BRIEF OF 10 NEW RAMSAR SITES

1. Koonthankulam Bird Sanctuary (Tamilnadu): Koonthankulam Bird Sanctuary is a significant man-made wetland which covers an area of 72.04 ha. It is situated in Nanguneri Taluk of Tirunelveli district of **Tamil Nadu**. This is the largest reserve for breeding resident and migratory water birds in South India. It is an Important Bird and Biodiversity Area forming part of the Central Asian Flyway. It irrigates about 190 acres of paddy.



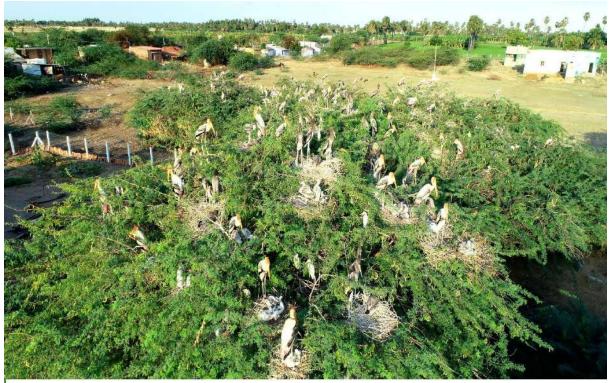
Figure: Aerial view of Koonthankulam Sanctuary



Figure: Koonthankulam: Flamingos feeding in the Tank area



KOONTHANKULAM BIRD SANCTUAR-BAR HEADED GOOSE FEEDING IN NEARBY PADY FIELD



KOONTHANKULAM BIRD SANCTUARY - PAINTED STORK NESTING GROUND IN KOONTHANKULAM VILLAGE

2. Satkosia Gorge (Odisha): Satkosia spreads along the magnificent gorge over the mighty river Mahanadi in Odisha. Established in 1976 as a wildlife sanctuary, Satkosia supports a rich ecosystem, representing a diverse population of floral and faunal species. Satkosia is the meeting point of two biogeographic regions of India; the Deccan Peninsula and the Eastern Ghats, contributing immense biodiversity. Satkosia Gorge wetland is a mosaic of marshes and evergreen forests. The forests of these catchments play a vital role in the prevention of the gorge siltation. It also helps in maintaining a specific desirable depth of water crucial for the endangered gharial population and spawning of commercially important carps species.

Figure: Arial View: Satkosia Gorge wetland and adjoining forested landscape



Figure: Arial View: Satkosia Gorge





Figure: Satkosia Gorge: Great Egret



Figure: Satkosia Gorge: Indian Skimmer

3. Nanda Lake (Goa): Nanda Lake is considered to be critically significant for its ecosystem services and biodiversity values for the local communities and society at large. The majority of the area is intermittent freshwater marshes that lie adjacent to one of the major rivulets of the Zuari River. This enables the locals to store the water during the off-monsoon season. The stored water is also utilized to cultivate paddy downstream of the lake and supports fishing and recreation. While during the monsoons the sluice gate is opened and the water is released which changes the character of the lake into a marshland. During this time the marshland is also utilized to grow paddy. This lake is habitat for notable faunal species include Threskiornis melanocephalus (Black-headed ibis), Alcedoatthis (Common kingfisher), Hirundo smithii (Wire-tailed swallow), Metopidius indicus (Bronze-winged jacana), Haliastur indus (Brahminykite), Ardea intermedia (Intermediate egret), Vanellus indicus (Red-wattled lapwing), Microcarbo niger (Little cormorant) and Dendrocygna javanica (Lesser whistling duck).



Figure: View of the Nanda Lake.



Figure: View of the Nanda Lake



Figure: View of the Nanda Lake



Figure: View of the Nanda Lake

4. Gulf of Mannar Marine Biosphere Reserve (Tamil Nadu): Gulf of Mannar Biosphere Reserve (GoMBR), is located in the southeastern coastline of India, and is a unique marine environment rich in biodiversity. This is the first Marine Biosphere Reserve in South & South -East Asia. GoMBR is one of the most biologically diverse regions in India, comprising 117 species of corals, >450 species of fishes, 4 species of sea turtles, 38 species of crabs, 2 species of lobsters, 12 species of sea grasses, 147 species of marine algae, 160 species of birds, 641 species of crustaceans, 108 species of sponges, 731 species of molluscs, 99 species of echinoderms, 4 species of sea horses, 12 species of sea snakes, besides 11 species of mangroves. The Reserve is also home to several globally important and highly threatened species like the Dugong, whale shark, sea horses, Balanoglossus,

green sea turtle, Hawksbill turtle, dolphins, sacred chanks etc. **Figure:** Sea Grass over shallow water surface.





Figure: Panoramic view of Gulf of Mannar Marine Biosphere Reserve.



Figure: Gulf of Mannar Marine Biosphere Reserve: Dugong



Figure: Mangrove cover in Mannar Biosphere Reserve



Figure: Gulf of Mannar Marine Biosphere Reserve - Olive ridley Turtle, corals

5. Ranganathittu Bird Sanctuary (Karnataka): Ranganthittu bird sanctuary is located in Mandya district, of the state of Karnataka, India. The site has been enlisted as one of the Important Bird Areas (IBA) in Karnataka and India by Bombay Natural History Society. It is an ecologically important riverine wetland of India, rich in biodiversity, with 188 species of plants, over 225 species of birds, 69 species of fishes, 13 species of frogs, and 30 species of butterflies. The site supports several threatened taxa which include two critically endangered species of fishes, six endangered species (bird: 1, fishes: 4, frog 1), and nine species of vulnerable species (mammal:1., reptile: 1, birds 5, fishes: 2). Besides, it also supports one species each of endangered, vulnerable, and endemic plant species, and about 98 medicinal plant species. This proposed site supports healthy populations of mugger crocodiles (Crocodylus palustris), smooth-coated otter (Lutrogale perspicillata) and the river waters harbour the endangered hump-backed masheer (Tor remadevii).



Figure: Devaraja Island on the wetland.



Figure: Avian species (Indian Cormorant) spotted in the wetland.



Figure: Arial view Ranganathittu Bird Sanctuary



Figure: Cattle Egret Bubulcus ibis nesting at Ranganathittu

6. Vembannur Wetland Complex (Tamil Nadu): Vembannur wetland in **Tamil Nadu** is a human-made inland tank. Vembannur wetland forms the southernmost tip of peninsular India. This wetland forms part of the Important Bird and Biodiversity Area (IBA) and hence part of BirdLife International Data Zone. About 250 species of birds have been recorded in the district. The site hosts around 12% of the total non-breeding population of garganey. Around 5 rare, endemic &threatened flora are present within the Site. The tank is believed to have been constructed in the regime of Pandyan king Veeranarayana. The tank and the Therrakal canal were designed to take water from River Pazhayar for irrigation

purposes. The River Pazhayar and Vembannur wetland collects the entire drainage of the valley and irrigates a substantial part of Nanchilwadu.



Figure: Vembannur Wetland - Avian species (Intermediate egret) spotted in the wetland.



Figure: Vembannur Wetland - Indian Pond Heron.

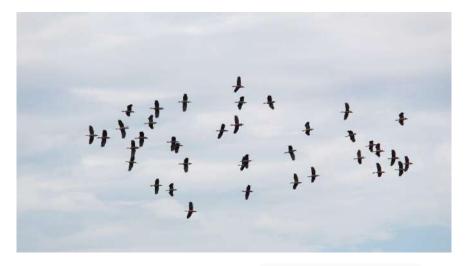


Figure: Vembannur Wetland - Flock of lesser whistling duck



Figure: Vembannur Wetland

7. Vellode Bird Sanctuary (Tamil Nadu): Vellode Bird Sanctuary is located in the Vadamugam Vellode Village of the Perundurai Taluk, located in the Erode District, Tamil Nadu, India. Vellode Bird Sanctuary provincially known as Periyakulam Yeri is one of the 141 Prioritized wetlands in Tamil Nadu. The wetlands have been evaluated and prioritized considering factors like the ecology of the wetland, earlier bird counts, records of breeding, and roosting colonies. Spread over an area of 77.185 ha, this site forms part of the Central Asian Flyway. Out of the nine Ramsar criteria, this site satisfies criteria 2, 3 and 5 respectively.



Figure: Panoramic view of Vellode Bird Sanctuary



Figure: Avian nesting grounds in Vellode Bird Sanctuary



Figure: Panoramic view of Vellode Bird Sanctuary



Figure: Vibrant Winged at Vellode Bird Sanctuary

8. Sirpur Wetland (Madhya Pradesh): Sirpur wetland is a significant historical wetland situated in Indore, Madhya Pradesh. It is not only important for its aesthetic value but it provides immense ecological services such as being an important source of water and helping groundwater recharge in the downstream areas. Sirpur wetland is also culturally important to the local communities of the city. The wetland supports a wide variety of flora and fauna. It is an important nesting place for terrestrial and aquatic migratory & residential birds. The diverse flora & fauna provides ideal habitat in the form of food and shelter for a large number of migratory birds during the winter season. Presently, the wetland is being developed as a bird sanctuary and ecological learning center.



Figure: Migration Season in the wetland.



Figure: Resting site of Heronry birds.



Figure: Sirpur wetland: Fishing Activities



Figure: Watwrbirds at Sirpur lake

9. Vedanthangal Bird Sanctuary (Tamil Nadu): Vedanthangal wetland is one of the oldest bird-protected areas located in Maduranthagam Taluk of Chengalpattu District of Tamil Nadu. This freshwater wetland is a people-protected water bird area, the history of which goes back to centuries where local people have been protecting this heronry and in return, have been benefited by the manure-rich water from the lake that increases the agriculture yield multifold—Liquid Guano Effect. This site is also recognized internationally, as an Important Bird and Biodiversity Area (IBA). It belongs to the Coromandel Coast biotic province.



Figure: Panoramic view of the Vedanthangal



Figure: Panoramic view of the Vedanthangal



Figure: Foraging ground in Vedanthangal



Figure: Nesting grounds in Vedanthangal

10. Udhayamarthandapuram Bird Sanctuary (Tamil Nadu): Udhayamarthandapuram Bird Sanctuary is located in the Tiruthuraipoondi Taluk of Tiruvarur district of Tamil Nadu. This is one of the important bird sanctuaries in Tamil Nadu. The site is an important staging and breeding ground for several species of waterbirds. The notable species observed at the site are oriental darter, glossy ibis, grey Heron &Eurasian spoonbill. It is one of the important breeding sites for the darter & Eurasian spoonbill. Udhayamarthandapuram stores floodwaters during monsoon overflows and maintains surface water flow during drier periods.



Figure: Panoramic view of the bird sanctuary



Figure: Udhayamarthandapuram wetland.



 $\textbf{Figure:} \ Udhayamarthan dapuram \ wetland: Waterbirds$



Figure: Udhayamarthandapuram wetland: Glossy Ibis and Red Wattled Lapwing