

## Pledge for Hedge-hogs! Research by ZOO/WILD Staff Brawin Kumar<sup>1</sup> and Priyanka Iyer<sup>2</sup>

India has three species of hedgehogs namely, Indian Long-eared Hedgehog *Hemiechinus collaris* found in Delhi, Himachal Pradesh, Jammu and Kashmir, Punjab, Gujarat, Rajasthan and Uttar Pradesh (Srinivasulu & Srinivasulu 2012), Indian Hedgehog *Paraechinus micropus* found in Punjab, Rajasthan, Gujarat and a single record from Maharashtra (Srinivasulu & Srinivasulu 2012) and Madras hedgehog or Bare-bellied Hedgehog *Paraechinus nudiventris* which is endemic to Southern India, found in Tamil Nadu, Andhra Pradesh and Kerala (Molur *et al.* 2005). They are insectivores and belong to family Erinaceidae.

The species in question is the Bare-bellied Hedgehog assessed as Least Concern by IUCN (Chakraborty *et al.* 2008) which is endemic to southern India. Habitat loss due to collection of fuel wood, logging, agriculture and urbanization are major threats affecting *Paraechinus nudiventris* (Molur *et al.* 2005).

We present here, information based on existing literature and a one day questionnaire survey conducted on 14 July 2013 at Nakkaneri. This initial survey was taken up after we heard of Madras Hedgehogs *Paraechinus nudiventris* being consumed by people of a village – Nakkaneri in Radhapuram Taluka on the border of two districts – Nagercoil and Tirunelveli in Tamil Nadu. We interviewed 12 people within the age group ranging between 10-74 years from the village which has about 150-170 houses and a population of about 900 people.

*Paraechinus micropus* (Blyth, 1846) is used for medicinal purposes in India (Mahawar & Jaroli 2008). As per Padmanabhan (2007) the species is also known from Palakkad and Mallapuram districts of Kerala. Superstition include that the spines of this hedgehog if kept at home keeps away evil spirits. Padmanabhan (2007) states that the flesh is edible and that the spine powder is mixed in coconut oil and applied over wounds for quick healing.

There are very few studies on *Paraechinus nudiventris*. In Kerala it is reported from Ottapalayam, Palakkad (Nameer 2000 seen in Molur *et al.* 2005). Recently, a research team also found a group within the Periyar Tiger Reserve (Thomas *et al.* 2012).

Ramanujam & Anbarasan (2007) reported Bare-bellied Hedgehog from Kurumpuram Reserve Forest, in Kaliveli watershed region, near Auroville in Pondicherry. They have reported that natural healers were seen with dried skins of hedgehogs. Recently, *P. nudiventris* has also been sighted in the Highwavys Mountains, Tamil Nadu by Srinivas *et al.* (2013). It is also known from Srivilliputhur Wildlife Sanctuary (Tamil Nadu Forest Department website). It is known from Kalakad-Mundanthurai Tiger Reserve, Tirunelveli (Johnsingh 2001) and in Salem, it is known from Danishpet. In Andhra Pradesh, it is known from Chittoor and Cuddapah (Molur *et al.* 2005).

### Summary of questionnaire survey

The village has a very interesting combination in terms of habitat and habitat changes. It has a dry scrub habitat and some of the plants that we could identify in the region are



**Hedgehog spotted by Rameshwaran in Tirunelveli District**  
(Photo: M. Rameshwaran)



**Windmills seen in Nakkaneri area, Radhapuram Taluk. The entire area has > 6000 windmills** (Photo: Priyanka Iyer)



**Habitat assessment** (Photo: Priyanka Iyer)

non-natives; *Prosopis* sp, *Calotropis* sp., *Agave* sp., Cactus

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**Brawin Kumar interacting with the old man in Nakkaneri**  
(Photo: M. Rameshwaran)



**Writing seriously about the knowledge of the old persons in Nakkaneri** (Photo: M. Rameshwaran)



**Dried skin of the hedgehog received from the villagers**  
(Photo: M. Rameshwaran)

and Palmyra among others. As per people's opinion there has not been adequate rain in three years. The region has over 6000 windmills belonging to 20 companies. The region is located about 5-6 km from Kudankulam Nuclear Power Plant Project.

The questionnaire survey gave us an insight into the beliefs and habits/attitude of the people towards hedgehogs and other wildlife found in the area. 25 percent of the people interviewed have moved from Sri Lanka in the 1960s and 1970s. Their occupation includes farming on a minor scale, fishing for livelihood and drying fish for chicken feed commercially (marine), working in the beedi factory and working in the windmill offices.

Based on our initial information on interacting with the people, we know that they consume hedgehogs and believe their spines have medicinal value. They do not actively hunt hedgehogs but on opportunistic finding they are amused by the ball formation that the animal takes when faced with any disturbance or threat and play with it. Then, they drown it in water to force it open to its natural form. They consume the meat, dry the skin with spines and as and when required crush the spines to a fine powder, mix it with honey and give it to their children as a remedy/cure for cough, cold and other breathing troubles.

They do hunt some other animals namely, hare, red fox, garden lizard. Monitor lizard eggs and they use snakes for medicinal value (they melt the fat and store the oil).

#### **Next step**

We plan to continue working towards better understanding the status of this species in Nakkaneri and conduct field surveys, questionnaire surveys in adjoining areas and outreach programmes.

There are many records of hedgehogs around reserve forests within Tamil Nadu which need to be further verified. We came across many people who have sighted hedgehogs in various locations but there is a lack of detailed distribution mapping of hedgehogs in southern India, this data gap needs to be addressed urgently. There are some newspaper records for the hedgehogs, but we are not sure about the species.

Based on literature and what we have found, it is evident that more research is essential to better understand its distribution, population abundance, ecological requirements and threats (Molur *et al.* 2005). Also, education and awareness about these lesser-known animals is essential to make sure the local communities are a part of conservation.

#### **Contact information**

In case you have any information on Bare-bellied Hedgehogs kindly contact us at:  
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**Brawin conducting the questionnaire interview with Suzlon employees** (Photo: M. Rameshwaran)



**Researcher speaking with a tribal boy in the Nakkneri street** (Photo: M. Rameshwaran)



**Not the same hedgehog ... just for fun ... a Long-eared Hedgehog (*Hemiechinus auritus*) from Afghanistan**