On the status of Lesser Fish-Eagle *Ichthyophaga humilis* in southern Kerala

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Lesser Fish-Eagle I. humilis at Parambikulam. 23 November 2009.

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Introduction

Lesser Fish-Eagle *Ichthyophaga humilis* is classified as Near Threatened by the IUCN (BirdLife International 2008). In India it is, "Resident. The Himalayas from Kashmir to Arunachal Pradesh, and the hills south of the Brahmaputra... In winter wanders to the plains of Haryana, U.P. and Bihar." (Ripley 1982). Naoroji (2006) describes this species as "... sedentary, winter vagrants do stray into Uttar Pradesh and central India and most unusually in south India along the Kaveri river (sic) near Kanakapura, Karnataka ...".

The first record of the species in Kerala was a photograph taken by Nameer P. O. on 20 January 2006 at Parambikulam Tiger Reserve. Since then there were several records of the species from various parts of southern Kerala (Sashikumar *et al.*, in press). It is still not clear whether this species suddenly expanded its distributional range or has been overlooked by ornithologists, or misidentified as Grey-headed Fish-Eagle *I. ichthyaetus*, which it superficially resembles, and which has a much wider range than *humilis* (Ripley 1982).

We present here records of *I. humilis* from southern Kerala as recorded during the survey, "Along the trail of Sálim Ali," in 2009. We also report the breeding of the species in Kerala.

Methods

An ornithological survey entitled, "Along the trail of Sálim Ali," sponsored by the Kerala Forests and Wildlife Department, was carried out by the authors, following the route of Sálim Ali's "Travancore-Cochin Ornithological Survey" of 1933, in the areas south of the Palghat Gap from Wadakkancheri to Kanyakumari, which formed the erstwhile Princely States of Travancore and Cochin (Ali & Whistler 1935–1937). The duration of our survey was one year, from 1 January 2009 to 31 December 2009. Nineteen base camps of the survey were established, spread over eight southern districts of Kerala, covering different habitats from the coastal plains to the high altitude regions of the Western Ghats, with altitudes ranging from 0 m to 2,530 m. A three-hour line transect, between 0600 hrs and 1100 hrs, was walked on

each field day and the birds observed in fixed distance bands were recorded; a total transect distance of 282.35 km was covered. The overall distance covered during the survey was 1,100 km. Raptors were observed during the transect surveys as well as afterwards. Regular observations were made from vantage points to observe soaring raptors. Birds were observed using 8 x 40 binoculars. Whenever possible, raptors, in flight or perched, were photographed, for later identification. Lesser Fish-Eagle, being a species confined to inland rivers and reservoirs, was given specific attention, and additional time was spent, to ascertain the presence or absence of this species in such habitats.

Results

During the survey there were 14 sightings of Lesser Fish-Eagle, at Mlappara (PTR), Thooakkadavu, Kuriarkutti (both in Parambikulam Tiger Reserve), and Kallada Reservoir in Shendurney Wildlife Sanctuary (Table 1). While we were at Thattakkad Bird Sanctuary, an injured Lesser Fish-Eagle was brought to the sanctuary office on 11 February 2009. After two days of medical treatment it was released (Fig. 2).



Fig. 2. Injured immature Lesser Fish-Eagle *I. humilis*, Thattakkad, 11 February 2009.

Table 1. Summary of Lesser Fish-Eagle sightings				
Location, Date	2	Numbers	Activity	Altitude (m)
Thattakkad Bird Sanctuary				
11 February 2009	Thattakkad	1	In captivity, injured, released later	42
Periyar Tiger Reserve				
03 March 2009	Mlappara	1	Fight	935
04 March 2009	Mlappara	2	Soaring, courtship display accompanied by call	
Shendurney Wildlife Sanctuary				
23 March 2009	Tenmala	1	Soaring	375
27 March 2009	Umayar	2	One at nest (nestling), second perched on a branch nearby	375
Parambikulam Tiger Reserve				
13 November 2009	Kuriarkutti	1	Perched	705
15 November 2009	Kuriarkutti	1	Flight	705
18 November 2009	Tunnel Entry	2	One perched, one in flight	690
21 November 2009	Thoonakkadavu	2	Perched, fishing	690
22 November 2009	Anappadi	1	Perched, fishing	696
23 November 2009	Tribal colony	1	Perched, fishing	690

Breeding

A nest, with a fledgling, was observed at Umayar (Shendurney Wildlife Sanctuary) on a tree on an islet in the reservoir on 27 March 2009 (Fig. 3). Umayar is about an hour's boat ride across Tenmala reservoir, upstream. At first we saw an eagle carrying a fish in its talons flying towards the islet. The bird perched on the high branch of a 'pala' Alstonia scholaris. On closer observation, we saw a well-concealed twig nest in the canopy, close to the perch of the eagle; another eagle was seen sitting inside the nest, and from the distance of about 100 m, this bird looked like a fledgling. The adult bird flew off after about 20 min. The nest was placed at about 20 m height. Both birds were silent during the time of observation.

Vocalisations

At Mlappara, Periyar Tiger Reserve, a pair of eagles was seen soaring high, circling, uttering loud nasal calls. A bird observed at Parambikulam Tiger Reserve also uttered similar calls perched on a branch at 1830 hrs.

Foraging

The bird was observed near reservoirs (Thoonakkadavu in Parambikulam Tiger Reserve and Kallada in Shendurney Wildlife



Fig. 3. Lesser Fish-Eagle I. humilis at nest, Shendurney, 27 March 2009.

Sanctuary), fast flowing rivers (Mlappara in Periyar Tiger Reserve, Kuriarkutti in Parambikulam Tiger Reserve and Thattakkad) and stagnant pools in the creeks of the reservoirs (Thoonakkadavu). In Parambikulam Tiger Reserve, six sightings were of birds perched on overhanging branch of trees on the reservoir bank at a height of three to five meters above water level in the morning and evening, probably looking for fish. Birds were seen flying from one bank to the opposite after an unsuccessful hunting sortie. Some of the hunting sorties we observed at Parambikulam Tiger Reserve were close to dusk.

Conclusion

Our field study shows that the Lesser Fish-Eagle is a breeding resident in Kerala and not uncommon in southern Kerala. Recent records of the bird from other locations in southern India (Praveen J., pers. comm.) underline this factor (see Praveen 2011, p 14—16 in this issue).

Significantly two other species of raptors, Jerdon's Baza Aviceda jerdoni, and Mountain Hawk-Eagle Spizaetus nipalensis also have two disjunct populations in India. The northern race of Jerdon's Baza, A. j. jerdoni, ranges from north-eastern West Bengal, Sikkim, Assam and associated North-East hill states to Arunachal Pradesh (Naoroji 2006), while the southern race A j. ceylonensis in the evergreen habitat of the southern Western Ghats from around Karnataka to south Kerala between 150 m and 1500 m (Naoroji 2006). Similarly, in the case of Mountain Hawk-Eagle, the northern race S. n. nipalensis is distributed throughout the Himalayan foothills from Kashmir to Arunachal Pradesh and throughout the north-eastern hill ranges, while the southern S. n. kelaartii resides above 600 m in the moist deciduous and evergreen hills of the Western Ghats, extending southward into Sri Lanka (Naoroji 2006). Keeping these patterns of distribution in mind, further research into the morphology and biology of the Lesser Fish-Eagle in Kerala is necessary.

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On the breeding of Lesser Fish-Eagle *Ichthyophaga humilis* in Cauvery Wildlife Sanctuary, Karnataka

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Introduction

Historically the Lesser Fish-Eagle Ichthyophaga humilis has been known to occur only in the Himalayan foothills, and northeastern India, where it is a breeding resident (Ali & Ripley 1987; Rasmussen & Anderton 2005). However, there have been a few recent sight reports and photographs from riverine habitats in southern India since 2004 (Lethaby 2005; unpublished, online reports in the bngbirds (http://groups.yahoo.com/group/ bngbirds/) & keralabirder (http://tech.groups.yahoo.com/group/ keralabirder/) egroups (see References). Little information exists about the distribution and habitats of Lesser Fish-Eagle in southern India, except for the infrequent sightings by bird watchers. One of its favourite haunts seemed to be the Cauvery River, along its stretch from Ranganathittu till about Hogenekkal, where it has been spotted at several places like Ranganathittu, Muthathi, Bheemeshwari, Doddamakali, and Galibore, some of these locations falling within Cauvery Wildlife Sanctuary. The species has been recorded from this region throughout the year.

In this note, we present observations made over a period of eight weeks, at Cauvery Wildlife Sanctuary, on perhaps the first nesting incidence of this species in Karnataka, and possibly the second from peninsular India. The first nesting record from

this latter region was in March 2009 from Shendurney Wildlife Sanctuary, Kerala (Sashikumar *pers. comm.* June 2009). We also record an instance of fishing by Lesser Fish-Eagle.

Discovery of the nest

On 7 June 2009, while watching birds near Bheemeshwari, in Cauvery Wildlife Sanctuary, around 1625 hrs, we (DK, SH, &VD) noticed a raptor perched on the topmost branch of a dead tree. Its back was towards us, and we had a clear view of its all-dark tail; we easily identified it as an adult Lesser Fish-Eagle. The raptor suddenly became alert and assumed an aggressive posture when a Brahminy Kite Haliastur indus soared above it. As soon as the kite went out of the view, the fish-eagle seemed more relaxed on its perch. When the kite reappeared, the fish-eagle took-off in a flash, raced after the intruder and chased it for some distance. It circled a few times over the area before disappearing towards the riverside. This typically 'aggressive' behaviour suggested a possible nest in the vicinity, and after a few minutes of searching, the nest was located. An adult fish-eagle was sitting in the nest, feeding a single chick! The adult was tearing off small pieces of food and feeding the chick. Based on the photographs, the age of the chick was approximated to be six weeks (Fig. 1).