

FAUNA OF CONSERVATION AREAS : FAUNA OF SANJAY GANDHI NATIONAL PARK, BOMBAY (VERTEBRATES)

G. M. YAZDANI, M. S. PRADHAN & D. F. SINGH

Zoological Survey of India, Western Regional Station, Pune.

INTRODUCTION

Among the four National Parks in the State of Maharashtra, Sanjay Gandhi National Park is a beautifully preserved green oasis within the confines of Bombay metropolis. The park exhibits an amazing diversity of terrain—beginning at just 30 meters above sea level, to almost 500 m and displays coastal, dry and mixed deciduous, and typical western ghat plateau habitats. It boasts of two big lakes and 2000 years old Kanheri caves.

Due to its proximity to Bombay city, a lot of people have visited, studied and written about this Park, but unfortunately this information is all scattered and most of it deals with the bird fauna, as indeed it is a bird watcher's paradise (Abdulali 1981, Naik 1986, Monga 1986, Singh & Yazdani 1988). In this paper we have tried to present as a consolidated work, the vertebrate fauna of this Park after an intensive survey from 1987 to 1989 under the special conservation area survey programme of the Zoological Survey of India. The groups were worked out as per the following: Pisces (GMY & DFS); Amphibia, Reptilia (DFS & MSP); Aves (DFS) & Mammalia (MSP).

The Park

(Fig. 1 & 1A)

Sanjay Gandhi National Park (previously known as Krishnagiri Upawan and later as Borivli National Park) is situated about 25 kms north from the heart of Bombay city and is only 8 kms from the shores of the Arabian Sea. It lies between 72° 53' & 72° 50' east longitude and 19° 88' & 19° 21' north latitude. The southern boundary of the park is formed by the shore of Vihar lake, on the east by the townships of Bhandup, Mulund and Thane and on the west by Goregaon, Malad, Kandivli and Borivli. The northern boundary extends beyond Bassein creek and includes the Nagla forest block. The park covers an area of 96.40km², out of which the recreational sector alone takes up 5.06km² area. The park terrain is semi-mountaneous, the level ground being between Tulsi and Vihar lakes, the lower westerly reaches of Krishnagiri Upawan and the northern end of Chenna forest. These hills are regarded as the outer spurs of the Sahyadris (western ghats). The major sources of water in the park are Tulsi and Vihar lakes, Dahisar and Rewat nallas. Tulsi and Vihar have a combined

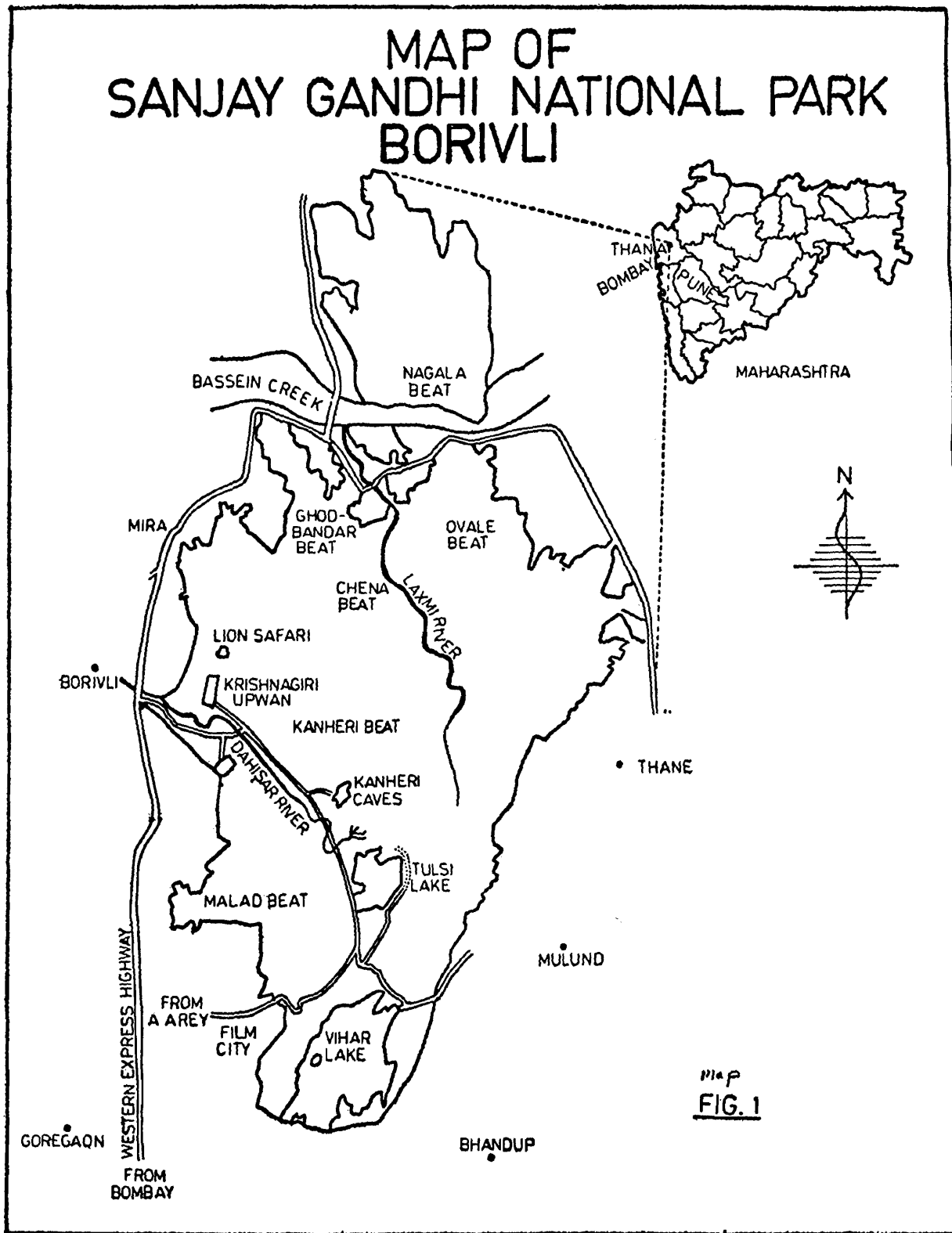


Fig. 1

water spread area of about 8.62km² and are a source of drinking water supply to Bombay city (Fig. 4-III).

Dahisar river, which originates from Tulse lake, flows through the forest of Magathana village and joins Manori creek (near Dahisar village) which finally meets Arabian sea. The catchment area of Dahisar river extends to over 2023.500 ha. Numerous small nallas join this river during its course through the park. Rewat nalla originates near Avaghade hill (SW of Yeur village) and flows northwards, finally joining Bassein creek. This nalla is locally known as Laxmi river, while near its origin it is known as 'Vaghacha khonda'. The catchment area of this nalla extends to over 2225.850 ha.

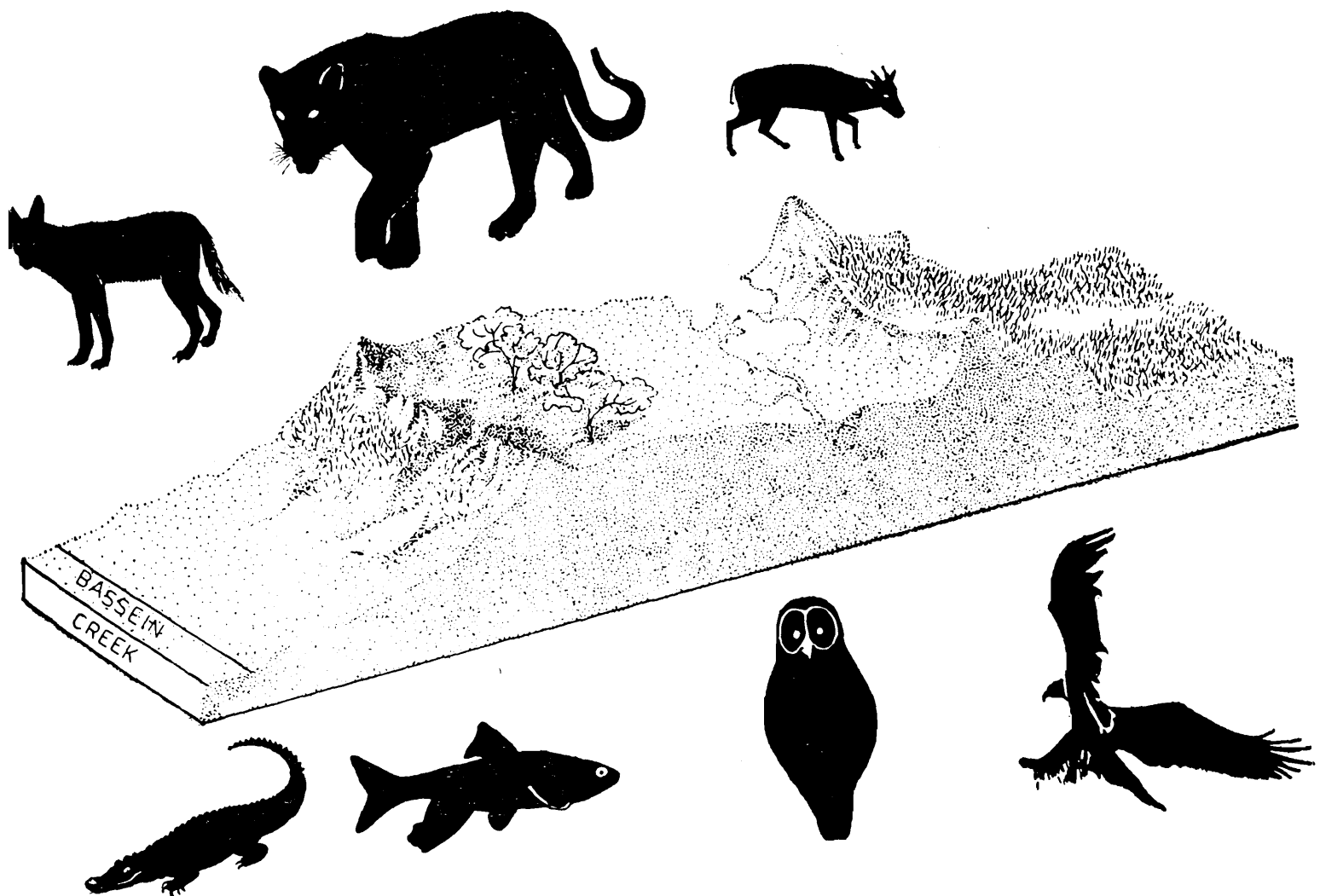


Fig. 1A

SGNP is one of the most highly visited national parks in the country. Over 30 lakh people visit it every year. Most of them visit the Krishnagiri Upawan sector which comprises the recreation zone. A mini train, nature trails, lion safari, lawns, paddle boating (on an artificially made lake on Dahisar river) are added attractions.

Another tourist spot is the historic Kanheri caves (numbering over hundred) built by Buddhist monks almost 2000 years ago. This site is looked after by the Archeological Survey of India. The caves are arranged in several viharas or monasteries, solitary cells for hermits, lecture halls and temples. Outside the caves are small tanks for water, separate for each cell, and couches carved out of rock, may be, for the monks to recline on.

The Forest

Due to its proximity to the coast, numerous water courses and hilly terrain, the flora too presents a very diverse picture, ranging from dry & moist deciduous to semi-evergreen to open scrub to halophytes. The principal types are ; *Tectona grandis* (Teak) *Terminalia tomentosa* (Ain), *Bombax malabaricum* (red silk cotton), *Adina cordifolia* (Kadamba), *Dendrocalamus strictus* (Bamboo), *Butea monosperma* (Flame of the forest), *Pterocarpus marsupium* (Bibla).

The Fauna

Studies have revealed that the Park is very rich in fauna. 30 spp. of Pisces, 7 spp. of Amphibia, 23 of Reptilia, 64 of Aves & 48 spp. of Mammalia have been observed and recorded (Appendix I).

(A) Fishes

30 species of fishes (freshwater & marine) were recorded from the Park. The freshwater sources are Tulsi & Vihar lakes, Dahisar & Rewat rivers. Numerous small tributaries join these rivers during their course through the park. As the rivers are of a short length, indigenous fish fauna includes rather small sized varieties like *Puntius*, *Rasbora*, *Garra* etc. A hill stream Cyprinid, *Parapsilorhynchus tentaculatus* was found in seasonal streams flowing down the Kanheri caves from an altitude of about 486 MSL. In summer, these fishes are seen in water filled stone cisterns along the caves.

(B) Amphibia

Most of the common species occurring elsewhere in India are represented here. *Rana breviceps*, the Indian burrowing frog, is found in the Kanheri caves area during early monsoon months. The common tree frog *Polypedates maculatus*, is quite commonly seen during the monsoon.

(C) Reptilia

The outstanding feature of the reptilian fauna of the Park is the occurrence of Crocodile, *Crocodylus palustris*, in Tulsi lake. The Indian Python & Cobra are also found in the forested areas of the Park.

(D) Birds

The bird fauna of the Park is rich and diverse. 64 spp. have been reported and an attempt made to give their status. The species composition is typical of the Konkan region.

(E) Mammals

48 spp. of mammals were observed in the Park. The fauna is typical of the Sahyadri region with a predominance of spotted deer, leopard, etc.

A good variety of bat species have been observed. It is interesting to note that the bats inhabit only a few (2-3) caves out of about a hundred caves in Kanheri.

Another interesting feature is the presence of both Bonnet & Rhesus monkeys in the Park.

A large number of domestic dogs have been seen near the MAFCO factory area. Their behaviour is almost like the wild ones and have started hunting and attacking in packs.

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REFERENCES

- Abdulali, H. 1981. Checklist of the Birds of Maharashtra with notes on their status around Bombay, Mah. *BNHS 2nd ed.*
- Monga, S. 1986. The Borivli National Park. *Sanctuary* 6 (4) : 314-362.
- Naik, V. R. 1986. Wildlife on BNHS land. *Hornbill*, 1 : 9-12.
- Singh, D. F. & Yazdani, G. M. 1988. A note on the Ichthyofauna of Sanjay Gandhi National Park, Borivli, Bombay, *Jour. Bom. Nat. Hist. Soc.*, 85 (3) : 631-632.

APPENDIX I

Class : PISCES
 Subclass : TELEOSTOMI
 Order : CYPRINIFORMES
 Family : CYPRINIDAE

1. **Salmostoma clupeioides** (Bloch)

1895. *Cyprinus clupeioides* Bloch, *Ausländische Fische*, Berlin 12, p. 49, pl. 408, fig. 20.

Type locality : Tranquebar.

2. **Danio aequipinnatus** (McClelland)

1839. *Perilampus aequipinnatus* McClelland, *Asiatic Res.* Calcutta, 19, p. 3 pl. 60, Fig. 1.

Type locality : Assam.

3. **Rasbora daniconius** (Hamilton)

1822. *Cyprinus daniconius* Hamilton, *Fishes of Ganges*, Edinburgh, pp. 327, 329, pl. 15, fig. 89.

Type locality : Rivers of Southern Bengal.

4. **Puntius ticto** (Hamilton)

1822. *Cyprinus ticto* Hamilton, *Fishes of Ganges*, Edinburgh, pp. 314, 389, pl. 8, fig. 87.

Type locality : South-east part of Bengal.

5. **Catla catla** (Ham)

1822. *Cyprinus catla* Hamilton, *Fish Ganges*, pp. 287, 387, pl. 13, fig. 81.

Type locality : In the rivers and tanks of Bengal.

6. **Cirrhinus mrigala** (Ham)

1822. *Cyprinus mrigala* Hamilton, *Fish Ganges*, pp. 279, 386, pl. 6, fig. 79.

Type locality : Ponds and freshwater rivers of the Gangetic provinces.

7. **Labeo calbasu** (Ham)

1822. *Cyprinus calbasu* Hamilton. *Fish Ganges*, pp. 297, 387, pl. 2, fig. 83.

Type locality : Rivers and ponds of Bengal and in the western provinces.

8. *Labeo rohita* (Ham)

1822. *Cyprinus rohita* Hamilton, *Fish. Ganges*, pp. 301, 388, pl. 36, fig. 85.

Type locality : Freshwater rivers of the Gangetic provinces.

9. *Parapsilorhynchus tentaculatus* Annandale

1919. *Parapsilorhynchus tentaculatus* Annandale, *Rec. Indian Mus. Calcutta*, 16 (1), p. 128, pl. 1, Figs. 4, 4a, pl. 3, fig. 2.

Type locality : Khandala, Maharashtra State.

10. *Garra mullya* (Sykes)

1841. *Chondrostoma mullya* Sykes. *Trans. Zool. Soc. London*, 2, p. 359, pl. 62 fig. 3.

Type locality : Poona.

Order : SILURIFORMES

Family : BAGRIDAE

11. *Aorichthys aor* (Hamilton)

1822. *Pimelodus aor* Hamilton, *Fishes of Ganges* pp 205, 379, pl. 20. fig. 68.

Type locality : Rivers of Bengal and upper parts of Gangetic estuaries.

12. *Mystus menoda trachacanthus* (Val)

1839. *Bagrus trachanthus* Valenciennes, *Hist. Nat. Poiss.* 14, p. 419.

Type locality : Bengal.

Family : HETEROPNEUSTIDAE

13. *Heteropneustes fossilis* (Bloch)

1794. *Silurus fossilis* Bloch, *Auslandische fische*, Berlin, 6, p. 370, fig. 2.

Type locality : Tranquebar.

Order : ATHERINIFORMES

Family : CYPRINODONTIDAE

14. *Aplocheilus lineatus* (Val)

1846. *Panchax lineatum* Val. *Hist. Nat. Poissons*, Paris, 18, p. 381.

Type locality : Bombay.

Order : CHANNIFORMES

Family : CHANNIDAE

15. *Channa punctatus* (Bloch)

1793. *Ophiocephalus punctatus* Bloch, *Auslandische Fische*, Berlin, 6, p. 139 pl. 358.

Type locality : Malabar.

Order : PERCIFORMES

Family : CICHLIDAE

16. *Tilapia mossambica* (Peters)

1852. *Chromis mossambicus* Peters, *Monatsb. Akad. Wiss.*, Berlin, p. 681.

Type locality : Zambesi river, South Africa.

Family : ANABANTIDAE

17. *Anabas testudineus* (Bloch)

1792. *Anabas testudineus* Bloch, *Naturg. Ausland. Fisches*, 6, p. 121, pl. 322.

Type locality : Japan, East Indies.

Family : GOBIIDAE

18. *Glossogobius giuris giuris* (Ham)

1822. *Gobius giuris* Hamilton, *Fishes of Ganges*, pp. 51, 366, pl. 33, fig. 15.

Type locality : Ponds and freshwater rivers of Gangetic provinces.

Prominent marine fishes of Bassein Creek

Order : CLUPEIFORMES

Family : CLUPEIDAE

19. *Hilsa toli* (Val)

Alausa toli Valenciennes *H. N. Poiss*, XX, p. 435.

Family : ENGRAULIDAE

20. *Coilia dussumieri* Val

Coilia dussumieri Val. *H. N. Poiss*. XXI, p. 81, pl. 610.

Order : SILURIFORMES

Family : ARIIDAE

21. Arius caelatus Valenciennes

1840. *Arius caelatus* Valenciennes, *H. N. Poiss.* 15, pp. 66.

Type locality : Bombay.

22. Arius sona (Ham)

1822. *Pimelodus sona* Hamilton, *Fishes of Ganges* pp 172, 376.

Type locality : Estuaries of Bengal.

Order : MYCTOPHIFORMES

Family : HARPADONTIDAE

23. Harpadon nehereus (Ham)

1822. *Osmerus nehereus* Hamilton, *Fishes of Ganges* : 209.

Type locality : Mouth of Ganges.

Order : PERCIFORMES

Family : TERAPONIDAE

24. Terapon jarbua (Forsskal)

1775. *Sciaema jarbua* Forsskal, *Descript. Animalium*, 50.

Type locality : Djedda Red sea.

Family : SCIAENIDAE

25. Johnius belangeri (Cuvier)

1830. *Corvina belangerii* Cuvier, *H. N. Poiss.* 5, 120.

Type locality : Pondicherry.

26. Johnius elongatus Mohan

1976. *Johnius elongatus* Mohan, *Matsya* (1) : 19, fig. 1.

Type locality : Veraval, Gujarat.

27. Kathala axillaris (Cuvier)

1830. *Corvina axillaris* Cuvier, *H. N. Poiss.* 5 : 113.

Type locality : Malabar.

Family : MUGILIDAE

28. **Valamugil spiegleri** (Bleeker)

1858. *Mugil spiegleri* Bleeker, *Nat. Tijdschr. Ned-Indie*, 16 : 279.

Type locality : Java.

Family : GOBIIDAE

29. **Boleophthalmus boddarti** (Pallas)

Gobius boddaerti Pallas, *spic* viii, pl. 11, pl. 2, fig. 4, 5.

30. **Boleophthalmus dussumieri** Val

Boleophthalmus dussumieri Val. *H. N. Poiss*, xii, p. 207, pl. 354.

Class : AMPHIBIA

Order : SALIENTIA

Family : BUFONIDAE

1. **Bufo melanostictus** Schn. Common Indian Toad

1799. *Bufo melanostictus* Sch. *Hist. Amph. Jena*, I, 216.

Family : MICROHYLIDAE

2. **Ramanella montana** (Jerdon) Jerdon's Ramanella

Family : RANIDAE

3. **Rana cyanophlyctis** Schn. Skipper frog

1799. *Rana cyanophlyctis* Schneider, *Hist. Amph. Jena*, I, 137.

4. **Rana tigrina** Daudin Indian Bull frog

1803. *Rana tigrina* Daudin, *Hist. Rain. Gren. Crap.* ; 64, pl. 20.

5. **Rana limnocharis** Weigmann Indian Cricket frog

1835. *Rana limnocharia* Weigmann, *N. Acta Ac. Leop. Carol.* 17 (1) : 255.

6. **Rana breviceps** Sch. Indian Burrowing Frog

1799. *Rana breviceps* Schneider, *Hist. Amph. Jena*, 1, p. 140.

7. **Blypedates maculatus** (Gray) Common tree frog

Class : REPTILIA
Order : LORICATA
Family : CROCODILIDAE

1. **Crocodylus palustris** Lesson Indian marsh crocodile

Crocodylus palustris Lesson, *Belang. Voy. Ind. Or. Zool.*, 305, Ganges.

Order : TESTUDINES
Family : EMYDIDAE

2. **Melanochelys trijuga** (Schweigger) Pond tortoise

1814. *Emys trijuga* Schweigger *Prodr. Monog. Chel.*, 41, Java.

Order : SQUAMATA
Suborder : SAURIA
Family : GEKKONIDAE

3. **Hemidactylus brooki** Gray Spotted Indian house Gecko

1845. *Hemidactylus brooki* Gray, *Cat. Liz. Brit. Mus.*, : 153, Borneo.

4. **Hemidactylus maculatus** Dumeril & Bibron Rock Gecko

1836. *Hemidactylus maculatus* Dumeril & Bibron, *Exp. Gen.* iii : 358, India (Bombay).

Family : AGAMIDAE

5. **Sitana ponticeriana** Cuvier Fan-throated Lizard

6. **Calotes versicolor** (Daudin) Indian garden lizard

1802. *Agama versicolor* Daudin, *Hist. Nat. Rept.* iii : 395. India.

Family : VARANIDAE

7. **Varanus bengalensis** (Daudin) Indian monitor

1758. *Lacerta bengalensis* Linn. *Syst. Nat.* ed x : 201, India.

Family : SCINCIDAE

8. **Mabuya carinata** (Sch.) Common or Brahminy skink

1801. *Scincus carinatus* Schneider, *Hist. Amph.* 2 : 183.

Suborder : SERPENTES

Family : TYPHLOPIDAE

9. **Ramphotyphlops braminus** (Daudin) Common worm snake

1803. *Eryx braminus* Daudin, *Hist. Nat. Rept.* vii : 279.

Family : BOIDAE

10. **Python molurus** (Linn.) Indian Python

1758. *Coluber molurus* Linnaeus, *Syst. Nat. ed.* 10th : 225, India.

11. **Eryx conicus** (Schn.) Russell's earth Boa

1796. In Russell, *Ind. Serp.* 1 : 5, Madras.

12. **Erxy johni** (Russell) John's earth Boa

1801. *Boa, johni* Russell *Ind. Serp.* ii : 18 & 20, pls. xvi & xvii.

Family : DIPSADIDAE

13. **Oligodon taeniolatus** (Jerdon) Russell's or variegated Kukri snake

1853. *Coronella taeniolata* Jerdon, *J. Astat. Soc. Bengal*, xxii, p. 528.

Family : NATRICIDAE

14. **Xenochrophis piscator** (Sch.) Checkered keelback

1799. *Hydrus piscator* Schneider, *Hist. Amph.* 1, p. 247 : East Indies.

Family : COLUBRIDAE

15. **Elaphe helena** (Daudin) Trinket snake

1796. In Russell, *Ind. Serp.*, i. 37, pl. 32. Vizagapatam.

16. **Ptyas mucosus** (Linn.) Dhaman or common rat snake

1758. *Coluber mucosus* Linnaeus *Mus. Ad. Frid.*, I : 37, pl. 23, India.

17. **Argyrogena fasciolatus** (Shaw) Banded Racer

1796. In Russell, *Ind. Serp.* 1 : 26, pl. xxi, India.

18. **Dendrelaphis tristis** (Daudin) Common Indian Bronze back or Tree snake

1803. *Coluber tristis* Daudin, *Hist. Nat. Rept.* vi : 430.

19. Lycodon aulicus (Linn.) Common wolf snake

1754. *Coluber aulicus* Linnaeus, *Mus. Addph. Frider*, I : 29, pl. xii, fig. 2.

20. Ahaetulla nasuta (Lacepede) Common green whip snake

1789. *Coluber nasutus* Lacepede, *Hist. Nat. Serp.* i, p. 100 & ii, p. 277. Pl. 4, fig. 2. Ceylon.

Family : ELAPIDAE

21. Bungarus caeruleus (Sch.) Common Indian Krait

1801. *Pseudoboa caerulea* Schneider, *Hist. Amph.*, ii : 284, Vizag.

22. Naja naja (Linn.) Indian Cobra

1758. *Coluber naja* Linnaeus, *Syst. Nat.* ed. 10th : 221, India.

Family : VIPERIDAE

23. Vipera russelli (Shaw) Russell's Viper

1799. *Coluber russelli* Shaw *Nat. Misc.* vii, pl. 291.

Class : AVES

Order : PODICIPEDIFORMES

Family : PODICEPIDIDAE

1. Podiceps ruficollis capensis Salvadori Little Grebe

1884. *Podiceps capensis* Salvadori, *Amm. Mus. Civ. Genova* : (2) I : 252 : Shoa, Africa.

Status : Common, resident.

Order : PELECANIFORMES

Family : PHALACROCORACIDAE

2. Phalacrocorax niger (Viellot) Little Cormorant

1817. *Hydrocorax niger* Viellot, *Nouv. Dict. Hist. Nat.* : 8 : 88 : East Indies, Bengal.

Status : Common, resident.

3. Anhinga rufa melanogaster Pennant Darter

1769. *Anhinga melanogaster* Pennant, *Indian Zool.* : 13 : 12, Ceylon.

Status : Common, resident.

Order : CICONIIFORMES

Family : ARDEIDAE

4. **Ardeola grayii grayii** (Sykes) Pond Heron

1832. *Ardea grayii* Sykes. *Proc. Zool. Soc. London* : 158.

Status : Common, resident.

5. **Bubulcus ibis coromandus** (Boddaert) Cattle Egret

1783. *Cancroma coromanda* Boddaert, *Table Pl. enlum* : 54.

Status : Common, resident.

Family : CICONIIDAE

6. **Egretta garzetta garzetta** (Linn.) Little Egret

1766. *Ardea garzetta* Linnaeus, *Syst. Nat. ed. 12, 1* : 237.

Status : Common, resident.

7. **Anastomus oscitans** (Boddaert) Openbill Stork

1783. *Ardea oscitans* Boddaert *Table Pl. enlum.* : 55 : Pondicherry.

Status : Common, resident.

Order : ANSERIFORMES

Family : ANATIDAE

8. **Anas crecca crecca** Linn. Common Teel

1758. *Anas crecca* Linnaeus *Syst. Nat. ed. 10, 1* : 26 : Sweden.

Status : Common, resident.

Order : FALCONIFORMES

Family : ACCIPITRIDAE

9. **Elanus caeruleus vociferus** (Latham) Blackwinged kite

1790. *Falco vociferus* Latham, *Index. Orn.* : 1 : 46 : Coromandal coast, India.

Status : Resident, commonly seen throughout the Park.

10. **Milvus migrans govinda** Sykes Pariah kite

1832. *Milvus govinda* Sykes, *Proc. Zool. Soc. London* : 81 : Dukhum.

Status : Resident, seen commonly.

11. *Haliastur indicus indus* (Boddaert) Brahmani kite

1783. *Falco indus* Boddaert, *Table Pl. enlum.* : 25 : Pondicherry.

Status : Resident. Common.

12. *Accipiter badius dussumieri* (Temminck) Indian Shikra

1824. *Falco dussumieri* Temminck, *Pl. Col. Livr.* : 52 : Bengal, India.

Status : Common.

13. *Gyps bengalensis* (Gmelin) Indian Whitnbacked Vulture

1788. *Vulture bengalensis* Gmelin, *Syst. Nat.* : 1 (1) : 245 : Bengal.

Status : Resident. Seen near MAFCO factory.

14. *Circus macrourus* (S. G. Gmelin) Pale Harrier

1770. *Falco macrourus* S. G. Gmelin *Reise d. Russl. th.* : 1 : 48 : Voronezh, Southern Russia.

Status : Resident. Near Tulsi lake.

15. *Spilornis cheela melanotis* (Jerdon) Lesser Crested Serpent Eagle

1844. *Buteo melanotis* Jerdon, *Madras Jour. Lit. Sci.* : 13 : 166 : at the foot of the Nilgiri.

Status : Resident. Occasional. Tulsi lake area.

16. *Circus aeruginosus aeruginosus* (Linn.) Marsh Harrier

1758. *Falco aeruginosus* Linnaeus, *Syst. Nat.* ed. 10, 1 : 91 : Europe, restricted type locality, Sweden.

Status : Occasionally seen in forested areas.

Order : GALLIFORMES

Family : PHASIANIDAE

17. *Pavo cristatus* Linn. Indian Peafowl

1758. *Pavo cristatus* Linnaeus, *Syst. Nat.* ed. 10, 1 : 156 : India.

Status : Resident. Common.

18. *Gallus gallus murghi* Robinson & Kloss Red jungle fowl

1920. *Gallus ferroginous murehi* Robinson & Kloss, *Rec. Indian, Mus.* : 19 : 14 : Chirula, Gaya Dist., Bihar.

Status : Resident, quite common.

19. *Gallus sonneratti* Temminck Grey Junglefowl

1813. *Gallus sonneratii* Temminck, *Fig. et Gall.* : 2 : 246 : Eastern Ghats near Madras.

Status : Resident. Common.

Order : GRUIFORMES

Family : TURNICIDAE

20. **Turnix suscitator taigoor** (Sykes) Common Bustard-Quail

1832. *Hemipodius taigoor* Sykes, *Proc. Zool. Soc., London* : 155 : Dukhun.

Status : Resident. Occassionally seen.

Family : RALLIDAE

21. **Amaurornis phoenicurus chinensis** (Boddaert) White breasted water hen

1783. *Fulica chinensis* Loddaert *Table Pl. enlum* : 54 : China.

Status : Resident. Common.

22. **Porphyrio p. poliocephalus** (Latham) Indian Purple Moorhan

1801. *Gallinula poliocephala* Latham, *Index Orn. Suppl.* : 68 : India.

Status : Resident. Common.

23. **Fulica atra** Linn. Coot

1758. *Fulica atra* Linnaeus *Syst. Nat.* ed. 10, 1 : 152 : Europe.

Status : Resident. Common.

Order : CHARADRIIFORMES

Family : JACANIDAE

24. **Hydrophasianus chirurgus** (Scopoli) Pheasant tailed Jacana

1786. *Tringa chirurgus* Scopoli, *Dal. Flor. et Faun. Insusbr. fasc.* : 2 : 92.

Status : Resident. Occasional.

25. **Metopidius indicus** (Latham) Bronze-winged Jacana

1790. *Parra indica* Latham, *Index Orn.* : 2 : 765 : India.

Status : Resident. Common.

Family : RECURVIROSTRIDAE

26. **Himantopus himantopus** (Linn.) Blackwinged stilt

1758. *Charadrius himantopus* Linnaeus *Syst. Nat.* ed. 10, 1 : 151 : Southern Europe.

Status : Resident. Common.

27. **Burhinus oedicnemus indicus** (Salvadori) Stone curlew

1865. *Oedicnemus indicus* Salvadori, *Atti Soc. Ital. Sci. Nat. milano* : 8 : 381 : India.

Status : Occassionally seen.

Order : COLUMBIFORMES

Family : COLUMBIDAE

28. **Streptopelia chinensis suratensis** (Gmelin) Spotted Dove

1789. *Columba suratensis* Gmelin, *Syst. Nat.* 1 (2) : 778 : Surat, Gulf of Cambay, India.

Status : Resident. Common.

29. **Streptopelia decaocto decaocto** (Frisvaldszky) Ring Dove

Status : resident.

Order : PSITTACIFORMES

Family : PSITTACIDAE

30. **Psittacula krameri manillensis** (Bech.) Rose ringed Parakeet

1800. *Psittacula manillensis* Bechstein, *Stubenvogel, 2nd Gotha ed.* : 612 : Phillippines.

Status : Resident.

Order : CUCULIFORMES

31. **Eudynamis scolopacea scolopacea** (Linn.) Koel

1758. *Cuculus scolopaceus* Linnaeus, *Syst. Nat.* ed. 10, 1 : 111 : Malabar.

Status : Resident. Common.

32. **Cantropus sinensis sinensis** (Stephens) Crow-pheasant

1815. *Polophilus sinensis* Stephens in Shaw's *Genl. Zool.* : 9 (1) : 51 : China.

Status : Resident. Common.

Order : STRIGIFORMES

Family : STRIGIDAE

33. **Tyto alba startens** Hartert Indian Barn Owl

1929. *Tyto alba startens* Hartert, *Nov. Zool.* : 35 : 98 : Cachar.

Status : Occassionally seen.

34. **Bubo bubo bengalensis** (Franklin) Great Horned Owl

1831. *Otus bengalensis* Franklin, *Proc. Zool. Soc. London* : 115 : Ganges.

Status : Uncommon.

Order : CAPRIMULGIFORMES

Family : CAPRIMULGIDAE

35. **Caprimulgus indicus indicus** Latham Indian Jungle Nightjar

1790. *Caprimulgus indicus* Latham, *Index Orn.* : 2 : 588 : India.

Status : Resident. Common.

Order : APODIFORMES

Family : APODIDAE

36. *Cypsiurus parvus batasiensis* (J. E. Gray) Palm Swift

1829. *Cyp. (Selus) batasiensis* J. E. Gray in Griffith's *Anim. Kingdom* : 7 : 60 : India, restricted to Calcutta.

Status : Uncommon.

Order : CORACIIFORMES

Family : ALCEDINIDAE

37. *Ceryle rudis leucomelanura* Reichenbach Pied Kingfisher

1851. *Ceryle leucomelanura* Reichenbach, *Handb. Spec. Orn.* : 21 : Ceylon.

Status : Resident. Common.

38. *Alcedo atthis bengalensis* Gmelin Common Kingfisher

1788. *Alcedo bengalensis* Gmelin, *Syst. Nat.*, 1 (1) : 450 : Bengal.

Status : Resident. Common.

39. *Halcyon smyrensis fusca* (Boddaert) White breasted Kingfisher

1783. *Alcedo fusca* Boddaert, *Table Pl. enlum* : 54 : Malabar Coast.

Status : Resident. Common.

Family : MEROPIDAE

40. *Merops orientalis orientalis* Latham Green Bee-eater

1790. *Merops orientalis* Latham, *Index Orn. Suppl.* xxxiii ; Ind.

Status : Resident. Common.

Family : UPUPIDAE

41. *Upupa epops ceylonensis* Reichenbach Indian Hoopoe

1853. *Upupa ceylonensis* Reichenbach, *Handb. Spec. Orn., Scansoriae* : 320 : Ceylon.

Status : Resident. Common.

Family : BUCEROTIDAE

42. *Tockus birostris* (Scopoli) Common Grey Hornbill

1786. *Buceros birostris* Scopoli, *Del. Flor. et Faun. Insbr. fasc* : 2 : 87 ; Cormandel, India,

Status : Resident. Common.

Order : PICIFORMES

Family : CAPITONIDAE

43. *Megalaima zeylanica inornata* Walden Green Barbet

1870. *Megalaima inornata* Walden, *Ann. Mag. Nat. Hist.*, 5 (4) : 219 : Malabar.

Status : Resident. Common.

Family : PICIDAE

44. *Micropternus brachyurus jerdonii* (Malherbe) Rufous Woodpecker

1849. *Phaiopicus jerdonii* Malherbe, *Rev. et. Mag. Zool.* : 1 (2) : 535 : Indian Peninsula restricted to Travancore.

Status : Resident.

45. *Dinopium benghalense tehminae* (Whistler & Kinnear) Goldenbacked Woodpecker

1934. *Brachypternus benghalensis tehminae* Whistler & Kinnear, *Jour. Bombay nat. Hist. Soc.* 37 : 293 : Rajampura, 1350 ft., Panthalam Hills Travancore.

Status : Resident.

46. *Picoides mahrattensis mahrattensis* (Latham) Yellow fronted pied woodpecker

1801. *Picus mahrattensis* Latham, *Index Orn. Suppl.*, xxxi ; Mahratta Country, India.

Status : Occassionally seen.

Order : PASSERIFORMES

Family : ORIOLIDAE

47. *Oriolus oriolus kundoo* Sykes Golden Oriole

1832. *Oriolus kundoo* Sykes, *Proc. Zool. Soc. London* : 187 : Dukhun.

Status : Local migrant.

Family : DICRURIDAE

48. *Dicrurus paradiscus grandis* (Gould) Racket-tailed Drongo

1836. *Edolins grandis* Gould, *Proc. Zool. Soc. London* : 5 : Nepal.

Status : Occassionally seen.

49. *Dicrurus leucophaeus longicaudatus* Hay Grey or Ashy Drongo

1845. *Dicrurus longicaudatus* Lord Arthur Hay in Jerdon, 1845, *Madras Jour. Lit. Sci.* : 13 : 121 : *nom. nud.*

Status : Migrant. Common.

Family ; STURNIDAE

50. *Acridotheres tristis tristis* (Linn.) Myna1766. *Paradisea tristis* Linnaeus, *Syst. Nat. ed.* : 12, 1 : 167 : Calcutta.*Status* : Resident. Common.

Family : CORVIDAE

51. *Corvus splendens splendens* Vieillot House Crow1817. *Corvus splendens* Vieillot, *Nouv. Dict. d' Hist. Nat.* : 8 : 44 : Ben.*Status* : Resident, Common.52. *Corvus macrorhynchos culminatus* Sykes Jungle Crow1832. *Corvus culminatus* Sykes, *Proc. Zool. Soc. London* : 96 ; Dukhun : Poona.*Status* : Resident. Common.53. *Pycnonotus cafer cafer* (Linn.) Redvented Bulbul1766. *Turdus cafer* Linnaeus, *Syst. Nat. ed.* : 12, 1 : 295 : Pondicherry.*Status* : Resident. Common.54. *Pycnonotus jocosus fuscicaudatus* (Gould) Redwhiskered Bulbul1866. *Otocompsa fuscicaudatus* Gould, *Proc. Zool. Soc. London* : 3 : 664.*Status* : Resident. Common.

Family : MUSCICAPIDAE

55. *Pellorneum ruficeps ruficeps* Swainson Spotted Babbler1832. *Pellorneum ruficeps* Swainson, *Fauna Boreali-Americana* : 487 ; Ind.*Status* : Resident in flocks.56. *Terpsiphone paradisi paradisi* (Linn.) Paradise Flycatcher1758. *Corvus paradisi* Linnaeus, *Syst. Nat. ed.* 10, 1 : 107 : India.*Status* : Occasional, migrant.57. *Savicoloides fulicata intermedia* Whistler & Kinner Indian Robin1932. *Savicoloides fulicata intermedia* Whistler & Kinnear, *Jour. Bom. Nat. Hist. Soc.* : 36 : 73 ; Rahuri, Rahuri, Ahmednagar.*Status* : Common.

58. *Prinia sociates sociates* Sykes Ashy wren-warbler

1892. *Prinia sociates* Sykes, *Proc. Zool. Soc. London* : 89 : Dukhun.

Status : Resident. Common.

Family : PARIDAS

59. *Parus major stupae* Koelz Grey Tit

1939. *Parus major stupae* Koelz *Proc. Biol. Soc. Washington* : 52 : 61 : Sanchi, Bhopal.

Status : Resident, occasionally seen.

Family : MOTACILLIDAE

60. *Motacilla caspica caspica* (Gmelin) Grey Wagtail

1774. *Parus caspicus* Gmelin, *Reise d. Russ* : 5 : pl. 20 : Fig. 2 : 104 : Southern Shore of Caspican Sea.

Status : Resident. Common.

Family : NECTARINIIDAE

61. *Nectarinia asiatica asiatica* (Latham) Purple Sunbird

1790. *Carthia asiatica* Latham, *Index Orn.* : 1 : 288 : India = Gurgaon.

Status : Resident. Common.

62. *Ploceus philippinus philippinus* (Linn.) Indian Baya

1766. *Loxia philippinu* Linnaeus, *Syst. Nat. ed. 12*, 1 : 905 : Ceylon.

Status : Resident. Common.

Family : ZOSTEROPIDAE

63. *Passer domesticus indicus* Jardine & Selby House Sparrow

1835. *Passer indicus* Jardine & Selby *III. Orn.* 3 : pl. 118 : India, restricted to Bangalore.

Status : Resident. Common.

Family : Emberizidae

64. *Melophus lathamii savoristatus* (Gray) Crested Bunting

1831. *Emberiza lathamii* Gray, *Zool. Misc.* : 1 : 2 : Canton, Kwangtung.

Status : Resident, occasionally seen.

Class : MAMMALIA

Order : INSECTIVORA

1. *Suncus murinus* (Lin.) House Shrew

1766. *Sorex murinus* Linnaeus, *Syst. Nat. 12th ed.*, 1 : 74 : Java.

Status : Common.

2. **Suncus stoliczkanus** (Anderson)

1877. *Crocidura (Pachyura) stoliczkanus* Anderson, *J. Asiat. Soc. Bengal*, 46 : 270 : Bombay, India.

Status : Occasional.

Order : CHIROPTERA

Suborder : MEGACHIROPTERA

Family : PTEROPIDAE

3. **Rousettus leschenaulti** (Desmarest) Fruit bat

1820. *Pteropus leschenaulti* Desmarest, *Encycl. Meth. Mamm.*, 1 : 110 : Pondicherry, India.

Status : Commonly seen in Kanheri cave No. 1.

4. **Pteropus giganteus** (Brunnich) Flying fox

1782. *Vespertilio gigantea* Brunnich, *Dyrenes Historie*, 1 : 45 : Bengal, India.

Status : Common.

5. **Cynopterus sphinx** Vahl. Short-nosed fruit bat

1797. *Vespertilio sphinx* Vahl., *Skr. Nat. Selak. Copenhagen*, 4, 1 : 123 : Tranquebar, Madras, India.

Status : Common.

Suborder : MICROCHIROPTERA

Family : EMBALLONURIDAE

6. **Taphozous melanopogon** Temminck Black bearded tomb bat

1841. *Taphozous melanopogon* Temminck, *Mon. Mamm.*, 2 : 287 : Bante, West Java.

Status : Commonly seen in Kanheri caves.

Family : MEGADERMATIDAE

7. **Megaderma spasma** (Lin.) Malay false Vampire bat

1758. *Vespertilio spasma* Linnaeus, *Syst. Nat. 10th ed.*, 1 : Celebes.

Status : Commonly seen in Kanheri areas.

8. **Megaderma lyra** Geoffroy Indian false Vampire

1810. *Megaderma lyra* E. Geoffroy, *Ann. Mus. H. N. Paris*, 15 : 190 : India.

Status : Common.

Family : RHINOLOPHIDAE

9. **Rhinolophus rouxi** Temminck Horse shoe bat

1835. *Rhinolophus rouxi* Temminck, *Mon. Mamm.*, 2 : 306 : Pondicherry and Calcutta, India.

Status : Reported by Brosset (1962) from Kanheri area.

10. Rhinolophus lepidus Blyth

1844. *Rhinolophus lepidus* Blyth, *J. Asiat. Soc. Bengal*, 13 : 486 ; Calcutta.

Status : Reported by Brosset (1962) from Kanheri area.

11. Hipposidorus speoris (Schneider) Schneider's leaf-nosed bat

1800. *Vespertilio speoris* Schneider, in Schreber's *Saugeth*, pl. 59 b : Tranqueber.

Status : Occasional.

12. Hipposidorus bicolor (Temminck) Leaf-nosed bat

1834. *Rhinolophus bicolor* Temminck, *Tijdschr. Natuur. Gesch.*, 1. i : 19, pl. 1, fig. 3 : Anjer Coast, Java.

Status : Reported by Brosset (1962) from Vihar lake area.

13. Hipposidorus galeritus Cantor Cantor's leaf-nosed bat

1846. *Hipposidorus galeritus* Cantor, *J. Asiat. Soc. Bengal*, 15 : 183 : Penang, Malay States.

Status : Reported by Brosset (1962) from Kanheri.

Family : VESPERTILIONIDAE

Subfamily : VESPERTILIONINAE

14. Pipistrellus mimus Wroughton Indian pygmy pipistrelle

1899. *Pipistrellus mimus* wroughton, *J. B. N. H. S.*, 12 : 722 : Mheskatri, Dangs, Surat Dist., India.

Status : Common.

Subfamily : KERIVOULINAE

15. Kerivoula picta (Pallas) Painted bat

1767. *Vespertilio pictus* Pallas, *Spic. Zool.*, 3 : 7 : Peninsular India.

Status : Reported by Brosset (1962) from Borivali.

Order : PRIMATE

Family : CERCOPIITHECIDAE

16. Macaca radiata (Geoffroy) Bonnet macaque

1812. *Cercocebus radiatus* E. Geoffroy, *Ann. Mus. H. N., Paris*, 19 : 98 : India.

Status : Common. Troops were sighted mostly near Kanheri area.

17. Macaca mulatta (Zimmerman) Rhesus macaque

1780. *Cercopithecus mulatta* Zimmerman, *Geogr. Gesch. Mensch*, 2 : 195 : India.

Status : Introduced. One small troop (size : 5-6) near deserted forest rest house on the side of Tulsi Lake was sighted. It is situated a few kms. away from Kanheri caves.

YAZDANI, PRADHAN & SINGH



1 Spotted deer in the recreation zone.



2. Blue bull kept in the recreation zone.

YAZDANI, PRADHAN & SINGH



3. Baby crocodile caught from Tulsi lake and kept in an enclosure.

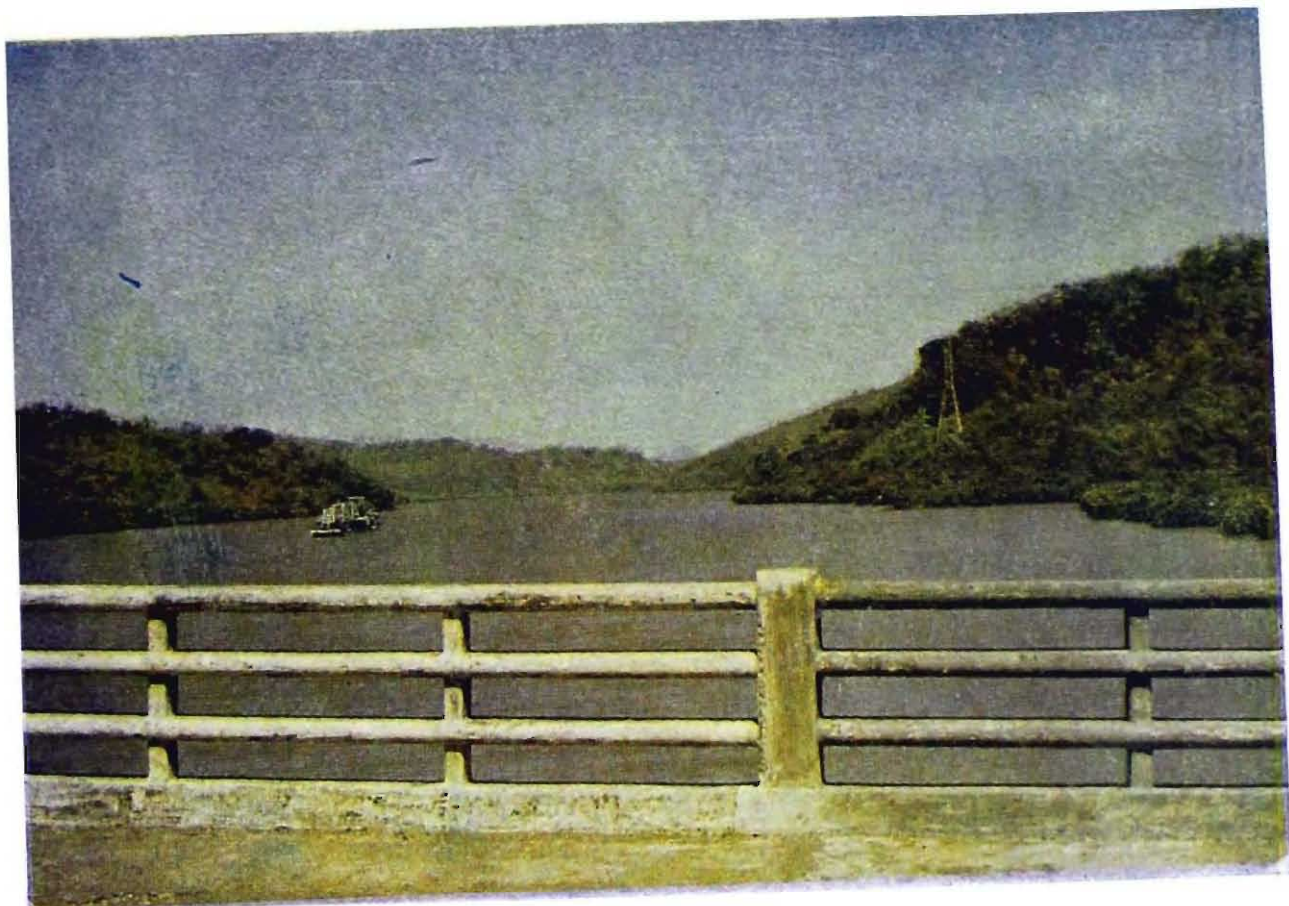


4. Tulsi lake.

YAZDANI, PRADHAN & SINGH



5. Dahisar river flowing through the recreation zone.



6. Bassein creek which divides the park into two.

YAZDANI, PRADHAN & SINGH

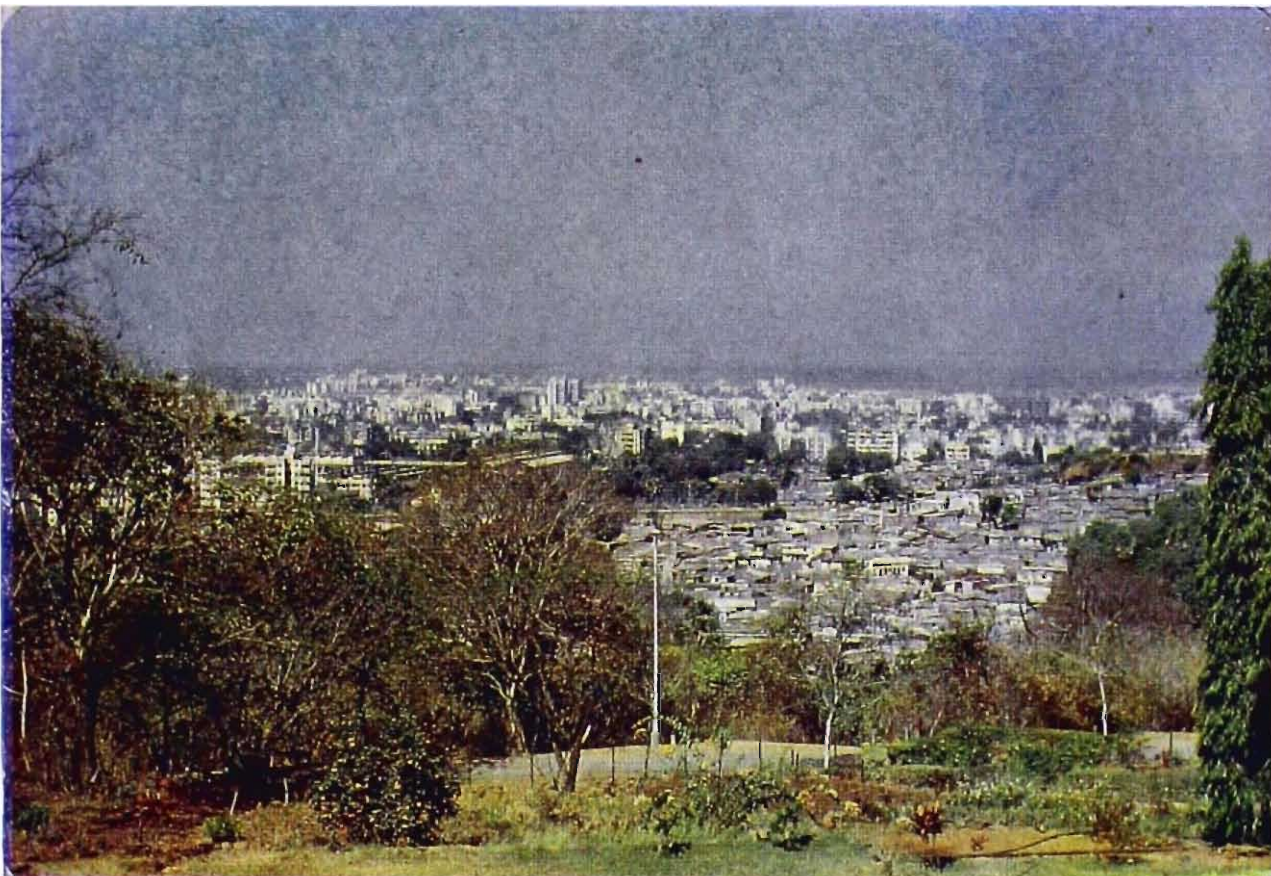


7-8. Glimpses of the forest.

YAZDANI, PRADHAN & SINGH



9. Historic Kanheri caves.



10. Slum adjoining the Park. Bombay city can be seen in the background.

YAZDANI, PRADHAN & SINGH



11. Litter left behind by visitors.

18. **Presbytis entellus** (Dufresne) Langur1787. *Simia entellus* Dufresne, *Bull. Soc. Philmon*, 1, 7 : 49 : Bengal in India.*Status* : Common.

Order : CARNIVORA

Family : CANIDAE

19. **Canis aureus** Linn. Jackal1758. *Canis aureus* Linnaeus, *Syst. Nat.* 10th ed., 1 : 40 : Province of Lar. Persia.*Status* : Occasional.20. **Vulpes bengalensis** (Shaw) Indian or Bengal fox1800. *Canis bengalensis* Shaw, *Genl. Zool.*, 1, 2 : 330 Bengal.*Status* : Occasional.

Family : VIVERRIDAE

21. **Viverricula indica** Desmarest Small Indian Civet1817. *Viverra indica* Desmarest, *Nouv. Dict. N. H.*, 7 : 170.*Status* : Common.22. **Paradoxurus hermaphroditus** (Pallas) Toddy Cat1777. *Viverra hermaphrodita* Pallas, *Schreher, Saivgeth.*, 36 : 426 : India.*Status* : Common.

Family : HERPESTIDAE

23. **Herpestes edwardsi** (Geoffroy) Common Mongoose1837. *Ichneumon edwardsi* (Geoffroy) *De' Scr. Egypte*, 2 : 139 : East Indies'' (Madras, Pocock, 1933).*Status* : Common.

Family : HYAENIDAE

24. **Hyaena hyaena** (Linn.) Striped Hyaena1758. *Canis hyaena* Linnaeus, *Syst. Nat.* 10th ed. : 1 : 40 : Benna Mountaine Laristan, South Persia.*Status* : Common.

Family : Felidae

25. **Felis chaus** Guldenstaedt Jungle Cat1776. *Felis chaus* Guldenstaedt, *Nov. Com. Acad. Petrop.*, 20 : 483 : Terek River, north of Caucasus.*Status* : Common.

26. *Panthera pardus* (Linn) Leopard or Panther

1758. *Felis pardus* Linnaeus, *Syst. Nat.*, 10th ed. : 1 : 41 : Egypt.

Status : Common. As per the forest official report, there are about twenty leopards moving in the entire S. G. N. P. area.

27. *Panthera tigris* (Linn) Tiger

1758. *Felis tigris* Linnaeus, *Syst. Nat.*, 10th ed. 1 : 41 : Bengal.

Status : Reported earlier but currently absent.

Order : ARTIODACTYLA

Family : SUIDAE

28. *Sus scrofa* Linn. Indian wild boar

1758. *Sus scrofa* Linnaeus, *Syst. Nat.*, 10th ed. : 1 : 49 : Germany.

Status : Common.

Family : TRAGULIDAE

29. *Tragulus (Moschiola) meminna* (Erxl.) Mouse deer

1777. *Moschus meminna* Erxleben, *Syst. Begn. Anim. Mamm.*, : 322 : Ceylon.

Status : Occasional.

30. *Muntiacus muntjack* (Zimmer) Indian muntjack or Barking deer

1780. *Cervus muntjack* Zimmerman, *Geogr. Gesch.*, 2 : 131 : Java.

Status : Common.

31. *Axis axis* (Erxleben) Chital or Spotted deer

1777. *Cervus axis* Erxleben, *Syst. Regn. Anim.*, : 312 : Bank of Ganges, India.

Status : Common. A small herd of spotted deers was sighted near Tulsi lake.

32. *Cervus unicolor* Kerr Sambar

1792. *Cervus axis unicolor* Kerr, *Anim. Kingd.*, 300 : Ceylon.

Status : Common. Hoof mark of sambar was found near Tulsi lake.

Family : BOVIDAE

33. *Tetracerus quadricornis* (blainville) Chowsingha or Four horned antelope

1816. *Cercophorus (Cervicapra) quadrincornis* Blainville, *Bull. Soc. Philoml., Paris* : 75 : 78 : Plains of Peninsular India.

Status : Introduced. About five four horned antelopes have been reported to be released in the National Park area by forest authorities.

34. Boselaphus tragocamelus (Pallas) Nilgai or Blue bull

1766. *Antelope tragocamelus* Pallas, *Misc. Zool.*, 5 : Plains of Peninsular India.

Status : A small herd of bull has been reported to be released in the National Park by the forest authorities.

Order : LAGOMORPHA

Family : LEPORIDAE

35. Lepus nigricollis Cuvier Black-naped or Indian hare

1823. *Lepus nigricollis* F. Cuvier, *Dict. Sci. Nat.* : 26 : 307 : Madras.

Status ; Common.

Order : RODENTIA

Family : SCIURIDAE

36. Funambulus pennanti Wroughton Five striped palm squirrel

1905. *Funambulus pennanti* Wroughton, *J. B. N. H. S.*, 16 : 411 : 411 : Mandvi Taluka, Surat Dist., Gujrat, India.

Status : Common.

37. Funambulus tristriatus (Waterhouse) Jungle striped squirrel

1837. *Sciurus tristriatus* Waterhouse, *Charlasworth's Mag. nat. Hist.*, 1 : 496.

Status : Commonly found in the forested areas of core zone.

Family : HYSTRICIDAE

38. Hystrix indica Kerr Indian Porcupine

1792. *Hystrix oristata* var *indica* Kerr, *Anim. Kingd.* : 213 : India.

Status : Common.

Family : MURIDAE

Subfamily : GERBILLINAE

39. Tatera indica indica (Hardwicke) Indian gerbil Antelope rat

1807. *Dipus indicus* Harwicke, *Trans. Linn. Soc., London.* : 8 : 279 : Northern India.

Status : Occassionally found in agricultural zone beyond creek.

Subfamily : MURINAE

40. Vandeleuria oleracea (Benett) Long-tailed tree mouse

1832. *Mus oleracea* Benett, *PZS*, 121 : Deccan, India.

Status : Occasional.

41. *Rattus blanfordi* (Thomas) White-tailed wood rat

1888. *Mus blanfordi* Thomas, *Ann. Mag. N. H.*, 7 : 24 : Madras, India.

Status : Occasional.

42. *Rattus rattus rufescens* (Gray) House rat

1837. *Mus rufescens* Gray, *Ann. Mag. N. H.*, 1 : 585 ; Dharwar, India.

Status : Common.

43. *Rattus norvegicus* (Berkenhout) Norway rat

1769. *Mus norvegicus* Berkenhout, *Outlines N. H. Gt. Britain & Ireland*, 1 : 5 Great Britain.

Status : Spread from Bombay harbour after plague epidemic. Found mostly near residential areas of Borivali East.

44. *Mus musculus castaneus* (Waterhouse) House mouse

1843. *Mus castaneus* Waterhouse, *Ann. Mag. N. H.*, 12 : 134 : Philippine Island.

Status : Common.

45. *Mus booduga* (Gray) Indian Pigmy field mouse

1837. *Leggada booduga* Gray, *Charlesworth's Mag. N. H.*, 1 : 586 : Southern Mahratta, India.

Status : Commonly found in agricultural zone beyond creek.

46. *Golunda ellioti* Gray Indian bush rat

1837. *Golunda ellioti* Gray, *Charlesworth's Mag. N. H.*, 1 : 586 : Dharwar, India.

Status : Occasional.

47. *Bandicota bengalensis kok (lordi)* (Gray) Lesser bandicoot rat or Indian mole rat

1897. *Mus kok* Gray, *Charlesworth's Mag. N. H.*, 1 : 585 : Dharwar, India.

Status : Common.

48. *Bandicota indica indica (malabarica)* (Bech.) Large bandicoot

1800. *Mus indicus* Bechstain, *Veber Viert Thiere*, 2 : 497 : Pondicherry, India.

Status : Common.