

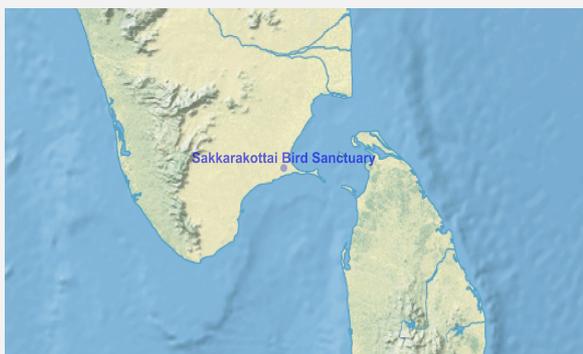


Ramsar Information Sheet

Published on 2 February 2025

India

Sakkarakottai Bird Sanctuary



Designation date	15 July 2024
Site number	2561
Coordinates	09°20'20"N 78°49'23"E
Area	230,49 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

Sakkarakottai Birds Sanctuary located at 9°21'8" N latitude and 78°48'50" E longitude, is part of Sakkarakottai, Rajasuriyamadai and Achadipirambu villages of Ramanathapuram Taluk, Ramanathapuram District of southern Tamil Nadu. The wetland is a peri urban wetland. The wetland receives water from the tributaries of Vaigai river. The Sakkarakottaikanmai area was declared as a bird sanctuary in the year 2012, with an estimated area of 230.49 ha (S.F. No. 68, 383, 209 & 25) in Sakkarakottai, Rajasuriyamadai and Achadipirambu villages. It is notified as a sanctuary within the meaning and scope of Section 18 (1) of Wildlife Protection Act 1972, through the G.O. Ms. No.114; E&F (FR.5) dated 17.04.2012 and appeared in the Gazette Part II on Page No. 231 on 09.05.2012. Most notable feature of the sanctuary area is the prominent growth of Babul (*Acacia nilotica*) trees. The sanctuary can be identified as a compact seasonally perennial water body in the Survey of India toposheet 1:50,000 NO: 58 K/15.

The sanctuary offers conducive breeding and feeding grounds for the birds, of which the most preferred nesting sites being the Babul trees (*Acacia nilotica*) planted extensively by the Forest Department under social forestry scheme. 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. The sanctuary acts as a efficient flood control & flood storage mechanism. Excess water that is stored during rainy season within the bunds is later utilized for agricultural purposes. The sanctuary controls the naturally occurring soil erosion. It also acts as a natural filtration system for nutrient removal from agricultural runoff.

The sanctuary is home to Vulnerable Indian spotted Eagle (*Aquila hastata*), Endangered Egyptian Vulture (*Neophron percnopterus*) and near threatened species including the Black-headed Ibis (*Threskiornis melanocephalus*), Spot-billed Pelican (*Pelecanus philippensis*), Oriental Darter (*Anhinga melanogaster*), Pallied Harrier (*Circus macrourus*) etc. The sanctuary also harbors rich biodiversity particularly among the lower vertebrate groups such as amphibians and reptiles (herpetofauna) as well as invertebrates.

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)	Sakkarakottai Bird Sanctuary
Unofficial name (optional)	Sakkarakottai

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 trijunction points of S. Nos.66, 50, 49 it runs towards southern side along the western boundary Ramanathapuram to Keelakarai Road having S.No. 92 of village No.49 Sakkarakottai village.
 East: Thence the boundary runs towards southern side along the western boundary of S. Nos. 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, and 79 of Ramanathapuram to Keelakarai road of village No. 49 Sakkarakottai village.
 South: Thence the boundary runs towards western side along the northern boundary of S.No. 77 of Ramanathapuram to Keelakarai road of village No.49 Sakkarakottai village and meets the trijunction points of village No. 49 Sakkarakottai village and village No.44 Rajasuriyamadai village. Thence the boundary runs towards western side along the northern boundary of S. Nos. 437, 435, 430, 429, 388 (Urani) 387, 386 (Northern side of uppuudaippuaurani) 385, 384, 490 of village No.44 Rajasuriyamadai village and meets the trijunction points of village No. 44 Rajasuriyamadai and village No.45 Achadipirambu villages. Thence the boundary runs towards western side along the northern boundary of survey No. 54, 53, 28, 27, 26 of the village No. 45 Achadipirambu village and meets the bijunction points of village No.45 Achadipirambu village and village No.44 Rajasuriyamadai villages. Thence the boundary runs towards western side along the northern boundary of S.Nos.175, 179, 185, 180, 184, 198, 199, 200, 207, 208, 59, 58, 55, and runs towards north west side and north east boundary of S.No. 26 of village No. 44 Rajasuriyamadai. Thence the boundary runs towards northern side and north east boundary of S. Nos. 25, 10 and 5 of village No. 44 of Rajasuriyamadai and meets the bijunction points of village No. 44 Rajasuriyamadai and Puthendal village.
 West: Thence the boundary runs towards north eastern side and turns to south western side of Puthendal village. Thence runs towards southern side along the western boundary of S.No.210 and runs towards eastern side along the southern boundary of S. Nos. 211, 212, 213, 214, 215, 216, 220, 221, 222, 223, 225, 230, 231, 232, 235, 236 and meets the bijunction points of village No.44, Rajasuriyamadai and village No. 45 Achadipirambu villages. Thence runs towards eastern side along the southern boundary of S.Nos.18, 19, 20, 21, 22, 23, 24 of village No. 45 (Refer additional materials section 6.1.2 for full description of the boundary)

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

RIS for Site no. 2561, Sakkarakottai Bird Sanctuary, India

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):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	Deccan thorn scrub forests (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 124 species of birds recorded in the Site. The Site supports 1 Endangered species, Egyptian vulture (*Neophron percnopterus*), 1 Vulnerable species, Indian Spotted Eagle (*Clanga hastata*) and 4 near threatened species, 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

The Site is an Important Bird and Biodiversity area with a IBA Site Code: IN-TN-03. This sanctuary supports about 124 birds, 69 butterflies, 10 mammals, 14 reptiles, 8 amphibians and 165 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. Sakkarakottai Bird Sanctuary is located in 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. Several 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 in the bunds of the wetland which helps them to be protected from predators. From October to February, a large number of birds visit this sanctuary. Eight species of birds are known to breed in the Sakkarakottai Bird Sanctuary and they are: the Spot-billed Pelican (*Pelecanus philippensis*), Little Cormorant (*Microcarbo niger*), Little Egret (*Egretta garzetta*), Grey Heron (*Ardea cinerea*), Oriental Darter (*Anhinga melanogaster*), Painted Stork (*Mycteria leucocephala*), Black headed Ibis (*Threskiornis melanocephalus*) and Asian Openbill (*Anastomus oscitans*). 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

Sakkarakottai Bird Sanctuary supports more than 2000 individuals of water birds. Near-threatened species such as Spot-billed Pelican, Painted Stork, Black-headed Ibis, Oriental Darter and Least concerned, Asian Open-billed Stork uses the trees in the wetlands as nesting sites. Acacia is used by the birds for roosting and nesting. Wetlands provide refuge and foraging grounds for migratory waterbird Species like Little stint, Common greenshank, Wood sandpiper, Garganey, Green-winged teals, and Northern Pintails which uses this site as stopover place during their migration.

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	<i>Vachellia nilotica</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		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								
Birds																
CHORDATA/ AVES	<i>Anas acuta</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Appendix II of CMS	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA/ AVES	<i>Anas crecca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA/ AVES	<i>Anastomus oscitans</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Anhinga melanogaster</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Aquila hastata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Ardea cinerea cinerea</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Calidris minuta</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Ciconia episcopus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Circus macrourus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.	The species migrates in Central Asian Flyway and uses the site as stopover and foraging ground.
CHORDATA/ AVES	<i>Egretta garzetta</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Microcarbo niger</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Mycteria leucocephala</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Neophron percnopterus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	<i>Pelecanus philippensis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Spatula querquedula</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Appendix II of CMS	The birds use the wetlands as foraging ground during its migratory visit to the wetland.
CHORDATA/AVES	<i>Threskiornis melanocephalus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Tringa glareola</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Tringa nebularia</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	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 sanctuary falls in an area geologically considered as pediment of recent origin. Though fluvial processes have resulted in the present morphological features of the area, human interference has greatly altered the natural conditions of erosion. Gneisses underlying the alluvium largely deposited by the Vaigai River are very deep seated. Calcium carbonate underlines the soil strata, leading to bore wells yielding brackish water.

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 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.

The sanctuary supports about 124 birds, 69 butterflies, 10 mammals, 14 reptiles, 8 amphibians and 165 plant species. Sakkarakottai Bird Sanctuary is located in 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.

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 >> P: Seasonal/intermittent freshwater lakes	Sakkarakottai	1	230.495	

(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	<i>Borassus flabellifer</i>	Native to the Indian region and Bangladesh in the Indian subcontinent and to Cambodia, Laos, Myanmar, Thailand.
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Calotropis gigantea</i>	The native range of this species is S. China to Tropical Asia.
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ficus religiosa</i>	The species is found throughout India. The native range of this species is SE. Pakistan to Myanmar.
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pongamia pinnata</i>	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	<i>Eichhornia crassipes</i>	Actual (major impacts)
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Parthenium hysterophorus</i>	Actual (minor impacts)
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Prosopis juliflora</i>	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	<i>Xenochrophis piscator</i>				Protected under Schedule I (Part C) of the Wild Life (Protection) Amendment Act, 2022.
CHORDATA/AVES	<i>Accipiter badius</i>				Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.
CHORDATA/AVES	<i>Anas clypeata</i>				Appendix II of CMS
CHORDATA/AVES	<i>Anas penelope</i>				Appendix II of CMS
CHORDATA/AVES	<i>Haliastur indus</i>				Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.
CHORDATA/AVES	<i>Platalea leucorodia</i>				Protected under Schedule I (Part B) of the Wild Life (Protection) Amendment Act, 2022.

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/ACTINOPTERYGII	<i>Oreochromis mossambicus</i>	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 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. Summer season is extremely hot in the area which may also lead to drought.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- 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.

Vaigai river basin lies between the geographic co-ordinates Lat. 90 o 15' – 10 o 20' N and Long. 77 o 10' - 79o 15' and falls within the Survey of India toposheets, 58F, 58G, 58J and 58k. The total extent of the area is covered within the administrative boundaries of 20 taluks and 37 blocks. 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.

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	<input type="checkbox"/>	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 mod-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, summer seasons receives minimum rainfall 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

Please provide further information on dissolved or suspended nutrients (optional):

The Biological Oxygen Demand (BOD) of the water is 6.90 mg/l, Chemical Oxygen Demand (COD) of the water is 58.60 mg/l, Total Nitrate present in the water is 2.11 mg/l, Total Phosphate present in the water is 0.11 mg/l and the total potassium present in the water is 3.50 mg/l.

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

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
Scientific and educational	Long-term monitoring site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, 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:

Outside the site:

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

Sakkarakottai 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 class and caste barriers in the village. Within the immediate periphery of the sanctuary, there is an old Amman temple used for worshipping by the villagers. A small temple dedicated to human being deity, was also observed in the vicinity of the sanctuary.

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

Earlier, the lake was maintained by the Public Works Department (PWD). The area has been maintained by the Tamil Nadu Forest Department since it was declared a bird sanctuary in 2010.

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Medium impact	Medium impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Agricultural and forestry effluents	Medium impact	Medium impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Droughts	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature extremes	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5.2.2 - Legal conservation status

National legal designations

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

Further information

The site requires management interventions in terms of preventing the spread of invasive flora and fauna. Activities focusing on hydrological connectivity such as inflow out flow management has to be undertaken.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented
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, Bharatpur. Paper presented at the seminar on Wetland Ecology and Management. -at Keoladeo National Park, Bharatpur. (Feb. 23-25).
13. Sundararaju, R., Thirunavukrasu, V. and Balachandran, S. (2010) Status of waterbirds in Tamilnadu wetlands, Tamilnadu Forest Department
14. Vijayan, V. S. (1986). On conserving the bird fauna of Indian Wetlands. Proc. Indian AcadSci. (Suppl) 91-101.
15. Wetland Habitat Management for Wildlife- Ohio division of wildlife.
16. Wetlands of India - A Directory. (1990). Ministry of Environment and Forests. Government of India.
17. WWF. (1987). Wetlands conservation and the Ramsar 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

<1 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<1 file(s) uploaded>

vi. other published literature

<3 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Common Coot (Tamil Nadu Forest Department, 29-01-2023)



Eurasian Spoonbill foraging in the Sakkarakottai Bird Sanctuary (Tamil Nadu Forest Department, 29-01-2023)



Sakkarakottai Bird Sanctuary (Tamil Nadu Forest Department, 28-01-2024)



Little Grebe in Sakkarakottai Bird Sanctuary (Tamil Nadu Forest Department, 28-01-2024)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation