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AN ACCOUNT OF THE AMPHIBIAN AND REPTILIAN FAUNA OF SUNDERBAN, WEST BENGAL

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INTRODUCTION

The comprehensive account on amphibians and reptiles of Sunderban have been found practically unknown until the report of Mukherjee (1975) on 2 species of amphibians and 14 species of reptiles. Acharji and Mukherjee (1964); Saha (1983) and Talukdar (1982) have also reported few species of reptiles from Sunderban. Similarly Mandal and Nandi (1989) have reported 7 species of amphibians and 56 species of reptiles in their study on Sunderban. Agarwal and Ghose (1995) have reported 7 species of amphibians and 17 species of reptiles in their study on Sunderban tiger reserve; Chanda (1995) has reported 7 species of amphibians and Sanyal *et al.*, (1995) have reported 17 species of reptiles from Sunderban. Recently Chowdhury and Vyas (2005) have reported 41 species of reptiles from Sunderban.

This will be the first report comprising totally 22 species of amphibians and reptiles of Sunderban based on the studies of collections made by different survey parties of Sunderban field research station, Zoological Survey of India. In the present paper author made an attempt to identify 5 species of amphibians belonging to 4 Genera and 17 species of reptiles belonging to 16 Genera.

ABBREVIATIONS USED

Coll.–Name of Collector.	KNR–K.N. Reddy.
Ex.(s)–Number of example.	MS–Mahadev Sumanta.
KN–Registration No.	NCB–N.C. Banerjee.
BR–B. Rana.	NCN–Dr. N.C. Nandi.
DBR–D.B. Ramnagar.	NPD–N.P. Debnath.
DM–Dilip Mondal.	RAK–Dr. R.A. Khan.
HKB–H.K. Bhowmik.	SCS–S.C. Saren.
HQ–Head Quarter.	UD–Uttam Das.
JKD–Dr. J. K. De.	VAR–Dr. Varadaraju.

**SYSTEMATIC LIST OF AMPHIBIANS AND REPTILES
REPORTED FROM SUNDERBAN**

Phylum CHORDATA

Class AMPHIBIA

Order ANURA Fischer

Family I BUFONIDAE

1. Genus *Duttaphrynus* Frost *et al.*, 2006

1. *Duttaphrynus melanostictus* (Schneider, 1799)

Family II DICROGLOSSIDAE

Subfamily DICROGLOSSINAE

2. Genus *Euphlyctis* Fitzinger, 1843

2. *Euphlyctis cyanophlyctis* (Schneider, 1799)

3. *Euphlyctis hexadactylus* (Lesson, 1834)

3. Genus *Fejervarya* Bolkay, 1915

4. *Fejervarya limnocharis* (Gravenhorst, 1829)

4. Genus *Hoplobatrachus* Peters, 1863

5. *Hoplobatrachus tigerinus* (Daudin, 1803)

Class REPTILIA

Order TESTUDINES

Suborder CRYPTODIRA

Family III CHELONIDAE

5. Genus *Lepidochelys* Fitzinger, 1843

6. *Lepidochelys olivacea* (Eschscholtz, 1829)

Order SQUAMATA

Suborder SERPENTS

Family IV COLUBRIDAE

6. Genus *Ptyas* Fitzinger, 1843

7. *Ptyas mucosus* (Linnaeus, 1758)

7. Genus *Oligodon* Boie, 1827

8. *Oligodon arnensis* (Shaw, 1802)

8. Genus *Lycodon* Boie, 1826
9. *Lycodon aulicus* (Linnaeus, 1758)
9. Genus *Amphiesma* Dumeril & Bibron, 1854
10. *Amphiesma stotatum* (Linnaeus, 1758)
10. Genus *Xenochrophis* Gunther, 1864
11. *Xenochrophis piscator* (Schneider, 1799)
11. Genus *Atretium* Cope, 1861
12. *Atretium schistosum* (Daudin, 1803)
12. Genus *Boiga*, Fitzinger, 1826
13. *Boiga trigonata* (Schneider in Bechstein, 1802)
13. Genus *Enhydris* Sonn & Latr, 1802
14. *Enhydris enhydris* (Schneider, 1799)
14. Genus *Cerberus* Cuvier, 1829
15. *Cerberus rhynchops* (Schneider, 1799)
- Family V ELAPIDAE
15. Genus *Bungarus* Daudin, 1803
16. *Bungarus caeruleus* (Schneider, 1801)
16. Genus *Naja* Laurenti, 1768
17. *Naja naja kaouthia* (Lesson, 1831)
18. *Naja naja* (Linnaeus, 1758)
- Family VI HYDROPHIDAE
17. Genus *Enhydrina* Gray, 1849
19. *Enhydrina schistosum* (Daudin, 1803)
18. Genus *Hydrophis* Latreille, 1802
20. *Hydrophis caeruleus* (Shaw, 1802)
- Family VII VIPERIDAE
19. Genus *Vipera*, Laurenti, 1768
21. *Duboida russelli* (Shaw & Nodder, 1797)
20. Genus *Trimeresurus*, Lacepede, 1804
22. *Trimeresurus erythrurus* (Cantor, 1839)

SYSTEMATIC ACCOUNT

Class AMPHIBIA

Family I BUFONIDAE

1. Genus *Duttaphrynus* Frost *et al.*, 2006

1. *Duttaphrynus melanostictus* (Schneider, 1799)

Common name : Common Indian Toad.

Material examined : 2 egs., (Reg. No., KN-1301), Fraserganj, 20.xii.1983, coll. by NCN; 1 ex., (Reg. No. KN-1300), Kakdwip, 23.iii.1987, coll. by NCB.

Measurements : Total length from Snout to vent : 8.0-11.0 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Myanmar; Sri Lanka; China; Malaysia; Indonesia; Philippines.

Family II DICROGLOSSIDAE

Subfamily DICROGLOSSINAE

2. Genus *Euphlyctis* Fitzinger, 1843

2. *Euphlyctis cyanophlyctis* (Schneider, 1799)

Common name : Skipper Frog.

Material examined : 2 egs., (Reg. No. KN-1316), Hardwood point, 8.ix.1983, coll. by SCS; 3 egs., (Reg. No. KN-1304), Sajnakhali, 22.iv.1985, coll. by RAK; 11 egs., (Reg. No. KN-1302), Fraserganj, 20.xii.1983, coll. by NCN; 4 egs., (Reg. No. KN-1303), Devlbari, 14.ii.1987, coll. by NCN; 3 egs., (Reg. No. KN-1365), Kishori Mohanpur, 25.ii.1991, coll. by KNR.

Measurements : Total length from snout to vent : 3.0-5.8 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Pakistan; Afghanistan; South Arabia; Sri Lanka.

3. *Euphlyctis hexadactylus* (Lesson, 1834)

Common name : Indian Green Frog.

Material examined : 7 egs., (Reg. No., KN-1370), Sandeshkhali, 21.vii.2006, coll. by VAR.

Measurements : Total length from snout to vent : 0.8-1.6 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Sri Lanka; Afghanistan; Bangladesh; Bhutan; Myanmar; Nepal; Pakistan; South Arabia.

3. Genus *Fejervarya* Bolkay, 1915

4. *Fejervarya limnocharis* (Gravenhorst, 1829)

Common name : Paddy Field Frog.

Material examined : 5 egs., (Reg. No. KN-1315), Sandeshkhali, 25.vi.1986, coll. by NCN; 1 ex., (Reg. No. KN-1312), Sattcherii, 11.xii.1983, coll. by JKD; 2 egs., (Reg. No. KN-1359, Nat Nikharighat, 21.ii.1990, coll. by NPD.

Measurements : Total length from snout to vent : 2.0-4.7 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Sri Lanka; China; Malaysia; Indonesia; Philippines; Bangladesh; Burma; Japan; Java; Myanmar; Nepal; Pakistan; Sumatra; Thailand; Vietnam.

4. Genus ***Hoplobatrachus*** Peters, 1863

5. ***Hoplobatrachus tigerinus*** (Daudin, 1803)

Common name : Common Indian Bullfrog.

Material examined : 1 ex., (Reg. No. KN-1310), Baramollakhali, 4.xi.1993, coll. by KNR; 2 egs., (Reg. No. KN-1355), Ghutihara, 8.ix.1983, coll. by SCS; 1 ex., (Reg. No. KN-1311), Chamaguri, 9.x.1984, coll. by JKD.

Measurements : Total length from snout to vent : 4.2-14.5 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Nepal; Myanmar; China; Indonesia; Bangladesh; Indo-China; Pakistan; Sri Lanka.

Class REPTILIA

Family III CHELONIDAE

5. Genus ***Lepidochelys*** Fitzinger, 1843

6. ***Lepidochelys olivacea*** (Eschscholtz, 1829)

Common name : Olive Ridley turtle.

Material examined : 2 egs., (Reg. No. KN-1367), Bhagbatpur, 28.v.1983, coll. by NCN.

Measurements : 2.8-2.9 inches.

Distribution : India; West Bengal; Orissa; Andaman and Nicobar Islands.

Elsewhere : Pacific; Indian and South Atlantic oceans.

Family IV COLUBRIDAE

6. Genus ***Ptyas*** Fitzinger, 1843

7. ***Ptyas mucosus*** (Linnaeus, 1758)

Common name : Indian Rat Snake.

Material examined : 1 ex., (Reg. No., KN-1324), Kumrakhali, 9.vii.1985, coll. by SCS; 1 ex., (Reg. No. KN-1358), Canning, 15.xi.1994, coll. by NPD.

Measurements : Total length : 30.0-60.0 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Throughout South and South-East Asia.

7. Genus *Oligodon* Boie, 18278. *Oligodon arnensis* (Shaw, 1802)

Common name : Common Kukri Snake.

Material examined : 1 ex., (Reg. No. KN-1352), Dabua, 31.viii.1995, coll. by KNR.

Measurements : Total length : 16.0 inches.

Distribution : India; Gujarat; Peninsular India; Western Himalaya; West Bengal.

Elsewhere : Pakistan; Nepal; Bangladesh; Sri Lanka.

8. Genus *Lycodon* Boie, 18269. *Lycodon aulicus* (Linnaeus, 1758)

Common name : Common Wolf Snake.

Material examined : 1 ex., (Reg. No. KN-1350), Canning Matla, 23.vii.1993, coll. by UD; 1 ex., (Reg. No. KN-1333), Matla, 16.v.1985, coll. by NCB; 1 ex (Reg. No. KN-1338), Gosaba, 21.viii.1987, coll. by NCN; 1 ex. (Reg. No., KN-1338), Mathakhali, 3.ii.1992, coll. by DBR.

Measurements : Total length : 7.0-19.0 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Pakistan; Nepal; Sri Lanka; Bangladesh; Myanmar.

9. Genus *Amphiesma* Dumeril & Bibron, 185410. *Amphiesma stolatum* (Linnaeus, 1758)

Common name : Striped Keelback.

Material examined : 1 ex., (Reg. No. KN-1332), Kakdwip, 23.ii.1980, coll. by HQ; 1 ex., (Reg. No. KN-1319), Kakdwip, 1.vii.1982, coll. by DBR.

Measurements : Total length : 20.0-24.0 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Pakistan; Nepal; Bhutan; Bangladesh; Sri Lanka.

10. Genus *Xenochrophis* Gunther, 186411. *Xenochrophis piscator* (Schneider, 1799)

Common name : Checkered Keelback.

Material examined : 1 ex., (Reg. No. KN-1321), Fraserganj, 20.xii.1983, coll. by NCN; 1 ex., (Reg. No. KN-1361), Sahebkhali, 24.xii.1992, coll. by HKB; 1 ex., (Reg. No., KN-1362), Rajabaririver, 21.vi.1991, coll. by KNR; 1 ex., (Reg. No. KN-1363), Namkhana, 23.xii.1991, coll. by NPD.

Measurements : Total length : 14.0-31.0 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Pakistan; Nepal; Myanmar; Malaysia; China; Taiwan.

11. Genus *Atretium* Cope, 186112. *Atretium schistosum* (Daudin, 1803)

Common name : Olivaceous Keelback.

Material examined : 1 ex., (Reg. No. KN-1314), Sandeshkhali, 23.iv.2006, coll. by VAR.

Measurements : Total length : 24.0 inches.

Distribution : India; Anaimalais; Wynaad; Karnataka; Uttar Pradesh; Orissa.

Elsewhere : Sri Lanka; Bangladesh; Nepal.

12. Genus *Boiga* Fitzinger, 182613. *Boiga trigonata* (Bechstein, 1802)

Common name : Indian Gaama.

Material examined : 1 ex., (Reg. No. KN-1347), Akhaynagar, 27.viii.1982, coll. by MS.

Measurements : Total length : 10.2 inches.

Distribution : India; Gujarat; Vadodara; Panchmahals and Dangs; Peninsular India; Rajasthan; Western and Eastern Himalayas.

Elsewhere : Throughout Most South Asia except Andaman and Nicobar Islands.

13. Genus *Enhydris* Sonn & Latr, 180214. *Enhydris enhydris* (Schneider, 1799)

Common name : Common Indian Water Snake.

Material examined : 1 ex., (Reg. No. KN-1330), Ukil Bazar, 11.v.1986, coll. by NCN; 2 egs., (Reg. No., KN-1327), Chadalkhali, 24.vi.1986, coll. by RAK; 1 ex., (Reg. No. KN-1345), Matla, 22.ix.1981, coll. by SCS; 1 ex., (Reg. No. KN-1325), Gosaba, 12.ii.1980, coll. by HQ; 1 ex., (Reg. No. KN-1323), Kakdwip, 15.vi.1982, coll. by NCB; 2 egs., (Reg. No. KN-1318), Mitakhali, 18.v.1987, coll. by DBR.

Measurements : Total length : 7.0-16.5 inches.

Distribution : India; Madhya Pradesh; Uttar Pradesh; Andhra Pradesh; Bihar; Orissa; West Bengal; Assam.

Elsewhere : Bangladesh; Nepal; Myanmar.

14. Genus *Cerberus* Cuvier, 182915. *Cerberus rhynchops* (Schneider, 1799)

Common name : Dog-Faced Water Snake.

Material examined : 1 ex., (Reg. No. KN-1351), Sajnakhali, 2.iii.1997, coll. by KNR; 1 ex., (Reg. No. KN-1343), Neit Nikarighat, 27.vi.1988, coll. by SCS; 2 egs., (Reg. No. KN-1342), Phuldubin, 11.ix.1984, coll. by JKD; 2 egs., (Reg. No. KN-1328), Chotamallakhali, 10.iv.1993,

coll. by KNR; 1 ex., (Reg. No. KN-1326), Purandar, 18.iii.1987, coll. by NCN; 1 ex., (Reg. No. KN-1331), Canning, 11.vi.1985, coll. by RAK; 1 ex., (Reg. No. KN-1308), Dharakhali, 9.iv.1985, coll. by RAK; 1 ex., (Reg. No., KN-1307), Fatikpur, 11.v.1985, coll. by NCN; 1 ex., (Reg. No. KN-1305), Ukilghat, 16.v.1986, coll. by NCN; 1 ex., (Reg. No. KN-1313), Ghutihara, 22.vi.1987, coll. by NPD; 1 ex., (Reg. No., KN-1309), 2.i.1993, coll. by HKB; 1 ex., (Reg. No. KN-1322), Kakkdwip, 12.iii.1980, coll. by NCB; 1 ex., (Reg. No. KN-1346), Baghatpur, 23.xii.1992, coll. by NPD.

Measurements : Total length : 7.5-28.2 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Pakistan; Bangladesh; Sri Lanka; Australia.

Family V ELAPIDAE

15. Genus *Bungarus* Daudin, 1803

16. *Bungarus caeruleus* (Schneider, 1801)

Common name : Common Indian Krait.

Material examined : 1 ex., (Reg. No., KN-1422), Kshetra Mohanpur, 12.ii.1980, coll. by HQ.

Measurements : Total length : 25.0 inches.

Distribution : India; Gujarat; West Bengal; Peninsular India; Rajasthan; Punjab; Haryana; Uttar Pradesh; Madhya Pradesh; Orissa; Maharashtra; Andhra Pradesh; Karnataka; Tamil Nadu; Kerala.

Elsewhere : Pakistan; Bangladesh; Nepal; Sri Lanka.

16. Genus *Naja* Laurenti, 1768

17. *Naja naja kaouthia* (Lesson, 1831)

Common name : Monoocellate Cobra.

Material examined : 1 ex., (Reg. No. KN-1336), Neil Nikarighat, 16.vii.1991, coll. by NPD; 1 ex., (Reg. No., KN-1349), Golbari, 31.viii.1995, coll. by KNR; 1 ex., (Reg. No. KN-1337), Dighirpara, 25.iii.1990, coll. by DM; 1 ex., (Reg. No., KN-1340), Sanjaypally, 1.xi.1994, coll., by BR; 1 ex., (Reg. No. KN-1348) Sandeshkhali, 31.viii.1995, coll. by KNR.

Measurements : Total length : 12.0-16.0 inches.

Distribution : India; Whole of North-Eastern India; West Bengal; Bihar; Eastern Uttar Pradesh; Eastern Himalayas.

Elsewhere : Bangladesh; Nepal; China; Most of South East Asia.

18. *Naja naja* (Linnaeus, 1758)

Common name : Spectacled Cobra.

Material examined : 1 ex., (Reg. No. KN-1360), Sandeshkhali, 5.vii.1992, coll. by NPD.

Measurements : Total length : 19.5-28.5 inches.

Distribution : India; Gujarat; Peninsular India; Kashmir; Punjab; Rajasthan; United Provinces; Haryana; Bihar; West Bengal; Orissa; Madhya Pradesh; Andhra Pradesh; Maharashtra; Goa; Karnataka; Tamil Nadu; Kerala.

Elsewhere : Pakistan; Bangladesh; Nepal; Bhutan; Sri Lanka.

Family VI HYDROPHIDAE

17. Genus *Enhydrina* Gray, 1849

19. *Enhydrina schistosum* (Daudin, 1803)

Common name : Beaked Sea Snake.

Material examined : 1 ex., (Reg. No. KN-1423), Sagar Island, 12.ii.1980, coll. by HQ; 1 ex., (Reg. No. KN-1424), Jambudweep, 22.xii.1983, coll. by NCN.

Measurements : Total length : 26.0-37.0 inches.

Distribution : India; Gujarat; Coastal waters of Goa; Tamil Nadu; Orissa; West Bengal.

Elsewhere : Pakistan; Bangladesh; Sri Lanka; Indo-Pacific water (Thailand, Malaysia and Singapore).

18. Genus *Hydrophis*, Latreille, 1802

20. *Hydrophis caerulecens* (Shaw, 1802)

Common name : Many toothed sea snake.

Material examined : 1 ex., (Reg. No. KN-1364), Haldibari, 10.xi.1980, coll. by RAK.

Measurements : Total length : 11.0 inches.

Distribution : India; Coasts of Goa; Maharashtra; Karnataka; Tamil Nadu; West Bengal; Gujarat.

Elsewhere : Pakistan; Bangladesh; China; Myanmar; Malaysia; Thailand to Australia.

Family VII VIPERIDAE

19. Genus *Vipera* Laurenti, 1768

21. *Vipera russelli* (Shaw & Nodder, 1797)

Common name : Russell's Viper.

Material examined : 1 ex., (Reg. No. KN-1425), Hazra, 27.xi.1981, coll. by DBR.

Measurements : Total length : 35.5 inches.

Distribution : India; They have been recorded from all over India.

Elsewhere : Indo-Australian Archipelago; Tropical area of Asia; Taiwan; Java; North and Tropical Africa.

20. Genus *Trimeresurus* Lacepede, 1804

22. *Trimeresurus erythrurus* (Cantor, 1839)

Common name : Naga Hill Pit Viper.

Material examined : 1 ex., (Reg. No. KN-1366), Haldibari, 20.ii.1991, coll. by SCS.

Measurements : Total length : 20.5 inches.

Distribution : India; West Bengal; Himalayas; Assam.

Elsewhere : Vietnam; Japan; Malaysia; China.

SUMMARY

The paper dealt with amphibian and reptilian fauna collected from Sunderban by different survey parties of Zoological Survey of India. It reports 5 species of amphibians in 2 families and 4 genera and 17 species of reptiles in 5 families and 16 genera.

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