**LIST OF MAMMALS OF SUNDARBANS**

**MAMMALS : (both aquatic and terrestrial)**

**(a) Aquatic species:**

 **Order : CETUCEA**

1 . *Platanista gangetica* (Roxburgh) Gangetic Dolphin

2. *Orcaella brevirostris* (Owen) Irrawady Dolphin

**(b) Terrestrial species:**

 **Order : CARNIVORA**

3. *Panthera tigris* (Linnaeus) Tiger

4. *Prionailurus viverrinus* Fishing Cat.

5. *Felis chaus*  Jungle Cat.

6. *Vulpes bengalensis* Indian Fox.

7. *Canis aureus (*Linnaeus*)* Jackal.

8. *Paradoxurus hermaphrodites* Toddy Cat

9. *Vivemcula indica* (Desmarest) Small Indian Civet.

10. *Herpestes edwardsii* (Geoflory) Common Gray Mongeese.

 **Order : ARINDACTYCA**

11. *Sus scrofa* Wild Pig.

12. *Axis axis*  Spotted Deer.

 **Order : RODENTIA**

13. *Funambulus pennantii* Five-striped squirrel.

14. *Apodemus Sylvaticus* Field Mouse.

15. *Rattus rattus* (Linnaeus.) Common Rat.

16. *Bandicota indica* (Beclistein) Large Bandicoot Rat.

17. *Bandicota bengaiensis* (Gray) Lesser Bandicoat Rat.

18. *Hystrix indica* Indian Crestod Porcupine.

 **Order: CALROPFERA**

19. *Rhinopoma hardwickii* (Gray) Lesser Rat-tailed Bat.

20. *Cynopterus brachyotis* Short-nosed Fruit Bat.

21. *Pipistrellus pygmaeus* Pygmy Pipistrelle.

22. *Scotophilus kuhlii (*Leach*)* Leach Yellow Bat.

23. *Megaderma lyra* Indian False Vampire.

 **Order: PRIMATE**

24. *Macaca mulatta* Rhesus Monkey

 **Order: PHOLIDOTA**

25. *Manis pentadactyla* Pangolin.

**LIST OF BIRDS OF SUNDARBANS**

 **Family : ANATIDAE, Ducks, Swans, Geese.**

 **Resident Species:-**

1. *Nettapus Coromandelianus* Cotton pygmy goose.

 **Migratory species:-**

1. *Anas crecca* Common Teal.
2. *Anas acuta*  Pintail
3. *Anas strepera* Gadwall.
4. *Anas platyrhynchos*  Mallard.
5. *Anas penelope* Eurasian Wigeon.
6. *Aythya ferina* Common Pochard.
7. *Aythya nyroca* White-eyed Pochard.

9. *Netta rufina (Pallas)* Redcrested Pochard.

10. *Tadorna ferruginea (Pallas)* Brahminy Duck.

11. *Dendrocygna javanica*  Lesser Whistling Teal.

 **Family: PHALACROCORACIDAE, Cormorants**

12. *Microcarbo niger* Little Cormorant (Resident)

 **Family: ANHINGIDAE, Darters**

13. *Anhinga* Darter (Resident).

 **Family: PELECANIDAE**

14. *Pelecanus philippensis*  Spot-billed Pelican (Migratory).

 **Family: PODICIPEDIDAE, Grebes**

 **Family : LARIDAE, Gulls, Terns Species; -**

1. *Sternula albifrons* Little Tern.
2. *Sterna acuticauda* Blackbilled Tern.
3. *Sterna aurantia* Indian River Tern.

# *Sterna bengalensis (Lesson)*  Indian Lesser Crested Tern.

# *Thalasseus bergii* Greater Crested Tern.

# *Rynchops albicollis* Indian Skimmer.

 **Migratory species :**

# *Larus argentatus* European Herring Gull

# *Chroicocephalus ridibundus*  Blackheaded Gull

# *Chroicocephalus brunnicephalus* Brownheaded Gull.

# *Sterna hirundo* Common Tern.

# *Onychoprion fuscatus* Sooty Tern.

# *Hydroprogne caspia*  Caspian Tern.

# *Gelochelidon nilotica*  Gull – billed Tern.

# *Chlidonias hybrida*  Whiskered Tern.

 **Marsh birds :**

 **Family : ARDEIDAE, Herons, Egrets.**

 **Resident species : -**

# *Ardea cinerea*  Gray Heron .

# *Ardea purpurea* Purple Heron.

# *Ardea alba* Large Egret.

# *Egretta garzetta*  Little Egret.

# *Bubulcus ibis* Cattle Egret.

# *Nycticorax nycticorax* Night Heron.

# *Ixobrychus minutus*  Little Bittern.

# *Ixobrychus cinnamomeus* Cinnamon Bittern

# *Ixobrychus flavicollis* Black Bittern.

 **Family : CICONIIDAE, Storks.**

  **Resident species :**

# *Anastomus oscitans (Boddaert)* Asian Open-billed Stork.

# *Leptoptilos dubius (Gmelin)*  Greater Adjutant

# *Ephippiorhynchus asiaticus* Blacknecked Stork

 **Family :THRESKIORNITHIDAE, Ibises, Spoonbills.**

# *Eudocimus albus* American White Ibis

  **Migratory species**

# *Ardea goliath*  Giant Heron.

  **Family : RALLIDAE, Rails**

 **Resident Species**

# *Amaurornis phoenicurus* White breasted Waterhen.

# *Porphyrio porphyrio* Purple Moorhen

# *Gallinula chloropus*  Moorhen.

# *Fulica atra* Eurasian Coot.

 **Family : JACANIDAE, Jacanas**

# *Metopidius Indicus* Browzewinged Jacana.

# *Hydrophasianus chirurgus* Pheasant – tailed Jacana.

 **Family: ROSTRATULIDAE, Painted Swipe**

 **Resident Species:-**

 **Family. CHARADRIIDAE, Plovers. Resident species:-**

# *Vanellus Indicus (*Boddaert*)*  Red Wattled Lapwing.

# *Charadrius dubius*  Little Ringed Plover.

# *Vanellus cinereus* Gheyheaded Lapwing.

# *Calidris minuta* Little Stint.

# *Calidris tenuirostris* Great knot.

# *Calidris ferruginea*  Curlew-Sandpiper

 **Family: SCOLOPACIDAE, Sandpipers Migratory species:-**

# *Numenius phaeopus* Whimbrel

# *Numenius arquata*  Curlew

# *Gallinago gallinago* Common Snipe

# *Capella stenura* Pintail Snipe

# *Actitis hypoleucos* Common Sandpiper

# *Tringa glareola* Wood Sandpiper

# *Xenus cinereus* Tereck Sandpiper

# *Tringa nebularia* Green Shank

# *Tringa totanus* Common Redshank

# *Pluvialis fulva* Pacific Golden Plover

  **King fishers: Family: ALCEDINIDAE Resident species:-**

 65. *Alcedo atthis* Common Kingfisher.

66. *Pelargopsis amauroptera* Brownwinged Kingfisher

#  67. *Halcyon pileata*  Blackcapped Kingfisher.

#  68. *Halcyon smyrnensis* Whitebreasted Kingfisher.

#  69. *Ceryle rudis* Pied Kingfisher.

#  70. *Todiramphus chloris*  White Collard kingfisher

 71. *Pelargopsis capensis*  Storkbilled kingfisher.

**Preying birds**

 **Family ACCIPITRIDAE, Hawks, Vultures.**

 **Resident species:-**

# *Milnves migran (Boddourt)* Pariah kite.

# *Haliastur indus* Brahminy kite.

# *Accipiter badius* Shikra.

# *Haliaeetus leucogaster* White bellied Sea Eagle.

# *Haliaeetus leucoryphus* Pallas’s Fish Eagle

1. *Ichthyophaga ichthyaetus* Greyheaded Fish Eagle.

# *Spilornis cheela* Crested Serpent Eagle.

  **Migratory species:-**

 79. *Circus aeruginosus (*Linnaeus*)* Western Marsh Harrier.

 80. *Pandion haliaetus*  Osprey

 **Family: FALCONIDAE, Falcons**

 Migratory species:-

 81. *Falco tinnunculus* Common Kestrel

 82. *Falco peregrinus* Peregrine Falcon.

 **Family: STRIGIDAE, Owls Resident species:**

 83. *Tyto alba* Barn Owl.

# *Otus*  Scops Owl.

# *Otus lettia* Collared Scops Owl,

# *Bubo bubo*  Eurasian Eagle Owl.

# *Bubo zeylonensis* Brown Fish owl.

# *Atthene brama*  Spotted Owlet.

**Woodpeckers: Family PICIDAE. Resident species:**

# *Micropterus brachyurus* Rufous Woodpecker.

# *Dinopium benghalense* Lesser Goldenbacked Woodpecker.

# *Chrysocolaptes lucidus (Scopoli)*  Buff-Spotted Flameback.

**Other Common birds: (Resident species): Family: PHASIANIDAE, Pheasants, Quails.**

# *Francolinus gularis (*Temminck*)* Swamp Patridge(Resident).

# *Gallus gallus* Red Jungle Fowl (Resident).

 **Family: COLUMBIDAE, Pigeon, Doves.**

# *Treron*  Green Pigeon.

# *Spilopelia chinensis* Spotted Dove.

# *Streptopelia decaocto (*Frivaldszky*)* Eurasian Collared Dove.

 **Family : PSITTACIDAE, Parrots.**

1. *Psittacula krameri* Roseringed Parakeet.

 **Family: CUCULIDAE, Cuckoos.**

 98. *Hierococcyx varius* Common Hawk-cuckoo.

 99. *Eudynamys scolopaceus*  Koel.

 **Family: CAPRIMULGIDAE, Nightjars.**

 100. *Caprimulgus climacurus*  Long-tailed Nightjar.

 **Family: CORACHDAE, Rollus**

 101. *Coracias benghalensis (Linnaeus)*  Indian Roller.

 **Family: MEROPIDAE, Bee-eaters.**

 102. *Merops orientalis* Green Bee-eater.

**Family: UPUPIDAE, Hoopoe.**

103. *Upupa epops* Hoopoe .

**Family: CAPITONIDAE, Barbets.**

104. *Megalaima haemacephala* Coppersmith Barbet.

 **Family : ALAUDIDAE, Larks**

 **Family: HIRUNDINIDAE, Swallows**

105. *Cecropis daurica* Redrumped Swallow

 **Family : LANIIDAE, Shrikes.**

106. *Pteruthius rufiventer* Blackheaded Shrike.

**Family: ORIOLIDAE, Orioles.**

107. *Oriolus larvatus* Black-headed Oriole.

**Family: DICRURIDAE, Drongos**

108. *Dicrurus macrocercus* Black Drongo.

**Family: ARTAMIDAE, Wood Swallows**

109. *Artamus fuscus*  Ashy Swallow Shrike

**Family: STURNIDAE, Starlings.**

#  *Gracupica contra* Pied Myna.

#  *Acridotheres tristis*  Common Myna.

#  *Acridotheres fuscus* Jungle Myna.

**Family: CORVIDAE, Crows, Jays**

# *Dendrocitta Vagabunda* Indian Tree Pie.

# *Corvus splendens* House Crow.

# *Corvus macrorhynchos* Jungle Crow.

**Family: PYCNONOTIDAE, Bulbuls**

1. *Pycnonotus cafer* Red-vented Bulbul.

**Family: TIMALIIDAE, Babblers.**

# *Turdoides striata* Jungle Babbler.

# *Spelaeornis chocolatinus* Long-Tailed Wren Babbler.

 **Family: MUSCICAPIDAE, Old World Fly catchers.**

# *Terpsiphone*  Paradise Flycatcher.

# *Ficedula parva (Bechstein)* Red-breasted Flycatcher.

# *Pachycephala grisola cineria*  Mangrove Whistler.

 **Family: SYLVIIDAE, Old World Warblers.**

# *Aerocephalus agricola* Paddy-field Warbler.

# *Phylloscopus fuscatus* Dusky Warbler/ Leaf Warbler.

# *Orthotomus*  Tailor Bird.

 **Family: TURDIDAE, Thrushes.**

# *Saxicola caprata* Pied Bushchat.

 **Family PARIDAE, Titmice**

 126. *Parus major (Linnaeus)* Grey Tit.

 **Family: DICAEIDAE, Flowerpeckers.**

1. *Dicaeum erythrorhynchos* Tickell's Flowerpecker.

 **Family: NECTARINIIDAE, Sunbirds.**

128. *Leptocoma zeylonica*  Purple-rumped sunbird.

 **Family: ZOSTEROPIADAE, White-eyes,**

129. *Zosteropidae*  White-eye.

 **Family: PLOCEIDAE, Weaver birds.**

# 130*. Ploceus philippinus* Baya.

 131. *Lonchura punctulata* Spotted Munia.

 **Other migratory birds:**

 **Family: TURDIDAE, Thrushes and chats.**

# 132*. Luscinia svecica* Bluethroat.

# 133*. Phoenicurus ochruros* Black Redstart.

# 134*. Saxicola rubicola* Stone chat.

# 135*. Monticola solitarius* Blue Rock Thrush.

 **Family: MOTACILLIDAE, Pipits and Wagtails**

136. *Anthus trivialis*  Indian Tree Pipit.

137. *Motacilla alba*  White Wagtail.

# *138. Motacilla flava*  Yellow Wagtail.

**LIST OF REPTILES ,TORTOISE AND TURTLES**

 **Reptiles**

 **Aquatic species: -**

 **Order: CHELONIA, Turtles, Tortioses, Terrapins.**

1. *Batagur baska (*Gray*)* River Terrapin
2. *Geoemyda tricarinata (*Blyth*)* Three Keeled Land Tortoise.
3. *Kachuga kachuga (*Gray) Red-Crowned Roofed Turtle.
4. *Kachuga tecta (*Tentbridge). Indian Roofed Turtle.
5. *Geochemvs hamiltion (*Gray*)*  Terrapin.
6. *Morenia ocellata. (*Dumcril & Bibron*)* Bengal Eyed Terrapin.

7. *Trionyx gangeticus (*Cuvier)Indian Softshell Turtle.

8. *Trionyx hurum (*Gray*)* Indian Peacock Softshell Turtle

9. *Lissemys punctata (*Bonnaterre*)*  Indian Flapshell Turtle.

10. *Pelochelys bibroni (*Owen*)* Coast soft shell/Giant Softshell Turtle.

1. *Chitra sindica (*Gray*).*

12. *Lepidocheays olivacea (*Eschscholtz)Olive Ridley Turtle.

13. *Chelonia mydas* Green Turtle.

14. *Eretmochelys imbricata*  Hawksbill Turtle.

**Order: SQUAMATA**

 **Sub - order: OPHIDIA, Snakes.**

15 *Xenochrophis piscator (*Schneider*)* Common Checkered Keelback (F.N.)

16.  *Enhydris enhydris (*Schneider) Hurriah (F.W.).

1. *Cerberus rhynchops (*Schwider*)* Dog - faced Water Snake.
2. *Acrochordus granulatus (*Schneider) Little Wart Snake.
3. *Gerardia prevostiara (*Eydow & Gervias*).*
4. *Braescutata viperina (*Schmidt*)*  Sea - snake.
5. *Enhydrina schistosa (*Daudin*)*  Sea - snake.
6. *Hydrophis obscurus (*Daudin*)* Russell’s Sea - snake,
7. *Hydrophis nigrocinctus (*Daudin*)* Estuarine Sea Snake.
8. *Hydrophis caerulescens (*Shaw*)* Sea - snake.
9. *Microcephalophis gracilis (*Shaw*)*  Slender Sea - snake.
10. *Microcephalophis cantoris (*Gunther*)* Sea – snake

 **Order: CROCODILIA, Crocodiles, Alligators, Gavials.**

27. *Crocodylus porosus (*Schneider*)* Estuarine Crocodile.

 **Terrestrial species.**

 **Order: SQUAMATA**

 **Sub - order: LACERTILIA, Lizards, Geckos, Monitors**

28. *Gekko gecko (*Linnaeus*)*  Tokay.

29. *Hemidactylus frenatus (*Schelgal*)*  House Gecko

30. *Hemidactylus flow* riridis Rupell House Gecko.

1. *Hemidactylus brookii*  Gray House Gecko.
2. *Calotes versicolor (*Daudin*)*  Garden Lizard.
3. *Chamaeleo zeylanicus (*Laurenti*)* Chameleon.
4. *Mabuya carinata (*Schneider*)* Golden Skink.
5. *Riopa punctata (*Gmelin*).*

36. *Varanus salavator (*Laurenti*)*  Water Monitor, (Salvator Lizard)

37. *Varanus flavescens (*Gray*)*  Yellow Monitor Lizard.

#  Rare and Endangered fauna

**Sub - order: OPHIDIA, Snakes**

38. *Typhlops porrectus (*Stoliczka*)* Blind Snake.

39. *Typhlops braminus (*Daudin) Brahminy Blind snake.

40. *Python molurus (*Linnaeus*)*  Indian Python.

41. *Eryx conicus (*Schneider*)* Rusell's Sand Boa.

42. *Elaphe helena (*Daudin*)*  Trinket Snake.

1. *Ptyas mucosa (*Linnaeus*)* Rat Snake.
2. *Oligodon arnensis (*Shaw*)* Kukri Snake.
3. *Ahaetulla nasuta (*Laccpexa) Green-vine snake.
4. *Ahaetulla myeterizans (*Linnaeus*)* Malayan Green whip Snake.
5. *Lycodon aulicus (*Linnaeus*)*  Wolf snake.
6. *Amphiesma stolatum (*Linnaeus*)* Striped Keelback.
7. *Atretium schistosum (*Daudin*)* Oliverceous Keelback.
8. *Dendrelaphis ahaetulla (*Linnaeus*)* Bronze - back.
9. *Dendrelaphis tristis (*Daudin*)*  Common Indian Bronzeback.
10. *Bungarus caeruleus (*Schneider*)* Common Krait.
11. *Bungarus fasciatus (*Schneider*)* Banded Krait.
12. *Naja naja (*Linnaeus*)* Indian Cobra.
13. *Naja naja kauthia* Monocled Cobra.
14. *Ophiophagus hannah*  (Cantor) king Corba.
15. *Vipera russelli (*Shaw*)* Rusell's Viper.

58. *Trimeresurus erythrurus (*Cantor*)* Pit Viper.

**LIST OF AMPHIBIANS**

 **Aquatic species: -**

1. *Rana cyanophlyctis (*Schneider*)* Indian Skipper frog.

2. *Rana tigrina (*Daudin*)* Bull Frog.

3. *Fejervarya limnocharis*( Gravenhorst*)* Paddy Field Frog.

4. *Rana hexadactyla (*Lesson*)* Pond Frog.

5. *Microhyla ornata (*Dumaril& Bibron*)* Ornate Narrow-mouthed Frog.

**Terrestrial species.**

1. *Bufo melanostictus (*Schneider*)* Common Indian Toad.

2.  *Rhacophorus maculatus (*Gray*)*  Tree Frog.

 **LIST OF FISHES**

**Class: Chondrichthyes, Cartilagenous fishes, Shark, Tiger shark, Hammer beaded shark, Saw fish, Guiter fish, Electric rays etc.**

**Marine and Estuarine fishes: -**

1. *Chiloscyllium griseum (Muller & Henle)* Grey Bamboo Shark.
2. *Stegostoma fasciatum (Hermann)* Zebra Shark.
3. *Carcharhinus limbatus (Muller & Henle).* Black Tip Shark.
4. *Glyphis gangeticus (Muller & Henle)* Ganges Shark*.*
5. *Sphyrna blochii (Cuvier)* Hammer head Shark.
6. *Pristis microdon (Latham)* Saw fish.
7. *Rhinobatos annandalei (Novman).* Guitar fish.
8. *Dasyatis sephors*  Hangar

**Class: OSTEICHTHYES, Bony fishes, (a) Marine/Estuarine fishes.**

1. *Scatophagus argus (Linnaeus)* Spotted Scat*.*
2. *Stromateus sinensis* Butter Fish*.*
3. *Pampus chirensis (Euphrasen).* Silver Pomfret.
4. *Pampus argenteus (Euphrasen).* Silver Pomfret.
5. *Cynoglossus cynoglossus (Hamilton).* Bengal Tongue Fish.
6. *Cynoglossus lingua (Hamilton).* Long Tongue Fish.
7. *Pama pama (Hamilton*).
8. *Daysciaena albida (Cuvier).* Bengal Corvina.
9. *Nibea soldado (Lacepede).* Soldier Croaker.
10. *Otolithoides biauritus (Cantor).*
11. *Johnius belangerii (Cuvier).*
12. *Johnius Coitor (Hamilton).* Big-Eyed Jew Fish.
13. *Hilsa ilisha (Hamilton).* Ilish.
14. *Hilsa Toli (Valenciennes).* Chinese Herring.
15. *Ilisha elongata (Bennett).*
16. *Nematalosa nasus (Bloch).* Gizzard Shad.
17. *Raconda russeliana (Gray).*
18. *Anodontostoma chacunda (Hamilton).*
19. *Leiognathus blochii (Valenciennes).* Pony Fish.
20. *Leiognathus equulus (Forsskal).* Common Pony Fish.
21. *Gerres oyena (Forsskal)* Common Silver-Biddy.
22. *Gerreomorpha setifer (Hamilton).*
23. *Coilia ramcarati (Hamilton).*
24. *Coilia ravsaldi (Valenciennes).*
25. *Setipinna phasa (Hamilton).* Gangetic Hairfin Anchovy.
26. *Setipinna taty (Valenciennes).* Scaly Hairfin Anchovy.
27. *Thryssa hamitonii (Gray).*
28. *Thryssa puraya (Hamiitoni).*
29. *Mogalops cyprinoides (Broussonet).*
30. *Anguilla bengalensis (Gray).* Mottled Eel.
31. *Channos chanos (Forsskal).* Milk Fish.
32. *Aorichthys aor (Hamilton).*
33. *Mystus gulic (Hamilton).*
34. *Mystus gulio (Hamilton).*
35. *Mystus vittatus (Bloch).* Stritped Dwarf Cat Fish.
36. *Rita rita (Hamilton).* Bagrid Cat Fish.
37. *Pangasius pangasius (Hamilton).* Pangas Cat Fish.
38. *Plotosus canius (Hamilton).* Grey Eel Cat Fish.
39. *Arius aius (Hamilton).* Thredfin Sea Cat Fish.
40. *Arius gagora (Hamilton).* Gagora Cat fish.
41. *Arius jella (Day).* Blackfin Sea Cat Fish.
42. *Arius sagor (Hamilton).*
43. *Arius sona (Hamilton).*
44. *Batrachocephalus mino (Hamilton).*
45. *Osteogenisus militaris (Linnaeus).* Soldier Cat Fish.
46. *Harpadon nehereus (Hamilton).* Bombay Duck.
47. *Batrichthys grunniens (Linnaeus).* Grunting toad fish.
48. *Rhynchoramphus georgii (Valenciennes).*
49. *Strengylura leira (Blaker).*
50. *Strongylura strongylura (Van Hasselt).* Spot Tail Needle Fish.
51. *Sillago sihama (Forsskal).*
52. *Terapon jarbua (Forsskal).*

*70. Rhinomugil corsula (Hamilton).*

1. *Valamugil cumesius (Valenciennls).*
2. *Valamugil speigleri (Bleeker).*
3. *Awasnichthys meno (Chatterjee).*
4. *Bathygobins orbicularis (Visweswara Rao).*
5. *Boleophthalmus boddarti (Valenciennes).*
6. *Brachygobius nunus (Hamilton).*
7. *Periophthalmodon schlosseri (Valenciennes).*
8. *Periophthalrus koelreutari (Pallas).* Giant Mud Skipper.
9. *Psendapocryptes lanceolatus (Bloch and Schneider)*
10. *Scartelaos histophorus (Valenciennes).*
11. *Stigmatogobius sadanundio (Hamilton).*
12. *Trypauchen vagina (Bloch & Schneider).*
13. *Ambloytrypauchen arctocaphalus (Alcock).*
14. *Kurtus Indicus (Bloch).*
15. *Trichiurus gangeticus (Gupta)*

*86. Lepturacanthus pantulai (Gupta)*

*87. Lepturacanthus savala (Cuvier).*

***(b) Cutturable brackishwater fishes.***

1. *Liza parsia (Hamilton)*
2. *Liza tade (Forsskal)* Kalagachhi Bhagone*.*
3. *Liza microlepis (Smith)* Ram Parse.
4. *Mugil cephalus (Linnaeus)* Aadh Bhagone*.*
5. *Chunos Chunos (Forsskal)*
6. *Etroplus suratensis (Bloch)* Chanda.
7. *Lates calcarifer (Bloch)* Bhetki.
8. *Eleutheronema tetradactylum (Shaw)* Gurjali.

*9. Megalops cyprinoides (Broussonet)* Omlet

 **LIST OF HEMICHORDATES**

 **Saccoglossus sp. - Estuarine species.**

**ECHINODERMS : Marine or Estuarine species. Subclass: ASTEROIDEA, Starfishes.**

1.  *Astropecten euryacanthus (Lutken).*

**Sub class: OPHIUROIDEA.. Brittle stars.**

1. *Amphioplus hastatus (Ljungman).*
2. *Amphioplus laeois (Lyman).*
3. *Ophiactis delagoa (Balinsky).*
4. *Ophiactis modesta (Brock).*
5. *Ophiocremis marmorata (Larmarck).*

**Sub class: ECHINOIDEA, Sea-urchins.**

1. *Temnopleurus toreumaticus (Leske),*
2. *Clypeaster rarispinus (De Meijere).*
3. *Laganum decagonale (Blainville).*
4. *Echinodiscus auritus (Leske).*
5. *Stotus rapax (Kochler and Vaney).*
6. *Thorsomia investigatoris (Kochler and Vaney).*
7. *Acaudina molpadioides (Semper).*
8. *Paracaudina australis (Semper).*

**LIST OF ARTHROPODS**

 **Aquatic species :**

 **Class : CRUSTACEA**

**(a) Prawns and shrimps : -**

1. *Caridina gracilipes (De Man)*

*2. Macrobrachium rosenbergii (De Man).*

*3. Macrobrachium malcolmsonii (Milne – Edwards).*

1. *Macrobrachium rude (Heller)*
2. *Macrobrachium mirabile (Kemp)*
3. *Macrobrachium lamarrei (Milne – Edwards)*
4. *Macrobrachium scrabriculum (Heller).*
5. *Macrobrachium javanicum (Heller).*
6. *Metapenaeus affinis (Milne – Edwards.)*
7. *Metapenaeus brevicornis (Milne – Edwards).*
8. *Metapenaeus dobsoni (Miers)*
9. *Metapenaeus monoceros (Fabricius).*
10. *Palaemon styliferus (Milne – Edwards)*
11. *Palaemon tenuipes (Henderson)*
12. *Parapenaeopsis sculptilis (Heller)*
13. *Parapenaeopsis stylifera (Milne – Edwards)*
14. *Penaeus indicus (Milne- Edwards)*
15. *Penaeus monodon (Fabricius)*
16. *Acetes indicus (Milne – Edwards)*
17. *Acetes crythrae (Nobili)*
18. *Thalassina anomala – Mud Lobstar*

**(b) Crabs :**

1. Paratelphusa spinigera (Wood - Mason)
2. *Paratelphusa jacquemontii (Rathbun)*
3. *Paratelphusa hydrodromus*
4. *Varuna Littusta (Fabricius)*
5. *Scylla serrata (Forskal)*
6. *Matuta Planipes (Fabricius)*
7. *Portunus pelagicus (Linnaeus)*
8. *Portunus sanguinolentus*
9. *Charybdis rostrata A. (Milne Edwards)*
10. *Charybdis orimtalis (Herbst)*
11. *Charybdis ornate A. (M. Edw)*
12. *Charybdis merguiensis (De Man)*
13. *Sesarma bidens (De Hann)*
14. *Sesarma impressa (Milne Edwards)*
15. *Sesarma raticulatum (Say)*
16. *Sesarma tetragonum*
17. *Metaplax crenulata (Gerstaecker)*
18. *Metaplax dentipes (Heller)*
19. *Metaplax distincta (Milne Edwards)*
20. *Metaplax intesmedia (De Man)*
21. *Metapograpsus maculatus (Milne Edwards)*
22. *Metapograpsus messor (Forskal)*
23. *Matuta victor (Fabricius)*
24. *Matuta lunaris (Forskal)*
25. *Calappa lophos (Herbst)*
26. *Dorippe facchino (Herbst)*
27. *Lencosia craniolaris (Herbst)*
28. *Ethusa indica (Alcock)*
29. *Hymenicus (Wood – Mason & Alcock)*
30. *Hymenicus inachoides (Alcock)*
31. *Philyra globosa (De Man)*
32. *Philyra globulosa (Milne Edwards)*
33. *Doclea japonica (Ortman)*
34. *Doclea canalifera (Stimpson)*
35. *Uca lactea (Milne Edwards)*
36. *Uca annulipes (Milne Edwards)*
37. *Uca dussumieri (Milne Edwards)*
38. *Uca triangularis (Milne Edwards)*
39. *Macrophthalmus pectinipes (Guerin)*
40. *Illyoplax gangeticus (Kemp)*
41. *Dotilla blanfordi (Alcock)*
42. *Dotillopsis brevitarsus (De Mall)*
43. *Ocypode macrocera (Milne Edwards)*
44. *Scopimera globosa (De Haan*)

**(c) Hermit crabs:-**

1. *Coenobita cavipes (Stimpson.)*
2. *Diogenes avarus (Heller).*
3. *Clibanarius padavensis (De Man).*

**(d) Branchiopods : -**

*Artemia sp and cladocerans viz. Daphnia sp, Ceriodaphnia sp., Moina sp. Bosmina sp.,Bosminopsis sp, Diaphanosoma sp.Macrothrix sp., Triops sp.*

**(e) Copepods :-** *Diaptomus sp., Pseudodiaptomus sp., Cyclops sp., Microstella sp., Acartia sp., Calanus sp., Paraclanussp.,*

**(f) Branchiurans :-**  *Argulus sp.*

**(g) Cirripeds:-**  *Lepas sp., Balanus sp., Megabalanus sp., Chirona sp., Chelonibia sp., Octalasmis sp., Corchoderms sp.,*

**(h) Mysids** :- *Mesopodopsis sp.* *Cumaceons*

 *Tanaidaceans*

**(i) Isopods:-** *Bopyrus sp., Probopyrus sp., Palaegyge sp.,*

**(j)** **Amphipods:-**  *Eriopisa sp.*

**(k) Stomatopods:-** *Squilla sp., Lysiosquilla sp,*

**Class : INSECTA**

1. **Aquatic hemipterans-** *Ranatra sp, Belostoma sp, Micronecta sp.,*  *Plea sp, Laccotrephes sp.*
2. **Aquatic beetles** *Laccophilus sp., Canthydrus sp., Eretes sp. Hydrophilius sp.*

 **(c) Larval odonates** *Agriocnemis sp., Neurothemis sp., Ischnura sp., Pseudagrion sp., Ceriagrion sp, Brachythemis sp, Crocothemis sp, Pantafa sp., Acisoma sp.,*

**Terrestrial species**

**Class; INSECTA**

**(a) Orthoptera** *Gryllus sp. Gryllotalpa sp, Hieroglyphus sp, Acrotylus sp,*

**(b) Isopoda** *Coptotermes sp, Heterotermes sp.*

**(c) Odonata** *Pseudagrion decorum (Rambur), Ceriagrion coromandelianum (Fabricius), Ischnura senegalensis (Rambur), Urothemis signata Orthetrum sabina (Drury), Crocothemis servilia (Drury), Brachythemis contaminata (Fabricius), Trithemis pallidinervis (Kirby), Rhyothemis variegata (Linnaeus.), Ictinogomphus rapax (Rambur), Microdiplax cora (Brauer).*

**(d) Hemiptera:** *Ranatra varipes (Stal), Anisops breddini (Kirkaldy), Micronecta lucina (Distant), Micronecta merope, Nephotettix bipunctatus, Leptocorisa acuta,*

1. **Lepidoptera**  *Spodoptera mauritia (Boisduval).*
2. **Coleptera**  *Haltica cyama (Weber), Epicauta sp., Monanus*

 *concinnulus (Walker).*

**(g)Hymenoptera** *Apis dorsata, Sima rufonigra Menaforia indica*

 *(Gupta & Sexena), Enicospilus nocturus (Kohl).*

**(h) Diptera** *Psychoda bengalensis (Brunetti), Geranomyia*

*circiphnetata (Brunetti), G. faviocosta (Brun)., G. tridens (Brun), Phlebotomus argentipes (Ann. & Brun)., P. minutus, Aedes niveus (Ludlow), Anopheles subpictus (Grassi), Aedeomyia catasticta (Knab), Culex vishnui (Theobald)\_., Lutzia fuscana (Wiedmann)., Taeniorhynchus annuiiferus (Theobald)., T. Uniformis , Odontoneyia rubrithorax maeq., O. dorsoangulata, Chrysops dispar (Fabricius), Haematopota Javan (Wiedmann), Tabanus striatus (Fabricius)., Sepsis indica (Wiedmann)., Sarcophaga dux , S. Ruficornis (Fabricius)., Musca crassirostris (Stein). M. Pattoni (Austen)., M. seniorwhite Petton, Callphora vicina , Stomoxys calcitrans (Linnaeus)., S. indica Pie., Curiceapumila Wied., Cyrtoneura stobulans (Fli)., Lipsa pumila Wied.*

**Class: ARACHNIDA.**

**(a) Acarina** *Bakeriella ocimis (Chakrabarti & Mondal), Eriophyes pongamiae*

*(Chaunabasavanna). Aculops abutiloni Mondal & Chakraborty.*

**(b) Araneae** *Lencage decorata (Blackwell), Araneus Mitificus*

 *(Simon), Ecuta javanica (Thore), Hippasa sp., Oxopes sp.*

**(c) Xiphosura** *Carcinoscorpius rotundicauda, Tachypleus gigas.*

**LIST OF anneLida**

**(Aquatic or wet soil inhabiting species)**

**Class: POLYCHAETA (Bristle worms),**

**Order:**  *Phyllodocida:- Phyllodoce madervensis ( Langerhans),
Eteone barantollae (Fauvel), Gattyana deludens (Fauvel), Glycera alba (Muller), Glycera laucad- ive Schmarda, Glycera rouxii (Audouin & Milne-Edwards). Goniada emerita (Audouin & Milne-Edwards), Nephtys oligobranchia (Southern), Areistrosyllis constricta (Southern), Tehiesapia annandeli (Fauvel), Lepidonotus lenuisetosus (Gravier), Dendronereids heteropods , Dendronereids arborifera (Ehlers), Dendronereis aestuarina, Namalycastis indica (Southern), Lycastonereis indica (Rao), Nereis chingrighattensis (Fauvel), Nereis Gricogratha (Ehlers), Perineis nigropunetata (Horst),*

**Order:**  *Capitellidae: Heteromastus similis (Southern), Mastobranchus indicus.*

**Order:** *Stemaspida: Steraspis sentata (Rajani).*

**Order:**  *Spionida:- Polydora kempt (Southern), Prionospio cirrifera (Wiren), Spio bengalensis (Willey), Sebeliaria Pectinata (Var), Armandia intermedia (Fauvel).*

**Order:** *Eunicida:- Diopatra ciuprea (Bosc), Diopatra neapolitana (Delle Chiaje), Marphysa mossambica (Peters), Marphysa bonhardi (Maclntosh), Marphysa sanguinea (Montagu), Lumbrineris heteropoda , Lumbrineris notocirrata (Fauvel), Lumbrineris polydesma (Southern).*

**Order***: Terebellida:- Loimia medusa (Savigny).*

**Order:** *Sabellida:- Laonome indica (Southern).*

**LIST OF MOLLUSCA.**

**i) Freshwater species:-**

Class: Gastropoda *Bellamya bengalensis (Lamarck), Indoplanorbis exustus (Deshayes) Lymnaea acuminata (Lamarck), Meianoides scabra (Muller), Melanoides tuberculata (Muller), Pila globosa (Swainson),*

Class: Bivalvia *Lameuidens marginalis (Lamarck).*

1. **Brackishwater Species:-Class: Gastropoda:-**

Order: *Archaeogastropoda:- Potamacmaca fluviatilis (Blanferd), Cyclostrema indocens (Preston), Nerita articulata (Gould), Neritina smithi (Wood), Neritina violacea (Gmelin), Psendonerita sulculosa (Von Martens), Littorina scabra (Linnaeus). Littorina carinifera (Menke) Littorina melanostoma (Gray), Littorina undulata (Gray), Gangetia miliace (Nevill), Teliscopium teliscopium (Linnaeus,) Cerithidea cingulata (Gmelin)*

Class: *Bivalvia: Saccostrea cucullata, Anadara granosa, Sanguinolaria acuminata, Ostrea virginica.*

 **LIST OF SPECIES, THEIR FAMILIES AND LOCAL NAMES OF**

**PLANT RESOURCES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **Species** | **Local Name** | **Family** |
| 1. |  *Acanthus ilicifolius L.* | Harguza | Acanthaceae(s) |
| 2. | *A. volubilis Wall* | Lata Harguza  | Acanthaceae(s) (C) |
| 3. | *Aegialitis rotundifolia Roxb* | Tora  | Plumbagenaceae (S) |
| 4. | *Aegiceras carniculatum(L) Blanco* | Khalsi  | Myrsinaceae(T) |
| 5. | *Avicennia alba (Blume)* | Piara Baen  | Verbenaceae(T) |
| 6. | *A. marina**(Forsk) Vierh.* | Kala Baen  | - do- (T |
| 7 | *A. officinalis L.* | Jat Baen  | - do- (T) |
| 8 | *Aglaie cuculata (Roxb)Pellegrin* | Amur  | Meliaceae(T) |
| 9 | *Acrostichum aureum L* | Hodo | Pteridaceae(S) |
| 10 | *Brugruiera cylindrica (L)*  | Bakul | Rhizophoraceae(T) |
| 11 | *B. gymnorhiza (L) Lam.*  | Kankra | Rhizophoraceae(T) |
| 12 | *B. sexangula (Lour) Poirot*  | Kankra | Rhizophoraceae(T) |
| 13 | *B. parviflora (Roxb.) Wight and Arn.* | Lata-Sundari | Tiliaceae(S) |
| 14 | *Brownlowia tersa (L) Koster* | Bakul | Rhizophoraceae(T) |
| 15 | *Cerbera manghas Geartn* | Dakor | Apocynaceae(T) |
| 16 | *Clerodendrum inerme(L) Geartn.*  | Banjai | Verbenaceae(S) |
| 17 | *Caesalpinia bunducella (L) Roxb.* | Nate | Leguminoseae(S) |
| 18 | *C. cristata (L).* | Nate | Leguminoseae(S) |
| 19 | *Ceriops decandra (Gritt) Ding Hou.* | Jhamti or Jele Goran Math Goran | Rhizophoraceae(S) -do-(T) |
| 20 | *C. Tagal (Prrottet)**C.S. Robinson* | Math Goran | Rhizophoraceae(S) |
| 21 | *Cynometra iripa kostel* | Singra Kalilata | Leguminoseae(T) |
| 22 | *Derris scandens (Roxb)**Benth* | Kalilata | Leguminoseae(T) |
| 23 | *Dalbergia spinosa Roxb.* | - | Leguminoseae(C) |
| 24 | *D. heterophylia (Willd) Back and Bakh.* | Kalilata | - do - (C) |
| 25 | *Entada scandens Benth* | Gila | - do - (C) |
| 26 | *Excoecaria agollocha L* | Genwa | Euphorbiaceae(T) |
| 27 | *Finlaysonia obovata L.* | Dudhilata | Leguminoseae(C) |
| 28 | *Fimbristylis ferruginea* | - | Cyperaceae(H) |
| 29 | *Hemithrea compressus L.* | - | Graminae (gr.)  |
| 30 | *Heliotropium* | - | Chenopodiaceae(H) |
| 31 | *Heritiera fomes Buch-Ham.* | Sundari | Sterculiaceae(T) |
| 32 | *Hibiscus tilliaceous* | Bhola | Malvaceae(T) |
| 33 | *Kandelia candel (L) Druce.* | Garia | Malvaceae(T) |
| 34 | *Lumnitzera racemosa Wild* | Kripe | Combrataceae(T) |
| 35 | *Mukuna gigancea (Willd) D.C.* | – | Cucurbitaceae(C) |
| 36 | *Myriostachya wightiana**(Nessex Steud) Hook f.* | Ghash | Graminae(Gr) |
| 37 | *Nypa fruiticans Wurmb.* | Golpata | Palmae(T) |
| 38 | *Phoenix paludosa Roxb.* | Hental | Palmae(T) |
| **Sl.No** | **Species** | **Local Name** | **Family** |
| 39 | *Porterasia coarctata (Roxb.) Tateoca.* | Dhanighash | Poeceae(Gr) |
| 40 | *Pandanus tectorius Soland* | Keya | Pandenaceae(T) |
| 41 | *Pluchea indica Linn.* | - | - |
| 42 | *Rhizophora apiculata Blume* | Garjan | Rhizophoraceae(T) |
| 43 | *R. mucronata Lam.* | -do- | -do-(T) |
| 44 | *Sacharum cylindricum L.* | Ulu | Graminae(Gr) |
| 45 | *Suaeda nudiflora Mog.* | Gira sak | Chenopodiaceae(H) |
| 46 | *S. monoeca L.*  | Nonaguru | - do –(H) |
| 47 | *S. meritima Dumort.* | Nonaguri | - do –(H) |
| 48 | *Sesuvium portulicastrum L.* | Jadu Palang | Ficoidae(H) |
| 49 | *Salicornea brachiata Roxb.* | - | Chenopodiaceae(H) |
| 50 | *Salacia prinoides (Willd) D.C.* | - | Celastraceae |
| 51 | *Scirpus littorea Schrad* | - | Cyperaceae(H) |
| 52 | *Sonneratia apetala Buch-Han* | Kaera | Lythraceae(T) |
| 53 | *S. caseolaris (L) Engl.* | Ora | - do – (T) |
| 54 | *S. griffithii kurz.* | Ora | - do – (T) |
| 55 | *S. alba J. Smith* | Ora | - do – (T) |
| 56 | *Stenochlaena palustre Bold* | - |  |
| 57 | *Stichtocardia tilifolia Hallier F.* | - | Manispermaceae(C) |
| 58 | *Thespesia populnoides (Roxb.) Kostel.* | Paras  | Malvaceae(T) |
| 59 | *T. populnea (Linn.) Solex Carrea* | Paras | Malvaceae(T) |
| 60 | *Tamarix troupii Hole* | Nona Jhau | Tomaricaceae (T) |
| 61 | *T. dioica Roxb.* |  Nona Jhau | Tomaricaceae (T) |
| 62 | *Viscum orinetale van.* | - | Loranthaceae (C) |
| 63 | *Xylocarpus granatum Koenig.* | Dhundul | Meliaceae(T) |
| 64 | *X. mekongensis Pierre. (Syn. X. gangeticus Parkinson)* | Passur | - do –(T) |

**LIST OF PLANT SPECIES WITH CULTURAL VALUE**

*Acanthus ilicifolius .* Harguza

*Nypa fruiticans* . Golpata,

*Entada scandens Benth*, Gila

*Aegiceras carniculatum*  Khalsi

*Sonneratia apetala* Keora

**LIST OF NON-TIMBER FOREST PRODUCTS (NTFP) COLLECTED**

**FROM THE FOREST BY COMMON PEOPLE**

----------------------------------------------------------------------------- FISHES & other ntft

1. *Stroinateus sinensis Day* Promfret 2. *Liza parsia (*Hamilton*)*

1. *Liza tada (*Forsskal) Kalagachhi Bhagone.
2. *Liza microlepis (*Smith*)* Ram Parse.
3. *Mugil oephalus (*Linnaeus*)* Aadh Bhagone.
4. *Chunos Chunos* (Forsskal).
5. *Eutroplus suratensis* (Bloch) Chanda.
6. *Lates calcarifer* (Bloch) Bhetki.
7. *Elentheronema tetradactylum* (Shaw) Gurjaoli.

10. Tiger prawn Chingri

11. *Scylla serrata* Estuarine edible crab

12. Honey Madhu

13. Wax Mom

14. Keora fruit Use as fruit.

**FLORAL DIVERSITY**

**a) Species diversity in the Mangrove areas:**

**120 species of Algae and 124 species of Angiosperms**

**LIST OF ALGAE**

|  |  |
| --- | --- |
| **FAMILY** | SCIENTIFIC NAME |
| Cyanophyaceae | *Anabaena oryzae* |
|  | *Anabaena variabilis* |
|  | *Hydrocoleum lyngbyaceum* |
|  | *Lyngbya lutea* |
|  | *L. hieronymusiie* |
|  | *L. confervoides* |
|  | *L. martensiana* |
|  | *L. semiplena* |
|  | *Microcoleus chthonoplastes* |
|  | *Oscillatoria jasorvensis* |
|  | *O. princeps* |
|  | *O. subbrevis* |
|  | *O. tenuis* |
|  | *Phormidium fragile* |
|  | *Schizothrix lamyi* |
|  | *Xenococcus chaetomorphae* |
|  | *X. cladophorae* |
|  |
| Xanthophyceae | *Vaucheria erythrospora* |
|  | *V. prescotti* |
|  | *V. mayyanadensis* |
|  | *V. pronosperma* |
|  |
| Chlorophyceae | *Boodleopsis sundarbanensis* |
|  | *Chaetomorpha linum* |
|  | *C. aerea* |
|  | *C. gracilis* |
|  | *C. brachygona* |
|  | *Cladophora echinus* |
|  | *C. patentiramea* |
|  | *Cladophorella sundarbanensis* |
|  | *Enteromorpha tubulosa* |
|  | *E. intestinalis* |
|  | *E. prolifera* |
|  | *Lola implexa* |
|  | *L. cappillaris* |
| **FAMILY** | SCIENTIFIC NAME |
|  | *L. tortusa* |
|  | *Rhizoclonium riparium* |
|  | *Spirogyra sp.* |
|  | *R. hookeri* |
|  | *Ulva patengensis* |
|  | *U. lactuca* |
|  |
| Rhodophyaceae | *Acanthophora specifera* |
|  | *Bostrychia radicans* |
|  | *B. tenella* |
|  | *Caloglossaa leprieurii* |
|  | *Catenella repens* |
|  | *C. impudica* |
|  | *C. nipae* |
|  | *Pterosiphonia pennata* |
|  | *Polysiphonia adnata* |
|  | *Polysiphonia mollis* |
|  |  |
|  |  |

## LISTS OF ANGIOSPERMS

**Mangroves Species**

|  |  |
| --- | --- |
| **FAMILY** | SCIENTIFIC NAME |
| Arecaceae | Nypa fruiticans  |
|  |
| Avicenniaceae | Avicennia officinalis |
|  | A. alba |
|  | A. marina |
|  |
| Combretaceae | Lumnitzera racemosa |
|  |
| Euphorbiaceae | Excoecaria agallocha |
|  |
| Meliaceae | Xylocarpus granatum |
|  | X. mekongensis |
|  |
| Myrsinaceae | Aegiceros corniculatum |
|  |
| Plumbaginaceae | Aegialitis rotundifolia |
|  |
| Rhizophoraceae | Rhizophora mucronata |
|  | R. apiculata |
|  | Bruguiera gymnorrhiza |
|  | B. sexangula |
| **FAMILY** | SCIENTIFIC NAME |
|  | B. cylindrica |
|  | B. parviflora |
|  | Ceriops decandra |
|  | C. tagal |
|  | Kandelia candel |
|  |
| Rubiaceae | Scyphiphora hydrophyllacea |
|  |
| Sonneratiaceae | Sonneratia apetala |
|  | S. griffithii |
|  | S. caseolaris |
|  | S. alba |
|  |
| Sterculiaceae | *Heritiera fomes* |
|  |

Mangrove Associates and Back Mangals

|  |  |
| --- | --- |
| **FAMILY** | SCIENTIFIC NAME |
| Acanthaceae | *Acanthus ilicifolius* |
|  | *A. volubilis* |
|  |
| Arecaceae | *Phoenix paludosa* |
|  |
| Caesalpiniaceae | *Cynometra ramifera* |
|  | *Caesalpinia bonduc* |
|  | *C. crista* |
|  |
| Malvaceae | *Hibiscus tiliaceous* |
|  | *H. tortuosus* |
|  | *Thespesia populnea* |
|  |
| Papilionaceae | *Dalbergia spinosa* |
|  | *Derris scandens* |
|  | *D. trifoliata* |
|  | *D. indica* |
|  |
| Rutaceae | *Atlantia correa*  |
|  |
| Tiliaceae | *Brownlowia tersa*  |
|  |

**Halophytic plants in the Intertidal Mangrove Zone**

|  |  |
| --- | --- |
| **FAMILY** | SCIENTIFIC NAME |
| Amaryllidaceae | *Crinum defixum* |
|  |
| Araceae | *Cryptocorne ciliata* |
|  |
| Aizoaceae | *Sesuvium portulacustrum* |
|  | *Trianthema portulacustrum* |
|  | *T. triquetra* |
|  |
| Asclepiadaceae | *Sarcolobus globosus* |
|  | *S. carinatus* |
|  | *Pentatropis capensis* |
|  |
| Boraginaceae | *Heliotropium curassavicum* |
|  |
| Convolvulaceae | *Ipomoea pes-caprae* |
|  |
| Rubiaceae | *Hydrophylax maritima* |
|  |
| Verbenaceae | *Clerodendrum inerme* |
|  |
| Loranthaceae | *Viscum orientale* |
|  | *Dendrophthoe falcata* |
|  |
| Poaceae | *Porteresia coarctata*  |
|  |

**Xerophytic Plants of the Mangrove areas**

#

|  |  |
| --- | --- |
| **FAMILY** | SCIENTIFIC NAME |
| Tamaricaceae | *Tamarix gallica* |
|  |
| Solanaceae | *Solanum trilobatum* |
|  |
| Opuntiaceae | *Opuntia dillenii* |
|  |

**b) Community diversity in the Mangrove areas:**

|  |  |  |  |
| --- | --- | --- | --- |
| 1st ZONE | Inundated with all the high tides- 30days in a month – river flats, mud flats & river slopes.(Silted up, rapid formative zones) | *Avicennia sp., Sonneratia sp., Aegiceros sp., Acanthus sp., Rhizophora apiculata, Scyphiphora sp.,Nypa sp.,Aegialitis sp.,Porteresia sp., Suaeda sp., Salicornia sp., Crinum sp., Cyperus sp., Cryptocorne sp., Myriostachya sp., Fimbristylis sp., Sesuvium sp.* | Major elements & Minor elements of Mangrove and Mangrove associates |
| 2nd ZONE | Inundated during medium high tides – 20 days in a month – river banks and ridge forests (Occasionally eroded steep land) | *Rhizophora sp., Bruguiera sp., Ceriops sp., Kandelia sp., Lumnitzera sp., Brownlowia sp., Xylocarpus sp., Phoenix sp., Dalbergia sp., Derris sp., Excoecaria sp., Sarcolobus sp., Acanthus sp., Heritiera sp., Scyphiphora sp., Viscum sp., Macrosolen sp.* | Major elements and Minor elements of Mangrove and Mangrove Associates |
| 3rd ZONE | Inundated during normal high tides – 15 days in a month – ridge forests (flat land with dense vegetation) | *Ceriops sp., Avicennia sp., Heritiera sp., Aegilitis sp., Xylocarpus sp., Excoecaria sp., Caesalpinia sp., Cynometra sp.* | Minor elements, Mangrove Associates and Back Mangrove |
| 4th ZONE | Inundated during spring tides – 10 days in a month – ridge forests (Flat lands with dense/sparce vegetation and salty patches | *Excoecaria sp., Ceriops sp., Clerodendrum sp., Hibiscus sp., Thespesia sp., Acrostichum sp., Cynometra sp., Heliotropium sp.* | Minor elements, Mangrove Associates, and Back Mangrove |
| 5th ZONE | Inundated during abnormal/equinoctial tides 5 days in a month, during monsoon and summer – ridge forests, sparce vegetation and reclaimed/naked areas | *Sessuvium sp., Solanum sp.,Heliotropium sp., Hibiscus sp., Thespesia sp., Acrostichum sp., Tamarix sp.* | Back Mangal |
| 6th ZONE | Above the tidal reaches – deltaic regions of the Lower Gangetic delta colonised with – mangrove associates mesophytic, halophytic and xerophytic plants (Naskar, 1933 has reported 1100 angiosperms from these Lower Gangetic Regions of 24-Parganas (S & N) West Bengal) | Non-littoral Plants |

**c) Ecosystem diversity – Mangrove ecosystem, Wetland ecosystem and Inland Forest Ecosystem**

###### Limiting factors for Flora

1. Temperature
2. Salinity
3. Presence of fresh water
4. Tidal fluctuation
5. Substrate and wave energy
6. Shelter

**FAUNAL DIVERSITY**

**a) Species diversity in the Mangrove areas:**

163 species of Birds, 40 species of mammals, 56 species of reptiles, 165 species of fish, 8 species of prawns, 67 species of crabs, 23

LISTS OF BIRDS

|  |  |
| --- | --- |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Acridotheres fuscus* | Jungle Myna |
| *Acridotheris tristis* | Common Myna |
| *Actitis hypoleucos*  | Common Sandpiper |
| *Aegithina tiphia* | Common Iora |
| *Alcedo atthis* | Common Kingfisher |
| *Amaurornis phoenicurus* | White-breasted Waterhen |
| *Anastomus oscitans* | Asian Openbill stork |
| *Anas strepera* | Gad wall |
| *Anas falcata* | Falcated Duck |
| *Anas penelope* | Eurasian Wigeon |
| *Anas clypeata* | Northern Shoveler |
| *Anas acuta* | Northern Pintail |
| *Ardea alba*  | Large Egret |
| *Ardea cinerea* | Grey Heron |
| *Ardea goliath* | Goliath Heron |
| *Ardea purpurea* | Purple Heron |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Ardeola grayii* | Pond Heron or paddy bird |
| *Ardeola striatus* | Little green Heron |
| *Artamus fuscus* | Ashy swallow-shrike |
| *Athene brama* | Spotted Owlet |
| *Aythya baeri* | Baer’s Pochard |
| *Aythya nyroca* | Common Pochard |
| *Aythya fuligula* | Tufted Duck |
| *Bubulcus ibis* | Cattle Egret |
| *Butorides striatus* | Little Heron |
| *Calidris alba* | Sanderling |
| *Caprimulgus macrurus* | Large tailed Nightjar |
| *Casmerodius albus* | Great Egret |
| *Centropus sinensis* | Crow-pheasant or Coucal |
| *Ceryle rudis* | Lesser pied Kingfisher |
| *Charadrius dubius* | Little ringed Plover |
| *Charadrius leschenaultii* | Large sand Plover |
| *Charadrius mongolus* | Lesser sand Plover |
| *Chlidonius hybridus* | Whisked Tern |
| *Chrysocolaptes lucidus* | Greater Flameback |
| *Calmator jacobinus* | Pied Cuckoo |
| *Copsychus saularis* | Magpie-robin or Dovel |
| *Coriacias benghalensis* | Indian Roller |
| *Coracina macei* | Large Cuckooshrike |
| *Coracina melanoptera* | Black headed Cuckooshrike |
| *Coracina melaschistos* | Black winged Cuckooshrike |
| *Corvus splendens* | House Crow |
| *Cuculus micropterus* | Indian Cuckoo |
| *Cypsiurus parvus*  | Palm Swift |
| *Dendrocitta vagabunda* | Indian tree pie |
| *Dendrocopus macei* | Fulvous breasted woodpecker |
| *Dendrocopus mahrattensis* |  Yellow crowned woodpecker |
| *Denrocygna javanica* | Lesser whistling Teal |
| *Dendronanthus indicus* | Forest Wagtail |
| *Dicaeum cruentatum* | Scarletbacked Flowerpecker |
| *Dicrurus adsimilis* | Black Drongo |
| *Dicrurus aenus* | Bronze Drongo |
| *Dicrurus hottentottus* | Spangled Drongo |
| *Dinopium benghalense* | Lesser goldenbacked Woodpecker |
| *Dupetorflavicollis* | Black Bittern |
| *Ephippirhynctus asiaticus* | Black-necked Stork |
| *Egretta garzetta*  | Little Egret |
| *Eudynamys scolopacea* | Asian Koel |
| *Falco chicquera* | Redheaded Merlin |
| *Francolinus gularis* | Swamp Partridge |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Gallus gallus* | Red jungle Fowl |
| *Gelocheidon nilotica* | Gull-billed Tern |
| *Gyps bengalensis* | Indian whiteback Vulture |
| *Haematopus ostralegus* | Eurasian Ovstercatcher |
| *Halcyon amauroptera* | Brown winged Kingfisher |
| *Halcyon capensis* | Stork billed Kingfisher |
| *Halcyon chloris* | White collared Kingfisher |

## LIST OF MAMMALS

|  |  |
| --- | --- |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Aonyx cinerea* | Clawless Otter |
| *Axis axis* | Chital or spotted Dear |
| *Felis chaus* | Jungle Cat |
| *Globicephala macrorhyncha* | Indian pilot Whale |
| *Lutra lutra* | Common Otter |
| *Lutrogale perspicillata* |  Smooth Indian Otter |
| *Macaca mulatta* | Rhesus Macaqua |
| *Orcaella brevirostris* | Irawaddy Dolphin |
| *Platanista gangetica* | Gangetic Dolphin |
| *Prionailurus viverrinus* | Fishing Cat |
| *Sus scrofa* | Wild Boar |
| *Panthera tigris* | Tiger |

## LIST OF REPTILES

|  |  |
| --- | --- |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Crocodylus porsus* | Estuarine Crocodile |
| *Varanus salvator* | Water Monitor |
| *Ophiophagus hannah* | King Cobra |

LIST OF FISHES

|  |  |
| --- | --- |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| **FINFISH** |
| *Aetobatus narinari* (Blainville) |  |
| *Aetomylaeus nichofii* (Schneider) |  |
| *Aorichthys aor* (Hamilton) |  |
| *Anadontostoma chacunda* (Hamilton) | Khoira |
| *Anguilla bengalensis* (Gray) |  |
| *Arius caelatus* (Valenciennes) | Aar |
| *Arius gagora* (Hamilton) |  |
| *Arius jella* (Day) |  |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Arius sona* (Hamilton) |  |
| *Bagarius bagarius* (Ham.) |  |
| *Boleophthalmus boddaerti* (Val.) |  |
| *Caranx carangus* (Bloch) |  |
| *Carcharhinus melanopterus* (Quoy & Gaimard) |  |
| *Chanda nama* (Hamilton) |  |
| *Chanos chanos* (Forsskal) |  |
| *Chirocentrus dorab* (Forsskal) |  |
| *Coilia dussumieri* (Valenciennes) | Amudi |
| *Coilia ramcarati* (Hamilton) | Ramcarati/Amudi |
| *Corica soborna* (Hamilton) |  |
| *Cynoglossus cynoglossus* (Hamilton) |  |
| *Datnoides quadrifasciatus* (Sovas.) |  |
| *Daysciaena albida* (Cuvier) |  |
| *Drepane punctata* (Linn.) |  |
| *Eleutheronema tetradactylum* | Gurjaoli |
| *Enpleurogrammus muticus* (Gray) |  |
| *Etroplus suratensis* (Bloch) | Chanda |
| *Euryglossa pan* (Ham.) |  |
| *Gadusia chapra* (Hamilton) |  |
| *Gazza minuta* (Bloch) |  |
| *Gerreomorpha setifer* (Ham.) |  |
| *Gerres oyena* (Forsskal) |  |
| *Glossogobius guiris* (Ham.) |  |
| *Harpadon nehereus* (Hamilton) | Bomla/Lottay/Nehera |
| *Hilsa ilisha* (Hamilton) | Ilisha |
| *Hilsa toli* (Cuvier) |  |
| *Himantura marginata* (Blyth) |  |
| *Ilisha elongata* (Bennett) |  |
| *Johnius sina* (Cuvier) |  |
| *Johnius vogleri* (Bleeker) |  |
| *Lates calcarifer* (Bloch) | Bhetki |
| *Leiognathus blochii* (Val.) |  |
| *Leiognathus fasciatus* (Lacepede) |  |
| *Lepturacanthus gangeticus* (Gupta) |  |
| *Lepturacanthus savala* (Cuvier) |  |
| *Liza microlepis* (Smith) | Ram Parse |
| *Liza parsia* (Ham.) | Parse |
| *Liza tade* (Forsskal) | Kalagachri, Bhagone |
| *Lutjanus argentimaculatus* (Forsskal) |  |
| *Lutjanus johni* (Bloch) |  |
| *Megalops cyprinoides* (Broussouet) |  |
| *Megalaspis cordyla* (Linn.) |  |
| *Mugil cephalus* (Linn.) | Aadh Bhagone |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| *Muraenesox cinereus* (Forsskal) |  |
| *Mystus cavasius* (Hamilton) |  |
| *Mystus gulio* (Hamilton) | Nona Tangra |
| *Mystus vittatus* (Bloch) |  |
| *Nematolosa nasus* (Bloch) |  |
| *Nibea soldado* (Lacepede) |  |
| *Odontamblyopus rubicundus* (Ham.) |  |
| *Osteogeniosus militaris* (Linn.) | Gadi-Tangra |
| *Otolithoides biauritus* (Cantor) |  |
| *Pama pama* (Ham.) | Bhola |
| *Pampus argenteus* (Euphrasen) |  |
| *Pampus chinensis* (Euphrasen) |  |
| *Pangasius pangasius* (Hamilton) | Pangas |
| *Parambassis ranga* (Ham.) |  |
| *Pellona ditchela* (Valenciannes) | Dhala |
| *Plotossus canius* (Hamilton) | Kanmagur |
| *Polydactylus indicus* (Shaw) |  |
| *Polynemus paradiseus* (Linn.) |  |
| *Pomadasys argenteus* (Forsskal) |  |
| *Pomadasys hasta* (Bloch) |  |
| *Pseudapocryptes lanceolatus* (Bl. & Sch.) |  |
| *Raconda russeliana* (Gray) |  |
| *Rhinomugil corsula* (Ham.) | Khorsula |
| *Rhizoprionodon acutus* (Rupell) |  |
| *Scatophagus argus* (Linn.) | Butter fish/Paira-toli |
| *Scoliodon laticaudus* (Muller & Henle) |  |
| *Scomberomorus commerson* (Lacepede) |  |
| *Setipinna phasa* (Hamilton) | Phasa |
| *Setipinna taty* (Valenciennes) | Phasa |
| *Sillaginopsis panijus* (Hamilton) | Tul Bele |
| *Sillago sihama* (Forsskal) |  |
| *Silonia silondia* (Hamilton) |  |
| *Stromateus sinensis* (Day) | Pomfret |
| *Terapon jarbua* (Forsskal) | Kat Kai |
| *Thyrssa hamiltoni* (Gray) | Phasa |
| *Thyrssa purava* (Hamilton) | Phasa |
| *Trichiurus pantului* (Gupta) |  |
| *Valamugil cunnesius* (Val.) |  |
| *Valamugil speigleri* (Bleeker) |  |
| *Xenentodon cancila* (Ham.) |  |

|  |  |
| --- | --- |
| **SCIENTIFIC NAME** | **COMMON NAME** |
| **SHELLFISH** |
| *Acetes erythraeus* (Nobili) |  |
| *Acetes indicus* (Milne-Edw) |  |
| *Macrobrachium lamarrei* (Milne-Edw) |  |
| *Macrobrachium rosenbergii* (Fab.) |  |
| *Metapenaeus monoceros* (Fabricius) |  |
| *Metapenaeus brevicornis* (Milne-Edw) |  |
| *Palaemon rude* (Heller) |  |
| *Palaemon styliferus* (Milne-Edw.) |  |
| *Parapanaeopsis sculptilis* (Hellar) |  |
| *Parapanaeopsis stylifera* (Milne-Edw) |  |
| *Penaeus monodon* (Fabricius) |  |
| *Penaeus indicus* (Edwards) |  |

**c) Ecosystem diversity – Mangrove ecosystem, Wetland ecosystem and Inland Forest Ecosystem**

###### Limiting factors for Fauna

1. Temperature
2. Salinity
3. Presence of fresh water
4. Tidal fluctuation
5. Substrate and wave energy
6. Shelter

**RARE AND ENDANGERED BIO-RESOURCES**

***FLORA***

*Acanthus volubilis*, *Kandelia candal, Nypa fruiticans, Sonneratia alba, S. casaeolaris, Aegialitis rotundifolia, Xylocarpus granatum, Heritiera fomes, Ceriops tagal, Lumnitzera recemosa*

***FAUNA***

*Panthera tigris tigris, Crocodilus porasus, Felis viverrina, F. bengalensis, Pratanista gangotica, Varanus salvator, Varanus flaveseens, Lipidochelys olivacea, Eretmochetys imbricata, Chelonia myrdus, Ardea goliath.*

 **SPECIES OF CONSERVATION INTEREST**

***FLORA***

*Heritiera fomes* (Sundari), *Nypa fruiticans* (Golpata), *Excoecaria agallocha* (Genwa), *Ceriops decandra* (Goran), *Avicennia alba* (Baen)

***FAUNA***

*Panthera tigris tigris* (Tiger), *Crocodilus porasus* (Salt Water Crocodile)

**KEY STONE SPECIES**

*Panthera tigris tigris*

**REPRESENTATIVES OF BIO-RESOURCES**

*Heritiera fomes* (Sundari), *Xylocarpus mekongensis (*Pasur), *Avicennia sp.* (Baen), *Xylocarpus granatum* (Dhundul), *Excoecaria agallocha* (Genwa), *Ceriops sp.* (Goran), *Nypa fruiticans* (Golpata), *Phoenix paludosa* (Hental)

**NATURALNESS (NATIVITY) OF BIO-RESOURCES**

Mangrove vegetation inhabited by tigers

**UNIQUENESS (ENDEMISM) OF BIO-RESOURCES**

*Nypa fruiticans, Heritiera fomes,* Gangetic Dolphin, Olive Ridle turtle, *Panthera tigris tigris* (Royal Bengal Tiger)

**CULTIVATED RESOURCES**

Pisciculture, Apiculture

**RESOURCES FROM THE WILD**

Timber, honey, wax, fish, prawn, crab.

**STATEMENT OF SIGNIFICANCE**

This MPCA is with in the area of Sunderban Biosphere Reserve and the statement of significance is same as that of the statement of significance of Sunderban Biosphere Reserve.