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Cover: Marine invertebrates - made with acrylic paint. © P. Kritika.



Predation of the Nicobar Shrew *Crocidura nicobarica* by a Cattle Egret *Bubulcus ibis*

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Crocidura is the most speciose currently recognized genus of mammals, with about 200 species (Burgin et al. 2018). India is known for the presence of 12 *Crocidura* species, distributed in the mainland and Andaman & Nicobar Islands (Kamalakannan et al. 2021). Currently, the Andaman & Nicobar (AN) Islands are known to house only a single genus *Crocidura* shrew, with five endemic species, namely, the Andaman Shrew *C. andamanensis*, the Andaman Spiny Shrew *C. hispida*, Jenkin's Shrew *C. jenkinsi*, the Nicobar Shrew *C. nicobarica*, and the most recent discovery, the Narcondam Shrew *C. narcondamica* by Kamalakannan et al. (2021), of which, *C. nicobarica* is only known from the Great Nicobar Island (Molur et al. 2005; Menon 2014; Kamalakannan et al. 2021). Due to the restricted insular habitat and the associated limited population size, the *C. nicobarica* has been categorised as 'Critically Endangered' by the IUCN Red List of Threatened Species (Molur 2016).

The Great Nicobar Island is the largest of the 11 islands of the Nicobar group of Islands, situated at the southernmost portion of the Andaman & Nicobar Islands, India (7.0346°N & 93.7842°E). The Great Nicobar Island is home to several endangered and endemic vertebrate fauna including the endangered Giant Leatherback

Sea Turtle *Dermochelys coriacea*, the endemic Nicobar Megapode *Megapodius nicobariensis*, and the endemic Nicobar Treeshrew *Tupaia nicobarica* (Saha 1980; Miller 1902; Pande et al. 1991; Kamalakannan et al. 2020). The mammalian fauna of the Great Nicobar Island comprises mostly bats and few non-volant mammals; the only known wild larger mammals are the Wild Boar *Sus scrofa* and the Nicobar Long-tailed Macaque *Macaca fascicularis umbrosus* (Bates & Harrison 1997; Molur et al. 2002, 2005; Aul et al. 2014). The region is composed of deciduous, moist, & evergreen forest, grasslands, and perennial rivers & streams (Rodgers & Panwar 1988).

Insects and small vertebrates are the primary diets of Cattle Egret *Bubulcus ibis* (Vega-Sánchez et al. 2022; Talbi et al. 2023), but predation of *Crocidura* shrew is rarely observed. Here, we recorded a Cattle Egret preying on a shrew at the littoral forests near Govind Nagar, Great Nicobar Islands (6.9997°N & 93.9086°E; Figure 1); it was an opportunistic observation, while watching the wetland birds. It was also observed that the Cattle Egret flipped the shrew back up on the ground and kept on biting on the head and neck regions with its bills and subsequently gobbled it down in one motion. The bird was identified based on its white plumage, short, thick neck, a sturdy yellow bill, and a hunched

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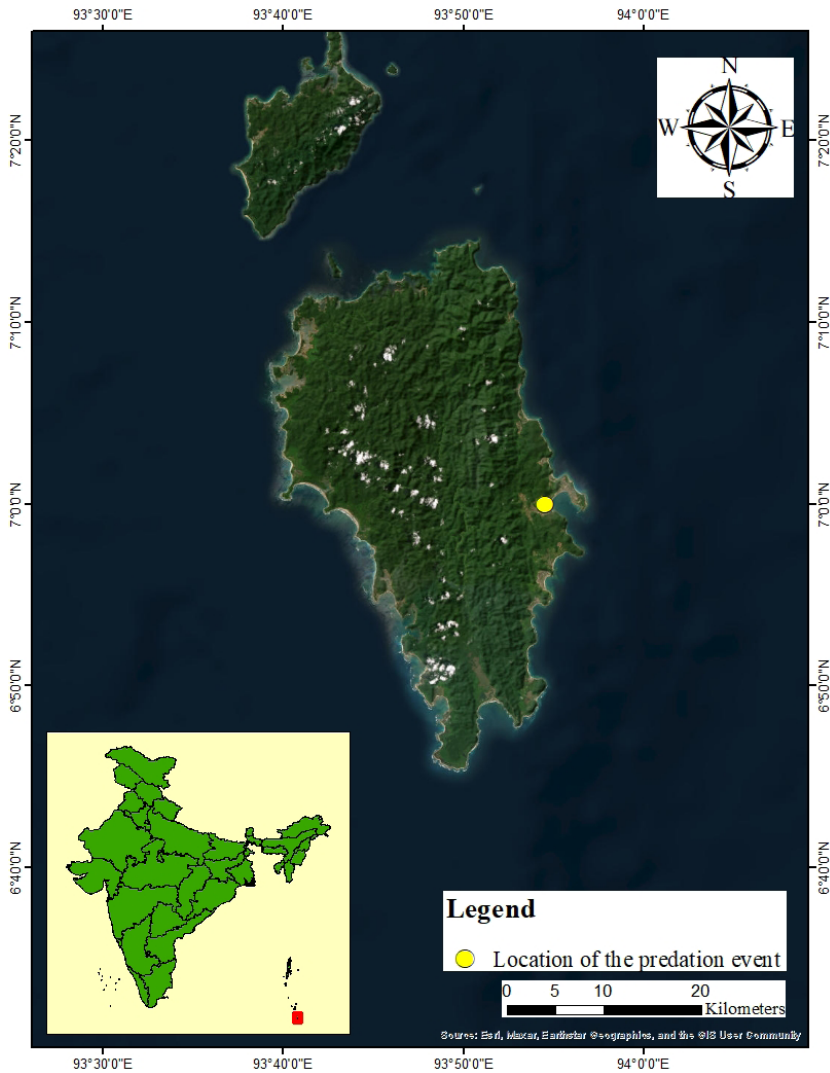


Figure 1. Map showing the location of predation of the Nicobar Shrew by a Cattle Egret in the Great Nicobar Islands, India.

posture; the mammal was identified as a shrew based on its long snout, grey dense dorsal pelage and medium-sized tail, and further as *C. nicobarica*, because it is the only shrew species known from the Great Nicobar Island (Image 1). Some individuals of the *C. nicobarica* have previously been observed in field surveys conducted at this location. The video of the predation event can be accessed at the following link: <https://osf.io/m7dxr/>. *C. nicobarica* is a comparatively large-sized shrew (head and body length: 10.7–12 cm; tail length: 9–9.5 cm), characterised by a bristly sooty brown dorsal fur with a slender tail (Menon 2014). They inhabit the leaf litter tropical moist deciduous forests.

The equilibrium between foraging gain and predation risk is the fundamental trade-off in animal life (Mazza et al. 2019). Predation instances on shrews are rarely observed due to its secretive behaviour, releasing

pungent and musky odour when it is threatened (Nagorsen 1996; Jung 2016). Jung (2016) has reported a similar predation event on a Western Water Shrew *Sorex navigator* by a Belted Kingfisher *Megaceryle alcyon* from Yukon, Canada. Further studies on these species' natural history of both *C. nicobarica* and *B. ibis* in the Great Nicobar Island will yield more information about their potential interactions and their ecological relations and functions.

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Image 1. Predation of the Nicobar Shrew by a Cattle Egret from the Great Nicobar Islands, India.

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