

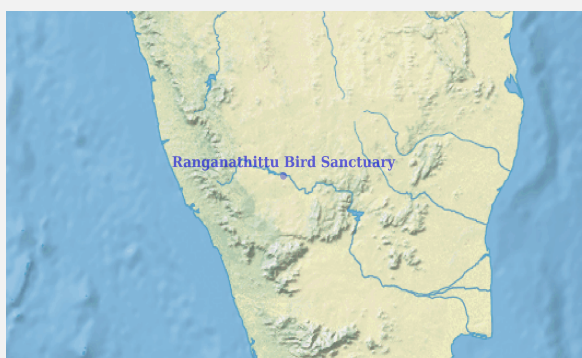


Ramsar Information Sheet

Published on 3 August 2022

India

Ranganathittu Bird Sanctuary



Designation date	15 February 2022
Site number	2473
Coordinates	12°24'28"N 76°40'55"E
Area	517,70 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

Ranganathittu bird sanctuary is located in Mandya district, of the state of Karnataka, India. The major islands and islets of Ranganathittu bird sanctuary are located in the mid-stream of river Cauvery, and form part of the wetland system. The wetland can be divided into three parts. The first part is the riverine area around Devaraja islands (59.08 ha) situated 1.60 km downstream of Krishna Raja Sagara dam. The second part is the riverine area around the most popular Puttaianakoppalu Island (202.82 ha) situated 8.30 km downstream of Krishna Raja Sagara dam. The third part is the riverine area around Gendehoshally Islands (255.79 ha), situated 30 km downstream of Krishna Raja Sagara dam. The total area of the site is 517.70 ha located between 12.422750°N, 76.587040°E and 12.357411°N, 76.809090°E. The site represents a unique riverine ecosystem comprising flora and fauna that survive in complete harmony and maintain a natural balance. The site has been enlisted as one of the Important Bird Areas (IBA) in Karnataka and India by Bombay Natural History Society. It is an ecologically important riverine wetland of India, rich in biodiversity, with 188 species of plants, over 225 species of birds, 69 species of fishes, 13 species of frogs, and 30 species of butterflies. The site is an important breeding site for about 20 species of waterbirds of which, 17 species breed on trees growing on the islands of Ranganathittu bird sanctuary. The site supports several threatened taxa which include two critically endangered species of fishes, six endangered species (bird: 1, fishes: 4, frog 1), and nine species of vulnerable species (mammal:1., reptile: 1, birds 5, fishes: 2). Besides, it also supports one species each of endangered, vulnerable, and endemic plant species, and about 98 medicinal plant species. This proposed site supports healthy populations of mugger crocodiles (*Crocodylus palustris*), smooth-coated otter (*Lutrogale perspicillata*) and the river waters harbour the endangered hump-backed masheer (*Tor remadevii*). The site supports over 1% of the world's population of Asian openbill, spot-billed pelican, and black-headed ibis.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	Retired Academic - University of Agricultural Sciences, Bengaluru
Postal address	Flat No. L-704, Purva Venezia, Major Sandeep Unnikrishnan Road, New Town Yelahanka, Bengaluru 560 064, Karnataka, INDIA.

National Ramsar Administrative Authority

Institution/agency	Ministry of Environment, Forest & Climate Change
Postal address	Office of the Additional 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	2016
To year	2021

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Ranganathittu Bird Sanctuary
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2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<2 file(s) uploaded>

Former maps	0
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Boundaries description

The proposed site is in three parts.
 1. The first part is the riverine area around Devaraja Islands situated 1.60 km downstream of KRS Dam. To the east and west are agricultural fields, to the north is Herekere Temple while to the south is Shri Nityananda Ashram.
 2. The Second part is the riverine area around the most popular Puttaianakoppalu Island (RBS) situated 8.30 km from downstream of KRS dam. To the north is Cauvery Sai dhama, to the south is karimanti, to the east is Chandravana Ashrama and to the west are agricultural fields.
 3. The third part is the riverine area around Gendehoshally Islands (255.79 ha), situated 30 km downstream of KRS dam. To the north is Agrahara, to the south and east is the highway and to the west is Chandravana Ashrama.

2.2.2 - General location

a) In which large administrative region does the site lie?	The site is located in Mandya district of Karnataka State, India.
b) What is the nearest town or population centre?	Srirangapatana

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):	517.7
Area, in hectares (ha) as calculated from GIS boundaries	515.513

2.2.5 - Biogeography

RIS for Site no. 2473, Ranganathittu Bird Sanctuary, India

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Freshwater Ecoregions of the World (FEOW)	Freshwater Eco-regions of the world (ID-714): Southern Deccan Plateau

Other biogeographic regionalisation scheme

Biogeographic regionalization scheme: Terrestrial Eco-regions of the World.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification

Ranganathittu is one of the oldest Bird Sanctuary of India, sustaining spectacular congregation of waterbirds and waders within the Western Ghats Biological Diversity Hotspot. The wetland supports significant populations of species like Threskiornis melanocephalus, Neophron percnopterus, Mycteria leucocephala, Hemibagrus punctatus, Microhyla sholigari, Lutrogale perspicillata, and Crocodylus palustris which is representative and significantly helps in maintaining the biodiversity of the region owing to large variety of ecological functions performed by the above-mentioned diverse range of species.

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

Optional text box to provide further information

Ranganathittu Bird Sanctuary has a diverse habitat including large and deep reservoirs with a number of islets and surrounding irrigated agricultural fields which provides good nesting and foraging habitats for birds. This diversity of habitats enable the wetland to act as an important breeding site for over 20 species birds and other fauna, where the following species nest in large numbers: Asian openbill (Anastomus oscitans), painted stork (Mycteria leucocephala), oriental darter (Anhinga melanogaster), little cormorant (Microcarbo niger), great cormorant (Phalacrocorax carbo), Indian cormorant (Phalacrocorax fuscicollis), spot-billed pelican (Pelecanus philippensis), grey heron (Ardea cinerea), purple heron (Ardea purpurea), great egret (Ardea alba), intermediate egret (Ardea intermedia), little egret (Egretta garzetta), cattle egret (Bubulcus ibis), Indian pond-heron (Ardeola grayii), black-crowned night-heron (Nycticorax nycticorax), black-headed Ibis (Threskiornis melanocephalus), Eurasian spoonbill (Platalea leucorodia), river tern (Sterna aurantia), great thick-knee (Esacus recurvirostris), red-wattled lapwing (Vanellus indicus), mugger crocodile (Crocodylus palustris) and smooth-coated otter (Lutrogale perspicillata). Thus, the site provides support to the species listed above during critical stage of their life.

Criterion 6 : >1% waterbird population

Optional text box to provide further information

The site regularly supports more than 1% threshold population of Spotbilled Pelican, Painted stork, Streak throated swallow, Cattle Egret, Blackheaded Ibis and Indian Cormorant. Based on the available census data from 2018 to 2022 on an average, the site supported 1391 individuals of Spot-billed Pelican representing 13.91% of the biogeographic population; 1568 individuals of Painted Stork representing 6.27% of the biogeographic population; 243 individuals of Oriental Darter representing 6.08% of the biogeographic population, 1572 individuals of Black-headed Ibis representing 6.29% of the biogeographic population and 732 individuals of Indian cormorant representing 2.44% of the biogeographic population.

Criterion 7 : Significant and representative fish

Justification Around 80 species of fish are known to use the site for feeding, breeding, and migration purposes from adjoining tributaries to the main Cauvery river and vice-versa. Of these, 10 species are threatened (2 critically endangered, 1 endangered, and 7 vulnerable); 14 species (i.e. 18% of the fish species found in the site) are endemic to the Western Ghats Biodiversity Hotspot and a few of these are exclusively restricted to the River Cauvery catchment. More than 50 fishes show migration cues i.e. 34 fishes are identified as local migrants while 16 species are long distance migrants.

Criterion 8 : Fish spawning grounds, etc.

Justification Ranganathittu serves as feeding and spawning grounds for several fish species such as *Opsarius gatensis*, *Devario malabaricus*, *Labeo calbasu*, *Puntius vittatus*, *Tor khudree*, *Channa marulius* and *Mastacembelus armatus*. Besides above fishes, several other fish species such as *Tor khudree*, *Balitora mysorensis*, *Wallago attu*, *Ompok bimaculatus*, *Tor remadeviae*, *Labeo calbasu*, etc. periodically use (disperse/migrate from the main channel to its tributaries and vice versa) the site throughout the year to complete their life cycle.

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>Hydrocotyle conferta</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EN	<input type="checkbox"/>		Endemic to southern Western Ghats
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Santalum album</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VU	<input type="checkbox"/>		Endemic to southern Western Ghats

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								
Others																	
CHORDATA / REPTILIA	<i>Crocodylus palustris</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	2016-2021	100	VU	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Site supports a healthy breeding population of this vulnerable species.
CHORDATA / MAMMALIA	<i>Lutrogale perspicillata</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	50	2016-2021	100	VU	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Site supports a healthy breeding population of this vulnerable species.
CHORDATA / AMPHIBIA	<i>Microhyla sholigari</i>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	endemic to southern India	Site supports a healthy breeding population of this vulnerable species.
Fish, Mollusc and Crustacea																	
CHORDATA / ACTINOPTERYGII	<i>Balantiocheilos melanopterus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			VU	<input type="checkbox"/>	<input type="checkbox"/>	Exotic species	The wetland supports a significant population of this vulnerable species, which also use the wetland as a spawning ground.
CHORDATA / ACTINOPTERYGII	<i>Balitora mysorensis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			VU	<input type="checkbox"/>	<input type="checkbox"/>	Native species	The wetland supports a significant population of this vulnerable species, which also use the wetland as a spawning ground.
CHORDATA / ACTINOPTERYGII	<i>Barbodes wynaadensis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			CR	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Western Ghats, India	The wetland supports a significant population of this critically endangered species, which also use the wetland as a spawning 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/ACTINOPTERYGII	<i>Cyprinus carpio</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	Exotic species	The wetland supports a significant population of this vulnerable species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Dawkinsia arulius</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Cauvery River	The wetland supports a significant population of this endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Hemibagrus punctatus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Cauvery River	The wetland supports a significant population of this critically endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Hyporhamphus xanthopterus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	Native species	The wetland supports a significant population of this vulnerable species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Hypselobarbus dubius</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Cauvery River	The wetland supports a significant population of this endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Hypselobarbus micropogon</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Cauvery River	The wetland supports a significant population of this endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Neolissochilus bovanicus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Cauvery River	The wetland supports a significant population of this critically endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Oreochromis mossambicus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	Exotic species found in the area	Vulnerable species qualifies for criteria 2.
CHORDATA/ACTINOPTERYGII	<i>Rasbora caverii</i>	<input type="checkbox"/>	<input 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"/>	Endemic to Western Ghats, India found in the area	The wetland supports a significant population of this species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Schismatorhynchus nukta</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Western Ghats, India	The wetland supports a significant population of this endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Silonia childreni</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input type="checkbox"/>	Native species	The wetland supports a significant population of this endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Tor remadevii</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	Endemic to Cauvery River	The wetland supports a significant population of this critically endangered species, which also use the wetland as a spawning ground.
CHORDATA/ACTINOPTERYGII	<i>Wallago attu</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		Vulnerable species qualifies for criteria 2.
Birds																	
CHORDATA/AVES	<i>Aquila clanga</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Known to occur at the site, e.g.: https://ebird.org/checklist/S76067758
CHORDATA/AVES	<i>Aquila hastata</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		Seen at the location: https://ebird.org/checklist/S63476915
CHORDATA/AVES	<i>Aquila rapax</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		Known to occur at the site, e.g.: https://ebird.org/india/checklist/S81853590
CHORDATA/AVES	<i>Mycteria leucocephala</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1800	2016-2021	7.5	NT	<input type="checkbox"/>	<input type="checkbox"/>	The site is an important nesting area for the species in the country.	The site supports 7.5% of the world population of the species.

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>Neophron percnopterus</i>	<input checked="" type="checkbox"/>	<input 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"/>		Seen at the location: https://ebird.org/checklist/S67065356
CHORDATA/ AVES	<i>Pelecanus philippensis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2000	2016-2021	17	NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site is an important nesting area for the species in the country.	The site supports 17% of the world population of the species.
CHORDATA/ AVES	<i>Sterna aurantia</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	Breeding resident	This vulnerable species breeds at the site.
CHORDATA/ AVES	<i>Threskiornis melanocephalus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1600	2021	12.65	NT	<input type="checkbox"/>	<input type="checkbox"/>	The site is an important nesting area for the species in the country.	The site supports 12.65% of the world population of the species.

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

Ranganthittu bird sanctuary in Karnataka is part of the Southern Deccan plateau, lying to the east of the Western Ghats region. This region comprises gently rolling plains, traversed by several of the large rivers that arise in the Western Ghats and flow eastward to empty into the Bay of Bengal and is punctuated by several circum-denuded granite hills from 600 to 900 meter in elevation. Located in Mandya district of Karnataka State, the area is bounded on the north by Hassan and Tumkur districts, on the west by Mysore district, east by Ramanagara district and Chamarajanagar district in the south. The region lies in the rain shadow of the Western Ghats, and is generally much drier than coastal Karnataka and the Western Ghats. The site represents a unique riverine ecosystem on one of the major rivers of the country. The wetland is a well-known nature tourism spot and around 3.5 lakh tourist visit the site per year. This results in considerable revenue generation and also provides an excellent educational opportunity to students and research opportunity to scientists. The wetland is an excellent source of freshwater for irrigation and storage, forming a healthy habitat for over 69 species of fishes. The wetland also plays a vital role in nutrient cycling and groundwater recharge, which influences the irrigation activities in the immediate vicinity.

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 > Flowing water >> M: Permanent rivers/ streams/ creeks	Cauvery Nadi/Cauvery River	1	517.7	

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Low-level rocky outcrops in mid-stream of river Cauvery	
Tree covered Islands found in the mid-stream of River Cauvery	68

(ECD) Habitat connectivity

Tree covered islands used for nesting by large waterbirds. The mugger crocodiles nest on the islands. Dens of Otters along the edge of some islands.. Rocky outcrops used for nesting by large plovers and River Terns.

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Barringtonia racemosa</i>	Rare
TRACHEOPHYTALILIOPSIDA	<i>Coix lacryma-jobi</i>	Rare
TRACHEOPHYTALILIOPSIDA	<i>Cryptocoryne retorspiralis</i>	Rare
TRACHEOPHYTAEQUISETOPSIDA	<i>Equisetum ramosissimum</i>	Rare
TRACHEOPHYTALILIOPSIDA	<i>Iphigenia indica</i>	Rare
TRACHEOPHYTALILIOPSIDA	<i>Iphigenia mysorensis</i>	Rare
TRACHEOPHYTALILIOPSIDA	<i>Ledebouria revoluta</i>	Rare
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Vitex leucoxyfon</i>	Rare
TRACHEOPHYTALILIOPSIDA	<i>Zeuxine strateumatica</i>	Rare

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTALILIOPSIDA	<i>Eichhornia crassipes</i>	Potential
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Ipomoea carnea fistulosa</i>	Potential

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/AVES	<i>Anhinga melanogaster</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Ardea alba</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Ardea purpurea</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Ardeola grayii</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Ciconia episcopus</i>				
CHORDATA/AVES	<i>Egretta garzetta</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Egretta intermedia</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Esacus recurvirostris</i>	15			IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Ichthyophaga humilis</i>				IUCN(NT)
CHORDATA/AVES	<i>Ichthyophaga ichthyaetus</i>				IUCN(NT)
CHORDATA/AVES	<i>Limosa limosa</i>				IUCN(LC);Winter visitor
CHORDATA/AVES	<i>Nycticorax nycticorax</i>				IUCN(LC);Breeding Resident
CHORDATA/AVES	<i>Phalacrocorax fuscicollis</i>				IUCN(LC);Breeding resident
CHORDATA/AVES	<i>Platalea leucorodia</i>				IUCN(LC);Breeding resident
CHORDATA/AMPHIBIA	<i>Rhinella achavali</i>				IUCN(LC);Breeding Resident

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/ACTINOPTERYGII	<i>Clarias gariepinus</i>	Potential

4.4 - Physical components

4.4.1 - Climate

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

Ranganathittu has a moderate climate with 3 seasons: summer (March to May), monsoon (June to October) and winter (November to February). The temperature varies from 15° C to 30° C. The site has an average rainfall of around 750mm and about 50 rainy days with about 50% of annual rainfall occurring during the southwest monsoon period.

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.

Cauvery River Basin

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 soil in most of the mid-stream islands is largely alluvium. The large central island at RBS is largely barren and largely devoid of any vegetation. The surface soil in the central part of the island is sandy and shows salt encrustations. There are numerous pebble beds amidst sand on the surface indicative of flash floods. The predominant pebbles are quartz, granite, gneiss, amphibolite, pegmatite and felsite. A pool overgrown with bulrush reeds hosts a small population of Streaked Weavers during monsoon. The island also hosts several feral cattle. The thermals created over this barren island during the day aids storks and pelicans to raise high-up in the air and head down to their foraging areas.
The soil along the river margin is soft and loamy, made up largely of alluvium - which also forms a good habitat for aquatic insects.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from surface water	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

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

The water level is fairly stable through the year except during mid-monsoon, when excess inflow of water into KrishnaRajaSagar Reservoir due to heavy rains in the catchment areas of River Cauvery and its tributaries that feed the reservoir, results in floods at Ranganathittu bird sanctuary, when excess water is released from the reservoir.

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	Clear
(ECD) Light - reaching wetland	Not assessed
(ECD) Water temperature	15 – 30 degree Celsius

4.4.6 - Water pH

Acid (pH<5.5)

Circumneutral (pH: 5.5-7.4)

Alkaline (pH>7.4)

Unknown

Please provide further information on pH (optional):

The water quality of Cauvery River assessed by the National Water Quality Monitoring Programme (GEMS and MINARS) 2020-21.

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

(ECD) Dissolved gases in water

Not assessed

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

(ECD) Dissolved organic carbon	Not assessed
(ECD) Redox potential of water and sediments	Not assessed
(ECD) Water conductivity	Not assessed

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 surrounding area near the wetland is irrigated, where paddy and Sugarcane are extensively grown with coconut grown in pockets.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Drinking water for humans and/or livestock	High
Fresh water	Water for irrigated agriculture	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Low
Climate regulation	Local climate regulation/buffering of change	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

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
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Low
Pollination	Support for pollinators	Low

Optional text box to provide further information

About 3,50,000 visitors visit the site and this eco-tourism activity generates considerable monitoring revenue to the government. Over 100,000 farmers in the surrounding area of the site get benefitted.

Other ecosystem service(s) not included above:

It helps in flood control during monsoon when excess water from Krishnarajasagar Dam (KRS dam) is released. Few medicinal plants occur here naturally. It is an important source of groundwater recharge and embankments and weirs help in settling of pollutants and sink for sediments, thereby purifying the water.

The Site is an important breeding site for several large colonial waterbirds in the country, where there has been no disruption of nesting since 1930s, and nesting of birds is not affected by vagaries of monsoon.

Within the site: 3,50,000

Outside the site: 1,00,000

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

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

Description if applicable

The riverine wetland surrounded by water and the water level is maintained by the construction of a weir across river Cauvery. It was built between 1645 -1648 when, Kantirava Narasaraaja Wodeyar was the ruler of Mysuru princely state. One of the most interesting findings in these islands is the presence of human artefacts' such as stone implements, beads pieces of pottery and microliths. These are indicative of the existence of prehistoric human settlement along the river.

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

Description if applicable

The Wetland located near the historical place of Mysuru (18 Kms), Srirangapattana (3 Kms) and 125 Km from Cosmopolitan City of Bengaluru.

4.6 - Ecological processes

(ECD) Primary production	Not assessed
(ECD) Nutrient cycling	Not assessed
(ECD) Carbon cycling	Not assessed
(ECD) Animal reproductive productivity	Not assessed
(ECD) Vegetational productivity, pollination, regeneration processes, succession, role of fire, etc.	Not assessed
(ECD) Notable species interactions, including grazing, predation, competition, diseases and pathogens	Large colonial Waterbirds nest in dense mixed species congregation on the tree covered islands. Crow and bonnet macaque (Macaca radiata) predation observed.
(ECD) Notable aspects concerning animal and plant dispersal	Nesting habitat for Mugger Crocodile Smooth-coated otters and fishes, including Hump-backed Mahseer.
(ECD) Notable aspects concerning migration	Over 65 species of migratory birds have been recorded at the site

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 type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

This place came into focus in 1939 by Dr.Salim Ali and it was declared as bird sanctuary on 1st July 1940 by the Government of His Highness the Maharaja of Mysore. Later, it has been notified as 'Ranganathittu Bird Sanctuary' under the Wildlife Protection Act, 1972 on 01 September,1998 by the Government of Karnataka.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Wildlife Division, Karnataka Forest Department, Aranya Bhavan, Ashok puram, Mysore-570008
Office of the Principal Chief Conservator of Forests (Wild Life), 2nd Floor, Aranya Bhavan, 18th cross, Mallechwaram, Bengaluru-560003

Provide the name and/or title of the person or people with responsibility for the wetland:

Principal Chief Conservator of Forests (Wild Life), 2nd Floor, Aranya Bhavan, 18th cross, Mallechwaram, Bengaluru-560003; Deputy Conservator of Forests, Aranya Bhavana, Ashoka puram, Mysuru-570008

Postal address:

Office of the Principal Chief Conservator of Forests (Wild Life)
2nd Floor, Aranya Bhavan
18th cross, Mallechwaram
Bengaluru-560003, INDIA
Tel- +91-08023345846
Email-pccfwl@gmail.com

Office of the Deputy Conservator of Forests
Aranya Bhavana
Ashoka puram
Mysuru -570008, INDIA
Tel-+91-08212481159.
Email - dcfwlmys@gmail.com

E-mail address:

dcfwlmys@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
Tourism and recreation areas		Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Water regulation

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Renewable energy	Low impact		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	Low 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		<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		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Dams and water management/use	Medium impact		<input checked="" type="checkbox"/>	<input 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	Low impact		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Agricultural and forestry effluents	Low impact		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Household sewage, urban waste water	Low 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
Eco-Sensitive Zone	Ranganathittu Bird Sanctuary	http://moef.gov.in/wp-content/uploads/2019/08/ranganittu.pdf	whole
Sanctuary	Ranganathittu Bird Sanctuary	https://www.aranya.gov.in/Static%20Pages/Sanctuary.aspx	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Ranganathittu Bird Sanctuary	http://datazone.birdlife.org/site/factsheet/ranganathittu-bird-sanctuary-iba-india ; https://www.mysorenature.org/around-mysore/mandya-sector/ranganathittu-bird-sanctuary	partly

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	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Proposed

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	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

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Ranganathittu bird sanctuary , is a famous eco-tourism spot for bird watching and research purpose in Karnataka. Boating all along the side of the islands closely watching various resident and migratory birds is a wonderful experience to the tourist. There are regular visits from schools and colleges and the interpretation center inside the RBS is very helpful in imparting awareness to different stakeholders.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Proposed

1. Regular survey and census of waterbirds will be undertaken to assess the breeding population, number of nests and average nestlings per nests of each species.
2. Regular monitoring of the roosting population of large waterbirds will be undertaken.
3. Regular monitoring of Marsh Crocodiles and Smooth-coated Otters will be undertaken.
4. Monitoring and protection of all the nesting dens of Smooth-coated Otters will be undertaken.
5. An enumeration of riverine and island vegetation will be undertaken.
6. A nursery of riverine and Island vegetation will be established to take-up replacement planting of the vegetation damaged and washed away by recurrent floods during monsoons.
7. Regular monitoring of the occurrence and spread of invasive vegetation, if any within the sanctuary premises will be undertaken to prevent their growth and spread within the sanctuary will be undertaken.
8. Regular monitoring of illegal fishing, if any will be undertaken.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

1. Directory of Indian Wetlands. 1993. WWF INDIA, New Delhi, India and AWB, Kuala Lumpur, xvi+264pp. 32 maps.
2. Islam, M.Z. and Rahmani, A.R. (2008) Existing and Potential Ramsar Sites in India. Indian Bird Conservation Network, Bombay Natural History Society, BirdLife International, and Royal Society for the Protection of Birds. Oxford University Press, New Delhi. Pp 592.1.
3. Rahmani, A.R., Islam, M.Z. and Kasambe, R.M. (2016) Important Bird and Biodiversity Areas in India: Priority Sites for Conservation (Revised and updated). Bombay Natural History Society, Indian Bird Conservation Network, Royal Society for the Protection of Birds and BirdLife International (U.K.). Pp. 1992 +xii.
4. Lal, R., Kothari, A., Pande, P., Singh, S., 1994. Directory of National Parks and Sanctuaries in Karnataka. Centre for Public Policy, Planning, and Environmental Studies, Indian Institute of Public Administration, New Delhi.
5. BirdLife International (2021a) Species factsheet: Pelecanus philippensis. Downloaded from <http://www.birdlife.org> on 03/12/2021.
6. BirdLife International (2021b) Species factsheet: Mycteria leucocephala. Downloaded from <http://www.birdlife.org> on 03/12/2021.
7. BirdLife International (2021c) Species factsheet: Threskiornis melanocephalus. Downloaded from <http://www.birdlife.org> on 03/12/2021.

More Bibliographical references uploaded as part of Additional documents under other published literature:IN_lit211218.pdf

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

<4 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<1 file(s) uploaded>

vi. other published literature

<1 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Barringtonia acutangula, a rare plant at Ranganathittu (S. Subramanya, 01-06-2018)



Ranganathittu Habitat (S. Subramanya, 06-08-2018)



Ranganathittu Habitat (S. Subramanya, 06-08-2018)



Ranganathittu Habitat (S. Subramanya, 06-08-2018)



Ranganathittu Habitat (S. Subramanya, 06-08-2018)



Ranganathittu Habitat (S. Subramanya, 06-08-2018)



Ranganathittu Habitat (S. Subramanya, 07-12-2018)



Ranganathittu Habitat (S. Subramanya, 07-12-2018)



Ranganathittu Habitat (S. Subramanya, 07-12-2018)



Devaraja Island (S. Subramanya, 08-12-2018)



Gendehosahalli Island (S. Subramanya, 06-08-2018)



Gendehosahalli Island (S. Subramanya, 06-08-2018)



Gendehosahalli Island (S. Subramanya, 06-08-2018)



Muger (Marsh) Crocodiles Crocodylus palustris at Ranganathittu (S. Subramanya, 07-12-2018)



Black-headed Ibis Threskiornis melanocephalus breeding at Ranganathittu (S. Subramanya, 06-08-2018)



Indian Cormorant Phalacrocorax fuscicollis at Ranganathittu (S. Subramanya, 06-08-2018)



Cattle Egret Bubulcus ibis nesting at Ranganathittu (S. Subramanya, 06-08-2018)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation