Ramsar Information Sheet

Published on 2 February 2025

India

Therthangal Bird Sanctuary

Designation date	15 July 2024
Site number	2562
Coordinates	09°27'33"N 78°46'14"E
Area	29,30 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Therthangal Birds Sanctuary, located at N 09º27.499' Latitude and E 078 º 45.536' Longitude, is part of Therthangal Village in Ramanathapuram District of Tamil Nadu. The wetland is a situated in rural area. The Therthangal wetland was declared as a bird sanctuary in the year 2010, with an estimated area of 29.295 ha. It is notified as a bird sanctuary with the meaning and scopes of Section 18 (1) of Wildlife Protection Act 1972, through the G.O Ms. No 220/W6, Environment and Forest Department (FRV) dated 15.12.2010. Most notable feature of the sanctuary area is the prominent growth of Babul (Acacia nilotica) trees.
The sanctuary offers conducive breeding and feeding grounds for the birds, especially the migratory birds, which use the site as foraging ground. The Babul trees (Acacia nilotica) planted in the wetland act as nesting sites. The sanctuary includes earthen embankments, bunds and the seasonally water holding marshy lake, which is equally beneficial for the birds as well as the villagers. Excess water that is stored during rainy season within the bunds is later utilized for agricultural purposes. The sanctuary acts as a store space for an efficient flood and inundation control mechanism. The sanctuary controls the naturally occurring soil erosion. It also acts as a natural filtration system for nutrient removal from agricultural runoff and wastewater systems. The sanctuary is home for many threatened species including Black-headed ibis (Threskiornis melanocephalus), Spot-billed pelican (Pelecanus philippensis), Oriental darter (Anhinga melanogaster) and Pallid harrier (Circus macrourus) among others. The sanctuary also harbours rich biodiversity particularly among the lower vertebrate groups such as amphibians and reptiles (herpetofauna) as well as invertebrates. This sanctuary supports about 96 bird, 57 butterfly, 7 mammal, 11 reptile, 6 amphibian and 133 plant species.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency: Tamil Nadu State Wetland Authority

Postal address: O/o Additional Principal Chief Conservator of Forests & Member Secretary
No.1, Jeenis Road, Panagal Building, VIII Floor, Saidapet, Chennai 600 015
Tamil Nadu, INDIA

National Ramsar Administrative Authority

Institution/agency: Ministry of Environment, Forest & Climate Change

Postal address: Office of the Secretary, Ministry of Environment, Forest and Climate Change, Government of India, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi - 110 003
INDIA

2.1.2 - Period of collection of data and information used to compile the RIS

From year: 2015

To year: 2024

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Therthangal Bird Sanctuary

Unofficial name (optional): Therthangal

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps: 0

Boundaries description

The boundary of Site are as follows
*S.F.No – Survey Number, V,No – Village Number
North: Starting from northern side of S.No. 7 and eastern side of S.No.5 of V.No. 76 Therthangal village and runs towards north-East on the southern sides of S.No.3 116 of V.No. 76 Therthangal village.
East: Thence the boundary runs generally towards south along the western sides of S.F.Nos.112, 111, 109, 92, 91, 90 and 81 of V.No. 76 Therthangal village and southern side of S.No. 89 and also runs western side of S.Nos.89,79,78, and 65 of V.No. 76 Therthangal village.
South: Thence the boundary runs towards west along the northern sides of S.No. 64, 21 of V.No. 76 Therthangal village.
West: Thence the boundary runs generly towards north along the western side of the S.No. 20, 15, 14, 13, 12, 11, 10, 9 and northern side of S.Nos. 9. Western side of S.No. 9 and southern and eastern sides of S.No.8 eastern, northern sides of S.No. 7 and joins the starting point.

2.2.2 - General location

a) In which large administrative region does the site lie? Ramanathapuram District

b) What is the nearest town or population centre? Ramanathapuram

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes ○ No ◉

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes ○ No ◉

2.2.4 - Area of the Site

Official area, in hectares (ha): 29.295

Area, in hectares (ha) as calculated from GIS boundaries: 29.13

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	Deccan thorn scrub forest (Indo-Malay Ecoregion)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

☑ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

Out of the 96 species of birds recorded in the Site. The Site supports 1 Endangered, Egyptian vulture (Neophron percnopterus), 1 Vulnerable, Indian Spotted Eagle (Clanga hastata) and 4 near threatened, Spot-billed Pelican (Pelecanus philippensis), Black-headed Ibis (Threskiornis melanocephalus), Oriental Darter (Anhinga melanogaster) and Asian Woolly-necked Stork (Ciconia episcopus) species as classified by the IUCN Red List.

☑ Criterion 3 : Biological diversity

Justification

This sanctuary supports about 96 birds, 57 butterflies, 7 mammals, 11 reptiles, 6 amphibians and 133 plant species. The site provides diverse habitats such as bunds, emergent vegetation, shallow water and deep water habitats, thus supporting various types of flora and fauna. The site especially supports diverse variety of water bird species. Therthangal Bird Sanctuary is located close to Gulf of Mannar on the Central Asian flyway which is a regular route for the migratory birds. The site offers ideal habitat for nesting, feeding and breeding of birds. It is a popular breeding site for heronry species and colonial birds. Eight bird species use the area as breeding grounds because of the availability of food for the juveniles during the breeding season and also due to the trees found within the wetland and in the bunds of the wetland which helps them to be protected from predators. From October to February, large number of birds visit this sanctuary. The Eight species of birds known to breed in the Therthangal Bird Sanctuary are, Spot-billed Pelican, Little Cormorant, Little Egret, Oriental Darter, Black crowned Night Heron, Black headed Ibis, Painted Stork and Asian Openbill. Hence the wetland helps in maintaining the biological diversity of this particular biogeographic region.

☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions

Optional text box to provide further information

Therthangal Bird Sanctuary supports more than 2000 individuals of water birds. Near-threatened species such as Spot-billed Pelican, Black-headed Ibis, and Oriental Darter nest in the trees of wetlands. Acacia is used by the birds for roosting and nesting.
Wetlands provide refuge and foraging grounds for migratory waterfowl. Species like Little stint, Common Greenshank, Wood Sandpiper, Garganey, Green-winged Teal, and Northern Pintail use this site as stopover place during their migration.

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further information

The site supports more than 1% of the South Asia population of Least Concerned, Painted Stork (1% of the South Asia population is 250) and Near Threatened, Spot-billed Pelican (1% of the South Asia population is 100) as per the population estimates provided in the Water Bird Population Portal. The site acts as a foraging ground and nesting ground for the bird species. The bird population data was used from the Waterbirds Population Portal to determine the percentage of occurrence of the species in the biogeographical region.

3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA / MAGNOLIOPSIDA	*Vachellia nilotica*	☐	☑	☐	LC	☐		The trees provides nesting habitat for water birds that are dependent on the wetlands. Water bird species such as Near Threatened Darter breeds in the trees found in the bunds of the lake which also provides protection from predators helping in increased survival rate of juveniles. Thus the species is important in maintaining the biological diversity of the area.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Birds																	
CHORDATA / AVES	*Anas acuta*	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022 and Appendix II of CMS	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA / AVES	*Anas crecca*	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA / AVES	*Anastomus oscitans*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	This species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.
CHORDATA / AVES	*Anhinga melanogaster*	☐	☑	☐	☐	☑	☐	☐	☐				NT	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	This species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.
CHORDATA / AVES	*Aquila hastata*	☑	☑	☐	☐	☑	☐	☐	☐				VU	☐	☐	Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The site acts as a foraging ground for the bird species as it lies in the Central Asian Flyway. The species migrates over long distances and the presence of heronry in the wetland may provide food for the species. The wetland is situated in one of the drier parts of the country and thus acts as important source of water during summer season.
CHORDATA / AVES	*Calidris minuta*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA / AVES	*Ciconia episcopus*	☐	☑	☐	☐	☑	☐	☐	☐				NT	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The birds use the wetlands as foraging ground during its migratory visit to the wetland.. The site lies in the Central Asian Flyway
CHORDATA / AVES	*Circus macrourus*	☐	☑	☐	☐	☐	☐	☐	☐				NT	☐	☐	Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The birds use the wetlands and the surrounding area as foraging ground during its migratory visit to the wetland.
CHORDATA / AVES	*Egretta garzetta*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.
CHORDATA / AVES	*Microcarbo niger*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA / AVES	*Mycteria leucocephala*	☐	☑	☑	☐	☑	☐	☐	☐	300	2022	1.2	LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	This species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.
CHORDATA / AVES	*Neophron percnopterus*	☑	☑	☐	☐	☑	☐	☐	☐				EN	☐	☑	Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The site acts as a foraging ground for the bird species as it lies in the Central Asian Flyway. The species migrates over long distances and the presence of heronry in the wetland may provide food for the species. The wetland is situated in one of the drier parts of the country and thus acts as important source of water during summer season.
CHORDATA / AVES	*Nycticorax nycticorax*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022	The species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.
CHORDATA / AVES	*Pelecanus philippensis*	☐	☑	☑	☐	☑	☐	☐	☐	150	2022	1.5	NT	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	This species breeds in the Acacia trees, which are found in and around the wetlands. This bird uses the wetlands as foraging ground. Hence, the site is important for conserving the population of this species.
CHORDATA / AVES	*Spatula querquedula*	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Appendix II of CMS	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA / AVES	*Threskiornis melanocephalus*	☐	☑	☐	☐	☑	☐	☐	☐				NT	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	This species breeds in the Acacia trees, which are found in and around the wetlands. The birds use the wetlands as foraging ground.
CHORDATA / AVES	*Tringa glareola*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA / AVES	*Tringa nebularia*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected under Schedule II (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The birds use the wetlands as foraging ground during its migratory visit to the wetland.

1) Percentage of the total biogeographic population at the site

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The site comes under Deccan thorn scrub forest in the Regionalization scheme of WWF (World Wide Fund For Nature) Terrestrial Ecoregions. The area has black soil with excellent water retentivity. The sanctuary is mostly rain fed. It is housed in a traditional irrigation tank fed by a distributary channel of Vaigai and Gundar river. The sanctuary receives water only during the rainy season and only when the Vaigai and Gundar river receive significant water. The area receives an average rainfall, varying between 503 mm to 1000 mm annually. Most of the water collected in the tank is from the North East monsoon. The period from mid-February to whole of August receives practically minimum rain fall, though occasional showers might result due to local climatic manifestations. The water source is mainly used for agricultural purposes and it attracts water birds as well.
The site provides provisional ecosystem services, such as, fresh water for drinking purposes and irrigating the agricultural fields to the adjoining villages around the lake. It also maintains the hydrological regime of the area, protects soil from erosion, regulates climate and reduces hazards by acting as a buffer during floods and extreme rainfalls. It is a major source of ground water recharge. It also provides cultural services in the form of recreation and tourism and supporting services in the form of biodiversity, nutrient cycling and pollination.
This sanctuary supports about 96 birds, 57 butterflies, 7 mammals, 11 reptiles, 6 amphibians and 133 plant species. Therthangal Bird Sanctuary supports more than 2000 individuals of water birds. Near-threatened species such as Spot-billed Pelican, Black-headed Ibis, and Oriental Darter nest in the trees of wetlands. Acacia is used by the birds for roosting and nesting.

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils	Therthangal Bird Sanctuary	1	29.295	

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
No non wetland habitat is found within the site	

(ECD) Habitat connectivity	The sanctuary is mostly rain fed. It is housed in a traditional irrigation wetland fed by a distributary channel of Vaigai river.

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/LILIOPSIDA	*Borassus flabellifer*	Native to the Indian region and Bangladesh in the Indian subcontinent and to Cambodia, Laos, Myanmar, Thailand.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Calotropis gigantea*	The native range of this species is S. China to Tropical Asia
TRACHEOPHYTA/MAGNOLIOPSIDA	*Ficus religiosa*	The species is found thought India. The native range of this species is SE. Pakistan to Myanmar.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Pongamia pinnata*	The native range of this species is Tropical & Subtropical Asia to W. Pacific. It is a shrub or tree and grows primarily

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTA/LILIOPSIDA	*Eichhornia crassipes*	Actual (major impacts)
TRACHEOPHYTA/MAGNOLIOPSIDA	*Ipomoea carnea fistulosa*	Actual (major impacts)
TRACHEOPHYTA/MAGNOLIOPSIDA	*Parthenium hysterophorus*	Actual (minor impacts)
TRACHEOPHYTA/MAGNOLIOPSIDA	*Prosopis juliflora*	Actual (major impacts)

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/REPTILIA	*Xenochrophis piscator*				Protected under Schedule I (Part C) of the Wild Life (Protection) Amendment Act, 2022.
CHORDATA/AVES	*Accipiter badius*				Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.
CHORDATA/AVES	*Anas clypeata*				Appendix II of CMS
CHORDATA/AVES	*Anas penelope*				Appendix II of CMS
CHORDATA/AVES	*Haliastur indus*				Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.
CHORDATA/AVES	*Platalea leucorodia*				Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/ACTINOPTERYGII	*Oreochromis mossambicus*	Actual (major impacts)

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
A: Tropical humid climate	Aw: Tropical savanna (Winter dry season)

The sanctuary receives water only during the rainy season and only when the Vaigai and Gundar river receive significant water. The area receives an average rainfall, varying between 503 mm to 1000 mm annually. Most of the water collected in the tank is from the North East monsoon. The period from mid-February to whole of August receives practically minimum rain fall, though occasional showers might result due to local climatic manifestations.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 16

a) Maximum elevation above sea level (in metres): 18

- Entire river basin ☐
- Upper part of river basin ☐
- Middle part of river basin ☐
- Lower part of river basin ☑
- More than one river basin ☐
- Not in river basin ☐
- Coastal ☐

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The site is situated in the Vaigai river basin. The Vagai basin is surrounded by Cauvery and Pambar Kottakaraiyar basins, on the north, Gundar basin, on the south, west by Periyar basin and east by Bay of Bengal. The length of the basin is about 289.59 km and the width varies from 15 to 55 km. The basin is an arcuate in shape, stretching from the Western Ghats Mountain of Kerala in the west to the Bay of Bengal on the east, with a general gradient towards North east, up to Theni and then south eastern direction up to the sea. The river basin is flanked by Western ghats on the south and west, southern slope of Palani hills (Kodaikanal hills), Sirumalai hills, Alagar hills etc. on the north, and Bay of Bengal on the east.

4.4.3 - Soil

- Mineral ☑
- Organic ☐
- No available information ☐

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

Please provide further information on the soil (optional)

The area has black soil with excellent water retentivity. As once digs deep, the soil retains its color but tends to be clayey in nature. They are generally alkaline in nature. The district soil Atlas classifies the soil of the region as Typic Ustipsamments and Vetric Haplustalfs + Ustropepts capable of supporting Palymra, Coconut and Pulses respectively.

4.4.4 - Water regime

Water permanence

Presence?	
Usually seasonal, ephemeral or intermittent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from precipitation	☑	No change
Water inputs from surface water	☑	No change

Water destination

Presence?	
Feeds groundwater	No change
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

This area receives an average rainfall, varying between 503 mm to 1000 mm annually. Most of the water collected in the tank is from the North East Monsoon. The period from February to whole of August receives practically minimum rain fall, though occasional showers might result due to local climatic manifestations. A period of 10 years (2012 to 2021) shows two peaks of rainfall availability in this region, in the month of May and October. Moreover, during summer rainfall is minimum in the sanctuary.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site ☐

Significant accretion or deposition of sediments occurs on the site ☑

Significant transportation of sediments occurs on or through the site ☐

Sediment regime is highly variable, either seasonally or inter-annually ☐

Sediment regime unknown ☐

(ECD) Water turbidity and colour: Water color is Brown; turbidity not measured

4.4.6 - Water pH

Acid (pH<5.5) ☐

Circumneutral (pH: 5.5-7.4) ☐

Alkaline (pH>7.4) ☑

Unknown ☐

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑

Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☐

Euhaline/Eusaline (30-40 g/l) ☐

Hyperhaline/Hypersaline (>40 g/l) ☐

Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐

Mesotrophic ☑

Oligotrophic ☐

Dystrophic ☐

Unknown ☐

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has greater urbanisation or development ☐

Surrounding area has higher human population density ☐

Surrounding area has more intensive agricultural use ☑

Surrounding area has significantly different land cover or habitat types ☐

Please describe other ways in which the surrounding area is different:

The sanctuary is found in an rural area and the predominant activity surrounding the sanctuary is agriculture. Few settlements are also found little far from the sanctuary area.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Medium
Fresh water	Water for irrigated agriculture	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Medium
Erosion protection	Soil, sediment and nutrient retention	High
Biological control of pests and disease	Support of predators of agricultural pests (e.g., birds feeding on locusts)	High
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Low
Scientific and educational	Educational activities and opportunities	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium
Pollination	Support for pollinators	Low

Within the site: V:100s

Outside the site: R:2000s V:100s

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ◉

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland ☑

Description if applicable

Therthanagal villagers have understood the importance of their wetland, functional significance of the birds which visit (migrants) or are residents in the sanctuary, from a very long time. A noteworthy aspect is, the bird dropping enriched water, which they have used effectively in agriculture. Hence, it is this interaction and long perseverance of the local people that has managed to sustain the wetland. This aspect must be used efficiently for the wise use of this wetland and preserving its ecological status. Traditionally, the villagers have protected birds as they have realized the importance of bird droppings in agriculture and thus their economy. Sentiments associated with bird protection have been observed across all the villagers.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland ☐

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples ☐

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland ☐

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	☑	☑

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	☐	☑

Other

Category	Within the Ramsar Site	In the surrounding area
Commoners/customary rights	☑	☐

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Wildlife Warden, Wildlife Division, Ramanathapuram

Provide the name and/or title of the person or people with responsibility for the wetland: Mr. Bakan Jagdish Sudhakar, IFS

Postal address:
Wildlife Warden,
Wildlife Warden Office,
Forest campus,
Opposite of Government ITI,
Ramanathapuram – 623 503.
Phone : 04567 – 230079

E-mail address: gommnp@gmail.com

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Housing and urban areas	Low impact	Low impact	☐	☑

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Medium impact	Medium impact	☐	☑

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Livestock farming and ranching	Medium impact	Medium impact	☐	☑

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	Medium impact	Medium impact	☐	☑

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact	Low impact	☐	☑

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	High impact	High impact	☑	☑

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Agricultural and forestry effluents	Medium impact	Medium impact	☐	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	Medium impact	Medium impact	☑	☑
Droughts	High impact	High impact	☑	☑
Temperature extremes	High impact	High impact	☑	☑

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Bird Sanctuary	Therthangal Bird Sanctuary		whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

Ib Wilderness Area: protected area managed mainly for wilderness protection ☐

II National Park: protected area managed mainly for ecosystem protection and recreation ☐

III Natural Monument: protected area managed mainly for conservation of specific natural features ☐

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention ☐

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☑

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems ☐

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Habitat manipulation/enhancement	Partially implemented
Catchment management initiatives/controls	Partially implemented
Re-vegetation	Implemented

Species

Measures	Status
Control of invasive alien plants	Implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Implemented
Harvest controls/poaching enforcement	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Partially implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but restoration is needed

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Proposed
Birds	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

1.Ali, S. and S. D. Ripley. (1969). Handbook of the birds of India and Pakistan. Oxford University Press, Bombay.
2.Ali, S. and S. D. Ripley. (1983). Handbook of the birds of India and Pakistan. Compact Ed., Oxford University Press, New Delhi.
3.Anon. (1988) Wetland Conservation, Wetlands & Waterfowl Newsletter. 1: 37-48
4.Bhadri, R. B., R. B. Singh and B. L Desai. (1961). Water plants, New Delhi
5.Garg, J. K. (1998). Wetlands of India, SAC (ISRO), Ahmadabad, pp: 239
6.Gaston, A.J.(1973). Methods for estimating bird population J. Bombay Nat. Hist. Soc. 72(2):272-281
7.Gole, P. (1989) Management of bird sanctuaries: Wetland habitats, Wetlands and Waterfowl Conservation in Asia. IWRB/AWB: 65-73
8.Kushlan. J. A. (1978). Feeding ecology of wading birds. Wading birds, Natl. Audubon Soc. Res. Rep.7: 249-297.
9.Menon, A. G. K. (1992). The fauna of India and adjacent countries, Pisces 4. Teleostei-Cobitoidea, Part 2, Cobitidae. Zoological Survey of India, Madras.
10.Menon, A. G. K. (1999). Checklist- Freshwater fishes of India, Zoological Survey of India, Occ. Pap. No. 175, pp: 366.
11.Perennou, C. (1989). Southern wintering range of some water birds. J. Bombay Nat. Hist. Soc. 86(2): 247-248.
12.Sridharan, U. and V. S. Vijayan. (1990). Ecology and management of resident water fowl in Keoladeo National Park, 13.Bharatpur. Paper presented at the seminar on Wetland Ecology and Management. -at Keoladeo National Park, Bharatpur. (Feb. 23-25).
14.Sundararaju, R., Thirunavukrasu, V. and Balachandran, S. (2010) Status of waterbirds in Tamilnadu wetlands, Tamilnadu Forest Department
15.Vijayan, V. S. (1986). On conserving the bird fauna of Indian Wetlands. Proc. Indian AcadSci. (Suppl) 91-101.
16.Wetland Habitat Management for Wildlife- Ohio division of wildlife.
17.Wetlands of India - A Directory. (1990). Ministry of Environment and Forests. Government of India.
18.WWF. (1987). Wetlands conservation and the Ramser Convention, WWW, pp: 6,

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<1 file(s) uploaded>

ii. a detailed Ecological Character Description (ECD) (in a national format)
<no file available>

iii. a description of the site in a national or regional wetland inventory
<2 file(s) uploaded>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<1 file(s) uploaded>

vi. other published literature
<2 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Therthangal Bird Sanctuary (*Tamil Nadu Forest Department, 13-03-2019*)

Painted Stork with juvenile (*Tamil Nadu Forest Department, 13-03-2019*)

Open-billed Stork with juvenile (*Tamil Nadu Forest Department, 09-10-2021*)

Painted Stork roosting in the trees found in the wetland (*Tamil Nadu Forest Department, 29-01-2023*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2024-07-15