



## ORIGINAL RESEARCH ARTICLE

## Sighting records of pied imperial pigeon (*Ducula bicolor*, scopoli, 1786) and nicobar green imperial pigeon (*Ducula aenea nicobarica*, Pelzeln, 1865) from Great Nicobar Island of Andaman Nicobar Islands, India.

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**Abstract:** Presented manuscript is the sighting records of two less known individual species of Columbidae family i.e. Pied Imperial Pigeon (*Ducula bicolor*, Scopoli 1786) and Nicobar Green Imperial Pigeon (*Ducula aenea nicobarica*, Pelzeln, 1865) from Great Nicobar Island of Andaman Nicobar Islands.

**Key words:** Great Nicobar Island; Andaman Nicobar Islands; Biodiversity; *Ducula bicolor*, *Ducula aenea nicobarica*

### Introduction

Great Nicobar Island is largest island among the Nicobar group and it is situated very far from Indian mainland and it is considered as the last island boundary of India situated at Bay of Bengal. Indira Point is situated at the Campbell Bay Island. These islands having variety of floral and faunal compositions and rich in various Biodiversity components especially in concern of avian diversity with the high level of endemism. According to IUCN red list of threatened species, Pied Imperial Pigeon (*Ducula bicolor*) is classified under Least Concern (ver. 3.1); whereas Nicobar Green Imperial Pigeon (*Ducula aenea nicobarica*) is classified as not assessed taxon of IUCN Red List, but it is mentioned in the catalogue of life (<http://www.iucnredlist.org>). These species were documented during the random patrolling at Great Nicobar Islands. The population trend is decreasing due to the major threats i.e. urbanization, anthropogenic activities, deforestation and illegal poaching activities.

**Profile of Study Area:** The study area Great Nicobar island is the politically part of India's one of the Union Territory Andaman and Nicobar Islands (Fig. 1). The Great Nicobar island is geographically situated at 7°01'03.64" N, 93°55'31.05"E. Geographical area is 1045 km<sup>2</sup> highest elevation is 642 m. Distance from Port Blair is 300 nautical miles. These areas are inhabitant by the population of Shompen indigenous tribes and Nicobari tribe whom mainly dependent to forest for their daily needs viz. food, fodder and other aspects.



Fig. 1: Geographically Position of Great Nicobar Islands.

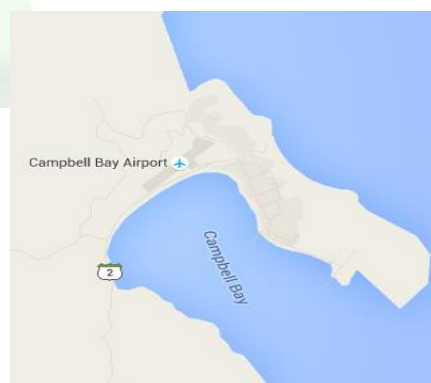


Fig. 2: Geographically Position of Campbell Bay.

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## Materials and Methods

Several surveys have been conducted at study site Campbell Bay (Fig. 2) and nearby area of Great Nicobar Islands of Andaman & Nicobar Islands, India to document the avian diversity. Mainly Ad hoc, line transect, point count method and call census were used for the documentation of species, occurrence and population trend.

Available microhabitats thoroughly explored for the searching of species. We have equipped with digital camera (Canon SX10, Canon 1200D), binoculars, field guide books, observation sheets for the proper observations.

Direct count method was adopted for the documentation. Birds were identified with the help of various diagnostic keys Grimmett *et al.*, (1999, 2011); Kazmierczak and Perlo (2006); Manakandan *et al.*, (2011); Norman (2014) and Salim (2012). Representative cases were photographed from different angles in the nature to confirm the species of interest.



**Fig. 3:** Pied Imperial Pigeon (*Ducula bicolor*, Scopoli, 1786)

### Diagnostic descriptions of observed species:

Pied Imperial Pigeon (*Ducula bicolor*, Scopoli, 1786) locally known as “Kaluia” (Fig. 3). Body length is near 41 cm, found on trees, arboreal pigeon feeds on fruits i.e. mainly frugivorous. Body colour is creamy white, jet black flight feathers and broad tail tip, colour of bill leaden blue or blue grey. Iris dark brown, legs and feet’s are pale smalt-blue. Call patterns are distinct with loud “Hu-Hu-Hu”. Oviparous, eggs are white in colour, body weight ranges from 465 to 510 gms. IUCN status “Least Concern” (IUCN 3.1). Maximum sighted at Jetty Bazar, Zero Point, Law point, Kamal Basti, Fisher men Colony of Campbell Bay Island, sighted 2-4 individuals in an average. Population trend is decreasing due to certain major threats like urbanization, deforestation and illegal poaching activities.



**Fig. 4:** Nicobar Green Imperial Pigeon (*Ducula aenea nicobarica*, Pelzeln, 1865)

Nicobar Green Imperial Pigeon (*Ducula aenea nicobarica*, Pelzeln, 1865) body length is 47 cm (Fig. 4). Arboreal Frugivorous. Overall body is grey with dark metallic bluish or purplish green back tail. Under tail coverts are dingy brown. Calling pattern is “kuku – kuku - kukku”. Body weight is about 454-795gms and oviparous. According to IUCN status “This taxon has not yet been assessed for the IUCN Red List, but is mentioned in the Catalogue of Life”. According to Sankaran (1998) their population status is Near Threatened and their population is facing certain severe threats to survival. This species was sighted mainly at near Army land, Joginder Nagar, Chingan Basti. Certain Major threats identified as urbanization, deforestation and illegal poaching activities.

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## References

- Grimmett, R., Inskipp, C. and Inskipp T. Birds of Indian Subcontinent. Oxford University Press, 2nd edition: (2011) 262-263.

2. Grimmett, R., Inskipp, C. and Inskipp, T. Pocket guide to the Birds of Indian Subcontinent. Oxford University Press: (1999) 50-51.
3. Kazmierczak, K. and Perlo, B.V. A field guide to the birds of India (Sri Lanka, Pakistan, Nepal, Bhutan, Bangladesh and the Maldives). (2006) Om Book Services.
4. Manakandan, R., Daniel, J.C. and Bhopale, N. Birds of the Indian subcontinent (A field guide). Bombay Natural History Society, Oxford University Press (2011).
5. Norman, A. Birds of India, Pakistan, Nepal, Bhutan, Bangladesh & Sri Lanka. Collins field guide, William Collins Publisher: (2014) 168-169.
6. Salim, A. The book of Indian Birds. Bombay Natural History Society, Oxford University Press: (2012) 201.

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