

# Desert World Heritage in the Arab States

## Factsheet

Forfar Depression Western Desert, Egypt



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Mabbutt (1969) (cited in Cooke et al. 93 and cited in Goudie. A Seely, M. 2011, p. 5) have listed various **forms of deserts** including:

- Desert uplands.
- Desert piedmonts.
- Stony deserts.
- Desert rivers and floodplains.
- Desert lake basins.
- Sand deserts.

### What is a desert landscape?

Deserts have spectacular arid or semi-arid landforms. They cover about one third of the land surface and occur in every continent around the world. They are areas where severe shortage of moisture and occasional rainfall result in a lack of vegetation cover. Many of the desert landscapes around the world are inscribed as World Heritage Sites due to their Outstanding Universal Value. The uniqueness of the desert landscapes has positioned them to be listed on the World Heritage Tentative List; however, governments' efforts to nominate such desert landscapes have been limited.

## Desert World Heritage Sites in the Arab States

The world's non-polar deserts occur in five great provinces; the largest of these by far includes the Sahara and a series of other deserts extending eastwards through Arabia and into central Asia. There is a gap in desert landscapes on the World Heritage List, and many potential sites exist in the Arab Region. Therefore, there is a strong need to encourage Arab States to seek the inscription of potential sites, whether or not they are listed on their respective Tentative Lists, in order to conserve and protect those ecosystems under the World Heritage umbrella.

The geographical spread of this factsheet is regional, including, but not limited to, the territory of member states to UNESCO in the Arab Region. In addition to listing the desert sites in the region already inscribed on the World Heritage List, this factsheet also presents a selection of sites with potential to be recognised as World Heritage Sites in relation to their value as (1) landscapes that are formed by the primary action of desert processes and are of potential Outstanding Universal Value, and (2) desert features of outstanding and universal importance in relation to geosciences, including their accessibility and comprehension by civil society (note: IUCN considers this does not include sites with interests that are only of a specialised scientific importance).

There are two inscribed desert cultural World Heritage properties in the Arab States:

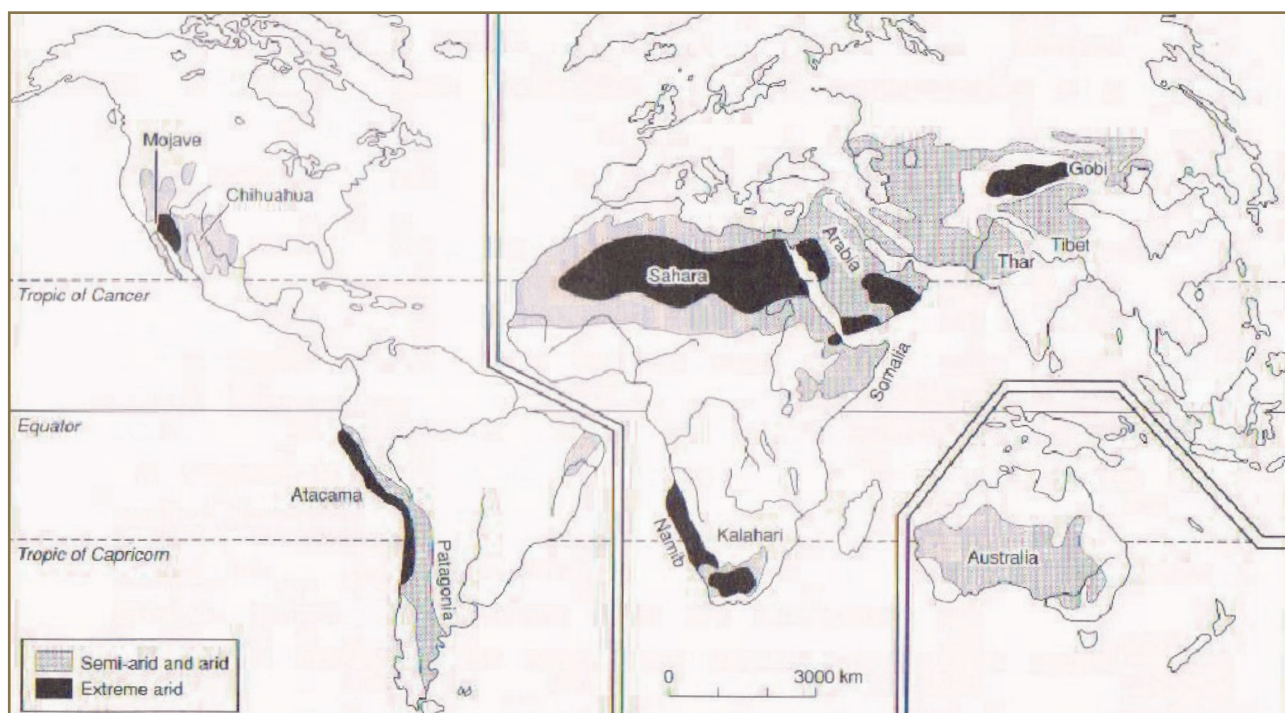
1. Petra ( Jordan)
2. Rock-Art Sites of Tadrart Acacus (Libya); an extension of Tassal n'Ajjer mixed World Heritage Site.

Petra, Jordan ©IUCN



There are four inscribed desert natural and mixed World Heritage properties in the Arab States:

1. Tassal n'Ajjer (Algeria)- Mixed.
2. Wadi Al Hitan Whale Valley "fossil site" (Egypt) - Natural.
3. Banc d'Arguant (Mauritania) - Natural.
4. Wadi Rum (Jordan) - Mixed.



Major non-polar deserts ( Goudie, 2002 and cited in Goudie, A. and Seely, M. 2011 p.3)



## Potential World Heritage desert sites in the Arab Region

The potential sites below represent a selection of the most significant desert landscapes and geomorphological sites that might or might not be listed on the World Heritage Tentative Lists by Arab States Parties. Under criterion (viii) those sites also have the potential to meet the necessary conditions of integrity with regard to their level of protection and management.

**1. Great Desert Landscapes/Western Desert (Egypt at Tentative List 2003):** Characteristics by classic barchans (crescent shaped sand dunes) and linear dunes that have been observed to be of higher significance than any other desert features that reflect the area's profound aridity: spring mounds, tufa, spreads, groundwater sapping features, closed depressions, yardangs, relict karst, the Selima sand sheet, and the sandstone topography of the Gilf Kebir (Embabi 2004 cited at Goudie, A. and Seely, M. 2011, p21).

**2. Wadi Howar National Park (Sudan at Tentative List 2004):** One of the most remarkable natural features of the southeastern Sahara; it has been a major former tributary of the Nile, and is one of the best examples of a river system that has ceased to flow throughout its length due to impacts of climate change.

**3. Sabkha (United Arab Emirates):** "Sabkha" is an Arabic word meaning "salt flat". the Sabkha is located in the western part of the Arabian Gulf. It is a unique landscape that is not to be found anywhere else on Earth. It was originally studied by various scientists around the world. It extends along the coastline of Abu Dhabi Emirate between Jabal Dhanna and Ras Ganada, a distance of 300km. It is also an important model for hydrocarbon generation (Evans 1995 cited in Goudie, A. and Seely, M. 2011 p.26).

**4. Desert Wadis (Egypt at Tentative List 2003):** Wadis Qena, Gemal and Allaqi (Eastern Desert). Wadi Qena, together with Wadi Allaqi, are former rivers that are intimately connected to the history of the Nile. These two large rivers fed the recently discovered "radar-imaged" rivers of southwest Egypt and were believed to be active during Acheulian times. Wadi Gemal is a fascinating unpolluted site on the Red Sea coast with very rich biodiversity.

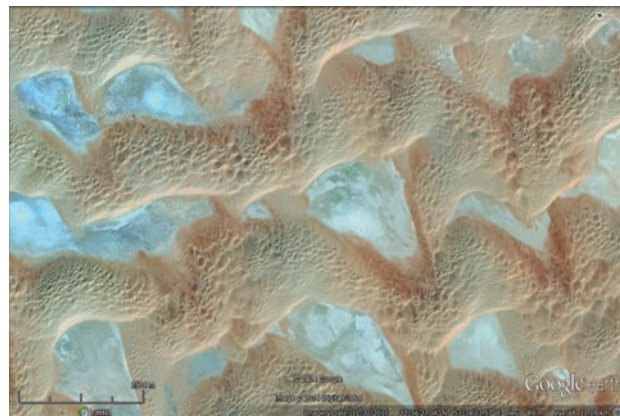
**5. Southern and Smaller Oasis, the Western Desert (Egypt at Tentative List 2003):** A range of oases that are of high biodiversity and geomorphological importance; Kharga Oasis, Bahariya Oasis, Farafra and Dakhla Oasis, Bahariya Oasis, and the Wadi El-Natroun Depression.

**6. Chott el Jerid/The Chotts (Tunisia at Tentative List 2008):** The closed basins of Tunisia, the subject of much classic French geomorphological research, consist of a series of large basins that were formerly more extensive in pluvial times. They are notable as being examples of saline basins, but they also have within them some of the best world examples of gypsum crusts and of gypsum dunes. They are bounded in part by extensive rock ramps, called glacis. The Chott Djerid is probably the most important of these features (Swezey 1997 cited at Goudie, A. and Seely, M. 2011, p.23).

**7. Liwa oasis (United Arab Emirates):** Forming an arch spanning 100 kilometres on the north-east corner of the Rub' Al Khali, the world largest sand desert, villages and palm groves in the Liwa Oasis provide a stark contrast to the surrounding desert. The synergy between sand dunes and sabkhas has been identified as a unique landform in the region. Dunes surrounding Liwa Oasis reach heights of 150 meters, with their formation being traced to thousands of years of deposition.



Sand Sea, Egypt © EEAA



Liwa desert, UAE (c) Google Earth

**8. The Musandam Peninsula (Oman):** The peninsula, located on the Strait of Hormuz, is a dramatic demonstration of nature's unrelenting ability to alter and shape any geographical surrounding. With its dramatic rugged limestone cliffs that have continuously been sculpted by the sea, and spectacular 'khawrs' or fjords along the coastline, these ridges of Jurassic and Cretaceous limestone are a unique landform in the region.



Masandam Peninsula, Oaman © Ministry of Environment and Climate Affairs



Ras Al Khama, UAE © Andrew Goudie



Arabian Oryx, Wadi Rum, Jordan © ARC-WH



Banc d'Arguin © IUCN

#### Disclaimer

Inclusion of a site in this list of possible priorities is without "prejudice to the success of any nomination that could be put forward and does not guarantee its future inclusion on the World Heritage List."

#### Acknowledgment

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#### References:

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2. Eric C.F Bird «Encyclopædia of the world's coastal landforms/ Eric C.F. Bird, editor, Dordrecht; Springer, 2010. Volume 2 (16.3) pages 1031-1032.
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TABE'A - A partnership programme between IUCN and ARC-WH

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