

RAMSAR SITES IN TAMIL NADU



P.BANU PRIYA

Foreword

Ramsar site is a great recognition to any wetland conservation. Till couple of months back the state of Tamil Nadu has only one Ramsar site i.e., Point Calimere wetland complex situated in Nagapattinam and Thiruvarur districts of Tamil Nadu. A strenuous effort was made by Tamil Nadu forest department to bring most of the inland water bird sanctuaries into Ramsar sites and their efforts bore the fruit and 13 inland and 1 coastal wetlands were successfully added to the list. It is a great honour to the Wildlife and Wetland conservation efforts of the State of Tamil Nadu. A useful attempt has been made by Ms.P.Banupriya, State Forest Service Officer Trainee of 2020-2022 batch from Tamil Nadu to bring out a booklet on Ramsar sites of Tamil Nadu.

I compliment her efforts in bringing out this booklet. This compilation gives an overall view about various sites. It can be used as a guide to promote tourism. It is a useful booklet for the field managers, Scientists, researchers, school and college students and general public. I wish her to bring out more useful booklets and publications during her service.

Best Wishes.



V. Thirunavukarasu, IFS
APCCF & Principal
CASFOS, Coimbatore

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RAMSAR SITES IN TAMILNADU

WETLANDS

According to the Union Ministry for Environment and Forests and Climate Change, wetlands are areas of marsh, fen, peat land or water, natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt. These include areas of marine water, the depth of which at low tide does not exceed 6m, but does not include river channels, paddy fields, manmade waterbodies/tanks constructed for drinking water purposes. There are 24,684 wetlands have been identified in wetland area 9,02,534 ha which is 6.92 % of the geographic area as per National Wetland Atlas published by Space Application Centre, Ahmedabad.



The wetlands in Tamilnadu are categorized into inland wetlands - Natural & man made and Coastal wetlands - Natural & man made Lakes /Ponds and Tanks/Ponds are the dominant wetland types in almost all districts. In coastal areas, Lagoons, inter tidal mudflats and Saltpans are dominant wetland types.

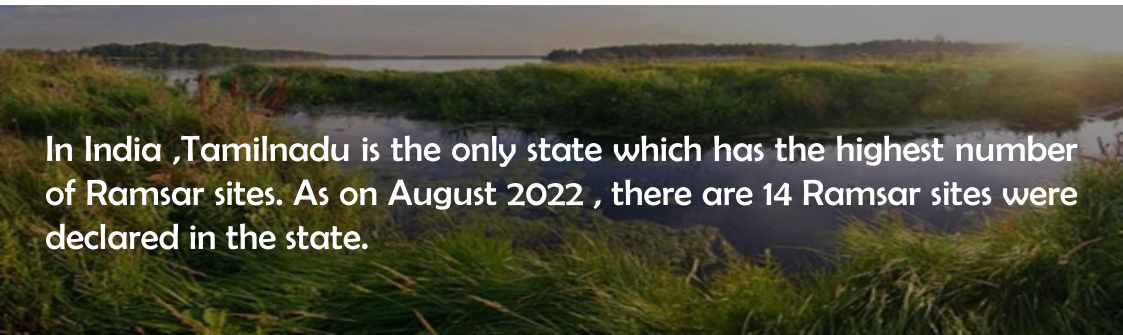


ABOUT RAMSAR SITES

The Ramsar Convention is an International treaty for the conservation and sustainable utilization of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational values.

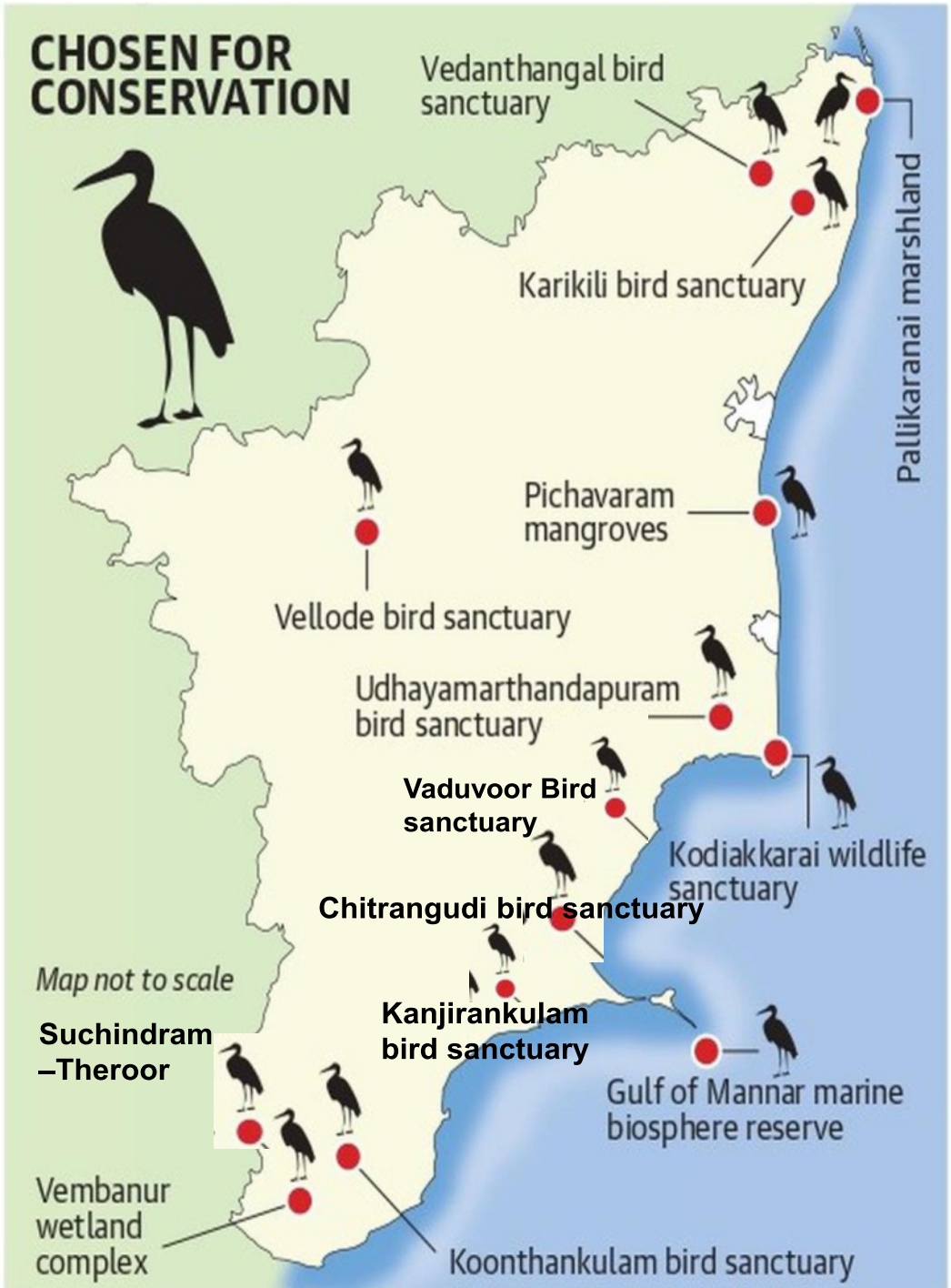
Any wetland must meet at least one of the nine criteria to be selected as a Ramsar site ,

1. If the wetland contains a representative, rare or unique example of a natural or near-natural wetland type found within the appropriate bio geographic region.
2. If it supports vulnerable, endangered or critically endangered species or threatened ecological communities.
3. If it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.
4. If it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
5. If it regularly supports 20,000 or more waterbirds.
6. If it regularly supports 1% of the individuals in a population of one species or subspecies of a waterbirds.
7. If it supports a significant proportion of indigenous fish subspecies, species or families, life stages, species interactions and/ or populations that are representative of wetland benefits and/or values, and thereby contributes to the global biological diversity
8. If it is an important source of food for fishes and is a spawning ground nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.
9. If it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species.



In India ,Tamilnadu is the only state which has the highest number of Ramsar sites. As on August 2022 , there are 14 Ramsar sites were declared in the state.

Ramsar sites Map



1. GULF OF MANNAR MARINE BIOSPHERE RESERVE

Area 526.72 sq.km

Date of Declaration 04.08.2022



Location Coastal regions of Thoothukkudi and Ramanathapuram District.

The Gulf of Mannar endowed with three distinct Coastal ecosystems namely coral reef, seagrass bed and mangroves is considered one of the world's richest region from a marine biodiversity perspective, is known for its unique biological wealth and is a store house of marine diversity of global significance. Most of the islands have luxuriant growth of mangroves on their shorelines and swampy regions. The sea bottom of the inshore area around the islands are carpeted with sea grass beds which serve as ideal feeding ground for *Dugong dugon*, the endangered herbivorous marine mammal. The islands have irregular outlines, with splits and partially enclosed

bays and often higher sandy beach ridges enclosing areas of mudflats and standing water with the bay. They are made up of sand structures with gravel and coral boulders. Sea grass beds serve as nursery and spawning grounds for diverse biota and habitat for macro and micro algae as epiphytes. This habitat is the feeding grounds for the largest endangered marine mammal such as *Dugong* and sea turtles. This area is also the last refuge of an invertebrate, the unique 'living fossil' *Balanoglossus* that links vertebrates and invertebrates. It is also important for crustaceans, molluscs, echinoderms, fishes, turtles and many other mammals.

2. KARIKILI BIRD SANCTUARY

Area 61.21 Ha

Date of Declaration 04.08.2022

Location Chengalpattu District.

Karikili Bird Sanctuary is a 61.21 Ha protected area located in the Chengalpattu District of Tamil Nadu. The sanctuary is about 75 kilometres from Chennai, south of Chengalpattu. The Karikili Bird Sanctuary has a history of people cooperating in protecting waterbirds, as their guano enables the supply of nutrient-enriched water to crop fields. About 100 Bird species were recorded in this sanctuary.

Karikili is situated about 10 km from Vedanthangal, and there are two tanks combined established as the bird sanctuary in 1988. This region is surrounded by open areas, paddy fields and scrub forest. Several migratory birds such as Northern Pintail, Garganey, Common Sandpiper were recorded from Karikili. Karikili Bird Sanctuary along with Vedanthangal Bird Sanctuary has been identified as one of the Important Bird Areas of Tamil Nadu. Several water birds use Vedanthangal as a nesting site and Karikili as a foraging site. The sanctuary has been designated as a protected Ramsar site since 2022.



3.KOONTHANKULAM BIRD SANCTUARY

Area 0.72 sq.km

Date of Declaration

11.08.2021

Location
Nanguneri ,
Tirunelveli
district.



This wetland is the largest reserve for breeding resident and migratory waterbirds in South India. It is an Important Bird Area (IBA) on the Central Asian Flyway. Koonthankulam Bird Sanctuary protected area declared as a sanctuary in 1994. It is composed of Koonthankulam and Kadankulam irrigation tanks. This is the largest reserve for breeding water birds in South India. The sanctuary has been designated as a protected Ramsar site since 2021.

This sanctuary is actively protected and managed by the Koonthankulam village community. The local people take a keen interest in protecting this sanctuary. Birds coming to villagers' backyards are protected vehemently and regarded as harbingers of luck. The guano from the tanks is collected by villagers in summer and applied as fertilizer to their fields. All villagers protect the birds, their nests and fledglings, Fallen chicks are taken care of in the rescue centre till they are able to fly on their own. The Indian festival Diwali is not celebrated here because the sound of crackers would drive away the winged visitors. An interpretation centre, watch tower, children's park and dormitory are open for public use throughout the year.

4. PALLIKARANAI MARSHLAND

Pallikaranai wetland is a freshwater marsh in the city of Chennai. It is situated adjacent to the Bay of Bengal. The Pallikaranai marshland is the only surviving wetland ecosystem of the city and is among the few and last remaining natural wetlands of South India. It is one of the 94 identified wetlands under National Wetland Conservation and Management Programme (NWCMP) . It is also one of the prioritised wetlands of Tamil Nadu.

Area 12.475 sq.km

Date of Declaration:
04.08.2022

Location Pallikaranai,
Chennai



Apart from its biodiversity value, the wetland also plays a vital role in the prevention of flooding for the city of Chennai, soaking up water during wet periods and releasing it during dry spells. Inhabitants of seven surrounding villages partially depend on the wetland for their subsistence

The marsh contains several rare or endangered and threatened species and acts as a forage and breeding ground for thousands of migratory birds from various places within and outside the country. A study in 2018 has showed that about 60 percent of the native species in the wetland, including hoorah grass, dwarf copperleaf or Ponnanganni keerai, floating lace plant or kottikizhangu wild paddy, crested floating heart and nut grass have been replaced by invasive species.

5. PICHAVARAM MANGROVE

Area: 14.786 sq.km

Date of Declaration: 04.08.2022

Location: Chidambaram,
Cuddalore District.



Pichavaram is a small coastal village near Chidambaram in Cuddalore District, Tamil Nadu. It is located between the Vellar estuary in the north and Coleroon estuary in the south. The Pichavaram mangroves in the southern Indian state of Tamil Nadu, that had helped lessen the devastating impacts of the 2004 tsunami in the region. Pichavaram consists of a number of islands interspersing a vast expanse of water covered with mangrove forest. The Pichavaram mangrove Forest is one of the largest mangrove forests in India covering about 45 Sq km of area. The biotope consists of species like *Avicennia* and *Rhizophora*.

The mangroves also attract migrant and local birds including snipes, cormorants, egrets, storks, herons, spoonbills and pelicans. About 177 species of birds belonging to 15 orders and 41 families have been recorded. The availability of different habitat types such as channels, creeks, gullies, mudflats and sand flats and adjacent seashore offers ideal habitat for different species of birds and animals.

6. POINT CALIMERE WILDLIFE SANCTUARY (KODIAKARAI)



Area : 21.47 km

Location: Nagapatinam district

Date of declaration: 19.08.2002

This isolated population of blackbuck probably survived unmolested throughout the centuries due to the locals now declining belief that eating its meat causes leprosy. Other notable animals includes Spotted deer, Jackal, Bonnet macaque, Wild boar, Monitor lizard, Short-nosed fruit bat, Small Indian civet, Star tortoise, Indian grey mongoose, Black-naped hare, Jungle cat and Feral pony.

This sanctuary is famous for large congregations of waterbirds, especially greater flamingos. This sanctuary is an area of high biodiversity, with many unique species of animals and birds. The flagship species of the sanctuary is the near threatened Blackbuck, one of the four antelope species in India and the most numerous large animal in the sanctuary.

This wetland site is a mix of salt swamps, mangroves, backwaters, mudflats and tropical Dry evergreen forests. There are 364 of flowering plant species have been identified in the sanctuary of which 50% are herbs and the others are climbers, shrubs and trees.

7. UDAYAMARTHANDAPURAM BIRD SANCTUARY

Area 45 km²

Location Thiruvarur

Date of Declaration 04.08.2022



The Sanctuary's diverse habitat includes lilly patches, reed brakes, aquatic grass, etc. Several types of waterbirds can be seen here from September onwards. Many migratory birds also visit the sanctuary like Coot, Grey Heron, Black headed Ibis, Night Heron, Purple Heron, Little

Cormorant Darter, Spoonbill, Indian Reef Heron and White necked stork. About 10000 birds congregate here during peak season from November-December. February and March, purple-moorhen and openbill storks can be seen here. Other migratory birds in the sanctuary include the white-ibis, white-necked stork, etc., The ideal season to visit this sanctuary is during the months of November and December.

A notable aspect of the sanctuary is the large number of purple moorhen and open bill storks during February and March. The sanctuary is open to visitors throughout the year. There are two watch towers inside the sanctuary for visitors

8.VEDANTHANGAL BIRD SANCTUARY

The Vedanthangal Bird Sanctuary is the oldest bird sanctuary in the country features thousands of migratory birds coming from various countries. Some easily found birds include Cormorants, Darters, Grebes, Large egrets, Little egrets, Moorhens, Night herons, Painted storks, Pintails, Pond herons, Sandpipers, Shovellers, Terns, White ibis and many more. Garganey, Teal, Glossy ibis, Grey heron, Grey pelican, Open-billed stork, Snake bird, Spoonbill, Spot bill duck are frequently visiting the sanctuary. They migrate from Europe during November and December to escape the frost that sets in.

Monkeys and other common mammals can be spotted. The area had a compact grove of more than 500 Barringtonia trees earlier. An additional 100 trees were planted in 1973 and over 1,000 trees were planted in 1996.

Area 30 Ha

Location Madhurantakam taluk, Chengalpattu district

Date of declaration 04-08-2022



9.VELLODE BIRD SANCTUARY

It is a large lake surrounded with semi-dark bushes, near Vellode. The sanctuary features thousands of birds coming from various countries, some of which can be easily identified. Some easily found bird species include Cormorants, Teals, Pintail ducks, Pelicans, and Darters. The best time to visit this sanctuary starts in November and continues until March. During this period birds are mostly busy in building and maintaining their nests. Many observatory towers have been built to watch these birds, around this lake.

Area 80 ha

Location Vellode, Erode District

Date of declaration 04.08.2022



This Wetland comes under the Protected areas of Tamil Nadu. The bird sanctuary is visited by a multitude of non migratory and migratory birds. Generally, the migratory birds start to arrive to the reserve at the commencement of the Northeast monsoon (October to December). At the onset of the monsoon, the bird sanctuary turn a perfect home ground for the winged visitors mainly because of the abundant bird food in the lake and in the nearby farming fields and a great deal of trees for resting and nesting. The presence of abundant fish species are also a part of bird food for the migratory and resident birds

10.VEMBANUR WETLAND COMPLEX



Area 19.7 ha

Date of declaration 03-08-2022

Location Kanniyakumari District

Vembanur wetland complex is the first wetland declared as Ramsar site in Kanniyakumari district. The Site forms part of an Important Bird Area (IBA) and it provides suitable habitat to several species of water bird in the breeding and non-breeding seasons such as the Indian river tern , Spotted greenshank, Garganey and Grey pelican . The wetland supports more than 2,000 hectares of agricultural land on which more than 1,000 families depend.

It also supplies fish and drinking water to local communities while moderating the impacts of drought and floods, influencing the local microclimate, enhancing the beauty of the landscape, and providing many recreational opportunities. Vegetation clearance and land conversion, garbage and solid waste present moderate threats to the ecological integrity of the Site. Spread over the months of June to September with four or five flood peaks, substantial base flow in streams rounds the year.

11.CHITRANGUDI BIRD SANCTUARY



Area 0.4763 sq km

Date of Declaration 13.08.2022

Location Chitrangudi village, Ramanathapuram District

This beautiful crescent shaped sanctuary attracts a host of migratory birds in winter. The place offers notable diversity in nestling and feeding behaviours and hence is a preferred nesting site for colonial birds and heronry species. Between October and February is the perfect time to spot the colourful winged creatures that flock the sanctuary from distant lands. The Avifauna population consists of Spot Billed Pelican, Open Billed Stork, Little and Large Egret and Purple heron.

The sanctuary vegetation is mostly tropical dry deciduous forest. It is dominated by babul along with *Prosopis juliflora*, Bermuda grass and *Dichanthium foveolatum*. The irrigation tank bund and the area outside the tank have Tamarind trees, Fig trees, Neem trees, Silk cotton trees, Drumstick trees and Palmyra trees. The medicinal plants *Ocimum sanctum* and *Gloriosa superba* also grow in the area.

12.SUCHINDRAM THEROOR WETLAND COMPLEX

Area 0.9423 sq.km

Date of Declaration 13.08.2022

Location Suchindram ,Kanyakumari District

Suchindram has 250 species of birds have been recorded in the district, of which 53 species are migratory, twelve are endemic and four species threatened Birds such as Spot-billed Pelican, Darter, Northern Pintail, Common Teal, Spoonbill, Garganey, Common Coot and *Eurasian coot* congregate in these tanks, sometimes in thousands.



The Spot-billed Pelicans are abundantly seen in the tanks during breeding season in the tank. These wetlands are one of the important foraging grounds for this threatened bird species. Suchindram tank has a large variety of aquatic vegetation including water Lilly, Lotus, Floating hearts, Pistia and other water plants. A few tall trees and other bushes have formed an island at the centre, which gives refuge and is a resting place for birds.

13.VADUVUR BIRD SANCTUARY



Area 1.281 sq.km
Year of Declaration 13.08.2022
Location Vaduvor lake, Thiruvarur District

Vaduvor Bird Sanctuary is located in Vaduvor lake, Mannargudi Taluk, Thiruvarur District, Tamil Nadu. The sanctuary is located near the rice-bowl of Tamil Nadu and granary of south India. The sanctuary attracts more than 40 species of waterbirds. The farmers of this region also love the arrival of migratory birds as the irrigation water becomes fertile once it was enriched with the excretory of the birds. The sanctuary attracts more than 40 species of water birds like the white ibis, painted stork, grey pelican, pintails, cormorants, teals, herons, spoonbills, darters, coots, Open bill storks and pheasant-tailed jacana.

The sanctuary is a favourite spot for the migratory birds and during the months of November and December more than 20000 winged visitors reach this area. The sanctuary has basic facilities for tourists to stay overnight and enjoy watching the birds from the two watch towers.

14.KANJIRANKULAM BIRD SANCTUARY

Area 1.04 sq.km

Year of Declaration 13.08.2022

Location Mudukulathur, Ramanathapuram District.



The sanctuary vegetation is mostly tropical dry deciduous forest. It is dominated by babul along with *Prosopis juliflora* and the grasses such as Bermuda grass and *Eremopogon foveolatus*. The invasive *Prosopis* is slowly encroaching on much of the sanctuary area, retarding growth of Babuls. The irrigation tank bund and the area outside the tank have tamarind trees, fig trees, neem trees, silk cotton trees, drumstick trees, and palmyra palms.

The breeding population of migratory waterbirds arrive here between October and February and include Painted stork, White ibis, Black ibis, Little egret, Great egret. It is notable as a nesting site for several migratory heron species that roost in the prominent growth of babul trees there.



Miss.P.Banupriya, Officer Trainee of SFS batch 2020-22 , CASFOS, Coimbatore belongs to the State of Tamilnadu and a Post graduate in Electronics & Communication Engineering also had work experience in Tamilnadu Police department before joining State Forest Service.



“Conserve wetlands to preserve Biodiversity”