

# Knowledge about Owls among general public in Madurai District, Tamil Nadu

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## Introduction

Owls included in two families: Tytonidae and Strigidae (Clark *et al.* 1978) are nocturnal raptors and are reflected in folk-lore and mythology. They are characterized by prominent forward facing eyes surrounded by a facial disc and an upright position. Being nocturnal in habit, noiseless in flight, and capable of uttering several vocalizations, owls are persecuted due to superstitious beliefs. India has 33 species of owls (Manakadan & Pittie 2002) from about 225 species known from the world (<http://www.globalowlproject.com>).

Recently, the study of owls is given importance due to their economic and ecological values. Owls play an important role in the biocontrol of insect and vertebrate pests (Kumar 1985; Santhanakrishnan 1987), and in India several studies address aspects like their natural history, nesting and perch sites, vocalizations, behaviour, nest box utilization, food habits, developmental biology, etc. (Kanakasabai *et al.* 1995, 1996; Chandrasekhara & Nameer 2003; Jadhav & Parasharya 2003; Nagarajan *et al.* 2002; Pande *et al.* 2004; Verzhutskii & Ramanujam 2002; Ramanujam 2007; Vanitha & Kanakasabai 2009).

Across the world, including in India, humans and owls has a curious love-hate relationship. Though the cultural relationship between man and owls can be traced back to the Vedic period (Pande *et al.* 2007) our understanding of the biology and ecology of some species of owls is still incomplete as compared to other raptors. Across the world owls appear in myth, superstition, literature, folklore and owl images are depicted on coins, medallions, carvings and sculptures. In India, on one hand, owls are considered as bad omen and on the other hand they are considered wise. Some superstitions linked to owls in India are:

- Death is associated with owls when an owl perches on the roof of anyones house or when the owl constantly hoots near the house.
- If a traveler dreams of an owl, it signaled that he would be robbed or shipwrecked.
- The flesh or eyes of owls cure some diseases.
- The word owl is used in a derogatory manner.

In this paper we describe and compare the cultural relationships between owls and human communities based on interview studies in Madurai District, Tamil Nadu, India.

## Materials and Methods

The present study was carried out in Madurai District of Tamil Nadu, India, lies between 9°56' N and 78°07' E, and is situated on the banks of the River Vaigai. The total geographical area of the district is about 10,88,622 sq.km and topography is simple and flat as well as hilly in few areas. Paddy is the predominantly cultivated crop in the study area; however other crops such as sugarcane, banana, jasmine, betlevine, groundnut and sorghum are also cultivated in different regions. The District receives rainfall during October-December (north-east monsoon); the summer temperature reaches a maximum of 40°C and the winter minimum is of 26°C. The average annual precipitation is about 850mm.

In Madurai district, 183 persons were interviewed between 2008 and 2009. The questionnaires were typed in English and Tamil and circulated among different target groups like farmers (n=73), temple workers (n=30), land owners

**Table 1: General knowledge of owl habitats in Madurai District**

| Habitats                    | % respondents |
|-----------------------------|---------------|
| Trees                       | 40.6          |
| Temple towers               | 24.6          |
| Holes in buildings an wells | 12.3          |
| Forests                     | 10.1          |
| Rocky mountains             | 6.2           |
| No response                 | 6.2           |

**Table 2: General knowledge of owl food in Madurai District**

| Food                       | % respondents |
|----------------------------|---------------|
| Insects                    | 30.1          |
| Rodents                    | 28.3          |
| Lizards and insects        | 17.6          |
| Snakes                     | 6.5           |
| Birds                      | 5.8           |
| Frogs                      | 5.2           |
| Rodents, birds and lizards | 4.6           |
| Fruits and vegetables      | 1.9           |

**Table 3: Classification of owl in Madurai District**

| Classification | % respondents |
|----------------|---------------|
| Bad omen       | 53.3          |
| Beneficial     | 20.5          |
| Just a bird    | 14.5          |
| Harmful        | 6.2           |
| Fearing        | 3.5           |
| Others         | 2.1           |

(n=36), students (n=24) and public (n=20). The interviewed persons were 37.7% females and 62.3% males and ranged in age from 15 to 69 years. The literacy level of the interviewed group is as follows: illiterate (28.4%), semi-literate (32.8%) and literate (38.8%).

## Results

### General owl knowledge

Around 43% of respondents liked owls because of their inestimable service as destroyers of insect and rodent pests. However, remaining respondents (57%) dislike owls because of their threatening face with large eyes and scary screeching calls during the night hours. In Madurai, 54.2% knew two species of owls (Spotted Owlet *Athene brama* and Barn Owl *Tyto alba*), 33.3% knew only one species (Spotted Owlet) and 12.4% knew three species (Spotted Owlet, Barn Owl and Indian Eagle Owl *Bubo bengalensis*). Majority of the respondents (77.7%) disagree that owls attack human beings.

### Owl habitats and food

The group listed different owl habitats in the study area and 40.6% listed trees as major owl habitats (Table 1). Insects (30.1%) and rodents (28.3%) were listed as main owl prey

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in the study area. Interestingly, peoples also answered that owls eat lizards, snakes, birds and frogs (Table 2).

### Owl hunting

More than 60% of the respondents answered owls are being hunted for food (30.3%) and medicinal purposes (23.7%) by a nomadic tribe "kuravas". They also stated owl meat particularly liver (3.9%), eyes (2.6%) and flesh could cure the diseases associated with lungs (9.2%) and eye related problems (25.5%).

### Owl beliefs

Over 69% of the respondents had strong beliefs and superstitions about owls. 80.6% peoples replied that screech of owls at night hours in roof of house cause sudden death and 19.4% peoples mentioned owls a sign of evil and misfortune. 72.3% respondents believed that have not seen directly any such incident (death) but heard about such news from older peoples.

### Owl perches

Nearly 56% of the respondents (mainly farmers and land owners) provided artificial perch sites in their agricultural field to attract owls. All such perching sites were made out of coconut stick (23.8%), bamboo poles (17.4%), casuarina poles (11.5%) and available wooden sticks. 65% of the farmers confirmed that such artificial perching sites were used by owls during night hours while searching the prey to swoop down the kill.

### Owl classification

The respondents were also asked to classify owls based on their knowledge and beliefs. A majority of peoples classified owls as bad omen (53.2%). Some farmers found that owls as beneficiary birds and young students replied owls as just a bird (Table 3).

### Conclusion

In today's world we have learned that most of the owls superstitious are just stories, born in a time when people were fearful and trying to find answers to their lives and environment. However, many of these legends survived over time. Their wide starring eyes give them a wise appearance, while the ability to turn their head around makes them fascinating and mysterious creature. Tufts of feathers on the top of an owl's head give them the appearance of horned devils and their piercing cries add to the spook effect found in the ancient folklore of many countries.

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