Designation date: 08/10/2007 Ramsar Site no. 1736

# Information Sheet on Ramsar Wetlands (RIS) – 2009-2014 version

Available for download from http://www.ramsar.org/ris/key\_ris\_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).

#### Notes for compilers:

- 1. The RIS should be completed in accordance with the attached Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1 / 0 1		
1. Name and address of the compiler of this form:	For office use onl	Υ.
Abdulghany Al Mosaed Environment Protection Authority (EPA). Wetlands Unit. Industry zoon Zubairy st, P.O.Box: 19719, Sana'a Yemen. Tel: +967-1-206611, +967-1-207817 Fax: +967-1-207327	DD MM YY	Site Reference Number
E-mail: <a href="mailto:epa-yemen@yemen.net.ye">epa-yemen@yemen.net.ye</a> <a href="mailto:ramsar-yemen@hotmail.com">ramsar-yemen@hotmail.com</a> <a href="mailto:epa-yemen.met.ye">2. Date this sheet was completed/updated:</a> <a href="mailto:31st,">31st, Oct 2012.</a>		
3. Country:		
Republic Of Yemen.		
4. Name of the Ramsar site:  The precise name of the designated site in one of the three official langua Alternative names, including in local language(s), should be given in parenth.		
Detwah Lagoon (Ditwah Protected Area)		

5. Designation of new Ramsar site or update of existing site:

**This RIS is for** (tick one box only):

a) Designation of a new Ramsar site  $\sqrt{\ }$ ; or

6.	For RIS updates only, changes to the site since its designation or earlier update:
a)	Site boundary and area
	The Ramsar site boundary and site area are unchanged:
	or  If the site boundary has changed:  i) the boundary has been delineated more accurately  ii) the boundary has been extended   ; or
	iii) the boundary has been restricted**
	and/or
	If the site area has changed: i) the area has been measured more accurately ii) the area has been extended □; or iii) the area has been reduced** □
Co the to	Important note: If the boundary and/or area of the designated site is being restricted/reduced, the ntracting Party should have followed the procedures established by the Conference of the Parties in Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior the submission of an updated RIS.  Describe briefly any major changes to the ecological character of the Ramsar site, including in
the	e application of the Criteria, since the previous RIS for the site:  Map of site:
	er to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital
a) .	A map of the site, with clearly delineated boundaries, is included as: i) a hard copy (required for inclusion of site in the Ramsar List): □;
	ii) an electronic format (e.g. a JPEG or ArcView image) $$ ;
	iii) a GIS file providing geo-referenced site boundary vectors and attribute tables $\Box$ .
e.g. or f	Describe briefly the type of boundary delineation applied: the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the reline of a waterbody, etc.
sui	the boundary represents the boundary of the Ditwah Protected Area Natural Sanctuary and is crounded by large sand dunes on the western side, mountains on the Eastern side, and by the en sea on the northern and western side. The total boundary line perimeter is about 11 km.
8. (	Geographical coordinates (latitude/longitude, in degrees and minutes):

See the Map No.1 Center: N: 12 42`20.04" E: 53 30`23.75" and boundaries at

2:

N: 12 42`40.22"

E: 53 31`11.01"

3

N: 12 42`39.99"

E: 53 29`56.45"

4

N: 12 42`2.11"

E: 53 29`42.49"

5

N: 12 42`3.55"

E: 53 30`35.68"

#### 9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Ditwah Protected Area is located on the northwest part of Socotra Island, 56 km west of Socotra Airport and 1.6 km from the nearest town (Qalansia) Qalansia city) under Qalansia and Abdulkuri District.

**10. Elevation:** (in metres: average and/or maximum & minimum)

400m to 2m below sea.

**11. Area:** (in hectares)

5.8 Kilometre square (580 ha).

#### 12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site is a coastal wetland, said to be a brackish lagoon in 1964 and apparently then sealed off from the sea naturally by a sand bar, but now used as a bad-weather harbour for fishing boats and therefore, a tidal inlet open to the sea. Inland, there is a lowland plain with Croton *Croton socotranus* shrubland. The site consists of seven different habitat types including sand dunes, tidal and subtidal areas, seagrass and shallow water.

The lagoon supports unique biodiversity with sea grass (*Halodule uninervis* and *Cymodocea rotundata*), algae, gastropod, crustaceans and fish species. (Appendix 1)

It is an important bird area, with 32 recorded species (resident and migrant), in special habitats which start from the land around the wetland, sand dunes, different depths of water in Detwah lagoon to coastal area, tidal and subtidal areas creating an ideal habitat for some fishes which put their larva in shallow water and continue their life cycle in the deep sea

This Ramsar Site includes the lagoon with a small part of terrestrial land around a tidal inlet on the northwest coast of Socotra Island; probably the most important wetland on Socotra but very poorly known.

The lagoon has been identified as an Important Bird Area by BirdLife International (Evans, 1994). The site was declared a protected area by Decree Number 275 in 2000.

# 13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1	•	2 •	<b>3</b> •	4 •	5 <b>•</b>	6 •	7	8 •	9

# 14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

#### Criteria 2:

Common name	Scientific name	IUCN Red List	CMS	CITES
Egyptian Vulture	<u>Neophron</u>	EN	I	II
	<u>percnopterus</u>			
Socotra	Phalacrocorax	VU	II	
Cormorant	nigrogularis			
Black-blotched	Taeniurops meyeni	VU		
Stingray				
Leopard Stringray	Himantura uarnak	VU		

Criteria 3: The site supports more than 30 bird species, several fishes, gastropod, crustaceans, and sponges. As shown in the appendix, six out of the 20 plant species at the site are endemic. The endemic shrubs *Croton socotranus* and *Jatropha unicostata* as well as scattered trees of *Euphorbia arbuscula*, , and *Ziziphus spina-christi* can be found at the site.

**Criteria 4:** The site is an IBA, an important roosting, feeding area and is important as a resident breeding site for 10 species of birds (listed in the appendix) and a wintering site for 16 species. The endangered Egyptian Vulture *Neophron percnopterus* and the vulnerable Socotra cormorant *Phalacrocorax nigrogularis* are some of the important resident breeding species.

**Criterion 8:** This area is essential for the completion of the life cycle of 22 fish species (listed in the appendix). The lagoon represents a shelter for juvenile fish and spawning area, as many species release their larvae in the shallow waters, while the relatively pristine sea grass habitat provides ideal refuge from predators, feeding area and shelter for juvenile fish.

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

#### a) biogeographic region:

Islands east of the Horn of Africa and south of Yemen (Socotra Archipelago, Afrotropical region)

b) biogeographic regionalisation scheme (include reference citation):

WWF Ecoregions <a href="http://worldwildlife.org/ecoregions/at1318">http://worldwildlife.org/ecoregions/at1318</a>

#### 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

The wetland represents a sandy lagoon with a maximum depth of 2 m. The site is surrounded by mountains; most of the rocks are limestone. There is a small brackish well within the site used mainly for livestock. The structure of the sand dunes in the site changes from year to year affected by the windy seasons.

The mountains surrounding the Ramsar Site are composed of limestone rock, an extension of the central mountains of Socotra Island. Granite rocks are also found on the western side of the lagoon. The site is surrounded by two small hills, one on the west and one on the east. Each reach 400 m and the plateau between the two hills reach just 60 m. On the south side of the lagoon towards the plateau the soil is of clay and sand composition.

The temperature is around 27 Celsius with around 200 mm annual rainfall. Maximum temperatures can reach 30 Celsius and minimum in the month of January at 25 Celsius. Rain falls from April to May and during the month of October; however rainfall on the coastal areas is relatively less than the inland mountainous areas of the island.

From December to February and June to September the area is affected by strong winds. The climate of the ecoregion is strongly influenced by both the southwest (April-October) and northeast (November-March) monsoons. The southwest monsoons bring extremely strong, hot and dry winds from Africa. There is little precipitation and extreme desiccation during these months. The winter monsoon begins in November and lasts until March. Mean annual rainfall varies from about 150 mm on the coastal plains to more than 1,000 mm in the mountains. Water salinity in the lagoon is similar to that of the open sea and varies between 37-39 ppm. Tidal variation is about 1 m.

Water temperature is on average 23 Celsius.

The area is mainly composed of sand however soils are found towards the south of the site and represent mixed organic and mineral soil.

#### 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The dominant landscape feature of Socotra Island is an extensive plateau of Cretaceous limestone averaging 300 to 700 m in elevation. The plateau rises near the Hagghier Mountains in the northwest (maximum elevation 1,519 m), which are composed of Precambrian granites and metamorphic rocks. The plateau then declines abruptly at the extreme western portion of the island, falling in steep escarpments to the coastal plains or directly into the ocean.

The northeast wind blows in winter and southwest winds in summer. Temperature: 25C to 39C rainfall: less than 200mm/year, average water temperature is 23C.

# 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

The site is known to be important for fish breeding and an important breeding, feeding and stopover site for birds. Seagrass systems are known to help stabilize the shoreline.

#### 19. Wetland Types

## a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

Marine/coastal:  $\underline{A} \cdot \underline{B} \cdot C \cdot \underline{D} \cdot \underline{E} \cdot F \cdot \underline{G} \cdot H \cdot I \cdot \underline{J} \cdot K \cdot Zk(a)$ 

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp Ts • U • Va • Vt • W • Xf • Xp • Y • Zg• Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

#### b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area. I

#### 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Sandy areas: coarse pure sand that lie immediately behind the sand barrier between the lagoon and the sea (at 2m depth) provide ideal habitat for the vulnerable Leopard Stingray *Himantura uarnak* and the near threatened Bluespotted Ribbontail Ray *Taeniura lymma*. Detwah lagoon is the only site on Socotra Island where these species are found.

Sandy-Soil mixed areas: at 0-0.5 m more landwards, these sandy soil areas provide idea habitat for crabs.

Sandy-Rocky areas: At the easternmost boundary of the protected area, an area where tidal variation occurs, sponge species can be found including the endemic *Psuedoceratina Arabica* and *Haliclona bawiana*, these areas provide ideal refuge areas for crustaceans as well.

#### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

There are around 20 species of flora, listed in the appendix. Croton socotrana is a dominant shrub in the landside of the protected area, and there are different sea grass species (Halodule uninervis) and several algae types. Seagrass areas are particularly important in the lagoon with species such as Halodule uninervis and Cymodocea rotundata and Cymodecea serrulata as well as Saragassum sp and Spatoglossum sp. providing ideal shelter for juvenile fish.

#### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

Endemic Sponges: Psudoceratina Arabica and Haliclona bawiana
Near Threatened: Ribbontailed Stingray <u>Taeniura lymma and Spotted Eagle Ray Aetobatus narinari</u>

#### 23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

The site is very important for local people and tourism as a recreation area, some people fish in the coastal area of the lagoon, using the lagoon as a safe harbor during storms. The site also provides one of the best landscape views on the island and is an important site for ecotourism, camping, diving activities.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

No.

If Yes, tick the box  $\square$  and describe this importance under one or more of the following categories:

- i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where 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:

# 24. Land tenure/ownership:

a) within the Ramsar site:

The wetland is common land (not owned by any one) but the land area within the site is owned by two tribal families. (Bani Yasaf and Bani Hamoud)

b) in the surrounding area:

The second large city on the island, Qalansia, has some government offices very close to the site and a police section responsible for monitoring tourist activities. There is also the army site that is within the boundary of the site, the surrounding area belongs to Government and local people, but in general the site is a protected area.

#### 25. Current land (including water) use:

a) within the Ramsar site:

There is a tourist campsite. Schools visit this site. Fishermen engage in deep water fishing, but only on a small scale.

b) in the surroundings/catchment:

Limited goat grazing

Government and houses construction. Small scale fishing with nets.

# 26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

Unregulated tourism activities (litter, off road driving in the protected area) There is increased interest from tourism companies to develop the area however until now the site remains relatively pristine, the sand dunes forming a natural barrier.

Boat activity inside the lagoon may have some impacts, although this is not monitored or regulated currently. Management of the area is difficult due to several different sides claiming ownership of the land and claiming benefits from the touristic activities taking place. Community awareness about the benefits of protected areas and the importance of the site remain very low. In the past local residents did not pay much attention to the area as it is not useful for livestock or agriculture, and this may also be because they recognised the importance of the lagoon for juvenile fish.

b) in the surrounding area:

Increased construction of buildings and roads

#### 27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Biosphere Reserve (the whole island) and World Heritage Site (all the Natural Sanctuary included). The whole island of Socotra is a World Heritage Site.

**b)** If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

✓]	[a	IJ;	Ιb	IJ;	II	<b>□</b> ;	III	IJ;	IV	LI;	$V \vdash$	I;	VI ا	Ш
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c) Does an officially approved management plan exist; and is it being implemented?:

There is a management plan setup by Environmental Protection Authority (EPA) and some basic monitoring of birds .

d) Describe any other current management practices:

There are no an activities or management in the current time, but only tourism management by the local association under supervision of EPA.

## 28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The site is a natural sanctuary and there is a management plan but there isn't adequate financial support or capacity for its implementation. There is no monitoring of local and tourism use. The local EPA branch has proposed a workplan for 2004-2006 focusing on 5 priority objectives however there are limited resources to carry out this plan:

1. Carry out a more in depth assessment of the biodiversity at the site

- 2. Implement an active management of the area with involvement of local communities
- 3. Develop a structured eco tourism program that could provide benefits and livelihoods for local communities
- 4. Develop sustainable infrastructure for local communities at the site and in Qalansia town
- 5. Use the area for education purposed and awareness activities.

#### 29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Management plan, field research in 1999 was done during a biodiversity project. This research was conducted by Al-Hariri and the Senckenberg Research Institute, in Frankfurt, Germany.

# 30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Occasional school visits are carried out to the site from local schools on the Island; however there are no structured education or communication programs. The Environment and Protection Authority endeavours to consult and involve the local residents and communities and raise awareness about the concept and benefits of a protected area.

#### 31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

The campsite contains traditional shelters, camping area, bathroom and kitchen run by the local association.

There are school visits to the site. Due its natural scenic beauty and unique white sand dunes the area is very popular with visitors and tourists and birdwatchers and has a high potential for tourism.

#### 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Environment Protection Authority (EPA),

Wetlands Unit and EPA's branch in Socotra Island.

#### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Environment Protection Authority (EPA).

Wetlands Unit.

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#### 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Ditwah Management plan. 2004

Presidential decree 275 for the year 2000.

Sparlding, M.D; Fox, H. E; Allen, G.R; Davidson, N; Ferdana, Z.A; Finlayson, M; Halpern, B. S; Jorge, M.A; Lombana, Al; Lourie, S. A; Martin, K.D; McManus, E; Molnar, J; Recchina, C.A; Robertson, J; (2007). Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas. *BioScience*. July/August 2007 / Vol. 57 No. 7.

# Appendix: Species list of Detwah Lagoon Ramsar Site

# Seagrass:

Family	Species
	Halophila uninervis
	Halophila ovalis
	Cymodocea serrulata
	Cymodecea rotundata

# Marine Algal Species:

Goupe	Species
Phaeophyta	Dictyota ceylanica
	Gracilaria canaliculata
	Sargassum sp.
	Spatoglossum sp.
Rhodophyta	Rosenvingea intricata
	Epiphytic flamentous algae
	Hypnea boergesenii
	Jania sp.

# Mollusc

Family	Species
	Saccostrea cucullata

# **Echinoderms**

Family	Species
Holothuroidae	Holothuria atra
	Holothuria edulis
	Holothuria leucospilota

Synaptidae	Synapta maculata

# Crustacea:

Family	Species	
	Ocypode saratan	
	Uca inversa	
Grapsidae	Grapsus albolineatus	
	Grapsus granulosus	
	Metopograpsus messor	
Goneplacidae	Pseudozius caystrus	

# Sponges:

Family	Species
	cf. Psudoceratina arabica
	cf.Haliclona bawiana

# Fish species:

Family	Species	
Carangidae	Trachinotus baillonii (Lacepède 1801)	
Dasyatidae	gen. sp.	
	Pastinachus sephen (Forsskal 1775)	
	Taeniura meyeni Müller & Henle, 1841	
	Taeniura lymma (forsskal ), 1775	
	Himanture uarnak (forsskal)	
Gerreidae	Gerres cf. oyena (Forsskål, 1775)	
	Gerres filamentosus Cuvier 1829.	
Gobiidae	gen. sp. 4	
	Lotilia graciliosa Klausewitz, 1960	
Gymnuridae	gen. sp.	
Haemulidae	Pomadasys sp.	
Leiognathidae	Leiognathus sp. juv.	
Lethrinidae	Lethrinus harak (Forsskål 1775)	
Mugilidae	Ellochelon cf. vaigiensis	
Mugilidae	gen. sp. indet (spp. mix)	
Myliobatidae	Aetobatis narinari (Euphrasen 1790)	
Silliganidae	Sillago cf. sihama (Forsskål, 1775)	
Sparidae	Crenidens cf. crenidens (Forsskål, 1775)	
Sphyraenidae	Sphyraena sp. juv.	
Syngnathidae	gen. sp. 1 (belly striped with several silver bars)	
Terapontidae	Terapon puta (Cuvier 1829)	

# **Birds:**

English name	Species	Ocurrence
Egyptian Vulture	Neophron pecnoptrus	RB
Common kestrel	Falco tennunculus	RB
Long-billed Pipit	Anthus similis	RB/ ESSP
Southern Grey Shrike	Lanius meridionalis	RB
Grey Heron	Ardea cinerea	PM/MV
Jouanin's Petrel	Bulweria falaxx	RB
Brown Booby	Sula leucogaster	RB
Socotra Cormorant	Phalacrocorax nigrogularis	RB
Little Egret	Egretta garzetta	PM/MV
Western Reef Heron	Egretta gularis	NBV
Greater Flamingo	Phoenicopterus roseus	PM/MV
Osprey	Pandion haliaetus	RB
Grey Plover	Pluvialis squatarola	PM/MV
Kentish Plover	Charadrius alexandrinus	RB
Bar-tailed Godwit	Limosa lapponica	PM/WV
Whimbrel	Numenius phaeopus	PM/WV
Eurasian Curlew	Numenius arquata	PM/WV
Common Greenshank	Tringa nebularia	PM/WV
Sanderling	Calidris alba	PM/WV
Little Stint	Calidris minuta	PM/WV
Dunlin	Calidris alpina	PM/WV
Terek Sandpiper	Xenus cinereus	PM/WV
Curlew Sandpiper	Calidris ferruginea	PM/WV
Sooty Gull	Larus hemprichii	RB
Baraba Gull	Larus cachinnans barabensis	PM/WV
Caspian Tern	Sterna caspia	V
Lesser Crested Tern	Sterna bengaleensis	PM/WV
Swift Tern	Sterna bergii	PM/WV
Sandwich Tern	Serna sandvicensis	PM/WV
Lesser Sand Plover	Charadrius mongolus	
Whit-cheeked Tern	Sterna repressa	

## **Annotations:**

RB: Resident breeding.

RB/ END: Resident breeding and endemic

RB/ESSP: Resident breeding, endemic subspecies

PM/WV: Migratory and wintering

V: Migratory

## Flora:

About 20 species of flora were recorded at the site.

Family	Species	Socotri Name
Euphorbiaceae	Croton socotranus (endemic)	مترر
Legumiae	Tephrosia apollinea	طفهر
	Cissus subfola	عطرها
	Ziziphus spina-christi	ضاد
	Adenium	
	obesum subsp. Socotranum	
	(endemic)	تريمو
	Jatroppha unicostata	2
Euphorbiaceae	(endemic)	سپره
	Argemone mexicana	مرخة
	Lysum sp.	سو هر
	Marua socotrana	اشحب
	Euphorbia arbuscola (NT	,
Euphorbiaceae	Endemic)	امتى
	Cissus sp.	عطرها
	Carphalea obovata (endemic)	شيحط
Graminae	Gram sp.	كيطة
Graminae	Gram sp1.	
	Indigofera sp.	
	Acacia sarcophylla	حرحير
	Gossypium barbadense	اشیرة, اجرة, اشهر
	Cucumis prophetarum	اشیرة, اجرة, اشهر حجب, دجن
	Pulicaria stephanocarps	جربب دریب