

Field Notes

First Breeding Record of the Slaty-Legged Crake *Rallina eurizinoides* in Malaysia and description of Breeding Behaviour

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Slaty-legged Crake has a wide but disjunct breeding range, from west and north-east India and Nepal as far east and north as Taiwan and the southern Japanese islands, On continental Southeast Asia, breeding has been recorded as far south as Western Thailand and Central Vietnam, and it is also a breeding bird throughout the Philippines and Sulawesi, Indonesia. Seven races are recognized: *R. e. amauroptera* occurs in the Himalayan foothills and south-west India; *R. e. telmatophila* breeds in continental south-east Asia; *R. e. sepiaria* is resident on the Ryuku Islands; *R. e. formosana* occurs in Taiwan and Lanyu Island; the nominate race breeds in the Philippines (except Batan Island) and Palau Island; Batan Island has its own endemic form – *R. e. alvarezii*; and *R. e. minahasa* occurs in Sulawesi and the Sula Islands (Taylor 2020).

The species has been hitherto unknown as a breeding bird in Malaysia and the rest of Borneo, being recorded only as a scarce migrant (MNS BCC 2021). Indeed, the first record of the species for Borneo was only in 2018 (Borneo Bird Images 2024), and there have been a small handful of records since.

On Labuan Island itself, the only Rallids mentioned in archival records are Slaty-breasted Rail *Lewinia striata*, Red-legged Crake *Rallina fasciata* and White-breasted Waterhen *Amauornis phoenicurus* (Sharpe, 1879).

This report describes the breeding of a pair of Slaty- legged Crakes which occurred on Labuan Island in late 2023 to early 2024.

Disclosure on Chicks Observations

Observations were made from a bird hide, at a distance of 9m from the nesting area (see Plate 1). Almost daily visits to the area were made by NH or NH and MEU. Equipment used for observation, images and video recording included 60x60 binoculars, a Xiaomi Rangefinder and DSLR cameras with 150-600mm telephoto lens. The chicks and adults appeared comfortable with human presence nearby.

A man-made pond was erected (1.22m x 1.88m) for the birds and other animals nearby, since it was the dry season by the time the chicks had fledged. Almost every day it was used for bathing by the Slaty-legged Crakes, as well as by Rufous-backed Kingfishers *Ceyx rufidorsa*, Malaysian Pied Fantails *Rhipidura javanica*, Western Hooded Pittas *Pitta sordida*, Yellow-vented Bulbuls *Pycnonotus goiavier* and occasionally by a group of Long-tailed Macaques *Macaca fascicularis*, Asian Water Monitor *Varanus salvator* and Gold-ringed Cat Snake *Boiga dendrophila*.

Key Timelines of Nesting Activity Observations

22 October 2023	A pair of Slaty-Legged Crakes was spotted in what appeared to be courtship preparation.
28 October to end December 2023	The pair of adults Slaty-Legged Crakes were observed taking turns going in and out of the nesting area, for bathing and preening at a pond nearby. Once in a while, an alarm or territorial call was heard from the nest area.
9 November 2023	The exact nesting site was first identified as both adult crakes were observed going in and out of a patch of Japanese stilt grass <i>Microstegium vimineum</i> , 9m from the observation hide.
28 December 2023	One chick was spotted with an adult. Two more chicks were seen to fledge from the nest the same evening.
28 to 31 January 2024	Feeding was observed to take place twice a day (early morning and in the mid-morning).
Early February 2024	Only two young chicks were seen and their plumage changed from black to brown on the head and breast, with narrow white stripes below.
Observations until mid-March 2024	Observation ended in mid-March 2024 as the dry season began and the Slaty-legged Crane family was no longer seen.



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Plate 1: Location of the hide in relation to the nesting site

Nesting Location and Environment

The nest area was situated at Sungai Pagar on the west coast of Labuan Island, Malaysia [5°16'18.5"N 115°10'06.7"E]. It was approximately 100m east of a crude oil terminal, 200m north of a golf course and 200m west of Sungai Pagar beach. This beach is approximately 58.3km across the sea from Muara Beach, Brunei Darussalam (see Plate 2). The nesting site was located in an area covered with Japanese Stilt grass *Microstegium vimineum*, approximately 3,000 m². The area was difficult to access due to proximity to the border fence of the Labuan Crude Oil Terminal.

Incubation and Fledging Periods

The duration from hatchling to fledgling was estimated to be around 20-24 days. The incubation period was not possible to ascertain. Fledglings were observed to be still dependent on adults for food and safety. The fledglings continued to be attended by both parents for about 47 days after leaving the nest. Thereafter, they were observed without the parents.



Plates 2: Nesting location and surrounding environment

Adults/Parental Responsibilities

It was not possible to distinguish the male from female adults. Hence, it was not possible to differentiate parental responsibilities. However, both adults were always seen together with their chicks outside the nesting area. Both adults fed chicks (see Plate 3).

Food Items for Juveniles

From observations it appears that the diet for the young chicks was mainly invertebrates and insects. Some items appeared to be maggots and larvae.

Behaviour of Juveniles

Chicks often snatched food from their parents, even when they were able to forage for themselves. Chicks were not alarmed by the presence of human observers, even when seen outside the hide. However, juveniles were quick to respond and retreat to safety when parents showed alarm or distress, or if an alarm call was heard from other birds sharing the same pond and foraging area, such as Oriental Magpie-Robin *Copsychus saularis*, Mangrove Blue Flycatcher *Cyornis rufigastra*, Greater Coucal *Centropus sinensis* and Rufous-backed Dwarf-Kingfisher.



Plate 3: Adults accompanying chicks and feeding them

Description of Juveniles

Plate 5 shows a series of images of the chick's plumage transition over time, compared to an adult. Young chicks were covered in black down, and were very similar to chicks of the White-breasted Waterhen. The beak was dark grey with a green sheen. Legs were shiny dark grey. The pre-juvenile moult resulted in dark brown body plumage, with the head being the last area to grow feathers. In juvenile plumage, the birds had a brown head and breast with narrow white bars below.



Plate 5: Collage of chicks' plumage development over time, compared to an adult (last image). Videos can be viewed here: <https://labuanislandbirds.wordpress.com/2024/03/15/labuan-island-north-borneo-1st-slaty-legged-crake-sintar-merah-rallina-eurizonoides-successful-breeding-record-and-documented/>

Discussion

According to Taylor (2020), breeding has been recorded in Jun - Sep in India, Apr – Jul in the Ryukyu Islands and Nov in the Philippines. A nest was also observed in the Philippines in Sep (Kaufmann 2011). Timing of breeding may be influenced by local climatic conditions, with breeding in India occurring in the SW monsoon season. The breeding of the Labuan birds occurred in Nov, during the NE monsoon season.

The nest may be sited on the ground or up to a meter above ground on a tree stump (Taylor 2020), or even a flowerpot (Kaufmann 2011). In the case of the Labuan birds, the nest was on the ground. Nests in India and the Philippines were located surprisingly close to human habitation (Kurian 2015, Kaufmann 2011), as in the case of the Labuan observation. It is hard to draw any conclusions about nest site preference from this, other than that the species is unusually tolerant of proximity to humans during breeding. Taylor (2020) records a range of 4-6 eggs for this species, with one observation reporting 7 in a nest (Murukesh & Balakrishnan

2015), of which only 3 hatched. In this case, the nest and eggs were not observed directly, so no conclusions can be drawn regarding clutch size.

The authors were unable to find any information regarding care of chicks after leaving the nest in published literature, so the observation of extended post-fledging parental care for at least 47 days may be an addition to information on this species.

The subspecific identity of the Slaty-legged Crakes on Labuan was not determined with certainty. Geographically, the closest breeding populations are those in the Philippines (nominate race) and Sulawesi (race *minahasa*). The Labuan birds resemble the nominate race, more than *minahasa*, which is darker above and has narrower barring on the underparts than the nominate race (James Eaton, in litt.), but further observations are desirable to confirm this.

Acknowledgment

NH and MEU wish to thank Mr. Moib Ismail bin Zainal, (Pembantu Hidupan Liar) and the PERHILITAN enforcement team who made these observations possible by providing Labuan Avian Group with a temporary permit for doing studies and observation on the Crakes as required under Section 10(1)(d), Akta Pemuliharaan Hidupan Liar (Pindaan) 2022. They also acknowledge the assistance of Muqtadir Halim of BERNAMA, Kok Ko Onn of Tawau and the Unit Rondaan of Bebuloh Police Department.

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Citation: Hassanuddin, N., Uzdek, M. E. & Dave Bakewell. (2024). First Breeding Record of the Slaty-Legged Crake *Rallina eurizonoides* in Malaysia and description of Breeding Behaviour. *Malaysian Bird Report*. Volume 2/2024, June 2024: pg. 6-11.