffer roadside fatalities. They may also suffer fatalities as a result of poisoning since insects may harbour insecticides. Rats and mice likewise may induce poisoning as this is a common form of rodent population control in some areas. In Trinidad and Tobago, tropical screech owls may experience significant prey overlap with ferruginous pygmy owls (*Glaucidium brasilianum*). These species co-exist across much of their range and both occupy similar ecological niches owing to the small body size of both.

COMMUNICATION. There are two main calls: the A-song and the B-song. The A-song is a short trill, punctuated by two, clear notes. It sounds like, "pu-pu-pu-pu-pu-POO," (Schulenberg et al., 2007). When excited, the last note may be repeated several times. The female may produce a similar, yet higher pitched, song (Konig and Weick, 2008). The B-song is used mainly during courtship and is a series of, "bububububububu," and is sung by both sexes. Males tend to sing their B-song when leaving the nesting site, before flying to their song perch where they then sing their A-song.

SEXUAL BEHAVIOUR. There isn't much information available on the breeding habits of these owls. They are not nest-builders and roost in natural cavities (Fig. 2) such as abandoned woodpecker nests, typically laying 1-4 white eggs. The female incubates and the male provides for her. The nesting period is different in different hemispheres. In the northern hemisphere, the nesting period extends from January-July. In the southern hemisphere, this period ranges from

September-October. When a male has found a suitable nesting site, he advertises to potential mates by singing in front of his site. They are believed to be monogamous although this remains uncertain.

ANTIPREDATOR BEHAVIOUR. Tropical screech owls are small and may be targeted by many other predators. These include the common opossum (*Didelphis marsupialis*), snakes such as cook's tree boa (*Corallus ruschenbergerii*), other birds of prey such as the barn owl (*Tyto alba*) and house cats (*Felis catus*). Two primary defensive behaviours can be observed (pers. obs.). The first behaviour is observed when smaller threats are present such as house cats. The owl puffs out its feathers, lowers its head and spreads its wings to its side. It then sways back and forth whilst also raising and lowering itself (Fig. 3). This gives the impression that the owl is much larger and more aggressive than in its regular, relaxed state. The other defensive behaviour observed was reserved for larger, seemingly more threatening predators. When in proximity to a barn owl for example, the smaller screech owl attempted to make itself less noticeable, abandoning the intimidation tactics used on smaller predators. The screech owl draws all its feathers tightly in to itself, raises its ear tufts and adopts a sideways profile in relation to the perceived threat. The eyes are also squinted, thereby, less noticeable. This gives the owl the appearance of a branch and is presumably used as a method of camouflaging to avoid predators. If an intruder enters the nest, the adult owl will throw itself on its back and raise its talons to the intruder (Thomas, 1977).

JUVENILE BEHAVIOUR. At 11 days of age, chicks begin snapping bills and use of talons. At 14 days old, the chicks display defences similar in nature to their adult counterparts. They will crouch down and fluff their feathers to appear intimidating. By day 23, chicks display the same nest defence behaviour as adults, throwing themselves on their backs and extending their talons toward any intruders (Thomas, 1977). Chicks fledge after about 30 days.

CAPTIVE BEHAVIOUR. In captivity, these owls may develop close bonds with owners if captive from a very young age. Personally, having one such owl from young, the owl attempts to communicate with me, when seemingly content, by a series of soft, cooing hoots. When hungry, it emits an impertinent series of shrieks. Although owls raised from too young, such as mine, are unable to hunt on their own without training, it seems to recognize and display regular adult defensive behaviours. When faced with a snake or cat, the owl hunched down and fluffed its feathers whilst also spreading its wings (pers. obs., 2014). It then swayed from side to side whilst raising and lowering itself on its tarsi. When faced with unfamiliar people or places, it draws its feathers in, raises its ear tufts and squints its eyes while maintaining a sideways profile to any unfamiliar persons. When approached by unfamiliar people, it emits a higher pitched shriek which it usually reserves for when it is disturbed when trying to sleep. Another noteworthy behaviour observed is how little water the owl drinks. It is rarely observed drinking water more than once a week and usually this precedes bathing. This is consistent with the notion that owls derive most of their moisture needs from their food.

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Fig. 2. Tropical screech owl with chicks in a nesting cavity.

[http://www.ramonmollerjensen.com/details.php?image_id=579, downloaded 20 November 2014]



Fig. 3. Captive tropical screech owl displaying defensive posture in response to a threat.

[original photograph by Sergio Monsegue, 18 January 2013]

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