On 13 July 2018, one of the chicks fell out of nest, onto the ground below. It was rescued and handed over to the rehabilitation team of the Department of Wildlife, Patiala District. They later informed that it had survived and they used to feed it raw egg in warm water **[70]**. On 08 September 2018, we saw the other juvenile flying around the nest, and from then on, the nest box was unattended.

Onkar Singh Brraich

70. The Indian Scops Owl chick, that fell out of the wooden nest box.

There is some evidence that artificial nest boxes positively influence the breeding of birds including owls. Prior studies have shown a larger clutch size in artificial nests occupied by Barn Owls *Tyto alba*, and Tengmalm's Owls *Aegolius funereus* in Norfolk, England and western Finland (Johnson 1994; Korpimäki 1984). Whether nest boxes would benefit tree cavity nesting owls like the Scops Owls remains to be seen.

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Ground nesting of Brahminy Kite *Haliastur indus* at Chilika Lagoon

The Brahminy Kite *Haliastur indus* is found throughout India, inhabiting coastal areas, lakes, large rivers, tidal creeks, jheels, and reservoirs (Ali & Ripley 1978; Rasmussen & Anderton 2012). It breeds between December and May, on large trees like *Ficus* sp., Tamarind *Tamarindus* sp., *Casuarina* sp., etc., preferably near water, and 6–15 m above the ground. The nest is usually a platform of twigs; clutch size varies between two to three greyish-white eggs marked with dull reddish spots (Ali & Ripley 1978). Occasionally, these raptors show some flexibility regarding their breeding behaviour, which are quite rare and unusual (Ellis et al. 2009).

Panchakudi is a small island (hereafter 'islet') (19.61ºN, 85.21ºE) situated in the southern sector of the Chilika Lagoon, Odisha (India). The islet is completely submerged during the monsoon and gradually appears in winter and summer. Every year, River Terns *Sterna aurantia*, Gull-billed Terns *Gelochelidon nilotica*, and Black-winged Stilts *Himantopus himantopus* breed here. To study the breeding ecology of ground-nesting birds, the islet was surveyed in January–June 2019 and January–March 2020. We visited it once in three days, in the early morning, to minimise disturbance.

On 01 March 2019, a Brahminy Kite's nest was sighted there while surveying ground-nesting birds. We began observing it, following protocols per Barve et al. (2020). The platform nest was made up of stems of dried aquatic plants, grass, and aquatic weeds *Potamogetan* sp. It contained one egg. But it was on the ground along with other colonial ground nesting birds. The nest was loosely constructed, and the cup region was lined with aquatic weeds. It was 45 cm in diameter and 09 cm deep. The nest was situated on the highest part of the islet, *c*.30 cm asl and 110 cm from the water. The egg hatched on 24 March 2019. Both parents shared parental duties. The fledgling was observed till 27 April 2019, after which it was not seen. It may have been affected by the extremely severe cyclonic storm 'Fani', which made landfall near Satapada of Chilika Lagoon on 03 May 2019. Small to medium-sized fishes and, interestingly, remains of a tern chick were also found near the nest.

Ground nesting by raptors is an exceptional event, but it has been recorded in some species such as Pallas' Fish Eagle *Haliaeetus leucoryphus*, Bald Eagle *H. leucocephalus*, Ferruginous Hawk *Buteo regalis*, Black-chested Buzzard-Eagle *Geranoaetus melanoleucus*, Osprey *Pandion haliaetus*, Golden Eagle *Aquila chrysaetos*, Egyptian Vultures *Neophron percnopterus*, Peregrine Falcon *Falco peregrinus*, and the Barred Owl *Strix varia* (Ferrer 2019; Postupalsky 2001). Basically, occasional ground nesting by raptors occurs on remote islands, in the absence of predators (Ferrer 2019). The ground nesting of a Brahminy Kite was reported in 1990 and 1991 from Point Calimere, Tamil Nadu (Morrison et al. 1992; Balachandran & Sakthivel 1994). Both those nests were made up of twigs of *Prosopis chilensis* and *Suaeda* and the inner cup lined with small pieces of dried mud. In contrast to them, at Chilika wetland, the kite used the stems of aquatic plants and lined the inner cup with dried aquatic weeds *Potamogetan* sp., due to the unavailability of trees and dried mud near the nesting site. Nest morphometric data and nesting site preferences matched with Ali & Ripley (1978). But nesting site fidelity was not observed during the subsequent breeding season, unlike Point Calimere, Tamil Nadu (Balachandran & Sakthivel 1994). The distance between the nesting colony of terns and the nest of the Bramhiny Kite was about 4.5 m. We noticed the terns occasionally mobbing the kites, especially the River Terns. Food, in the form of fishes and birds (tern chicks) were brought to the nestling, as was observed at in the Cauvery Delta, India (Sivakumar & Jayabalan 2004) and New South

Wales, Australia (Rourke & Debus 2016; Wooding 2019).

The possible reasons for the unusual ground nesting of Brahminy Kite at Panchakudi are: it is remote, without the presence of any large trees and, except Bandicoot rats *Bandicota* sp., no other mammals exist there, so there is no predatory pressure on the kite. It is fairly well known that a breeding site of raptors is influenced by the availability of prey items (Graham & Redpath 1995; Marzluff et al. 1997; Ontiveros et al. 2005) as well as accessibility to them (Widen 1994). This could, possibly, be the reason for the choice of the kites' nest location, among the colony of ground nesting birds.

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The Red-flanked Bush Robin *Tarsiger cyanurus* in eastern Arunachal Pradesh—an overlooked species

The Himalayan Bush Robin *Tarsiger rufilatus* and the Red-flanked Bush Robin *T. cyanurus* were, until recently, considered conspecific (Collar et al. 2020). The former has a range that extends from north-eastern Afghanistan and northern Pakistan, eastwards through the Himalayas to north-eastern India (Arunachal Pradesh); northwards to central and southern China, migrating down to lower altitudes, southwards from its breeding grounds and north of South-east Asia (Collar et al. 2020). The Red-flanked Bush Robin has a breeding range from Finland and north-western Russia, and Ural mountains, eastwards to the northern Sea of Okhotsk, Kamchatka, southwards to Altai, northern Mongolia, Japan, north-eastern China, and Korea, and migrates southwards all the way till eastern and south-eastern China, Taiwan, Hainan, and northern South-east Asia (Collar et al. 2020). To summarise, the Himalayan Bush Robin is a short-distance migrant whereas the Red-flanked Bush Robin is quite a long distance migrant.

The Red-flanked Bush Robin has been considered a winter vagrant (Rasmussen & Anderton 2012). There have been only two confirmed historical records of the species, the first, a skin collected by Baker on 02 February 1896 (Baker 1894), while the second, from Saiha, Mizoram, collected by Rupchand Thakur on 20 March 1953 (UMMZ birds #180734). The fact that Himalayan Bush Robin and Red-flanked Bush Robin were considered as same species and their morphological features being similar, the rarer Red-flanked Bush Robin has been overlooked in India. Males are easier to identify: the Red-flanked Bush Robin has a white (versus bluish) pre-ocular supercilum, paler turquoise-blue (versus darker and rich cobalt blue) upperparts, and buffier (versus white) underparts (Rasmussen & Anderton 2012; del Hoyo et al. 2020). The females and first-winter birds are harder to tell apart: they tend to be much warmer brown overall, with more prominent, browner breast band, and dull blue rump and tail, than Himalayan (Rasmussen & Anderton 2012). The most likely area where this species can occur in winter, or during migration, is in extreme north-eastern India, which is comparatively less visited by birders.

Observations

We planned a trip to the Walong region of Arunachal Pradesh, with a plan to search for the Red-flanked Bush Robin in the Lohit and Anjaw Districts of Arunachal Pradesh. Before visiting, we had geared ourselves up with all the identification information. While birding at Udayak Pass (27.91ºN, 96.33ºE, *c.*1,640 m), we saw a peculiar looking Bush Robin with a white pre-ocular supercilium **[71]** (Shah 2020a). Quickly looking through the camera's viewfinder, DS exclaimed, 'Red-flanked Bush Robin!' We were ecstatic and the bird gave us several good views.

We reconnoitred the Walong region for four days, during which we visited Helmet Top and Tilam Top several times. We encountered Red-flanked Bush Robins approximately six times in the montane forests. The males were quite easy to identify, but the females were harder, and were left unconfirmed. During the entire visit, we only encountered one male Himalayan Bush Robin whose picture we were unable to click. The male showed prominent cobalt-blue upperparts and a bluish preocular supercilium. The male was observed along with a female Red-flanked/Himalayan Bush Robin. While on the other hand, all the