# Predation of Common Tree Frog by Ornate Flying Snake at Satchari National Park, Bangladesh

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The Ornate Flying Snake Chrysopelea ornata Shaw, 1802 is one of the most spectacular snakes because of its ability to glide through the air (Ingle 2010). It is widely distributed in South and Southeast Asian countries however its global status hasn't been evaluated (IUCN Bangladesh 2015). There are three recognized subspecies: C. o. ornata Shaw, 1802 from southwest India, C. o. ornatissima Werner, 1925 in north and east India to Southeast Asia including Bangladesh, and C. o. sinhala Deraniyagala, 1945 which is endemic to Sri Lanka (Samson et al. 2015). Despite being categorized as Least Concern the species is not common in Bangladesh, however, it occurs in different habitat types including deciduous forests, mixed evergreen forests, mangroves and even homestead vegetations (IUCN Bangladesh 2015). The snake is diurnal in nature, predominantly arboreal and known to consume small vertebrates (IUCN Bangladesh 2015).

Here we report an opportunistic observation of predation of a Common Tree Frog *Polypedates leucomystax* Gravenhorst, 1829 by *C. ornata* at Satchari National Park (24.1263°N, 91.4415°E) - a small mixed evergreen forest (243 hectares) under Sylhet Hills bio-ecological zone of north-east Bangladesh and a part of Indo-Burma biodiversity hotspot.

*P. leucomystax* is found in most Asian countries (Diesmos et al. 2004). In Bangladesh, it occurs from the coastal areas to the hilltops, inhabiting both primary and secondary forests, bushes, tree holes, homestead vegetations and human habitations (IUCN Bangladesh 2015). The frog is listed as 'Least Concern' both in Bangladesh (IUCN Bangladesh 2015) and global scale (Diesmos et al. 2004). *P. leucomystax* is nocturnal in nature and becomes active at dusk (IUCN Bangladesh 2015). However, *P. leucomystax* represents a complex of poorly known cryptic species and comprehensive taxonomic revision is required (Diesmos et al. 2004).

On 1 October 2017 at 11h35, during non-human primate survey, an adult *C. ornata* was opportunistically sighted predating on an adult *P. leucomystax* in a bamboo-clump close to human settlement (FIG. 1). The snake was hanging with its tail coiled around a bamboo branch about 6 m above the ground with its body twisted around the frog to hold and immobilize it. The trunk of the frog with its hind thighs was caught tightly through frequent constrictions of the snake's body. At 11h53, with a little jerking motion the snake started swallowing the frog from the head side and completed swallowing it at 12h29. Immediately after, the snake moved towards the adjoining Toon tree *Toona ciliata* and continued moving through the tree branches towards the nearby forest patch before disappearing from our sight. During this observation, the prey didn't produce any sound and the snake's head was hanging down with the prey in its mouth (FIG. 2). The cause of the hanging was not clear. It possibly helped in muscle contraction and extraction while swallowing.



FIG. 1: C. ornata constricting P. leucomystax.

*C. ornata* feeds on small vertebrates including frogs, lizards, small snakes, birds, bats, and small rodents (Diesmos et al. 2004). *P. leucomystax* is found in all the potential habitats of *C. ornata* in Bangladesh (following IUCN Bangladesh 2015) and a similar observation of predation of *P. leucomystax* by *C. ornata* at Satchari National Park was reported by Babu et al. (2018). It can be assumed that *P. leucomystax* is common in *C. ornata* diet but poorly studied. *C. ornata* has been reported to predate on fish in India (Melvinselvan and Nibedita 2016). We recommend detailed studies on *C. ornata* diet which can be interesting considering its wide distribution and variation of habitats.



FIG. 2: C. ornata hanging by its tail during feeding.

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#### **Biosketches**

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