

FAUNA OF PROTECTED AREAS - 6 WATER BIRDS OF BUXA TIGER RESERVE, WEST BENGAL

S. Sivakumar and Vibhu Prakash

Bombay Natural History Society, Hornbill House, S.B. Singh Road, Mumbai, Maharashtra 400023, India.

Buxa Tiger Reserve (26°30'-26°55'N & 89°20' & 89°55'E) is situated in Jalpaiguri District of West Bengal. The Reserve spreads over an area of 760 sq km with the core area being 385 sq km. The northern boundary of the Reserve is along the international boundary of Bhutan. The eastern part of the Reserve ends with the boundary of Assam. The western and southern boundaries are bordered by tea gardens, agricultural fields and human settlements. There are 37 villages inside and 33 tea gardens on the fringes of the Reserve. The forest of Buxa is broadly classified as tropical moist-deciduous forest (Champion & Seth, 1968). The temperature ranges from a maximum of 32°C to minimum of 12°C and the average annual rainfall is 4100mm. The altitude of the Reserve varies from ca. 60m–1750m.

The Reserve is intercepted by several rivers (Rydak, Bala, Jainty, Dima) and perennial streams. A small stagnant waterbody (~1.3km long & ~50m wide) called Naratali is found in the Reserve. These are the important wetlands of the Reserve that attract a variety of waterbirds. A regular monitoring of waterbirds (presence/absence) was attempted in Rydak (near Bhutanghat guest house) and Dima (in Dima Beat) rivers and, monthly population counts (only for larger birds such as egrets, herons, duck, teals & storks) were made in Naratali during the winter of 2000–2001. The Reserve is well known for its diversified forest bird species but not known to many as an important water bird area.

Forty-five water bird species were recorded from the Reserve during the study period (Table 1). Beside these, water dependant birds such as Osprey *Pandion haliaetus*, Brahminy Kite *Haliastur indus*, Western Marsh-Harrier *Circus aeruginosus*, Eastern Marsh-Harrier *Circus spilonotus*, Plumbeous Redstart *Rhyacornis fuliginosus*, White-capped Redstart *Chaimarrornis leucocephalus*, Kingfishers (White-breasted, Brown-winged, Ruddy, Small Blue & Lesser Pied), forktails (Little, Black-backed and Slaty-backed) and wagtails (White, Large Pied & Yellow) were also seen regularly around the waterbodies of the Reserve.

Totally, 13 species of waterbirds were recorded in January and a maximum population of 313 birds were recorded in February at Naratali (Fig. 1). Naratali is an important wetland of the Reserve. A pair of Lesser Adjutant-stork *Leptoptilos javanicus* (a Red Data Book species) was seen regularly around the wetland. Once a Coot was recorded from the area. The species was not reported earlier from the Reserve (see Allen *et al.*, 1996), which is almost outside of its distributional range

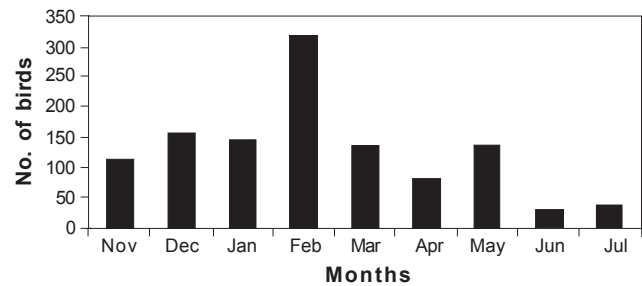


Figure 1. Water bird population in various months in Naratali (in Buxa Tiger Reserve) during 2000-2001

(Grimmett *et al.*, 1998; Kazmierczak, 2000).

Two small breeding colonies (about 30 pairs in each) of Small Pratincole *Glareola lactea* was seen in Bala Riverbed of Jainty Range. One nest of Malayan Night-Heron *Gorsachius melanolophus* was seen near Jindabala stream in Checko-23rd Mile Tower road. The Rydak Riverbed is the only place, where Ibisbill *Ibidorhyncha struthersii* can be sighted in Buxa Tiger Reserve. We saw them in pairs and in small parties of four to six birds along the River near Bhutanghat guesthouse and adjoining areas during our visits in 1999-2001. Stevens (1925) has seen Ibisbill frequently in small parties on the Rydak River in January 1922 in Bhutanghat area. Increasing human population in and around the Reserve, a hydro-electric project of the Bhutan government in the Rydak river system, converting grassland and scrub forest into forest plantation around Naratali may create some adverse effect on the waterbirds of Buxa.

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Table 1. Waterbirds recorded in the major wetlands of Buxa Tiger Reserve, West Bengal.

English name	Scientific name	1	2	3
Little Grebe	<i>Tachybaptus ruficollis</i>	+	-	-
Little Cormorant	<i>Phalacrocorax niger</i>	-	+	-
Great Cormorant	<i>Phalacrocorax carbo</i>	+	+	+
Little Egret	<i>Egretta garzetta</i>	+	-	-
Purple Heron	<i>Ardea purpurea</i>	-	-	+
Median Egret	<i>Mesophoyx intermedia</i>	+	-	-
Cattle Egret	<i>Bubulcus ibis</i>	+	-	-
Indian Pond-heron	<i>Ardeola grayii</i>	+	-	-
Little Green Heron	<i>Butorides striatus</i>	+	-	-
Black Crowned Night-heron	<i>Nycticorax nycticorax</i>	+	+	-
Malayan Night-heron	<i>Gorsachius melanolophus</i>	-	-	+
Chestnut Bittern	<i>Ixobrychus cinnamomeus</i>	+	-	-
Asian Openbill-Stork	<i>Anastomus oscitans</i>	+	-	-
Black Stork	<i>Ciconia nigra</i>	-	+	-
Lesser Adjutant Stork	<i>Leptoptilos javanicus</i>	+	-	-
Lesser Whistling-Duck	<i>Dendrocygna javanica</i>	+	-	-
Brahminy Shelduck	<i>Tadorna ferruginea</i>	-	+	-
Cotton Teal	<i>Nettapus coromandelianus</i>	+	-	-
Gadwall	<i>Anas strepera</i>	+	-	-
Eurasian Wigeon	<i>Anas penelope</i>	+	-	-
Mallard	<i>Anas platyrhynchos</i>	+	+	-
Spot-billed Duck	<i>Anas poecilorhyncha</i>	+	-	-
Northern Pintail	<i>Anas acuta</i>	+	-	-
Common Teal	<i>Anas crecca</i>	+	-	-
Red-crested Pochard	<i>Rhodonessa rufina</i>	+	-	-
Ferruginous Pochard	<i>Aythya nyroca</i>	-	+	+
Common Merganser	<i>Mergus merganser</i>	+	-	-
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	+	-	-
Common Moorhen	<i>Gallinula chloropus</i>	+	-	-
Common Coot	<i>Fulica atra</i>	+	-	-
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	+	-	-
Bronze-winged Jacana	<i>Metopidius indicus</i>	-	-	+
Greater Painted-Snipe	<i>Rostratula benghalensis</i>	-	-	+
Long-billed Ringed Plover	<i>Charadrius placidus</i>	-	+	-
Little Ringed Plover	<i>Charadrius dubius</i>	-	-	+
Red-wattled Lapwing	<i>Vanellus indicus</i>	-	-	+
River Lapwing	<i>Vanellus duvaucelli</i>	+	+	+
Common Greenshank	<i>Tringa nebularia</i>	+	+	+
Green Sandpiper	<i>Tringa ochropus</i>	+	+	+
Wood Sandpiper	<i>Tringa glareola</i>	-	+	+
Common Sandpiper	<i>Actitis hypoleucos</i>	-	+	+
Little Stint	<i>Calidris minuta</i>	-	-	+
Ibisbill	<i>Ibidorhyncha struthersii</i>	-	-	+
Small Pratincole	<i>Glareola lactea</i>	-	-	+
Brown Dipper	<i>Cinclus pallasii</i>	-	+	+
Total		28	14	17

+ present; - absent; 1 - Naratali; 2 - Rydak; 3 - Dima

AN OBSERVATION OF A RANID FROG (*HOPLOBATRACHUS CRASSUS* JERDON, 1853) SWALLOWING A RHACOPHORID (*POLYPEDATES MACULATUS* GRAY, 1834) IN KALAMETIYA WILDLIFE SANCTUARY, SRI LANKA

Roshan K. Rodrigo, V.A.M.P.K Samarawickrama, Naalin Perera, M. Sandun, J. Perera, T.N. Peries and C.N.B. Bambaradeniya

IUCN - The World Conservation Union, 53, Horton Place, Colombo 07, Sri Lanka.

Email: rodrigo_roshan@hotmail.com

with web supplement

The observation of an adult *Hoplobatrachus crassus* (Jerdon's Bull Frog) swallowing another adult *Polypedatus maculatus* (Chunam Tree-frog) (Image 1^u) was made at around 2030hr on 2 November 2002 in Kalametiya Wildlife Sanctuary, Sri Lanka. The location was adjacent to the road leading to Kiula - Kalametiya fishing harbor and the habitat was a seasonal pond. The shallow pond had accumulated water from the mid inter-monsoon showers. The surrounding vegetation was grasslands and scrublands. Species identification was done by their colour patterns and other morphological characters based on Dutta and Manamendra-Arachchi (1996).

At the edge of the pond the bull frog swallowed *P. maculatus* slowly by its head. The swallowing took place for about eight minutes after which the bull frog leaped into the water. Bambaradeniya (1997) had recorded a *H. crassus* swallowing a microhylid (*Microhyla rubrum*) in a rice field at Bathalagoda, Sri Lanka.

Microhyla ornata (Ornate narrow mouth frog), *Limnonectes limnocharis* (Common Paddy Field Frog) and *Uperodon systoma* (Baloon Frog) were also recorded from the same pond during the time of observation.

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^u See Image 1 at www.zoosprint.org

