A check-list of the amphibians and reptiles of Andaman and Nicobar Islands

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ABSTRACT

A check-list of the amphibians and reptiles known from the Andaman and Nicobar Islands is presented. At present, 17 species of amphibians and 77 species of reptiles are known, endemic in these groups being 25.5% and 29.9%, respectively.

The Andamans consist of 291 islands, the Nicobars of 26, both the groups being located in the Bay of Bengal. Floristically, the group of islands collectively referred to as the Andamans are similar to the Tenasserim coast of Myanmar. Ripley and Bechtler (1989) hypothesized that these islands may have been once contiguous with the mainland during the Late Pleistocene when sea levels dropped. On the other hand, the Nicobars appear to be a group of truly oceanic islands, its biota presumably being established through over-water dispersal. Nicobar's avifauna has been shown to be an impoverished subset of that of the Andamans by Ripley and Bechtler (1989) who contended that drops in sea levels during the Pleistocene failed to join the two island groups because of the deep saltwater strait (the 10° Channel) between the two island groups. The primary colonization source for the herpetofauna of these islands is thought to be Myanmar for the Andamans and Thailand for the Nicobars (Biswas and Sanyal, 1989). However, analysis of faunal composition and affinities of the region is bedeviled by inadequate data, for which fresh field work has been initiated. The primary sources of information on the herpetofauna are Sarkar (1980) for amphibians and Biswas and Sanyal (1977, 1980) for reptiles.

The Andamans have 11 reptile species endemic to the Bay Islands, while the Nicobars has 13, the two island groups sharing six endemic species. In all, 22 species that occur in the Andamans have not been found on the Nicobars, while the Nicobars also have 21 species that have thus far not been reported from the Andamans. The deep 10° Channel that runs between the two island groups is a barrier between the ranges of endemic avian species of both the Andamans and the Nicobars (Ripley and Bechtler, 1989).

A check-list of species and subspecies of amphibians and reptiles recorded from the Andaman and Nicobar Islands has been presented here, largely based on literature records and museum material. At present, 17 species of amphibians and 77 species of reptiles have been recorded. The total endemcity at the species level is 4 (25.5%) for amphibians and 23 (29.9%) for reptiles.
CHECK-LIST OF AMPHIBIANS AND REPTILES

BUFONIDAE

1. Bufo melanoostictus Schneider, 1799:
   Distribution: Andamans and Nicobars.

2. Bufo camortensis Mansukhani & Sarkar, 1980:
   Distribution: Nicobars (endemic).

MICROHYLIDAE

3. Kaloula pulchra (Muller, 1836):
   Distribution: Andamans (endemic).

4. Microhyla ornata (Dumeril & Bibron, 1841):
   Distribution: Andamans and Nicobars.

5. Microhyla chirripanii Pillai, 1977:
   Distribution: Andamans (endemic).

6. Microhyla heymonsi Vogt, 1911:
   Distribution: Nicobars.

RANIDAE

7. Limnonectes andamanensis Stoliczka, 1970:
   Distribution: Andamans and Nicobars (endemic).

8. Limnonectes caurivora Groenvorst, 1829:
   Distribution: Andamans and Nicobars.

9. Limnonectes dorae (Boulenger, 1887):
   Distribution: Andamans and Nicobars.

10. Limnonectes basileana (Stoliczka, 1870):
    Distribution: Andamans (endemic).

11. Limnonectes limnocharis Bol, 1836:
    Distribution: Andamans.

12. Limnonectes macrodon (Dumeril & Bibron, 1841):
    Distribution: Nicobars.

13. Limnonectes tigrinus (Dandin, 1809):
    Distribution: Andamans.

14. Limnonectes leucostictus (Schlegel, 1837):
    Distribution: Nicobars.

15. Rana erythraea (Schlegel, 1837):
    Distribution: Nicobars.

16. Rana nicobariensis (Stoliczka, 1870):
    Distribution: Nicobars.

RHACOPHORIDAE

17. Polypedates leucostictus Gravenhorst, 1829:
    Distribution: Nicobars.

CHECK-LIST OF REPTILES

CROCODYLIDAE

1. Crocodylus porosus Schneider, 1801:
   Distribution: Andamans and Nicobars.

DERMOCHELIDAE

2. Dermochelys coriacea (Vandelli, 1761):
   Distribution: Andamans and Nicobars.

CHELONIDAE

3. Chelonia mydas (Linnaeus, 1758):
   Distribution: Andamans and Nicobars.

4. Eretmochelys imbricata (Linnaeus, 1766):
   Distribution: Andamans and Nicobars.

5. Lepidochelys olivacea (Eschscholtz, 1829):
   Distribution: Andamans and Nicobars.

BATAGURIDAE

6. Cuora amboinensis (Daudin, 1801)
   Distribution: Nicobars.
TRIONYCHIDAE

7. Lissomys punctatus (Lacepède, 1788)  
   Distribution: Andamans (probably introduced).

GELKKONIDAE

8. Chemaspis kanianus (Kelaart, 1852)  
   Distribution: Andamans.
9. Gehyra mutilata (Wiegmann, 1835)  
   Distribution: Andamans.
10. Gehyra gecko (Linnaeus, 1758)  
    Gehyra gecko gecko (Linnaeus, 1758)  
    Distribution: Andamans and Nicobars.
11. Gehyra smithii Gray, 1842  
    Distribution: Nicobars.
12. Gehyra pyronota (Tytler, 1864)  
    Distribution: Andamans (endemic).
13. Gonydactylus rubida Blyth, 1860  
    Distribution: Andamans and Nicobars (endemic).
14. Hemidactylus frenatus Dumortier & Bibron, 1836  
    Distribution: Andamans and Nicobars.
15. Lepidodactylus lugubris (Dumeril & Bibron, 1839)  
    Distribution: Andamans and Nicobars.
16. Phelsuma altamannanae Blyth, 1860  
    Distribution: Andamans (endemic).
17. Psammophis kuhlii Stejneger, 1902  
    Distribution: Nicobars.

AGAMIDAE

18. Bronchocela cristata (Kuhl, 1920)  
    Distribution: Nicobars.
    Distribution: Nicobars.

Distribution: Nicobars ( endemic).
20. Bronchocela jubata Dumeril & Bibron, 1837  
    Distribution: Andamans and Nicobars.
21. Calotes andamanensis Boulenger, 1891  
    Distribution: Andamans (endemic).
22. Calotes emma Gray, 1845  
    Calotes emma alticristatus (Schmidt, 1827)  
    Distribution: Andamans and Nicobars.
23. Calotes myriaceus Dumeril & Bibron, 1837  
    Distribution: Andamans and Nicobars.
24. Calotes versicolor (Daudin, 1802)  
    Calotes versicolor versicolor (Daudin, 1802)  
    Distribution: Andamans.
25. Coryphophylax suberistatus (Blyth, 1860)  
    Distribution: Andamans and Nicobars (endemic).

DIBAMIDAE

26. Dibamus leucurus (Bleeker, 1880)  
    Distribution: Nicobars.

SCINCIDAE

27. Dasania rugifera (Stoliczka, 1870)  
    Distribution: Nicobars.
    Distribution: Nicobars (endemic).
29. Dasia olivacea Gray, 1838  
    Distribution: Andamans and Nicobars.
30. Lophola macrolymnus (Stoliczka, 1873)  
    Distribution: Andamans (endemic).
31. Lophia quadrivistatum (Peters, 1857)  
    Distribution: Nicobars.
32. Lygosoma haringii (Günther, 1864)  
    Distribution: Andamans.
33. *Mahuya andamanensis* Smith, 1935:
   **Distribution**: Andamans and Nicobars (endemic).
34. *Mahuya ruwai* Boulenger, 1887:
   **Distribution**: Nicobars.
35. *Mahuya ryleri* (Theobald, 1889):
   **Distribution**: Andamans (endemic).
36. *Scincella macriti* (Steindachner, 1869):
   **Distribution**: Nicobars (endemic).
37. *Sphenomorphus maculata* (Blyth, 1853):
   **Distribution**: Andamans and Nicobars.

### Varanidae
38. *Varanus salvator* ( Laurenti, 1768)
   **Varanus salvator andamanensis** (Deraniyagala, 1944):
   **Distribution**: Andamans and Nicobars (endemic).

### Typhlopidae
   **Distribution**: Andamans and Nicobars.
40. *Typhlops andamanensis* Stoliczka, 1871:
   **Distribution**: Nicobars (endemic).
41. *Typhlops osteis* Boulenger, 1890:
   **Distribution**: Andamans (endemic).

### Xenopeltidae
42. *Xenopeltis unicolor* Reinwardt, 1827:
   **Distribution**: Andamans and Nicobars.

### Boiidae
43. *Python reticulatus* (Schneider, 1801):
   **Distribution**: Nicobars.

### Acrochordidae
44. *Acrochordus granulatus* (Schneider, 1779):
   **Distribution**: Andamans.

### Colubridae
45. *Amphiesma nicobrensis* (Sclater, 1881):
   **Distribution**: Nicobars (endemic).
46. *Amphiesma solitarius* (Linnaeus, 1768):
   **Distribution**: Andamans.
47. *Boiga andamanensis* (Wall, 1809):
   **Distribution**: Andamans (endemic).
48. *Boiga cyanura* (Dumeril & Bibron, 1854):
   **Distribution**: Nicobars.
49. *Boiga dendrophila* (Boie, 1827)
   **Boiga dendrophila subspecies**:
   **Distribution**: Nicobars (endemic).
50. *Boiga ochraceus* (Günther, 1869)
   **Boiga ochraceus ochraceus** (Günther, 1869):
   **Distribution**: Andamans and Nicobars.
   **Boiga ochraceus walli** Smith, 1943:
   **Distribution**: Andamans and Nicobars.
51. *Cantoria violacea* Giard, 1857:
   **Distribution**: Andamans.
52. *Cerberus rhynchops* (Schneider, 1799)
   **Cerberus rhynchops rhynchops** (Schneider 1799):
   **Distribution**: Andamans and Nicobars.
53. *Chrysopela paradisi* Boie, 1827:
   **Distribution**: Andamans.
54. *Coluber muscosus* (Linnaeus, 1758)
   **Coluber muscosus muscosus** (Linnaeus, 1758):
   **Distribution**: Andamans.
55. *Dendrelaphis cyanochloris* (Wall, 1921):
   **Distribution**: Andamans and Nicobars.
56. *Dendrelaphis humayuni* Tiwari & Biwas, 1973:
   **Distribution**: Nicobars (endemic).
57. *Dendrelaphis pictus* (Smelik, 1799)
   **Dendrelaphis pictus andamanensis** (Smith, 1943):
   **Distribution**: Andamans and Nicobars (endemic).
58. Elaphe flavolineata (Schlegel, 1837):
   Distribution: Andamans and Nicobars.
59. Fordonia leucobalba (Schlegel, 1837):
   Distribution: Nicobars.
60. Gonyosoma oxycephalum (Boie, 1827):
   Distribution: Andamans and Nicobars.
61. Liopeltis nicobariensis (Stoliczka, 1870):
   Distribution: Nicobars (endemic).
62. Oligodon woodi (Sclater, 1881):
   Distribution: Andamans and Nicobars (endemic).
63. Ophites capucinus Boie, 1827:
   Distribution: Andamans and Nicobars.
64. Ophites tiwarii Biswas & Sanyal, 1965:
   Distribution: Andamans (endemic).
65. Stepnophis bitrigatus (Gunter, 1868):
   Distribution: Nicobars.
66. Xenochrophis melanostomus (Boie, 1826):
   Distribution: Andamans and Nicobars (endemic).
67. Xenochrophis trianguligerus (Boie, 1827):
   Distribution: Nicobars.

ELAPIDAE

68. Bangarus andamanensis Biswas & Sanyal, 1978:
   Distribution: Andamans (endemic).
69. Naja kaouthia Lesson, 1831:
   Distribution: Andamans (endemic).
70. Ophiophagus hannah (Cantor, 1836):
   Distribution: Andamans.

HYDROPHIIDAE

71. Laticauda colubrina (Linnaeus, 1766):
   Distribution: Andamans and Nicobars (marine).
72. Laticauda colubrina (Schneider, 1799):
   Distribution: Andamans (marine).
73. Microcephalops cantoris Gunther, 1864:
   Distribution: Andamans (marine).
74. Pelamis platurus (Linnaeus, 1766)
   Distribution: Andamans (marine).

VIPERIDAE

75. Trimeresurus cantorii (Blyth, 1846):
   Distribution: Andamans and Nicobars (endemic).
76. Trimeresurus labialis Fitzinger, 1861:
   Distribution: Nicobars (endemic).
77. Trimeresurus purpureomaculatus (Gray & Hardwicke, 1830), Trimeresurus
   purpureomaculatus andersoni
   Theobald, 1868:
   Distribution: Andamans and Nicobars (endemic).

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REFERENCES


