

YELLOW-FOOTED GREEN PIGEON

Notes on nesting behaviour of *Treron phoenicoptera* in a semi-urban area of Bangladesh



IUCN Red List:
Least Concern
(BirdLife
International 2016)

Adult Yellow-footed Green Pigeon in a nest with nestlings

The Yellow-footed Green Pigeon *Treron phoenicoptera* under family Columbidae is a common bird species distributed throughout South and Southeast Asia (Ali & Ripley 1987; Baptista et al. 2016). Five sub-species have been identified—*T. phoenicoptera phoenicopterus* distributed in India and Bangladesh; *T. p. chlorigaster* in Pakistan and India; *T. p. phillipsi* in Sri Lanka; *T. p. viridifrons* in China, Myanmar and Thailand and *T. p. annamensis* in Thailand, Laos, Cambodia and Vietnam (Baptista et al. 2016). The Yellow-footed Green Pigeon is widely distributed in Bangladesh and it has been categorized as ‘Least Concern’ species regionally as well as globally (IUCN Bangladesh 2015; BirdLife International, 2018). It occurs mainly in deciduous forests, homestead gardens, groves, forest fringes and cultivated land with scattered trees. As a frugivorous bird this

Aves
[Class of Birds]

Columbiformes
[Order of Pigeon, Doves, Dodos and Solitaries]

Columbidae
[Family of Pigeons and Doves]

Treron phoenicopterus
[Yellow-footed Green Pigeon]

Species described by Latham in 1790

bird feeds mainly on figs and berries and spends most of the time on fruit-yielding trees in groups of 5–20 individuals (Naher 2015). The breeding behaviour of this species is poorly known. This note constitutes the preliminary data on breeding behaviour of Yellow-footed Green Pigeon in a semi-urban area at Jahangirnagar University Campus, Bangladesh.

Jahangirnagar University is located in the central region of Bangladesh and about 32km north of Dhaka, the capital of Bangladesh. The study area is located at 23.8797°N & 90.2680°E. The climate is characterized by hot and humid summer with rain and comparatively dry and cool winter. The study area has diverse ecological habitats and consists of grassland, cultivated land, bushes, woodland, monotypic plantation, wetland and human settlements. The diverse habitat of the study area supports

Global Distribution:

Native: Bangladesh, Bhutan, Cambodia, China, India, Laos, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Viet Nam (BirdLife International 2016)



Eggs of Yellow-footed Green Pigeon

large number of plants and animal species, which makes the campus area an important ecological site to study flora and fauna. A total of 230 plant species have been recorded from this area belonging to 159 genera and 62 families (Hossain et al. 1995). The study site is the home of 195 bird species belonging to 43 families (Begum 2016). The Yellow-footed green pigeon was recorded as a resident breeding bird species (Mohsanin & Khan 2009). The

present study was conducted in 2016 between February to August.

During the study, a total of 13 nests were recorded. Among the nests, we were able to study only three nests, that had access. The first nesting attempt in the breeding season of 2016 was observed in April whereas the last one was recorded in June. Nests consisted of very simple structure and were made of small twigs placed crisscrossed over each other. Eggs were white in colour without any spot and were glossy in texture. The average size of the egg was 30.11 mm x 22.55 mm (n=2). The nesting tree species

were — Mahogany (*Swietenia mahagoni*) (n=2), Teak (*Tectona grandis*) (n=7), Acacia (*Acacia auriculiformis*) (n=1), Koroi (*Albizia lebbek*) (n=2) and Sal (*Shorea robusta*) (n=1). The nest height above the ground varied largely from 5.5–20.1

Table 1: Growth of the nestlings of Yellow-footed Green Pigeon

Individual no.	Weight of chicks (gm)		
	Day 2	Day 5	Day 10
1	13.3	41.4	73.5
2	14.3	44.2	80.4



Nestling development of Yellow-footed Green Pigeon - Day 5

On the 10th day, the fledgling had fully grown contour and flight feathers with olive green colour and was ready to fledge. The body weight of the nestlings (n=2) increased steadily since the day of hatching until they were 10 days old (Table 1) a digital pocket scale was used to measure the body weight. The fledgling left the nest on the 13th day.

Breeding season of the Yellow-footed Green Pigeon lasted from April to June as reported by earlier observations by Devi & Saikia (2012) and Rasmussen & Anderton (2012). This is known to lay 1–2 white eggs and the incubation period is 20–24 days (Devi & Saikia 2012). The nesting height varied between 5.5 to 20.1m from the ground and the most preferred nesting tree was teak (53.8%). Rahman (2008) also described egg size of the same species is 29mm in Bangladesh. *Treron p. clorigastor* has egg size 31.8 x 24.6 mm (n=40) (Ali & Ripley 1983).

Our natural history observations provide the baseline information on breeding behaviour of the Yellow-footed Green Pigeon in a semi-urban area of Bangladesh.



Nestling development of Yellow-footed Green Pigeon - Day 10

m (n=13). Incubation period of the Yellow-footed Green Pigeon was not known as all the nests observed were found either with egg clutches (laying date of the first egg was unknown) or with chicks. The newly hatched chick was naked skinned with soft white hair and no pins were visible. The feather pins emerged on the fifth day and rapid growth was observed thereafter. After that the contour feather, primary feather as well as remiges and

rectrices started to develop.

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Mominul Islam Nahid¹, Sajeda Begum², Mohammed Mostafa Feeroz³ & Md. Kamrul Hasan⁴

¹⁻⁴Department of Zoology, Jahangirnagar University, Savar, Dhaka 1342, Bangladesh. Email: ¹nahid_1511@yahoo.com (Corresponding author), ²bsajeda@yahoo.com, ³feerozmm@yahoo.com, ⁴hasan_wildlifeju@yahoo.com

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