

Short Communication

First record of Eastern grass owl *Tyto longimembris* in Cambodia

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On 20th December 2007, at 'Wat Prohoot' in Chikraeng District, Siem Reap Province, central Cambodia (approx. UTM P48 0442000E, 1440000N), we flushed two Eastern grass owls *Tyto longimembris* from the ground in open, seasonally flooded grassland (Fig. 1). One of the birds was flushed from an active nest and the other individual from a roosting site located c. 25 m from the nest. These observations represent both the first record and first breeding record of the Eastern grass owl in Cambodia.

At first glance the birds resembled the barn owl *Tyto alba*. The first individual (Fig. 2), however, had a mostly dark upper side (crown to rump uniformly medium brown; median, greater and primary coverts dark brown with some irregular and diffuse, slightly paler patches; primaries and secondaries golden-brown with dark brown bars and marks; primaries with blackish tips above and below), in sharp contrast to the pure white face, pale underside (pale brown breast and snowy-white belly), white upper tail coverts, whitish leading edge of the wing, white underwing (with few dark marks, and dark-barred primaries and secondaries), and whitish to pale golden-brown, dark-barred upper tail. The second individual looked similar, differing only in details: it had an obvious golden-buffish patch on the back, the primaries and secondaries appeared paler overall, and the wing coverts were less extensively dark brown, forming a narrower dark band on the upper wing that contrasted both

with a broad white band on the leading edge of the wing and the overall paler tail feathers; so, overall, this bird showed more contrast on its upper side. On its underside, some irregularly scattered dark spots were visible. Both birds had very long legs, extending well beyond the tip of the tail in level flight (see Fig. 2) and also obvious when the birds hovered briefly with extended legs (Fig. 3, showing the second individual) before dropping into the grass. Both birds were in primary moult.

The nest was located on dry ground and thus differed to two nests found by Kasornorkbua *et al.* (2008) in Thailand, in dense patches of thick grasses floating on the surface of a swamp with 30-50 cm deep water. The nest was hidden in a cavity formed by c. 1 m tall, dense grass. The actual nest 'cup' was a simple pad on the ground (no nesting material had been brought in by the birds, but rather the existing grass trampled down) with a c. 1 m long, semi-covered entrance tunnel (Fig. 4). On 20th December, the nest contained five white eggs. On 25th December (when two birds, presumably a male and a female, were flushed), however, it contained only four eggs, two of which were broken (largely dried out already, but with embryos at an early stage of development still recognisable). One was outside the nest 'cup', and the remaining two intact eggs were cold (Fig. 5). On 3rd January 2008, the nest was empty and abandoned.

Thirteen pellets, collected from the nest and the nearby roosting site, mainly contained skulls, bones, and hair of rat-sized rodents, but also of some small passerine birds (according to bill shape, both insectivores and seed-eaters). This is in accordance with the findings of Kasorndorkbua *et al.* (2008) in Thailand (mainly murid rodents) and Lin *et al.* (2007) in southern Taiwan (95% mammals, mainly rats, and 5% birds).

The Eastern grass owl may be a new breeding bird in this part of the Tonle Sap floodplain. Wat Prohoot is a well visited birdwatching site and the wider area has been the location of bird surveys since 1999 (Goes *et al.*, 2001) and an intensive field study on Bengal florican *Houbaropsis bengalensis* since 2002 by several scientists with excellent general ornithological skills (Davidson, 2004; Gray *et al.*, 2007a; Gray, 2008). Moreover, during conversations with local people, who have a generally good knowledge of the grasslands and their birds, it came to light that they did not know this *Tyto* owl, which roosts and nests in the open grassland, while the barn owl is well known. The record presented here, as well as recent breeding records by Kasorndorkbua *et al.* (2008) in northern Thailand, may be indicative of a current range extension of the Eastern grass owl in Indochina, with the birds moving further inland from the species' previously known breeding range that consists of a band along the coast of Myanmar in the West and, geographically isolated, a band along the coast of southeastern China to southern Vietnam in the East (see distribution map in del Hoyo *et al.*, 1999). If true, such movements may be caused by large-scale habitat alterations due to the expansion and intensification of agriculture in traditional breeding areas, such as the Mekong Delta.

It is also conceivable that the Eastern grass owl is a traditional breeding bird of the Tonle Sap floodplain, but has merely been overlooked. The species is little known and rarely observed, and may be under-recorded due to its nocturnal habits. Furthermore, it may be easily confused with the barn owl, which at least in Cambodia, can be found hunting in the same habitat (M. Handschuh, pers.

obs.). Moreover, the aforementioned fieldwork on the Bengal florican in the grasslands of the outer Tonle Sap floodplain, where the nest was located, does not usually start until later in the dry season, by which time the owls may have finished nesting and moved to wetter areas in the inner floodplain, which are only rarely visited by observers.

Independent of the scenario, the Eastern grass owl is without a doubt a rare breeding species in the Tonle Sap floodplain that is likely to be threatened by the rapid expansion of agro-industrial plantations and the large scale conversion of grasslands into dry season rice cultivation, and the associated construction of dams and ditches that alter the hydrology and usage patterns by local communities, and thus the vegetation composition of surrounding grasslands (see Gray *et al.* 2007b, Gray, 2008).

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Fig. 1 Nesting habitat of the Eastern grass owl (© Oldrich Rajchl).



Fig. 3 Eastern grass owl. Note the long legs (© O. Rajchl).



Fig. 2 Eastern grass owl (© O. Rajchl).



Fig. 4 Nest site of the Eastern grass owl. Note the tunnel-like entrance to the hidden nest (© O. Rajchl).

All five images on this page were taken in Chikraeng District, Tonle Sap floodplain, central Cambodia, in December 2007.



Fig. 5 Eggs of the Eastern grass owl. The nest originally contained five eggs of the same size and colour (© O. Rajchl).

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About the Authors

SANG MONY had pursued a career in the hospitality sector in Siem Reap before joining the Sam Veasna Center for Wildlife Conservation (SVC) in late 2006. Starting off at the end of the 1990s in a junior position at a beer garden, he worked his way up to the post of Senior Waiter at the Raffles Grand Hotel and later at the Sokha Hotel. At the SVC, Mony was trained to become a bird guide. After successfully completing his training in 2007,

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MARKUS HANDSCHUH started his conservation career during his school days in southern Germany, recording bird nests, breeding birds at home and volunteering on various local projects. After completing his 'civilian service' at a wildlife rescue centre in 1996, he went on to study zoology, botany and palaeontology at the universities of Constance and Tübingen. From 2002 to 2005, he worked as Senior Bird Keeper at the Durrell Wildlife Conservation Trust in Jersey (UK), from where he also undertook overseas fieldwork on critically endangered bird species. He then moved to the British Trust for Ornithology as a Research Ecologist. In 2007, he took up the post of Animal Collection Manager at the ACCB in Siem Reap, where since late 2009 he has been the Project Manager.

ISADORA ANGARITA-MARTÍNEZ is an avid birdwatcher and avian researcher. She holds a BSc. (Hons.) degree in Biology from the Universidad del Valle, Cali, Colombia, and a Diploma in Endangered Species Management from the Durrell Wildlife Conservation Trust, Jersey, UK. Isadora has many years of first-hand experience working on and coordinating research and conservation projects, mainly in her home country, Colombia. Her expertise also includes community-based conservation initiatives and environmental education activities. From 2007 to late 2009, Isadora was the Project Manager at the ACCB in Siem Reap. Currently, she works as a consultant for non-governmental environmental organisations.