Ramsar Information Sheet

Published on 1 May 2017

United Arab Emirates

Bul Syayeef

Designation date	27 September 2016
Site number	2293
Coordinates	24°18'11"N 54°20'59"E
Area	14 504,50 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

Bul Syayeef is one of the important coastal wetlands in the biogeographic region with a high conservation value due to the presence of different wetland habitats such as mangroves, salt marshes, seagrass bed, intertidal mudflats, and shallow water, and an important set of wetland dependent species. The tidal mudflats and associated mangroves are home to many species of wildlife, especially over 80 migratory and resident birds. The area came to prominence in 2009, when it hosted one of the largest breeding events of the greater flamingo (Phoenicopterus roseus) in the Arabian Gulf when 2000 breeding pairs were recorded and 801 chicks were successfully hatched. The Site also supports several thousand migratory shorebirds and the presence of the critically endangered hawksbill turtles (Eretmochelys imbricate) and the endangered green turtle (Chelonia mydas) both of which are possibly nesting, and vulnerable dugongs (Dugong dugon) further adds to the importance of the area.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Dr. Salim Javed, Dr. Shaikha Salem Al Dhaheri
Institution/agency	Environment Agency-Abu Dhabi
Postal address	P.O. Box: 45553 Mamoura Building, Tower A, Maroor Street Abu Dhabi
E-mail	sjaved@ead.ae
Phone	+97126934711
Fax	+97124463339

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

From year	2009
To year	2014

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Bul Syayeef

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 Ramsar Site is located in the west Musaffah channel, just 20 km outside of the Abu City and is east of Maqta area. On the south is the industrial town of the Musaffah. The western boundary of the Ramsar Site has Al Aryam island, a privately owned island while the northern boundary has Futaysi island.The eastern side is more open and Maqta Bridge is 10 km east along the channel.

2.2.2 - General location

a) In which large administrative region does the site lie?	Abu Dhabi Emirate
b) What is the nearest town or population centre?	Musaffah

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):	14504.5
Area, in hectares (ha) as calculated from GIS boundaries	14504.5

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	Afrotropical -Arabian Peninsula AT1306

Other biogeographic regionalisation scheme

Arabian Desert and East Sahero-Arabian Xeric Shrublands

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Other ecosystem services provided: Bul Syayeef is an important coastal wetland that supports a diversity of wetland habitats, e.g mangroves, tidal mudflat and salt marshes which provides home to an important diversity of species, including birds and other marine wildlife. These habitats and their extent within the 145 sq. km area is one of the most extensive representatives of these habitats in the biogeographic region. Designation of Bul Syayeef as a Ramsar Site will add the element of representatives to the existing protected area network in UAE. It also provides other ecosystem services such as nutrient recycling, nursery for fishes and protection from storms.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification: Over 80 species of birds have been recorded from the area. One of the largest breeding events of the greater flamingos (Phoenicopterus roseus) in the Arabian Gulf occurred in the area in 2009 where close to 2000 breeding pairs were recorded and 801 chicks successfully hatched. The area is also one of the most important Sites for the wintering greater flamingos in the UAE where 10,000-15,000 flamingos can be present during the peak winter, which is about 50-70% of the total flamingo numbers in the UAE (Javed, 2011). Similar to the flamingos, large numbers of other species such as western reef heron (Egretta gularis), osprey (Pandion haliaetus), crab plovers (Dromas ardeola) occur at the Site. Many nationally and regionally important species occur in the area either as resident or migratory species. Species such as Caspian tern (Hydroprogne caspia) and Saunder's little tern (Sterna saundersi) are also potentially breeding in the area. The vulnerable Socotra cormorant (Phalacrocorax nigrogularis) and greater spotted eagle (Aquila clanga), and the relatively uncommon black-tailed godwit (Limosa limosa) are also found in the area. In 2011, great stone plover (Esacus recurvirostris) was recorded from the Site, the first UAE record for the species. Species such as the Osprey, crab plover, Socotra cormorant, Caspian Tern, Saunders Little Tern are listed as listed as national priority species (due to small world range, rare UAE breeder or locally threatened (Hornby & Aspinall, 1996).

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

☑ Criterion 6 : >1% waterbird population

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Avicennia marina	Mangrove	☐	☑	☐	LC	☐		Important plant species and makes up a very important ecosystem

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

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
Birds																		
CHORDATA / AVES	*Aquila clanga*	Greater Spotted Eagle	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☑		Globally threatened species, seen in the area during winter
CHORDATA / AVES	*Dromas ardeola*	Crab-plover	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	*Egretta gularis*	Western Reef Heron; Western Reef-Heron	☐	☐	☐	☐	☑	☐	☐	☐	100	2009-2011		LC	☐	☐		25-30 pairs regularly breed in the area
CHORDATA / AVES	*Esacus recurvirostris*	Great Stone-curlew/ Great Thick-knee	☐	☐	☐	☐	☑	☐	☐	☐				NT	☐	☐		First record for the UAE from the area
CHORDATA / AVES	*Hydroprogne caspia*	Caspian Tern	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Regularly seen breeding in the area
CHORDATA / AVES	*Limosa limosa*	Black-tailed Godwit	☐	☐	☐	☐	☑	☐	☐	☐				NT	☐	☐		Although the species was recently downlisted, it still is an important species and with a declining trend. The area provides important wintering habitat to this species
CHORDATA / AVES	*Pandion haliaetus*	Osprey; Western Osprey	☐	☐	☐	☐	☑	☐	☐	☐	10			LC	☐	☐		5-6 pairs regulary breed in the area
CHORDATA / AVES	*Phalacrocorax nigrogularis*	Socotra Cormorant	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		The Socotra Cormorant is globally threatened and one of the few regional endemics with sizeable and biggest breeding population on offshore islands of Abu Dhabi.
CHORDATA / AVES	*Phoenicopterus roseus*	Greater Flamingo	☐	☑	☑	☐	☑	☐	☐	☐	10000	2009-2014	20	LC	☐	☐		Bred in the area in 2009 and highest wintering concentration in the country.
Others																		
CHORDATA / REPTILIA	*Chelonia mydas*	Green Turtle	☑	☐	☐	☐	☐	☐	☐	☐				EN	☑	☑		Globally threatened species, though not nesting but forages in the area
CHORDATA / MAMMALIA	*Dugong dugon*	Dugong	☐	☐	☐	☐	☑	☐	☐	☐				VU	☑	☐		
CHORDATA / REPTILIA	*Eretmochelys imbricata*	Hawksbill Turtle	☑	☐	☐	☐	☐	☐	☐	☐				CR	☑	☑		A critically endangered species, breeds in Abu Dhabi waters. The species with declining trend worldwide contributes to marine and coastal food webs and transport nutrients within their areas of presence
CHORDATA / MAMMALIA	*Sousa chinensis*	Indo-Pacific Humpback Dolphin; Indo-Pacific Humpbacked Dolphin	☑	☐	☐	☐	☐	☐	☐	☐				NT	☑	☐		The species though listed as NT continues to decline, due to lack of protection and mortality from fishing gears.

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 Bul Syayeef is an ecologically important zone and a key coastal wetland in the Emirate of Abu Dhabi, UAE and the biogeographic region. Eight different habitat types are found in the area with open shallow water with seagrass as the most dominant habitat type occupying nearly 50% of the Site. The Intertidal mudflats (with no saltmarshes) are also a very significant habitat within the Site. Mangroves, salt marshes and stretches of intertidal mudflats are important elements that provide enormous ecological benefits ranging from nursery for fishes to nesting areas for birds and acting as source of food for variety of species, particularly the migratory birds, which feed and rest on the vast intertidal flats of the area. Given the rapid development of the coastal areas in the Emirates, there are very few such sites left, which support a relatively diverse set of habitats and rich biodiversity. Other than 80 species of birds (Appendix II), the Site is also important for globally threatened marine turtles and host many other species of plants, invertebrates and reptiles.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters	Shallow waters	1	7500	Representative
B: Marine subtidal aquatic beds (Underwater vegetation)	Seagrass & macro algal bed	2	5348	Representative
G: Intertidal mud, sand or salt flats		0	209	
H: Intertidal marshes	Tidal flats with Algal mat	3	682	Rare
I: Intertidal forested wetlands	Mangroves	4	486	Rare

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Cistanche tubulosa	-	
Cyperus conglomeratus conglomeratus	-	
Halocnemum strobilaceum	-	
Salsola imbricata	-	
Suaeda vermiculata	-	

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/REPTILIA	Bunopus tuberculatus	Baluch Rock Gecko				
ARTHROPODA/INSECTA	Coccinella undecimpunctata					
CHORDATA/REPTILIA	Mesalina brevirostris brevirostris	Short-nosed Lizard				

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts
CHORDATA/AVES	Acridotheres tristis	Common Myna	Potentially

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
B: Dry climate	BWh: Subtropical desert (Low-latitude desert)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres) 0

a) Maximum elevation above sea level (in metres) 2

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.

Arabian Gulf

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 ◉

4.4.4 - Water regime

Water permanence

Presence?
Usually permanent water present

Source of water that maintains character of the site

Presence?	Predominant water source
Marine water	☑

Stability of water regime

Presence?
Water levels fluctuating (including tidal)

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: Occasionally turbid

(ECD) Water temperature: 28.8C (Average)

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):

8.44

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 ☐

Please provide further information on salinity (optional):

Average salinity is 34.58

(ECD) Dissolved gases in water

Dissolved Oxygen 7.1 (Average)

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☑
Mesotrophic ☐
Oligotrophic ☐
Dystrophic ☐

Unknown ☐

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

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

Surrounding area has greater urbanisation or development ☑

Surrounding area has higher human population density ☐

Surrounding area has more intensive agricultural use ☐

Surrounding area has significantly different land cover or habitat types ☐

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

Only the south side of the Ramsar Site is significantly different as it is developed and industrialised. The north, the east and west have similar habitats as in the Site.

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)	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low
Erosion protection	Soil, sediment and nutrient retention	High
Climate regulation	Local climate regulation/buffering of change	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
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 microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Nutrient cycling	Carbon storage/sequestration	High

Within the site: 550

Outside the site: 100

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

The Site is socially important as the local community have been fishing in the area using a traditional fishery method such as Hadhra. Fishing using another fishing method ‘Bohoor’ used to be practiced until fishing rights using this method has been taken away.

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

(ECD) Carbon cycling: Mangroves & salt marshes help in carbon sequestration

(ECD) Notable aspects concerning migration	The Site is an important for migratory waterbirds, in particular shorerbirds as thousands of waders use the tidal mudflats for feeding and roosting. Also, the Site is is very important for the migratory greater flamingos as an important wintering ground.
(ECD) Pressures and trends concerning any of the above, and/or concerning ecosystem integrity	Pressure from development and presence of industrial establishment are elements of concern. However, these will be addressed and mitigated in the future.

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	☑	☐
Other public ownership	☐	☑

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Commercial (company)	☐	☑

Other

Category	Within the Ramsar Site	In the surrounding area
Unspecified mixed ownership	☐	☑

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

Private and government ownerships in the surrounding area, which has a mix of industrial, commercial and residential establishments.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Environment Agency - Abu Dhabi

Provide the name and title of the person or people with responsibility for the wetland: Ashraf Al Cibay/Khalfan Al Rumaithi

Postal address:
Marine Biodiversity Division, Terrestrial & Marine Biodiversity Sector
Environment Agency-Abu Dhabi
Mamoura Building, Tower A, Maroor Street
Abu Dhabi

E-mail address: aalcibahy@ead.ae

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
Commercial and industrial areas	Medium impact	Medium impact	☑	☑
Housing and urban areas	Low impact	Medium impact	☐	☑

Water regulation

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

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Shipping lanes	Low impact	Medium impact	☑	☑

Biological resource use

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

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified/others	Low impact	Low impact	☐	☑

Invasive and other problematic species and genes

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

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Storms and flooding	Low impact	Low impact	☑	☐

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Under declaration process	Bul Syayeef Marine Protected Area		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	Proposed

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

Measures	Status
Fisheries management/regulation	Partially implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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:

None at the moment

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
Water quality	Implemented
Birds	Implemented
Plant species	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Ahmed. S., Shah, J.N., Khan, S.B., Hammadi, A., Hammadi, E and Javed, S. 2010. Distribution and abundance of greater flamingo (Phoenicopterus roseus) in Abu Dhabi, United Arab Emirate. Wildlife Middle East. 5.
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Zohary, M. 1973. Geobotanical foundations of the Middle East: Vol.1, Gustav Fischer Verlag, Stuttgart, Germany.

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
<no file available>

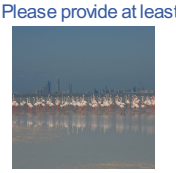
iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

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:



Flamingos against the backdrop of Abu Dhabi city (*SalimJaved / EAD, 26-12-2013*)

Flamingos with Mangroves in the background (*Salim Javed / EAD, 29-03-2010*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2016-09-27