

WADI EL GEMAL NATIONAL PARK

Alberto Siliotti

English Edition 



ECOTOURISM IN WADI EL GEMAL NATIONAL PARK PROJECT

An ecotourism model for the Wadi el Gemal National Park is being implemented through an innovative Public-Private-Partnership between Gorgonia Beach Resort, the KFW DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH (development finance institution) and Wadi el Gemal National Park in Egypt. The Project goal is to help the Park to fulfill its dual mission to provide for the visitor enjoyment while conserving resources for future generations.



We work to develop and promote ecotourism business by enhancing the Park's tourism infrastructure and services in a manner that enhances the visitor experience and resource protection and at the same time benefit the local Ababda tribe and private tourism business. This will ultimately improve the overall marketability of Wadi el Gemal area as a destination, extending the benefits of ecotourism on a larger scale.

The success of the Project is a result of the cooperation, support and engagement of our partners; the Ababda tribe, the Park Manager Mr. Mohamed Gad and his team of Park Rangers, local NGOs, private sector, developmental and governmental bodies.

Special thanks for Mr. Niklas Esser; Mr. Luca Scarsini and Mr. Mahmoud Sarhan for their distinguished efforts in project planning and management.

Sincerely,

Johannes Girardi

Project Manager

Wadi el Gemal National Park



- WGNP Borders
- Main road
- Roman track
- Main track
- secondary track

REGULATIONS OF THE PARK

- Do not disturb or damage animals and plants.
- Do not collect or damage rocks, minerals or geological features and archaeological evidences.
- Do not drive off marked tracks.
- Do not write, paint or carve graffiti.
- Do not leave any garbage, toilet paper or body waste.
- Do not use wild plants for firewood.
- Camp only in designated areas.



Offenders are subject to prosecution according to the terms of Law n. 102 of 1983

**TAKE NOTHING WITH YOU
LEAVE NOTHING BEHIND**

RUBBISH AND TIME...

Remember that rubbish thrown away in the desert may remain there even for centuries



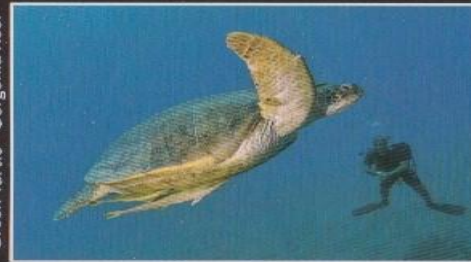
Wadi el Gemal Island



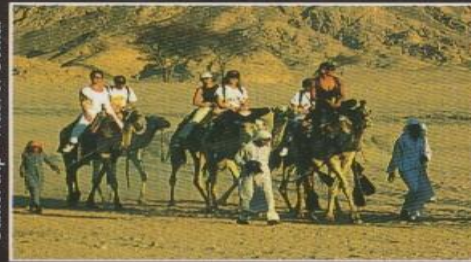
Medicinal plant
Wadi el Gemal



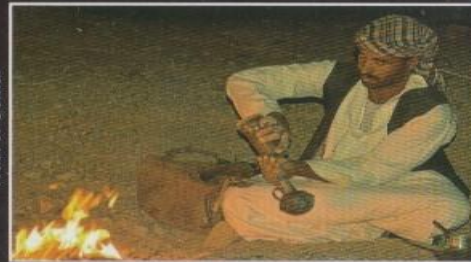
Green Turtle - Gorgonia Reef



Camel trip - Wadi el Gemal



Bedouin coffee
Wadi el Gemal

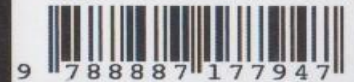


The Wadi el Gemal National Park is both one of the most interesting and least known sites in the entire Red Sea. An extraordinary variety of fish and madrepores enhances the splendid coral reef, and over 70 species of plants and shrubs adorn the impressive desert valleys, which boast the most ancient emerald mines in the world.

54 pages with more than 200 pictures, satellite maps and drawings



ISBN 978-88-87177-94-7



9 788887 177947



Bedouin
crafts



Gasoline

Postal
Office

Mosque

Mosque

Bank

Gasoline

Gebel Elba
National Park
Office

Parking

Camel Market

Souq

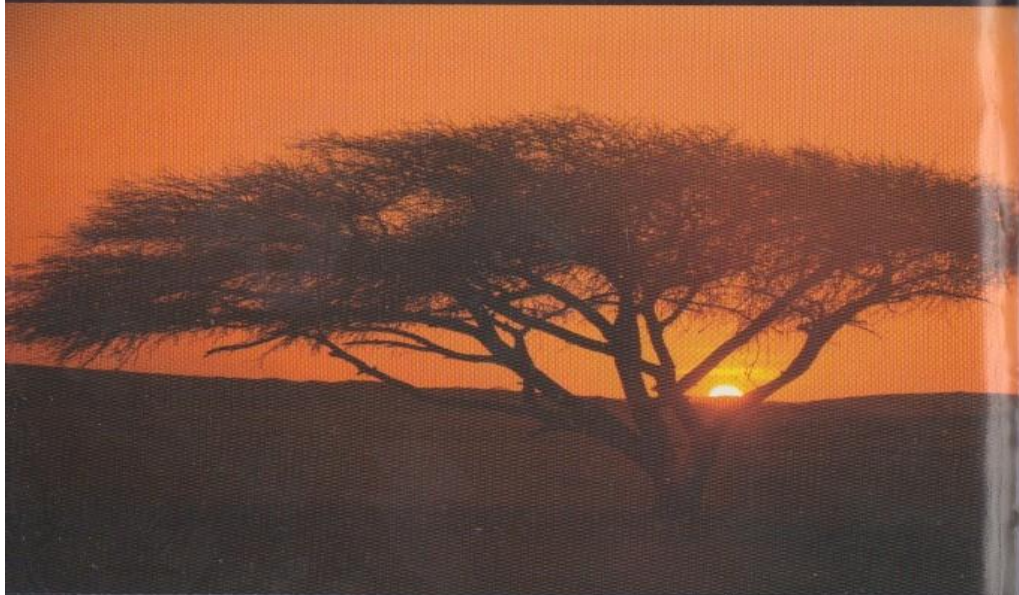
Camel Market

Marsa Alam Km 243



Bir Shalateen





An acacia tree (*Acacia tortilis tortilis*) at sunset in the Wadi el Gemal National Park

To Yvonne

Texts and photographs Alberto Siliotti
 Project editor Elisa Martini
 Underwater photographs Manfred Bortoli,
 Silvia Liotta, Pierpaolo Peluso
 English translation Richard Pierce

Illustrations Stefania Cossu,
 Elisa Martini, Giulia Scapini
 Graphic project Geodia

Thanks are due to the following for
 their valuable collaboration: Mohamed
 Gad, Ahmed Shawki (Wadi el Gemal
 National Park), Francesca Matteazzi
 and the Gorgonia Beach Resort

Copyright © 2015 by Geodia (Verona, Italia)

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means—electronic or photomechanical, including photocopying, recording, or storage in a retrieval system—without the prior written permission of the publisher.

ISBN 978 88 87177 94 7

Dar el-Kutub 20168/2015

The Author

Alberto Siliotti is a science journalist who is one of the leading experts on the Red Sea, about which he has directed documentaries and has written many articles and books, including the famous Sharm el-Sheikh Diving Guide (1999), Fishes of the Red Sea (2001), Sinai Diving Guide (2005), The Great Shipwrecks of the Red Sea – Thistlethorn & Rosalie Moller (2006).



Cover illustration: camels among the mangroves at Ras Qulan (photograph: Manfred Bortoli)

The Wadi el Gemal National Park



Index

The Wadi el Gemal National Park	5
The flora	6
The Mangroves	10
Terrestrial Animals and Birds	12
- Birdwatching	17
The Coral Reef and the Marine Fauna	18
- The Dugongs	20
- The Turtles	20



A whitetip reef shark (*Triaenodon obesus*) at Shaab Sharm



Mangroves on Wadi el Gemal Island

EXPLORING THE PARK: THE DIVING SITES 34

- Sha'ab Sharm	36
- Sha'ab Gad el Nos	
Sha'ab esta	38
- Hankorab	40
- The Abu Ghosun wreck	42
- Siyul	44
- Sataya - Dolphin House	46

THE COAST FROM WADI EL GEMAL TO BIR SHALATEEN 48

- Troglodytic Berenike	51
- The Bisharin Bedouin	52
- The camel market at Bir Shalateen	53

THE ABABDA BEDOUIN 22

The History of the Region	24
- The Pharaoh's emeralds	25

EXPLORING THE PARK: THE LAND ITINERARIES 26



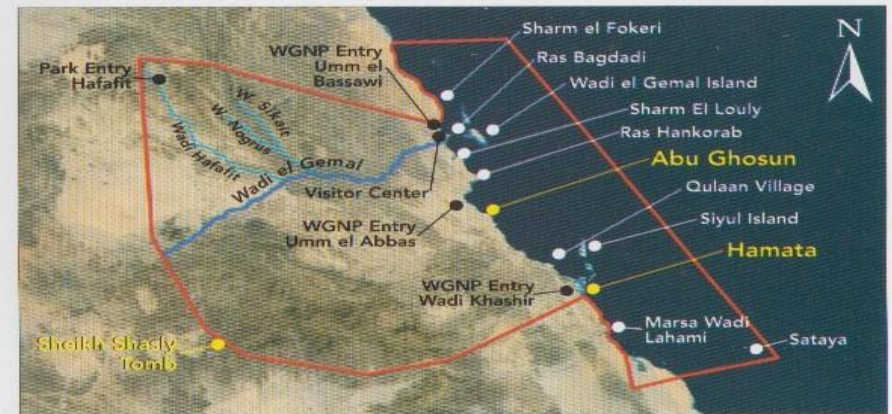
An osprey (*Pandion haliaetus*) at Ras Hankorab



An Ababda Bedouin at Wadi el Gemal

The Wadi el Gemal National Park

Still little known and with relatively few visitors, Wadi el Gemal, which boasts the most ancient emerald mines in the world, is one of the most interesting areas in Egypt because of its many ecosystems and archaeological sites.



The Wadi el Gemal National Park (WGNP) has a surface area of 7450 km²

Wadi el Gemal, the 'Valley of the Camels', situated about 45 kilometers south of Marsa Alam, is one of the largest valleys (wadi in Arabic) in the Eastern or Arabic Desert, the region between the Nile and the Red Sea. The valley was the bed of an ancient river that no longer exists; it originated about 15,000 years ago in the tall mountains to the west dominated by Gebel Hamata (1975 m) and flowed into the Red Sea. Along the way it was fed by about twenty tributaries that created a vast network of

secondary valleys. This region is distinguished by its very different environments, which are home to a great variety of flora, comprising more than 140 species of plants and bushes, including 70 medicinal plants, and a large fauna population with 45 species of resident birds, reptiles (25 species) and mammals (24 species). Because of its extraordinary features, in 2003 Wadi el Gemal was declared a National Park (WGNP). The park, protected by 11 rangers, is made up of two parts, a terrestrial one measuring 4770 km² and another, no

less important marine area (2000 km²) that extends along 120 km of coast and is often bordered by mangroves and an amazing coral reef with a population of over 100 species of fish, turtles and dugong. Wadi el Gemal, which is now inhabited by more than 2000 Bedouin belonging to the Ababda tribe, was known in ancient times for its deposits of emeralds and was traversed by a major track, which is still negotiable, that connected the ancient Ptolemaic and Roman port of Berenike and the Nile River Valley.

Visitor overlook at WGNP

WGNP office at Shams Alam

Visitor Center

WGNP office and headquarters at Umm el Abbas

WGNP office at Hamata

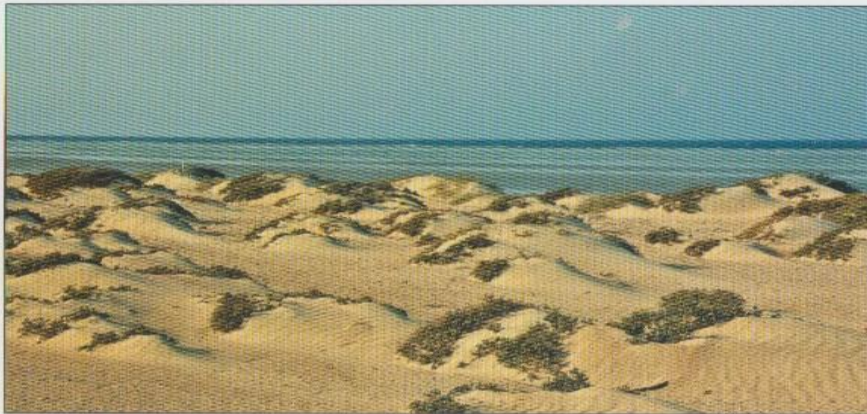
The Wadi el Gemal National Park (WGNP)

The Flora

The park boasts some of the richest flora in the Arabian Desert, over 140 species of plants and bushes that characterize its diverse ecosystems: the coastal belt, the mouth of the wadi, the coastal plain and the large valleys.



Atriplex farinosa



Small coastal dunes with *Zyghophyllum album* and *Limonium axillare*

The seasonal rain collected in a subterranean water supply network here is scarce, yet it is enough to guarantee the growth of the local flora, which includes plants, bushes and tall trees. The Ababda Bedouin use the plants in many different ways: for example, as food for their animals (camels, sheep and goats), as fuel to cook their food and prepare their traditional drinks (tea and coffee), as medicinals, to make objects, and even as food for themselves.

The Bedouin are quite knowledgeable about the flora in the park and have given a name to each plant. These local names are added

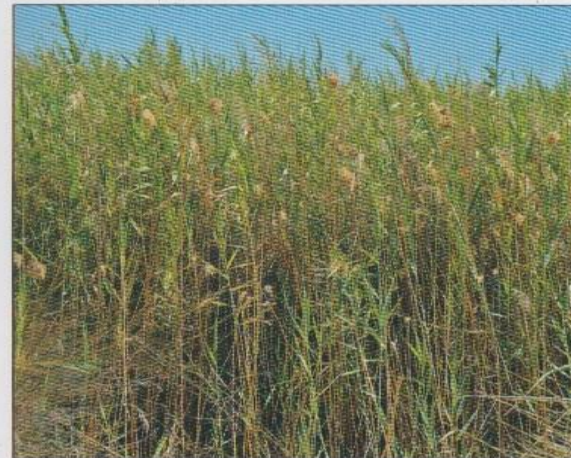
here in parenthesis. The coast, several areas of which are bordered by mangroves (see page 10), is dominated by small sand dunes



Limonium axillare and *Zyghophyllum album* (Z) bushes



Nile tamarisk (*Tamarix nilotica*) along the coast



A thicket of reeds (*Phragmites australis*) at the mouth of the Wadi el Gemal

tamarisk plants (*Tamarix nilotica* or *turfa*), date palms (*Phoenix dactylifera* or *nakhl*), a doum palm (*Hyphaene thebaica* or *dum*), and a large number of common reeds (*Phragmites*



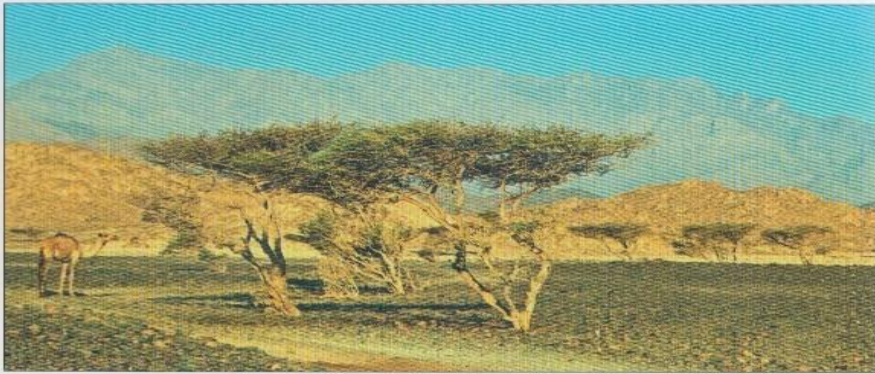
Date palms (*Phoenix dactylifera*) at the mouth of the Wadi el Gemal

australis or *bus*). Some stretches of the coast, in particular the Wadi El Gemal Island and Ras Baghdadi, are especially abundant in the *Atriplex farinosa* saltbush (*handa'al*), whose very long roots help to fix this plant into the sand.

colonized by shrubs that have adapted to the hypersaline environment. Two of these shrubs are *Limonium axillare* (*shaliif*), whose roots are used by the locals to cure diabetes, and *Zyghophyllum album* (*bihtinay*) and *Z. coccineum* (*bawal*), both of which are used to stimulate the appetite. In the vicinity of the mouth of the Wadi el Gemal one can see some large Nile



Atriplex farinosa saltbush borders the coast of Wadi el Gemal island

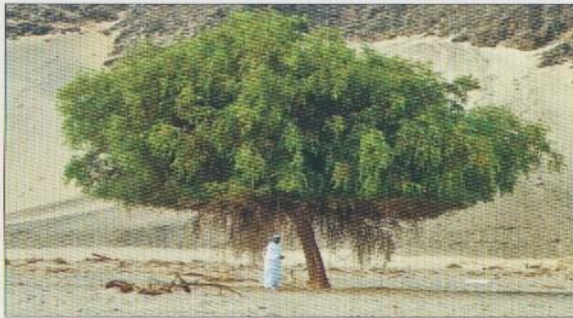


A group of acacias (*Acacia tortilis tortilis*) in the Wadi el Gemal park



The edible fruit of *Balanites* reminds one of dates

The vegetation in the wadi differs quite a lot from that along the coast and is characterized by the large quantity of acacia and desert date trees. The acacias here belong to the *Acacia tortilis* species, which is represented by two subspecies: *Acacia tortilis tortilis* (*samur*) with its



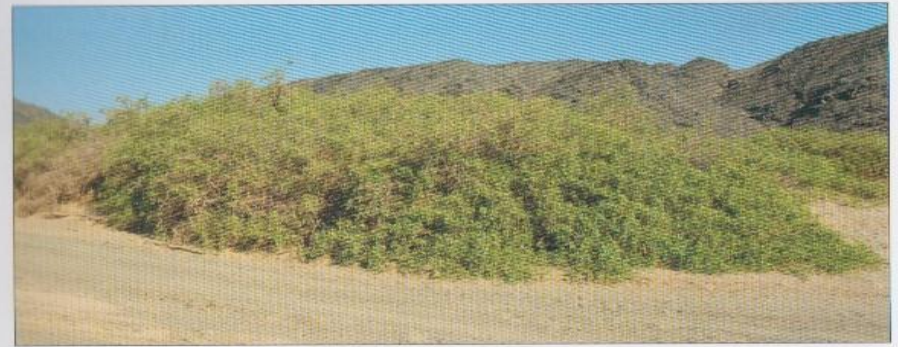
The *Balanites aegyptiaca* desert date

typical umbrella shape, and *Acacia tortilis raddiana* (*sayyal*), which differs from the former subspecies in that it has only one trunk. Acacias are the most important tree in the Arabian

Desert: they serve as food for camels, provide building material and firewood for the Bedouin, and their resin is used to cure gastric hyperacidity and eye infections. The other most widespread and characteristic plant in the Wadi el Gemal area is the desert date or *Balanites aegyptiaca* (known as *lalub* or *higlig*), the fruit of which has a shape similar to that of dates and has anti-diabetic and anthelmintic properties. The wood of this plant is especially hard and is used to make camel saddles or kitchen utensils. Another feature



Zilla spinosa in blossom



Salvadora persica (*arak*) is common and widespread at Wadi el Gemal

of the flora at Wadi el Gemal is the abundance of a particular shrub, *Salvadora persica* or toothbrush tree, which the locals call *arak* or *siwak* and which forms typical and impenetrable green islets along the course of the wadi. *Arak* fruit is edible, and when dried has a diuretic effect, while its branches, which contain a powerful antiseptic for the throat, are used by the Bedouin to clean their teeth.

Another important plant is the *Zilla spinosa* (*bisilla*), the most widespread in the park territory, characterized by its long thorns which, however, do not stop

animals (particularly gazelles and ibexes) from eating it. The Bedouin use *Zilla* as an antiseptic for the urinary system and its dried branches make excellent firewood.



Senna alexandrina is an important medicinal plant

Lastly, among the most important and famous medicinal plants in the



Citrullus colocynthis, also known as the 'desert gourd'

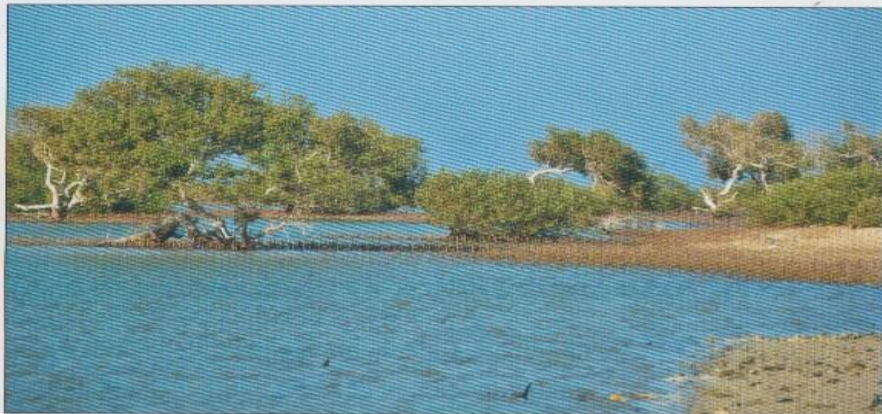
park, mention should be made of *Senna alexandrina* (*sana abbali*) with its typical yellow flowers, whose leaves have a powerful laxative effect when dried and boiled, and *Citrullus colocynthis*, known as the 'desert gourd' (*handal*), a plant that besides being excellent food for gazelles, has purgative, diuretic, anti-rheumatic and anti-epileptic properties. However, since it is powerful, it may also be dangerous.



The Mangroves



One of the special features of the coasts of the Wadi el Gemal National Park is the amazing abundance of mangrove thickets, which go to make up an ecosystem that is unique in the Red Sea area.



The large mangrove thicket in the Hamata zone

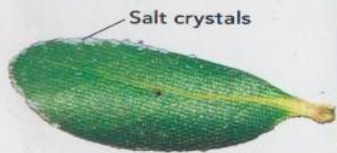
Mangrove thickets are coastal forests typical of tropical or subtropical zones. Their distinguishing feature is the plant in the *Verbenaceae* family called *Avicennia marina* (white or grey mangrove) which has a natural filtration system – an extensive root network made up of aerial roots

called pneumatophores that branch out and emerge vertically from the ground for as much as 20-30 centimeters.

These roots filter the sea water and eliminate the salt crystals from the leaves, thus making it possible for the trees



Mangroves have special aerial roots called pneumatophores that emerge from the water



An *Avicennia marina* leaf with salt crystals

to take in oxygen. Mangroves constitute an ecosystem that is closely connected to that of a coral reef and is very important because it acts as a refuge not only for the juveniles of many species of fish and for many invertebrates, but also for numerous species of birds.

Furthermore, mangrove thickets are also home to innumerable crustaceans, most of which consist of the species *Macrophthalmus* sp. (sentinel crab) and *Uca* sp. (fiddler crab). The males of this latter species are easily recognizable since one of their claws, usually the right one, is oversized,



Macrophthalmus sp., the sentinel crab, lives in the intertidal zones of mangrove thickets

almost half as long as its body, hence their common name. Lastly, again thanks to the dense system of roots, mangrove thickets work a sort of mechanical



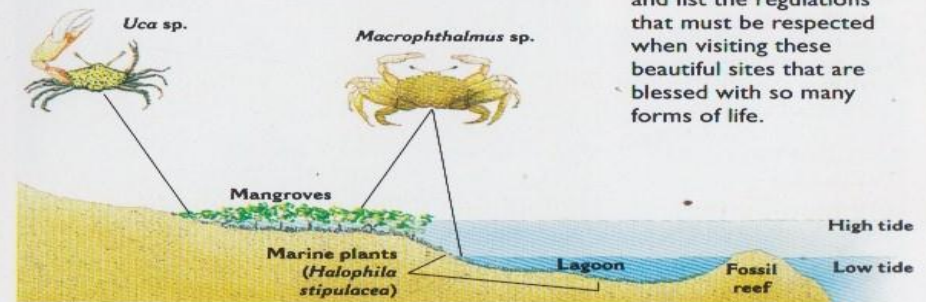
Avicennia marina flowers

process that plays a major role in safeguarding the sandy coasts from erosion. In the Wadi el Gemal National Park the mangroves, which are protected by law due to their great importance, grow in nine different areas,



A fiddler crab (*Uca* sp.)

the principal ones of which are Wadi el Gemal Island and above all the Ras Qulan-Hamata area, which has the largest mangrove forest in the entire Egyptian Red Sea region. The mangrove thickets are almost always indicated by large blue signs that inform us that this plant is a protected species and list the regulations that must be respected when visiting these beautiful sites that are blessed with so many forms of life.



The complex mangrove ecosystem



Terrestrial Animals and Birds

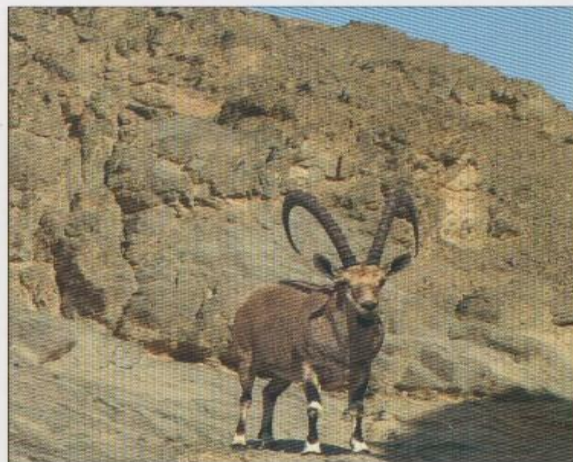
The National Park is inhabited by mammals, reptiles and birds, including the largest population of Dorcas gazelles (*Gazella dorcas*) in the Eastern Desert.



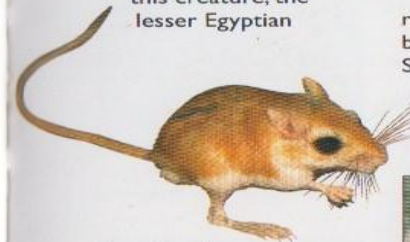
Gazella dorcas

A Dorcas gazelle (*Gazella dorcas*)

The Wadi el Gemal region is rich in fauna. The Dorcas gazelle (*Gazella dorcas*) and the very rare Nubian ibex (*Capra ibex nubiana*) are the most important of the 24 species of mammals that live here. Both are considered vulnerable and are on the IUCN (*International Union for the Conservation of Nature*) Red List of Threatened Species. For the most part the gazelles live close to sources of water in the wadis, which have many acacia and desert date trees. They can be

The Nubian ibex (*Capra ibex nubiana*)

spotted in the early morning and around sunset, while the ibexes prefer the surrounding mountainous areas. Other mammals one may come across rather easily are the Rüppel's fox (*Vulpes rueppellii*), named after the great German explorer and naturalist Eduard Rüppel (1794-1884), who was the first person to describe this creature; the lesser Egyptian

Rüppel's fox (*Vulpes rueppellii*)Lesser Egyptian gerbil (*Gerbillus gerbillus*)

gerbil (*Gerbillus gerbillus*); and the rock hyrax (*Procapra capensis*). The

A rock hyrax (*Procapra capensis*)

reptiles are represented by 25 species, especially Steudner's pygmy gecko and the Middle Eastern rock gecko (*Tropicolotes*

spiny agama, which lives on the rock masses at the edges of the wadis, and serpents such as the venomous but rare horned viper (*Cerastes*

The spiny agama (*Agama spinosa*)

steudneri, *Pristurus flavipunctatus*), while the most common lizard is *Agama spinosa*, the

cerastes) and the more common Saharan sand snake (*Psammophis aegyptius*), which is not very dangerous and feeds mostly on lizards and small rodents.

The *Psammophis aegyptius* or Saharan sand snake

The numerous birds in the Wadi el Gemal National Park belong to the Western Palearctic ecozone. They include resident species that nest here (approximately 45), species that visit the park in the winter, and around 50 species of migratory birds that are present in the park during their autumn passage in September and October, when they leave the northern regions and head south, and in March and April, when they make their return trip northward. The birds are to be found everywhere in the park: in the wadis, on the mountains, along the coasts, in the mangrove thickets and on the



The Western reef heron (Egretta gularis)

islands. Due to the importance attached to the bird species on all the islands of the WGNP, which are the nesting grounds for a dozen species, the islands have been classified as IBAs (Important Bird and Biodiversity Areas) of BirdLife International, the international organization whose aim is to protect birds. The

following birds nest in the mangrove areas: the western reef heron (*Egretta gularis*), also commonly known as the western reef egret, the



Larus leucophthalmus

green heron (*Butorides striata*) and the osprey (*Pandion haliaetus*). The sooty falcon (*Falco concolor*), which is migratory, goes to the National Park islands to nest from August to November: indeed, 10% of the world population of this species nests on Wadi el Gemal Island. The WGNP islands are also the nesting grounds for the red-billed tropicbird (*Phaeton aethereus*), the Eurasian spoonbill (*Platalea leucorodia*), the Caspian tern (*Sterna caspia*), the lesser crested tern (*Sterna bengalensis*), the white-eyed gull (*Larus leucophthalmus*) and Hemprich's gull (*Larus hemprichii*), named after the German naturalist Wilhem Hemprich. Although it is one of the rarest gulls in the world, the white-eyed gull,



The white-eyed gull (Larus leucophthalmus)



The osprey (Pandion haliaetus)



A sooty falcon (Falco concolor)



Lesser crested terns (Sterna bengalensis)

endemic to the Red Sea, can be seen easily along the coast and even near the hotels.





The desert lark (*Ammonaetes deserti*)

Among the birds that live and nest in the desert and mountainous zones of the park are the desert lark (*Ammonaetes deserti*), the most common species in these areas and the easiest to spot, the hoopoe lark (*Alaemon alaudipes*), as well as the rarer Lichtenstein's sandgrouse (*Pterocles lichtensteini*) and the sand partridge (*Ammoperdix heyi*), which prefer to live in the mountainous areas, if possible near sources of water. Both these last-mentioned species

are easier to see in wadis with rather abundant vegetation, especially in the early morning and late afternoon. Lastly, in the rocky areas of the wadis you can observe two typical inhabitants of the desert: the white-tailed wheatear (*Oenanthe leucopyga*) and trumpeter finch (*Bucanetes githaginea*), both of which belong to



Lichtenstein's sandgrouse (*Pterocles lichtensteini*)



The Egyptian vulture is one of the hieroglyphs



The Egyptian vulture (*Neophron percnopterus*)

the Passeriformes order. Further south, in the Bir Shalateen region, which has one of the most important camel markets in Egypt, visitors may also be able to see two species of vulture, both considered vulnerable and therefore protected: the Egyptian vulture (*Neophron percnopterus*) and the lappet-faced or Nubian vulture (*Torgos tracheliotus*).



The hoopoe lark (*Alaemon alaudipes*)



A Nubian vulture (*Torgos tracheliotus*)

The former, also known as the white scavenger vulture and pharaoh's chicken, is the vulture represented in the Egyptian hieroglyph that stands for the sound aleph. The vulture was associated with the goddesses Nekhbet, the protectress of Upper Egypt, and Mut.

BIRDWATCHING

The Wadi el Gemal National Park is one of the best regions to study birds in their natural habitat. A good pair of binoculars (7 x 50 or 12 x 50), a small spyglass mounted on a tripod, a notebook to write the names of the species you have observed, and perhaps a good camera with a rather powerful telephoto lens (200-400 mm) are the essential tools needed for birdwatching. The best time to birdwatch is the early morning and late afternoon, particularly in spring (March, April and May) and autumn (September, October and November), when you can observe both the sedentary species and the migratory birds that fly over the coasts of the Red Sea and enter the park region.

WHERE TO GO

Hotels

The hotels are certainly the best (and most comfortable) place to birdwatch: the presence of abundant vegetation and fresh water is a guarantee that many birds species will frequent the hotel areas. In the Gorgonia Beach Resort situated in the WGNP area you will be able to watch a colony of white-eyed gulls (*Larus leucopthalmus*), while both the Gorgonia Beach Resort and the nearby Shams Alam Beach Resort are normally visited frequently by the



Eurasian collared dove (*Streptopelia decaocto*), African collared dove (*Streptopelia roseogrisea*), Isabelline shrike (*Lanius isabellinus*) and black scrub robin (*Cercotrichas podobe*).

The Wadi el Gemal and Siyul Islands

In the southern part of the Wadi el Gemal and Siyul islands – where no fewer than 9 species of birds nest, including, in autumn, the extremely rare sooty falcon (*Falco concolor*) – the white-eyed gull (*Larus leucopthalmus*), Hemprich's gull (*Larus hemprichii*) and white-cheeked terns (*Sterna repressa*) can be spotted easily.

The Mouth of the Wadi el Gemal

Situated in the vicinity of offices of the WGNP and the Shams Alam Beach Resort, this is one of best locations to observe many species of birds, including the western reef heron (*Egretta gularis*) and the osprey (*Pandion haliaetus*).

The Qulaan-Hamata Area

This zone is frequented by many bird species, such as the western reef heron (*Egretta gularis*), the Goliath heron (*Ardea goliath*) and green heron (*Butorides striata*), as well as the crab plover (*Dromas ardeola*), which nests here around mid-May.

Wadi el Gemal

In the early morning in autumn and winter the westernmost part of the wadi offers birdwatchers the chance to see such Passeriformes as the mourning wheatear (*Oenanthe lugens*) and the white-tailed wheatear (*Oenanthe leucopyga*). Other species are Hume's



White-eyed gull *Larus leucopthalmus*

owl (*Strix butleri*), a raptor active mostly at sunset and during the night, the desert lark (*Ammonaetes deserti*) and, near Bir Wadi el Gemal, the sand partridge (*Ammoperdix heyi*), Lichtenstein's sandgrouse (*Pterocles lichtensteini*) and the trumpeter finch (*Bucanetes githagineus*).

Wadi Abu Ghosun

Here you can observe the greater hoopoe-lark (*Alaemon alaudipes*), the desert lark (*Ammonaetes deserti*), white-tailed wheatear (*Oenanthe leucopyga*), sand partridge (*Ammoperdix heyi*) and trumpeter finch (*Bucanetes githagineus*); in the westernmost part of the wadi, you will see some Lichtenstein's sandgrouse (*Pterocles lichtensteini*).

Wadi Lahami

This zone, so rich in mangrove thickets, is frequented by western reef herons (*Egretta gularis*) and the white-cheeked tern (*Sterna repressa*); it is also one of the few places where birdwatchers can see the Goliath heron (*Ardea goliath*).

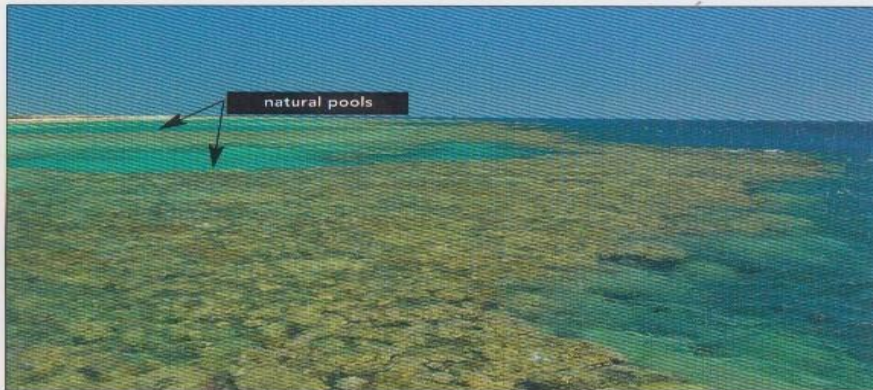
Bir Shalateen

This is probably the only site where it is quite easy to observe the Egyptian vulture (*Neophron percnopterus*) and the lappet-faced vulture (*Torgos tracheliotus*).



The Coral Reef and the Marine Fauna

The Wadi el Gemal National Park boasts a spectacular coral reef populated by 104 fish species and its sea beds are covered with 7660 hectares of marine plants that provide nourishment for an important community of dugongs and green sea turtles.



The coral reef on the coasts of the Wadi el Gemal Park is what is known as a fringing reef, which has the occasional pool with a sandy floor

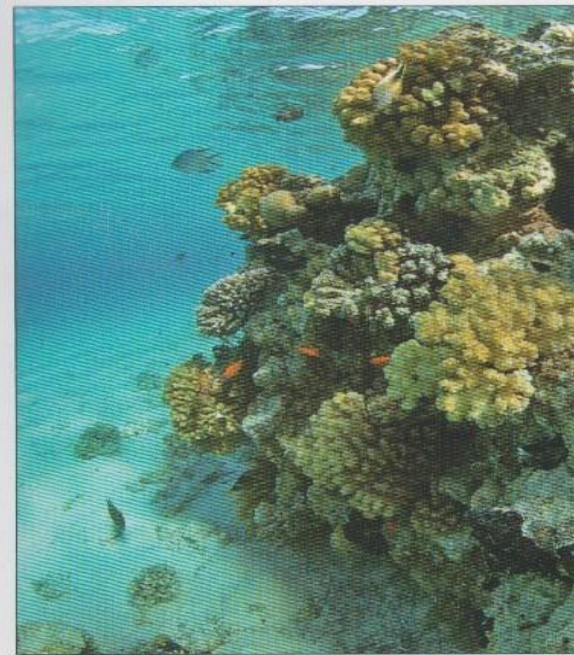
The splendid coral reef that borders most of the coasts of the National Park belongs to the *fringing reef* category, that is to say, it grows immediately after the coast line, separating this latter from the open sea, and extends for a distance that varies from a few to over 100 meters. Sometimes small natural pools with a sandy floor may develop inside the reef. The coral reef consists of madrepores, also known as stony corals, or better,

'constructors', because they have a calcareous structure or skeleton, an example of which are the very widespread acropora corals. Other skeletons develop on to

this structure, as well as organisms like soft corals, sponges, Bryozoa and many others, and all together they form the reef proper. Very often along the coasts of the

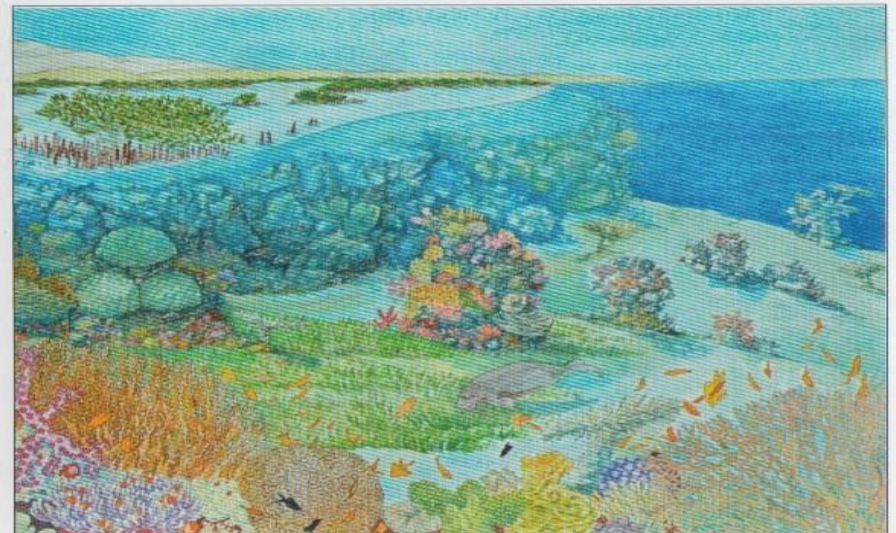


Large prairies of sea plants (in this photograph, *Halophila stipulacea*) are a distinguishing feature of the WGNP sea floor



The scarp of the fringe reef may be anywhere from 4 to 30 meters high and is almost always characterized by the presence of stony coral

Wadi el Gemal National Park the reef – the upper parts of which, a few centimeters under the surface of the sea, teem with life – descends to the sandy sea floor, which is colonized by marine plants that provide shelter for the young of many small coral reef fish species and are indispensable nourishment for the dugongs (*Dugong dugong*) and green sea turtles (*Chelonia mydas*), which, although now rare species, are still typical of the Wadi el Gemal area. Lastly, the waters of the Park are home to a large population of dolphins, which mostly consists of the spinner dolphin (*Stenella longirostris*) and is concentrated mainly in the Sataya reef, aptly named 'Dolphin House'.



An idealized representation of the fringing reef along the coast of the Wadi el Gemal National Park

**CORALS***Dendronephthya* sp.
Prickly alcyonarian*Subergorgia hicksoni*
Hickson's giant seafan*Lithophyton arboreum*
Broccoli soft coral*Turbinaria mesenterina*
Salad coral*Millepora dichotoma*
Fire coral*Acropora* sp.
Table coral*Pocillopora verrucosa*
Raspberry coral*Stylophora pistillata*
Finger coral*Sarcophyton trocheliophorum*
Mushroom leather coral*Platygyra daedatea*
Brain coral*Porites solidia*
Massive pore coral*Pachyseris* sp.
Pachyseris*Heteractis magnifica*
Magnificent sea anemone**THE DUGONGS**

As they are so rich in sea plants, the Wadi el Gemal National Park coasts are the ideal habitat for a community

*A Dugong (Dugong dugong)*

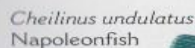
of dugongs (*Dugong dugong*), a rare marine mammal considered vulnerable and therefore on the IUCN (International Union for the Conservation of Nature) Red List. Dugongs are the only exclusively herbivorous marine mammals (their daily ration is 30-50 kg of plants, preferably *Halophila stipulacea* and *H. uninervis*), which is why they have been nicknamed 'sea cows'.

THE TURTLES

There are five species of sea turtles in the Red Sea, all of them endangered and thus protected. Two of them, the hawksbill sea turtle (*Eretmochelys imbricata*) and the green sea turtle (*Chelonia mydas*), are part of the fauna in the Wadi el Gemal National Park, which is their ideal habitat. Both lay their eggs on the beaches of the Wadi el Gemal and Siyul islands in early summer. The green sea turtle, which is

*Chelonia mydas*
A green sea turtle

easy to recognize because of its rounded beak and larger size (the adults are more than 90 cm long), is herbivorous and frequents areas with an abundance of sea plants. It is often to be seen in the area between the Shams Alam Beach Resort and the mouth of the Wadi el Gemal, and especially near the Ras Baghdadi.

*A green sea turtle (Chelonia mydas) among the sea plants**Arothron diadematus*
Masked pufferfish*Variola louti*
Moon grouper*Balistoides viridescens*
Giant triggerfish*Cheilinus undulatus*
Napoleonfish*Balistapus undulatus*
Orangestriped triggerfish*Abudefduf sexfasciatus*
Scissortail sergeant*Amphiprion bicinctus*
Red Sea anemonefish*Zebrasoma desjardinii*
Sailfin surgeonfish*Scarus sordidus*
Bullethead parrotfish*Dascyllus aruanus*
Banded dascyllus*Chromis dimidiata*
Half-and-half chromis*Pseudanthias squamipinnis*
Scalefin anthias*Priacanthus hamrur*
Common bigeye*Chromis viridis*
Bluegreen puller*Amblyglyphidodon leucogaster*
Whitebelly damselfish*Heniochus intermedius*
Red Sea bannerfish*Chaetodon austriacus*
Polyp butterflyfish*Pomacanthus imperator*
Emperor angelfish*Pomacanthus maculosus*
Arabian angelfish*Caesio lunaris*
Lunar fusilier*Chaetodon semilarvatus*
Polyp butterflyfish*Pterois volitans*
Lionfish*Fistularia commersonii*
Cornetfish*Taeniura lymma*
Bluespotted stingray*Stenella longirostris*
Common dolphin*Dugong dugong*
Dugong*Tursiops truncatus*
Bottlenose dolphin*Triaenodon obesus*
Whitetip reef shark*Carcharhinus amblyrhynchus*
Grey reef shark

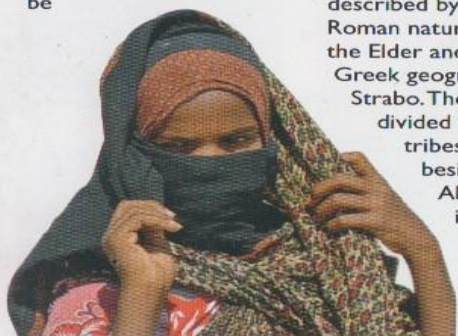
The Ababda Bedouin

The Ababda Bedouin are the original inhabitants of the WGNP territory. Shepherds, camel breeders, fishermen and guides, they live in the region that lies between Quseir and Bir Shalateen and still preserve their ancient customs and traditions.



The traditional maggad sword and shield dance

According to recent genetic and linguistic research, the Ababda belong to the Beja ethnic group, a people of Sudanese origin who can be



A young Ababda woman

identified with the formidable Blemmyes, a nomadic population that often warred against the Romans and who were described by the Roman naturalist Pliny the Elder and the Greek geographer Strabo. The Beja are divided into five tribes and, besides the Ababda, also include the Bisharin Bedouin who live south of Bir



An Ababda Bedouin wearing a traditional costume

Shalateen. They supposedly settled in the Red Sea region during the time of the pharaohs and were Islamized

around the 14th century. The Ababda on the other hand claim they are of Arabian origin and are divided into four tribal groups scattered throughout the WGNP. Some who live along the coast and in the plain behind it were originally fishermen who then adopted a sedentary lifestyle, active in the tourist sector as producers and vendors of handmade objects and as guides. Others chose to settle in the wadis and on the mountains, breeding goats,



The khisha, the traditional Ababda shelter

sheep and camels, engaging in some agricultural activity and, especially in the past, producing charcoal from dead shrubs and trees

and gathering medicinal plants, whose therapeutic properties they know by heart. Some Ababda have preserved a semi-nomadic lifestyle and still live in huts known as *khisha* made of acacia wood and palm leaves. The Ababda have also preserved many of their ancient traditions, such as the dance with swords and shields called *maggad*, which evokes their ancient origins as warriors and attaches much importance to song and music. Besides tea (*shai*), the traditional Ababda

beverage is a special coffee prepared by pulverizing toasted beans in a small mortar and then boiling them in water, ginger and other spices in a special terra cotta container with a long neck, the *jabana*, which is placed over a shrub and



Preparing the special spiced coffee in a jabana



The Bedouin tribes of the Red Sea

acacia branch fire. The coffee is served in small porcelain cups at least three times. The same type of fire is carried out to cook, under the ashes, the traditional bread known as *gabori*. The Ababda greatly respect their natural environment and their ancient tribal law prohibits them from damaging or felling live trees.

Sadly, progress and tourism are jeopardizing the preservation of their precious and unique cultural heritage. In 2005, thanks to financial support from the

Dutch Embassy in Egypt, in the area called *Umm el Bassawi* that corresponds to the former entrance to the WGNP, a small

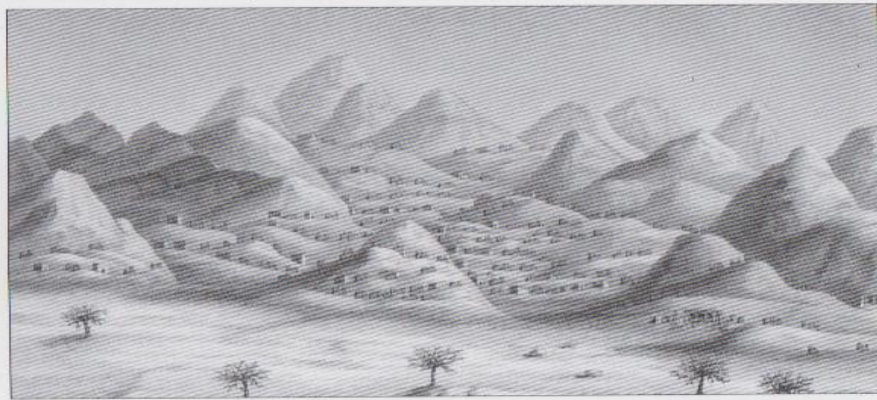
center was built to preserve the cultural heritage of these Bedouin. It is called *Beyt el Ababda* (House of the Ababda) or *Ababda Museum*, but it is now in a state of total neglect.

The History of the Region

It was the Ptolemies and above all the Romans who greatly developed this region, which is still known for its deposits of emeralds, by laying out important tracks that connected the major ports of the Red Sea, Berenike and Myos Hormos, with the Nile.



Ptolemy XII
(117-51 BC)

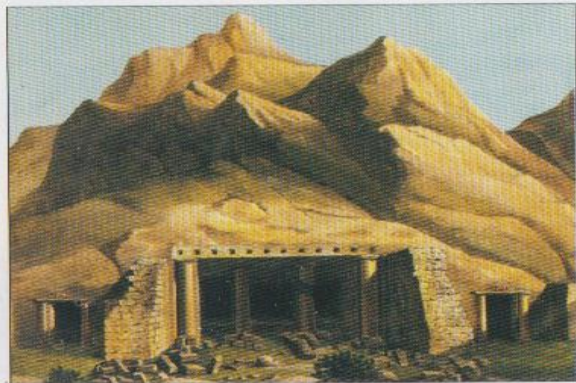


An illustration of the ancient Roman mining village of Sikait by the French traveler and mineralogist Frédéric Cailliaud, the first European to reach this site (1817)

There is no proof that the ancient Egyptians frequented the Wadi el Gemal region or were

acquainted with its emerald deposits, the only ones in the entire ancient world. In fact, they were

first mentioned only during the rule of Ptolemy XII (117-51 BC), the father of the famous Cleopatra (69-30 BC). According to some Latin authors, this renowned queen had a passion for these stones and used them as ornaments, and the great Greek geographer Strabo, who visited Egypt in 24 BC, also wrote about the emerald mines. In any case, the first epigraphic proof of the existence of the Wadi el Gemal emerald mines dates to the year AD 11, 41 years after the annexation of Egypt on the part of the



The large temple of Sikait as depicted by Cailliaud



The French mineralogist
Frédéric Cailliaud (1787-1869)

Roman Empire (30 BC), and the classical authors called the area surrounded by Gebel Nugros, Gebel Sikait and Gebel Zabara or Mons Smaragdus, (Emerald Mountain). The mines were exploited until around 1600, when emeralds were discovered in Colombia and the Wadi el Gemal deposits were abandoned and forgotten for over three centuries, until they were rediscovered by the young French mineralogist Frédéric Cailliaud (1787-1869), who had been commissioned to go to the Eastern Desert by the Pasha of Egypt, Muhammad Ali, to carry out research on mineral deposits there in 1816 and 1817. However, the Frenchman wrongly believed he had found the site of ancient Berenike sung by the authors of classical times, the city all traces of which had been lost. Cailliaud was again sent to the Gebel Zabara and Gebel Sikait area the following year to study his findings in depth and verify whether the emerald deposits really had potential from an

THE PHARAOHS' EMERALDS

Emeralds are a variety of beryl, a mineral consisting of silicate of aluminum and beryllium whose characteristic green color is due to traces of amounts of chromium. In the Wadi el Gemal region the combination of highly metamorphic magmatic rock such as pegmatite and schist created by the transformation of clay

under great pressure led to the formation of this rather rare mineral. The mines, which were excavated for almost 1500 years, lie in five precise zones: two in the Wadi el Gemal area proper, and the others in Wadi Sikait, in the adjacent Wadi Nugros, and on the slopes of the Gebel Zabara.



A small emerald from Wadi Sikait

economic standpoint. But it was the great explorer from Padua, Giovanni Belzoni – who arrived in this area in October 1819 in search of Berenike – who identified the Gebel Zabara and Gebel Sikait area with the ancient Mons Smaragdus.

Belzoni was followed, in 1819, by the Milanese chemist Giuseppe Forni, who returned there in 1823 together with the geologist Giovanni Battista Brocchi from Bassano del Grappa (Italy): the road to the emerald mines had been opened.



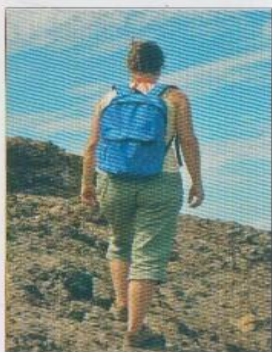
The route taken by Belzoni
between Wadi el Gemal
and Berenike



Exploring the Park: the Land Itineraries

Many different land itineraries can be taken to explore the Wadi el Gemal National Park – one of the most extraordinary areas in the Red Sea – depending on the mode, the time at visitors' disposal and their interests.

The Wadi el Gemal National Park can be visited in various ways: with an off-road vehicle, on foot, on camelback, and by bicycle. The length of your trip may vary from a few hours to a couple of days. What



Some routes can be taken only on foot



One of the best ways to visit the park is on a bicycle

these possible itineraries have in common are the magnificent landscapes that visitors will be able to enjoy, flora and fauna that are unique in the entire Eastern Desert, and fascinating archaeological sites that are still intact. The

route described below is the most classic of all and must be traveled by means of an off-road vehicle in one day, although many alternatives are possible. The present entrance to the WGNP is via a lateral wadi called Umm el

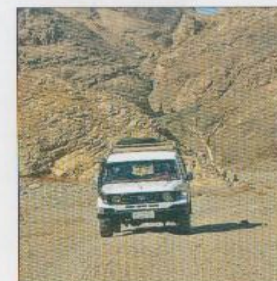


Visiting the Wadi el Gemal on camelback



Abbas, a few dozen meters past the National Park headquarters, 22.7 km south of the *Gorgonia Beach Resort*. Until a few years ago it was possible to begin traveling on this route from a much more distant point, *Shams Alam Beach Resort*, taking a large road that first runs to the *Visitor Center* and then proceeds into a zone called *Umm el Bassawi* and on to *Beyt el*

Ababda, also called the *Ababda Museum* (which is now disused), and then heads directly into the Wadi el Gemal. Recently, however, for reasons of conservation the last stretch of this road is now off limits for off-road vehicles. Consequently the only way to gain access to Wadi el Gemal from this point is by using alternative means of



Off-road vehicles are the simplest and fastest means of transportation in the park



The panoramic viewpoint at Wadi Umm el Abbas

transportation. After having passed by the WGNP entrance of Umm el Abbas and proceeded for about a dozen kilometers along the Wadi Umm Abbas, you will come to a magnificent panoramic viewpoint where you see Wadi el Gemal in the distance. It must be



Map of the main route in the Wadi el Gemal National Park



The small Wadi el Gemal spring

pointed out that all the rises you will see along this first stage of the itinerary consist of fossil coral reefs, testimony of the fact that toward the end of the Quaternary period this area was covered by the sea. Further along, the track becomes a spectacular gorge called *Kabb el Khawwara* that affords access to Wadi el Gemal, 17.5 kilometers from the starting point. At this stage you must go up the bed of Wadi el Gemal; after about 14

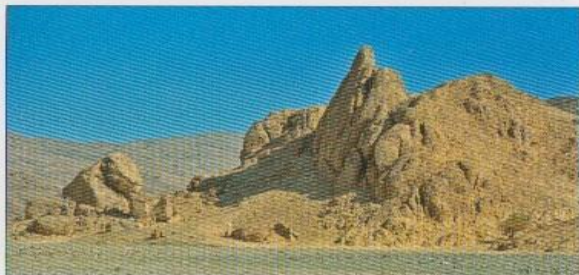


Toothbrush tree (*Salvadora persica*)



Overall view of the site of Sikait

kilometers you will come to a small spring on the west side of the wadi, while in the middle is a green island covered with a shrub typical of this area, *Salvadora persica*, the toothbrush tree, which the locals call *arak*. On the opposite side are some ancient Roman structures connected to the excavation activity in this area that mark the mouth of a small lateral wadi called *Umm el Kabo*. To the left of the entrance is a large sign providing information concerning this site. The track proceeds for a



The rock formation known as Galb Sikait

little less than one kilometer, after which you must continue on foot. After passing a narrow gorge, you will

reach the easternmost emerald mine in the zone. As you proceed on the bed of the Wadi el Gemal, along which there are many acacias (*Acacia tortilis*) and desert date plants (*Balanites aegyptiaca*), you will first come to the WGNP rangers'



An ancient Roman structure in the Wadi Umm el Kabo

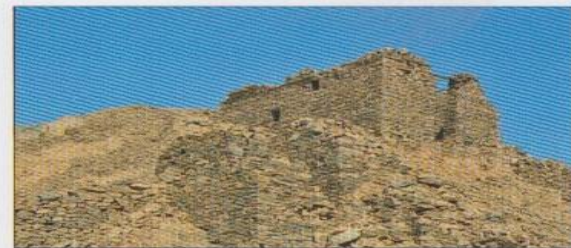
outpost and then, after about two kilometers, you will enter the Wadi Sikait, which has a curious rock formation known as *el Galb Sikait*. After continuing for about 7 km from the outpost, you will arrive



The park outpost at Wadi Sikait



at the ruins of Senskis, present-day Sikait. This was the most important and largest mining site in the zone, with two rock-cut temples on the east side of the wadi opposite the numerous dwellings, which are dominated by a larger edifice that has been nicknamed the Administration House by the archaeologists but whose real purpose is unknown. The first of the two temples, called 'small temple', has three doors on the lintels of which were sculpted solar discs encircled by



One of the most impressive constructions in Sikait, which archaeologists call the Administration House

cobras. A 3rd-century AD inscription that has disappeared but could be seen during Belzoni's time, stated that the temple was dedicated to the "goddess Isis, Lady of Senskis". A recent

graffito that is still legible mentions that the temple was visited by the Milanese chemist Giuseppe Forni in 1819 and 1823. Three pillars made with local stone were erected by the archaeologists in 2003 to reinforce the temple structures. About 300 meters further north is the



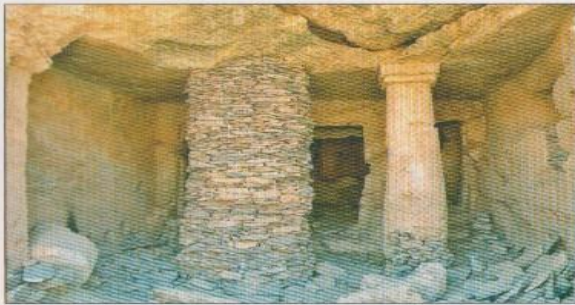
The inscription the Milanese chemist Giuseppe Forni carved on the small temple of Sikait, which he visited in 1819 and 1823



A solar disc on the lintel of the temple



The small temple of Sikait with the retaining pillars that archaeologists built there in 2003



The interior of the large temple of Sikait. At left is the pillar built by archaeologists in 2006 to prevent the ceiling from collapsing



The central cell of the large temple, with a small rock-cut altar

second temple, which is larger than the other; it dates to the Ptolemaic period but was rebuilt during Roman dominion. This temple lies about 20 meters above the bed of the wadi. It had a small hypostyle hall with four columns, only one of which can be seen today; on the west wall are three small cells with altars.

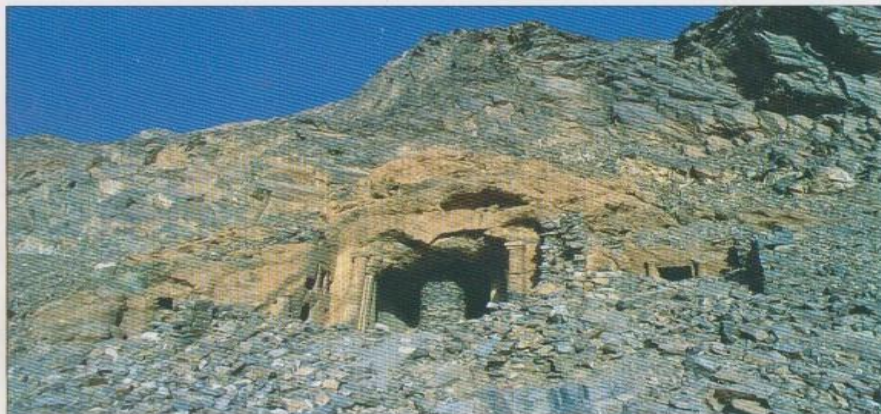
Two chapels flank the entrance of the temple, the ceiling of which was in a precarious state and was consolidated by the archaeologists with a



Inscription on the south wall of the temple carved by a Greek traveler, Leonidas, who visited the site in 1844

pillar made of local stone. On the south wall are graffiti and paintings

left by travelers of different periods.



The large temple of Sikait, flanked by two chapels



Map of the Wadi Sikait-Wadi Nugros-Wadi el Gemal area

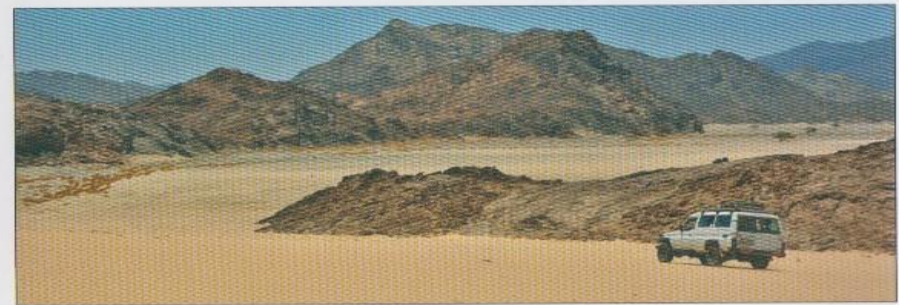
Proceeding northward again for 2.5 km you will arrive at the zone of the mines, whose entrances are located on the face of the mountain a few dozen meters above the bed of the wadi. By heading backward on the track for 8 kilometers and going up the adjacent Wadi Nugros you will be able to visit the mining site of Wadi Nugros, which is similar to Sikait but not as large. On the other hand, should you decide to follow the bed of the



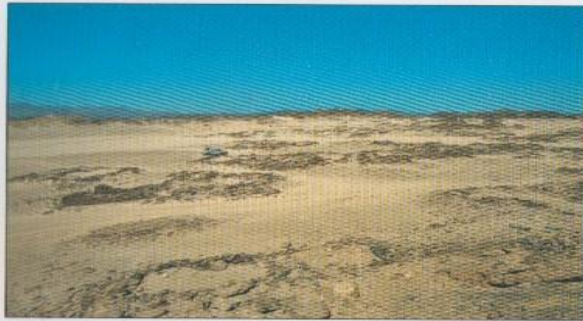
One of the wells affording access to the mines of Wadi Sikait

Wadi el Gemal, which runs westward, you will arrive at a beautiful zone with light-colored sand

where the Roman archaeological sites of Apollonos and Kab Marfu'a are located.



The light-colored sand near the hydreuma of Apollonos and Bir Wadi el Gemal



The structures of the Apollonos hydreuma

This site has the ruins of the most important *hydreuma* or fortified watering station on the Koptos-Berenike track, which is called *Apollonos*. Unfortunately, due to floods very little remains of the impressive structures of the station, whose position is

indicated by a strange isolated rock the locals call *el Galb Wadi el Gemal*. One kilometer further west, at a slightly elevated position with respect to the *hydreuma*, one can visit the



The so-called el Galb Wadi el Gemal rock



The mining site of Kab el Marfu', west of Apollonos

interesting and complex structures of a site connected to the mining activity in the *Kab el Marfu'a* zone, which was operative from the 1st to the 5th century AD. From here you can go to *Bir Wadi Gemal*, the most important watering point in the wadi, where some Bedouin usually stop to water their herds. The return trip is made by following the large and easily negotiable road that goes first through the *Wadi Shawab*, with its numerous granite quarries, then enters the *Wadi Abu Ghosun*, passing over a section of the



The Cabalsi hydreuma

Roman period Koptos-Berenike road, with the ruins of another *hydreuma* called *Cabalsi*, and ends along the coast on a level with the Bedouin village of *Abu Ghosun*.



The Bir Wadi el Gemal well



THE TRACK FROM KOPTOS TO BERENIKE

Berenike, which together with *Myos Hormos (Quseir)* was the most important port in the Red Sea, was connected to the Nile by a major track that allowed the caravans that transported spices, aromatic plants and other products from India and from the coasts of Yemen, to arrive at the cities of *Apollinopolis Magna (Edfu)* or *Koptos (Qift)* in 7-10 days.



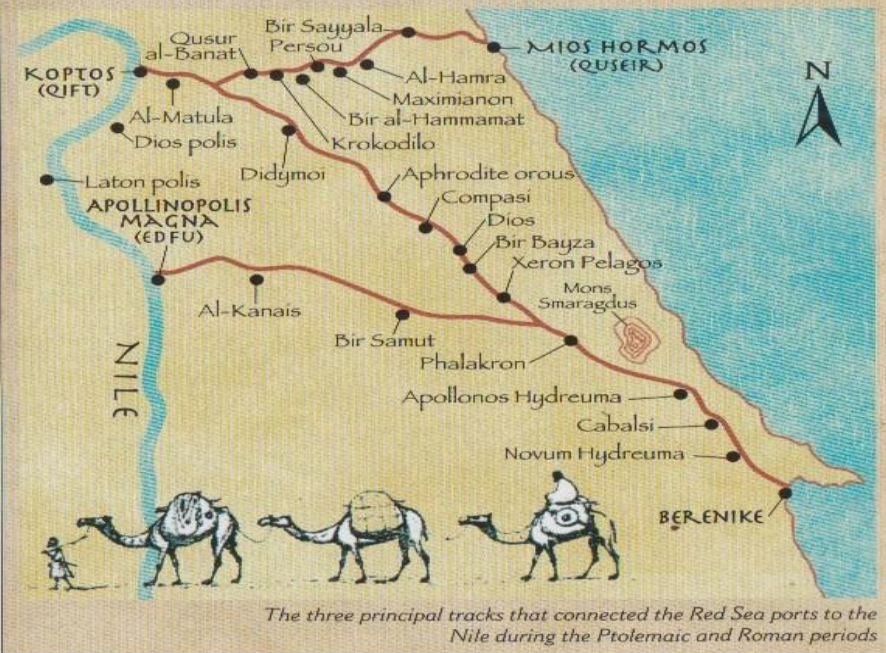
A sign (alam) along the track to Berenike

The first track (*Berenike-Edfu*) was used for the most part during the Ptolemaic period, while the second one (*Berenike-Koptos*), which was 300 km long, was followed during the Roman period. The major points of the track had signs made of small masses of stones, called *alam* in Arabic, to indicate the route. These tracks were provided with watering stations (*hydreumata* in Greek) and small forts called *praesidia*, which can still be seen, located every 15-30 kilometers, a distance that virtually corresponded to a day's travel.



The Koptos-Berenike road inside the park

An important stretch of the Koptos-Berenike track, about 100 km, crosses through the *Wadi el Gemal* Park and can easily be crossed by car. This route offers fascinating scenery dotted with Roman ruins that to all intents and purposes have not changed in the last 2000 years.





Exploring the Park: the Diving Sites

The marine area of the WGNP has about thirty diving sites that offer divers the possibility to admire and observe an extraordinarily rich and still intact coral reef with many fascinating plants and fish.



The outer part of the reef, with acropores, Anthias and net fire coral (*Millepora dichotoma*)

There are at least 30 diving sites in the Wadi el Gemal Park, situated from northwest to southeast over a range of about 100 kilometers and concentrated around the Wadi el Gemal island and, further south, in the Wadi Lahami zone. Although some sites can be reached by land, most of them are accessible only via the sea, preferably with safari boats, which allow divers to stay overnight in the most interesting areas and to explore the coral reef both at night and in the early morning, certainly the best times,

especially for those who want to take photographs. Many sites are exposed to the wind and currents and are therefore accessible only when the sea is relatively

calm. But all the sites offer extremely interesting dives in underwater areas whose ecosystems are often quite different from one another.



The diving sites in the Wadi el Gemal National Park are particularly interesting for photography buffs





SHA'AB SHARM

Sha'ab Sharm (the Arabic word *sha'ab* means 'large coral reef') is one of the northernmost and most beautiful diving sites in the WGNP. Lying 12 kilometers from the coast and about 700 meters long, this large 'tower', which some people also call Gota Sharm, is distinguished by its



The Sha'ab Sharm reef and its two diving areas



Numerous gorgonian sea fans, acropores and colorful soft corals decorate the marvelous southeast plateau

southeastward and westward from 18 to 35 meters. Exposed to the wind and currents (which may become violent), this site is often visited by pelagic fauna: grey reef sharks (*Carcharinus amblyrhynchos*) and scalloped hammerheads (*Sphyrna lewini*) are often to be seen here.

impressive, almost vertical walls, which plunge into the depths for over 200 meters, and

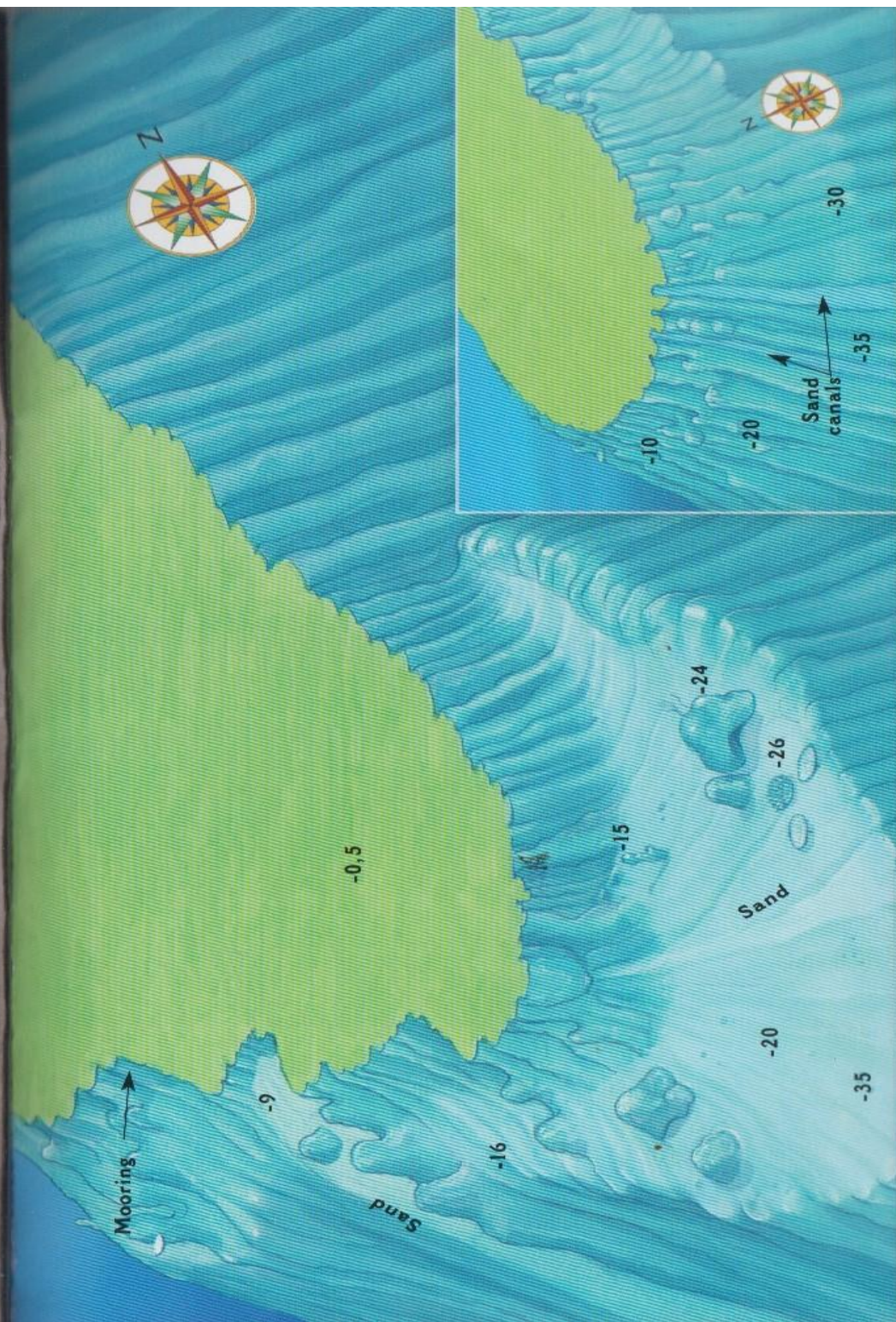
by two plateaus filled with gorgonians and soft coral that extend



Scalloped hammerheads (*Sphyrna lewini*)



View of the beautiful southeastern plateau with its many gorgonian sea fans (*Subergorgia hicksoni*)



SHA'AB GAD EL NOS
SHA'AB ESHTA

These sites are situated to the west of Wadi el Gemal Island. **Sha'ab Gad el Nos**, also known as Sha'ab Gubar, lies in the middle of a promontory of madrepores that extends westward from the island. The main tower rises up over the sandy sea floor, flanked by another smaller one to the west with a small grotto.

Sha'ab Eshta, on the other hand, lies 2.2 km to the northwest of the other site and is part of a group of four other madreporian formations situated in a radius of 1.5 km. The reef is elongated from East to West and is separated from a canal by a smaller, round tower.

The distinguishing feature of both Sha'ab Gad el Nos and Sha'ab Esta is the conspicuous growth of Porites stony coral (*P. nodifera*, *P. solida*) and Acropora, populated by



The western side of Wadi el Gemal Island has a large number of diving sites



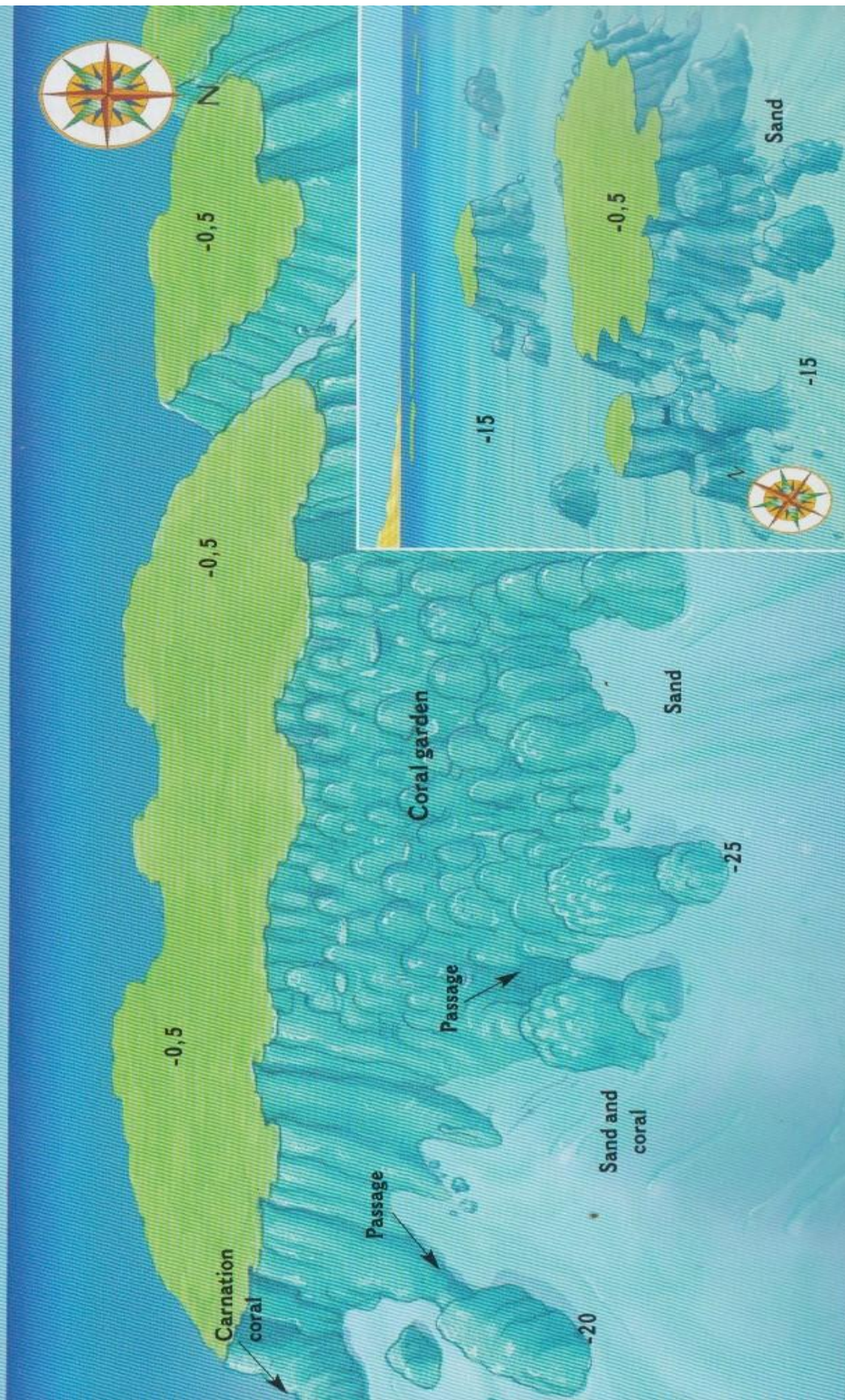
A school of *Anthias* among net fire coral (*Millepora* sp.) and carnation coral (*Dendronephthya* sp.)

Anthias fish, with swathes of carnation coral (*Dendronephthya* sp.), broccoli coral (*Lithophyllum*

arboreum) and net fire coral and blade fire coral (*Millepora dichotoma*, *M. plathypilla*).

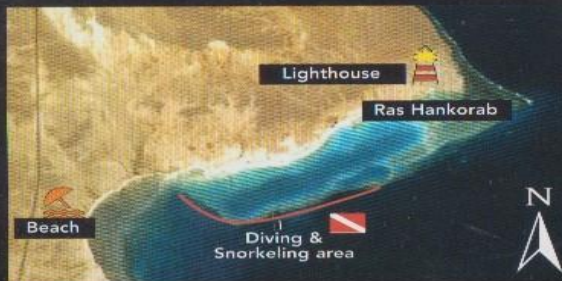


A school of yellowfin goatfish (*Mulloidichthys vanicolensis*) among *Acropora* and *Porites*



**HANKORAB**

The Hankorab zone, accessible by land thanks to an easy track that starts off 18 km from the Gorgonia Beach Resort, boasts one of the most beautiful beaches in the area and is ideal for both snorkeling and diving. The coral reef slopes down to a vast sandy



The Ras Hankorab area, with its splendid beach, is a favorite with visitors to the WGNP



An *Octopus cyaneus* has found a home among the acropores in the Hankorab reef

plateau that in turn descends softly for about 10-14 meters, thus ensuring dives that are ideal above all for

beginners, since it affords shelter from the waves and currents. On the reef wall are a great many acropores

(*A. humilis*, *A. hemprichii*, *A. pharaonis*), finger coral (*Pocillopora* sp.), and various genera of sponges. This is a fascinating underwater world filled with circling red Anthias, damselfish (gen. *Dascyllus* and *Chromis*), parrotfish (gen. *Scarus*) and butterflyfish (gen. *Chaetodon*). A pleasant walk takes you to the nearby Ras Hankorab lighthouse (the word ras means 'ruler'), on which some ospreys (*Pandion haliaetus*) are sometimes perched.



The Hankorab coral reef has a wide variety of madrepores and is frequented by many species of reef fish





THE ABU GHOSUN WRECK

At Abu Ghosun there is a small but interesting wreck of a Maltese cargo ship, the SS Hamada, which sank there on 28 June 1993 for reasons that are still being disputed. The ship, 63 meters long, had weighed anchor at Jeddah (Saudi Arabia) and headed for Suez with a load of plastic pellets, most of which are still lying on the beach opposite. A short route that begins two km after the Abu Ghosun mosque affords access to the



The Abu Ghosun area, with the beach opposite the wreck

beach, from where you can reach the wreck after swimming with fins for about ten minutes. The wreck, which is now split into



One of the two telephones on board, still well preserved

two principal parts, lies at a depth that varies from 3 to 20 meters, but none of it emerges to the surface. This is the only wreck that is easy to reach and can be explored, albeit only partially, by snorkelers as well.



The capstans of the bridge are encrusted by madreporae and small soft corals (Xenidae)



The stern of cargo ship SS Hamada, which sank at Abu Ghosun





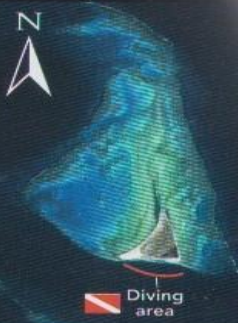
The Wadi el Gemal National Park

SIYUL

Siyul is the largest of the four islets that are part of the Qulan-Hamata archipelago in the southern section of the Wadi el Gemal National Park. It has been colonized by thousands of birds (no fewer than 8 species nest there) and has an extremely beautiful coral reef that is home to many species

bicinctus). The dive is made here along the reef wall on the southern side of the islet, which descends on a sandy slope with a series of furrows. The first part of the dive consists of enormous table-like *A. pharaonis*

Zebrasoma desjardini



The island of Siyul



Many lyretail coralfish (*Pseudanthias squamipinnis*) swim among the hard and soft corals



Red anemone with Red Sea clownfish (*Amphiprion bicinctus*)

of fish, including the red lionfish (*Pterois volitans*), sailfin tang (*Zebrasoma desjardini*), and Red Sea clownfish (*Amphiprion*

acropores, some of which are over 3 meters in diameter, lying at a depth of 20-26 meters.



Gigantic fan-like *Acropora pharaonis* are a feature of the Siyul reef





SATAYA DOLPHIN HOUSE

The Sataya reef, also called the 'Dolphin House', is 4.8 km long, making it the largest in the Wadi el Gemal National Park. The coral reef forms two wide lagoons: the western one has a population of around 100 spinner dolphins (*Stenella*



The Sataya reef, also known as the Dolphin house



A three stripe damselfish (*Dascyllus aruanus*) among the acropores in the southeast Sataya reef

(southeast Sataya) offers an equally extraordinary occasion: a marvelous dive from the outer side of the reef that bounds the lagoon and that is flanked on its southern side by a series of pinnacles. Parrotfish (gen. *Scarus*), butterfly fish (*Heniochus intermedius* and *Chaetodon semilarvatus*), lionfish (*Pterois volitans*) and schools of yellowfin goatfish (*Mulloidichtys vanicolensis*) are among the main species that frequent this reef, which is also visited by the occasional blacktip reef shark (*Carcharhinus melanopterus*).

longirostris) that rest there during the day, while at night they move to the open sea in search of food. You can enjoy the remarkable

experience of observing the dolphins by making your dive here with a mask and mouthpiece, especially in the early morning. The eastern lagoon



The colony of spinner dolphins (*Stenella longirostris*) in the western lagoon



The Coast from Wadi el Gemal to Bir Shalateen

The coastal road that runs through the Wadi el Gemal National Park and goes to the picturesque camel market at Bir Shalateen offers the opportunity to discover new, striking facets of the Red Sea.



The mouth of the Wadi el Gemal near Ras Baghdadi boasts an incredible abundance of vegetation

The Red Sea coast is skirted by a lovely road that allows you to visit unpolluted bays, mangrove thickets and Bedouin villages. About two km from the check point near the Gorgonia Beach Resort is a WGNP office and, on the left hand side, the wide road that goes first to the Visitor Center and then into the Umm el Bassawi zone, from which you can enter the Wadi el Gemal on foot, by camelback or on a bicycle. Another 2.8 km and you will see, to the left, a large doum palm tree that indicates the

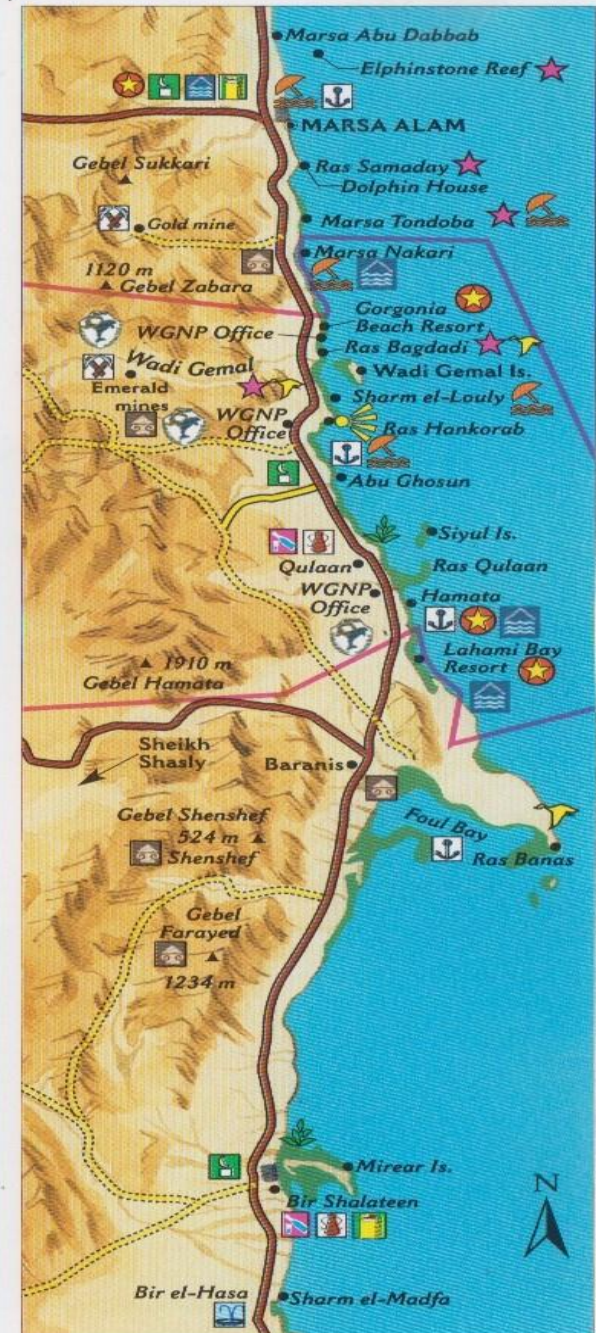
entrance to the mouth of the Wadi el Gemal, with its luxuriant vegetation. After passing the marvelous bay of **Sharm el Louly** you



The entrance to the mouth of the Wadi el Gemal is indicated by a large doum palm (*Hyaena thebaica*)

come to the **Hankorab** zone, which has the most beautiful and most popular beach in the park, as well as the official entrance to the

0	Gorgonia Resort
1,6	Shams Alam Res.
1,9	WGNP Office
2.1	WGNP Entrance
4.8	Ras Baghdadi
12	Sharm el Louly
18.5	Hankorab
22.5	WGNP Office
22.7	WGNP Entrance
33	Abu Ghosun Mosque
35	Abu Ghosun Wreck
38.8	Track to Bir Rada
43.8	Mangroves
54	Qulaan
56.5	Mangroves
58	Kite Village
59	WGNP Hamata Office
60	Hamata marina Hyperbaric chamber
60.6	Hamata Mosque
68	Mangroves
69.5	Wadi Lahami Ecologde
70.2	Lahami Bay Resort
75	Baranis Check Point
92	Baranis (Berenike)
149	Marsa Hemira
188	Shalateen Check Point
189	Gasoline
191	Camel market





The northernmost part of the Hankorab beach



The characteristic mosque at Abu Ghosun

Wadi el Gemal National Park, which is situated immediately after the stone building that serves as the main park headquarters. The next very interesting sight is

the lovely mosque in the Bedouin village of **Abu Ghosun**, which is

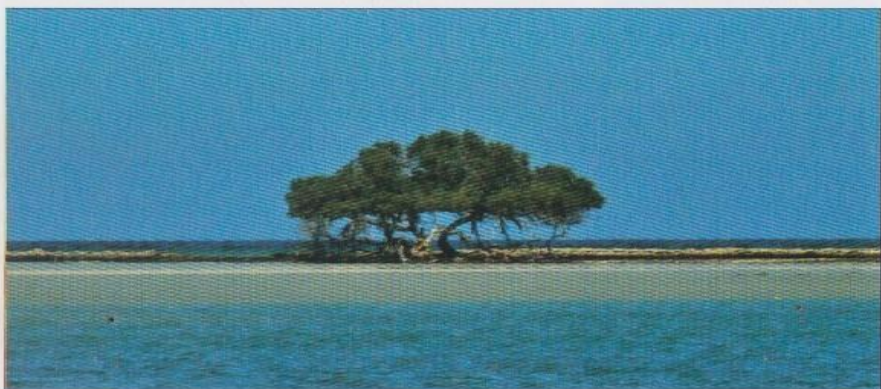


this is **Kite Village**, the most important center for kite surfing in the area. By continuing on the road for about one km you arrive at another WGNP office at your left, after which is the beautiful and large **Hamata** marina, the starting point for safaris in the southern Red Sea. Another ten km will take you to the large bay of **Wadi Lahami**, which is also bordered by a large mangrove thicket. This bay has a small ecolodge and the two southernmost hotels in Egypt.



Some typical products of Bedouin craftsmanship in the small Qualan market

followed by a large mangrove thicket in the picturesque bay of Ras Qulan. Nearby is a small market of hand-made objects run by the Bedouin. By proceeding along the road for another two kilometers or so, you will notice many 'sails' floating in the sky over the sea:



A large mangrove thicket borders the lovely bay of Ras Qulan



Kite-surfing at Kite Village

After about 20 kilometers there is a check point, where one must have special authorization in order to continue to **Baranis**, a

small village not far away from the modest ruins of the large Ptolemaic port

of Berenike, which unfortunately cannot be visited.



The jetty of the tourist harbor of Hamata, which also has the only hyperbaric chamber in the area

TROGLODYTIC BERENIKE

Berenike was founded around 275 BC by Ptolemy II Philadelphus (308-246 BC), who gave it this name in honor of his mother Berenike I. In a short

time it became the largest and most important port in the Red Sea. All the highly prized products from Arabia and India – aromas and spices, incense and myrrh – arrived here and were transported on the Nile to Alexandria and then Rome thanks to the



Ptolemy II (308-246 BC)



The Italian explorer Giovanni Belzoni (1778-1823), who rediscovered the site in 1820



route that connected Berenike and the city of Koptos (present-day <) through the Eastern Desert, is populated by Bedouin whom the classical authors called Troglodytes. Very few traces of Berenike remain and since 1994 the site has been excavated by a team headed by Steve E. Sidebotham of the University of Delaware.



The remains of the ancient port of Berenike are now almost totally covered with sand

**THE BISHARIN BEDOUIN**

Like the Ababda, these Bedouin belong to the large Beja ethnic group, which originated in northeastern Sudan and settled also in Eritrea and in the southernmost area of Egypt, first of all at Bir Shalateen. The Bisharin are a proud people of very ancient origin whom the classical authors called Blemmyes. They are shepherds



A Bisharin hut made of acacia tree branches and palm tree leaves

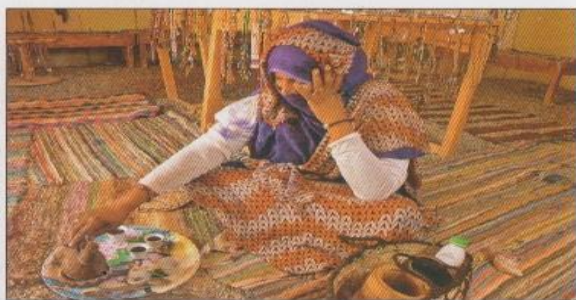
and expert breeders of camels, sheep and goats. Besides Arabic, the Bisharin speak the Beja language of Afro-Asiatic origin.



A typical Bedouin who belongs to the Bisharin tribe

The last stretch of the road, which is about 100 kilometers long, separates Baranis from

the town of Bir Shalateen, whose main point of interest is the famous camel market but



The 'base' of the cooperative of craftswomen from Shalateen is a large hut made of palm leaves, where they sell their fine handmade products



A typical locally produced handmade object, made of leather and plant fiber

which also has other picturesque aspects such as the lively souk that sells all sorts of products, from food to spices, cloth and handmade objects and that clearly reveals Sudanese influences. At Bir Shalateen, whose population of roughly 10,000 is divided between the Ababda and Bisharin tribes (60% and 40% respectively), in 2007 a group of about 80 women artisans established a cooperative that produces and sells quality handmade objects that are on display in a large hut near the entrance to the town and that have become extremely popular with visitors.



A Bisharin Bedouin



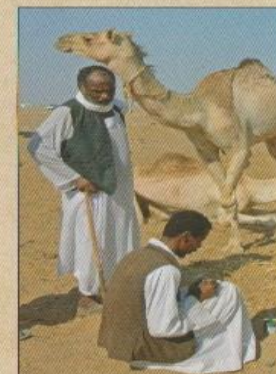
Besides the famous camel market, Bir Shalateen also has a small but very animated market offering different kinds of products

THE CAMEL MARKET AT BIR SHALATEEN

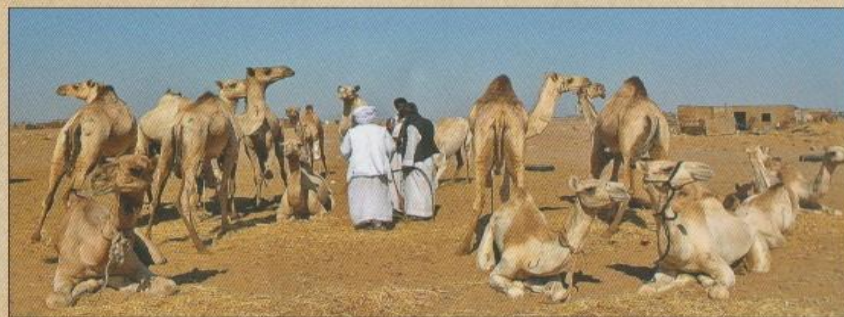
The Bir Shalateen camel market, which is open every day, is the largest and most important in all Egypt. The animals, which come from Sudan, are transported on large trucks to this town as well as to the other two principal markets: at Daraw near Aswan, and Imbaba, in the northern outskirts of Cairo. The



camels therefore arrive at the market after having traveled hundreds of kilometers, and are first placed in quarantine and then branded with a special varnish before being sold.



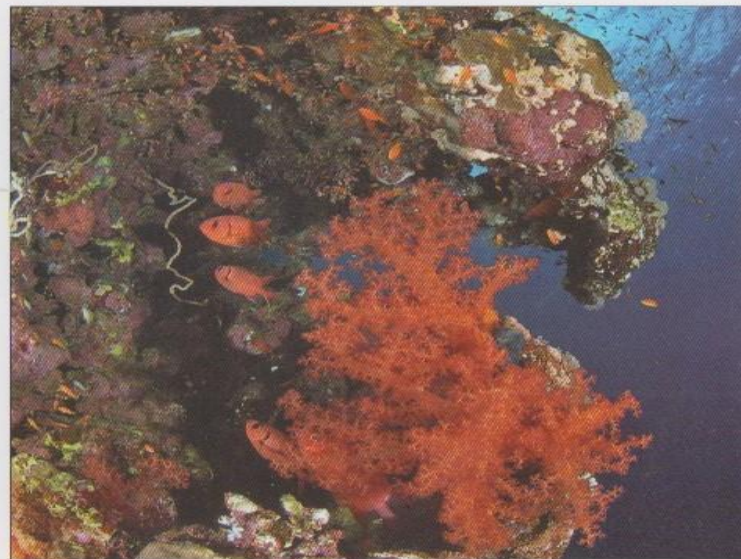
Writing the bill of sale of a camel



The bargaining at the camel market usually takes place in the early morning

**BIBLIOGRAPHY**

Debelius, H., *Red Sea Reef Guide*, Frankfurt, 1998. **Harrison, P., Misiewicz, A.**, *Reef Fishes and Corals of the Red Sea*, London, 2000. **Mojetta, A., Ghisotti, A.**, *Pesci e coralli del Mar Rosso*, Milano, 1996. **Randall, J.E.**, *Sharks of Arabia*, London, 1986, 1983. **Sheppard, C., Price, A., Roberts, C.**, *Marine Ecology of the Arabian Region*, London, 1992. **Siliotti, A.**, *La scoperta dell'Antico Egitto*, Vercelli, 1998. **Siliotti, A.**, *Sinai Diving Guide*, Cairo, 1999. **Siliotti, A.** (a cura di) *Belzoni's Travels - Narrative of the Operations and Recent Discoveries in Egypt and Nubia*, London, 2001. **Siliotti, A.**, *Pesci del Mar Rosso*, Verona, 2002. **Siliotti, A.**, *Red Sea Map*, Verona, 2010. **Sidebotham S.E., Hense M., Nouwens H.M.**, *The Red Land*, Cairo, 2007. **Sidebotham S.E.** *Berenike and the ancient maritime spice road*, Berkeley, 2011. **EEAA**, *Management Plan for Wadi El Gemal National Park*, Cairo, 2004.



Soft red coral (Dendronephthya klunzingeri) with pinecone soldierfish (Myripristis murdjan) at Sha'ab Sharm

PHOTOGRAPH CREDITS

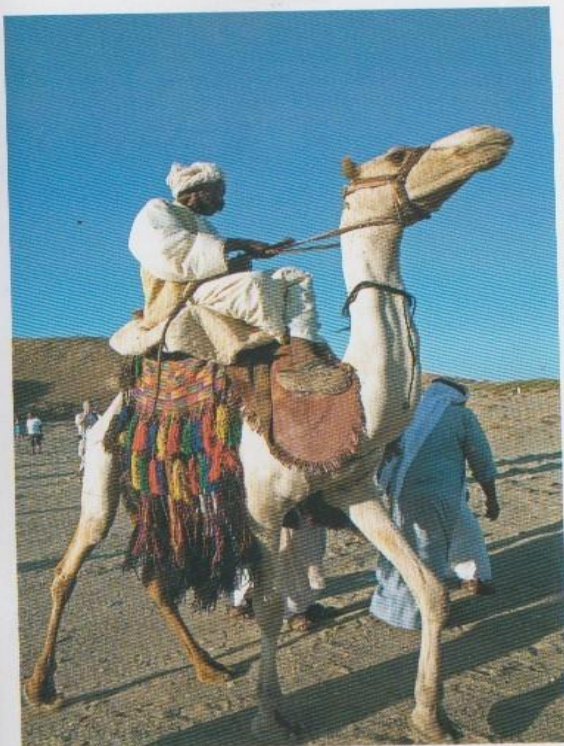
All the photographs in this book are by Alberto Siliotti/Archivio Image Service-Geodia except for the following:

Manfred Bortoli: pp. 31, 32, 36, 40, 42.

Silvia Liotta: pp. 36, 38, 42, 44.

Pierpaolo Peluso: pp. 34, 36, 38, 44, 46.

Google™ Earth Pro: foto satellitari; pp. 5, 27, 31, 35, 36, 38, 40, 42, 44, 46.



THE WADI EL GEMAL NATIONAL PARK

Alberto Siliotti



GEODIA EDIZIONI

THREATS

The population of this gazelle has declined throughout its range. Their natural predators include humans, cheetahs, leopards, Arabian wolves, and lions. Due to human hunting, few large cats remain to prey on Dorcas gazelles. Mostly unhealthy gazelles are caught successfully by predators, since the healthy gazelles tend to escape them easily. To escape from the cheetah, the fastest of carnivores, they run extremely fast and make zigs-zags, as does the Thomson's gazelle. The serval and caracal also prey on this species.

The biggest modern threat to this gazelle is the ever-expanding human civilization, which shrinks the gazelle's habitat by converting it to farmland, and by introducing new flocks of domestic sheep and goats which compete with gazelles for grassland. After rain, they have been observed digging out bulbs from the ground.



IUCN classified Dorcas Gazelle as threatened species

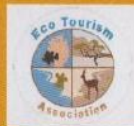
Wadi El-Gemal National Park

Wadi El Gemal National Park (meaning "Valley of the Camels") is an extensive area of land and coastal water lying to the south of Marsa Alam. It includes many diverse ecological habitats and a rich variety of animal and bird types including several endangered species. The area was designated a National Park by the Egyptian Environmental Affairs Agency in January 2003.

It covers a total of some 6,000 square kilometres including several islands, a stretch of mangrove rich coast line and an extensive mountainous area inland which surround one of Egypt's largest desert wadis.

The Wadi El Gemal acts to channel any water from the mountains towards the coastline but some is trapped underground which is a key factor supporting the area's vibrant ecosystem.

The valley is most easily accessed by an entrance from the coast road approximately 45km south of the small town of Marsa Alam.



All copy right reserved for Wadi El-Gemal National Park,
Abdullrahman Nassar 2014

ABDULRAHMAN.SHAABAN@HOTMAIL.COM

WADI EL-GEMAL NATIONAL PARK

The Egyptian Dorcas Gazelle



DESCRIPTION

Dorcas gazelles have longer ears and more strongly curved horns, which bow outwards then turn inwards and forwards at the tips. The white underside is bordered with a brown stripe, above which is a sandy stripe. The forehead and face are darker than the body.

Populations around the Red Sea are darker and more reddish. In the last century, the populations of Dorcas gazelle were partially destroyed in all the countries where it was found. Currently, large populations of Dorcas gazelles are found in the Negev and the Arava, with other large populations in Sudan, Iraq, and the southern part of the eastern desert of Egypt.

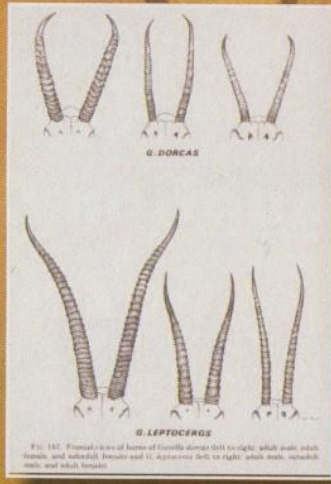


FIG. 182. Frontal views of horns of *Gazelle dorcas* (left to right) adult male, subadult female, and subadult female and *G. leptoceros* (left to right) adult male, subadult male, and subadult female.

BEHAVIOUR

Dorcas gazelles are highly adapted to the desert; they can live their entire life without drinking, as they can get all of the moisture they need from the plants in their diets, though they do drink when water is available. They are able to withstand high temperatures, but when it is very hot, they are active mainly from dusk to dawn. In areas where they face human predation, they tend to be active only at night to minimise the risk of falling prey to hunters. These gazelles feed on leaves, flowers, and pods of many species of acacia trees, as well as the leaves, twigs and fruits of various bushes. They occasionally stand on their hind legs to browse from trees, and after rain, they have been observed digging out bulbs from the ground. Dorcas gazelles are able to run at speeds up to 80 km/hr (50 mph) to 96 km per hour (60 mph) when threatened, they tail-twitch and make bouncing leaps with their heads held high (stotting), possibly to announce they have seen a predator.



BREEDING

When conditions are harsh, Dorcas gazelles live in pairs, but when conditions are more favorable, they join together in family herds with one adult male, several females, and young. During the breeding season, adult males tend to be territorial, and mark their range with dung middens. In most parts of their range, mating takes place from September to November. Gestation takes six months; a single fawn is typical, although twins have been reported in Algeria. The newborn is well developed at birth, with fur and open eyes.

Within the first hour, the fawn attempts to stand, and it will suckle on this first day of life. In the first two weeks, the young gazelle lies curled up in a scrape on the ground or beneath bushes while the mother grazes close by. The young then starts to follow its mother around and begins to take solid food. After around three months, the fawn stops suckling and is fully weaned.



Wadi El-Gemal National Park

The Wadi El Gemal National Park (meaning "Valley of the Camels") is an extensive area of land and coastal water lying to the south of Marsa Alam. It includes many diverse ecological habitats and a rich variety of animal and bird types including several endangered species. The area was designated a National Park by the Egyptian Environmental Affairs Agency in January 2003.

It covers a total of some 6,000 square kilometres including several islands, a stretch of mangrove rich coast line and an extensive mountainous area inland which surround one of Egypt's largest desert wadis.

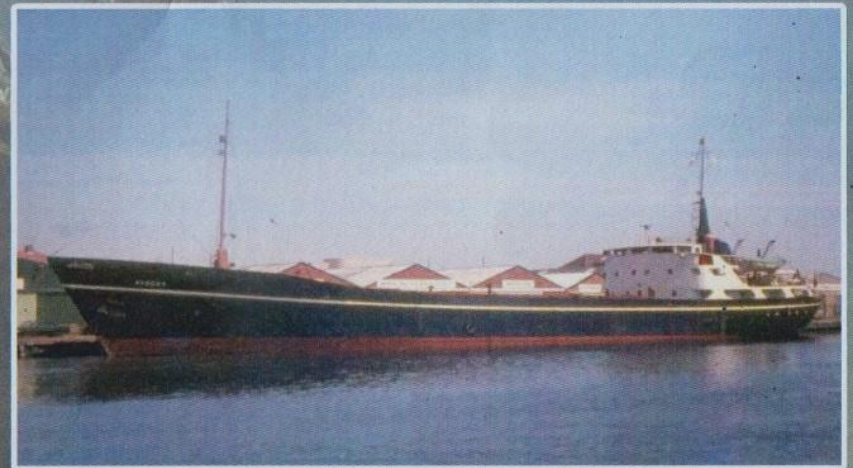
The Wadi El Gemal acts to channel any water from the mountains towards the coastline but some is trapped underground which is a key factor supporting the area's vibrant ecosystem.

The valley is most easily accessed by an entrance from the coast road approximately 45km south of the small town of Marsa Alam.



WADIEL-GEMAL NATIONAL PARK

Wreck Abu Ghosoun



The Ship Story :

The Hamada was a small cargo ship of 654 GRT built at John Lewis & Sons Ltd.(Yard No. 347), Aberdeen, UK, for the P & O subsidiary company General Steam Navigation Co., Ltd. The ship was launched on 15 March 1965 as the Avocet (Registry No. 651078) and was completed on 12 June of that same year with a length of 65.10 meters, beam of 11.07 meters, and draught of 4.05 meters. Propulsion was provided by a single 1,470 bhp MN17 type diesel manufactured by British Polar Engine Ltd., Glasgow, Scotland, and a single propeller for a speed of 12.5 knots.

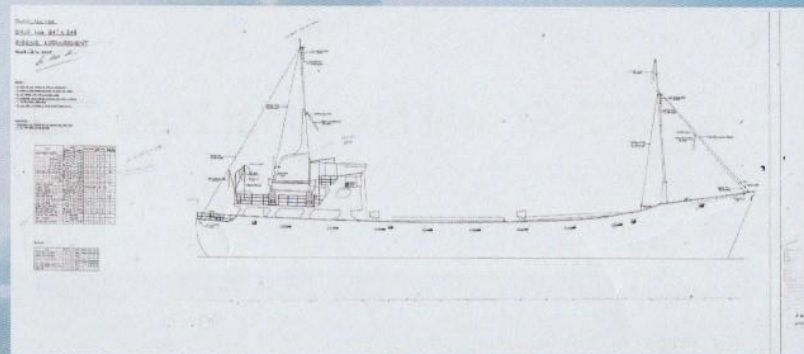
From the time of her launching in 1965 until late 1971, the Avocet was operated in the coastal waters of the UK by the General Steam Navigation Co. On 01 October 1971 management and operation of the ship was transferred to another P & O subsidiary company called P & O Short Sea Shipping Ltd. Then, on 01 December 1972, ownership of the ship was transferred to General Steam Navigation (Trading) Ltd. Management and operation were transferred once again on 31 March 1975 to the P & O Ferry Line until 16 June 1976 when ownership was transferred to P & O Ferry's General European Ltd.

On 22 June of that same year the ship was sold to Stavros Elias Lianos Maritime Ltd., Cyprus, and renamed the Afroditi H, and then was resold to the Euromaster Navigation Co. Ltd., Cyprus.

In 1982 the ship was renamed Samarah and then was sold to Leghorn Shipping Co. Ltd., Cyprus in 1983 where she operated for nearly two years before being sold yet again.

In 1985, the ship was sold to the Chaldean Shipping Co. Ltd., Cyprus, and renamed Hamada. A year later, in 1986, the Hamada was sold to the Phemios Shipping Co., Valetta, Malta.

There are different versions of the Hamada's loss. One report indicates that she caught fire and sank in deep water. The P & O file states that the ship struck a "submerged object" in heavy weather at position 24.42N/35.25E off of Ras Banas while enroute on 28 June 1993 from Jeddah to Suez and subsequently foundered.

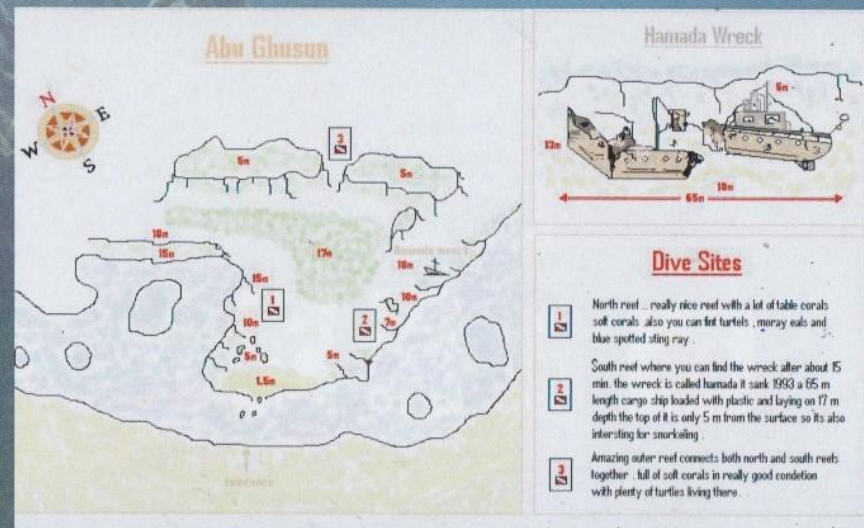


copy from original arrangement drawing of ship



For Divers:

The ship lies on its starboard side on the bottom in two sections, with the stern section away from the reef. The port side of the ship is just above water at low tide here. Penetrations into the pilothouse, engine room and cargo holds are all possible. The bow thruster, propeller, and rudder are all still in place as well. Plenty of marine life to be found on the wreck, such as lionfish, schools of glass fish, gobies, and surgeon fish, among others. Maximum depth of 14 meters means lots of bottom time here.



Dive Sites

- 1 North reef ... really nice reef with a lot of table corals soft corals also you can find turtles , moray eels and blue spotted sting ray .
- 2 South reef where you can find the wreck after about 15 min the wreck is called hamada it sank 1993 a 65 m length cargo ship loaded with plastic and laying on 17 m depth the top of it is only 5 m from the surface so its also interesting for snorkeling .
- 3 Amazing outer reef connects both north and south reefs together . full of soft corals in really good condition with plenty of turtles living there .

WADI EL GEMAL

The Wadi El Gemal National Park (meaning "Valley of the Camels") is an extensive area of land and coastal water lying to the south of Marsa Alam. It includes many diverse ecological habitats and a rich variety of animal and bird types including several endangered species. The area was designated a National Park by the Egyptian Environmental Affairs Agency in January 2003.

It covers a total of some 6,000 square kilometres including several islands, a stretch of mangrove rich coast line and an extensive mountainous area inland which surround one of Egypt's largest desert wadis.

The Wadi El Gemal acts to channel any water from the mountains towards the coastline but some is trapped underground which is a key factor supporting the area's vibrant ecosystem.

The valley is most easily accessed by an entrance from the coast road approximately 45km south of the small town of Marsa Alam. Do not try to enter by yourself as it is easy to get lost inside the National Park and it might be difficult for rescuers to find you.

Animals that inhabit the wadi include many rare species such as the Nubian Ibex and the Hyrax as well as wild donkeys, camels and gazelle.

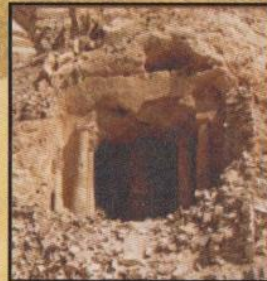
THE ABABDA BEDOUIN

In this area the local population is the Ababda who have many rich and colourful traditions - much of which is endangered by the pressures of modern life and the economic exploitation of the area and its' resources. Traditionally nomadic, many still work herding their flocks of goats through the network of wadis in search of grazing land and water. They are renowned for their skilled animal tracking abilities.



HISTORICAL SITES

The ancient emerald mining settlements can still be seen if you go on an organized safari tour. The most well known is the Roman settlement of Sakit which they called Mons Smaragdus or Emerald Mountain.



You can wander through the village, see a temple dedicated to the god Isis cut out of the rock and also visit the actual mines.

MANGROVES

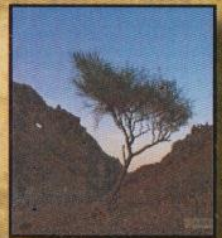
Mangroves can tolerate relatively salty water because their roots filter the sea water and the salt crystals are excreted through their leaves and if you look at a Mangrove leaf under the sun you can often see the shiny salt water crystals on it.

Mangrove performs a crucial role in the coast's eco system by providing protection for birdlife and is one of the few places in the desert environment suitable for nesting. Its' cover also enables baby fish to hide from predators and their roots protect the coast from erosion and were also traditionally used by the bedouin for house construction and its' foliage as an animal feed.



ACACIA TREES

Further up the wadi you can find acacia trees usually along the edges of the valley floor. These have evolved over thousands of years to survive the arid conditions of the desert with extraordinarily long roots enabling them to reach the ground water deep below the surface.



WADI EL GEMAL ISLAND

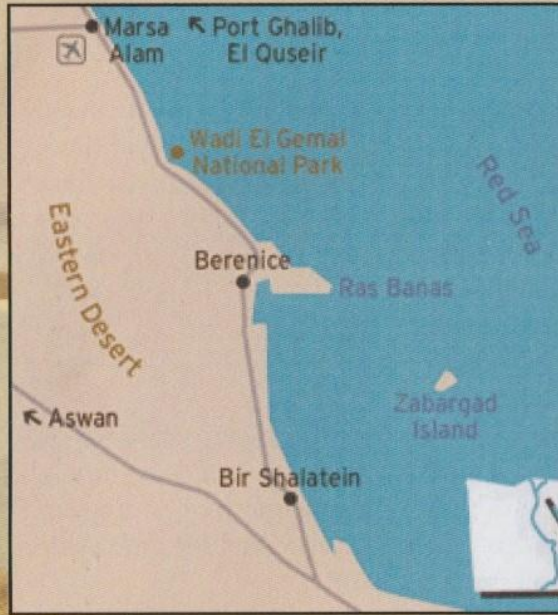
With its beautiful coral reefs, extensive sea grass beds, crystal clear waters, and amazing wildlife this island is one of the top destinations for visitors.



You can get there by a day boat. The island is a haven for dugongs, turtles and a vast variety of migrating sea birds and has been designated as "an important bird area" by Bird Life International.

Qulaan

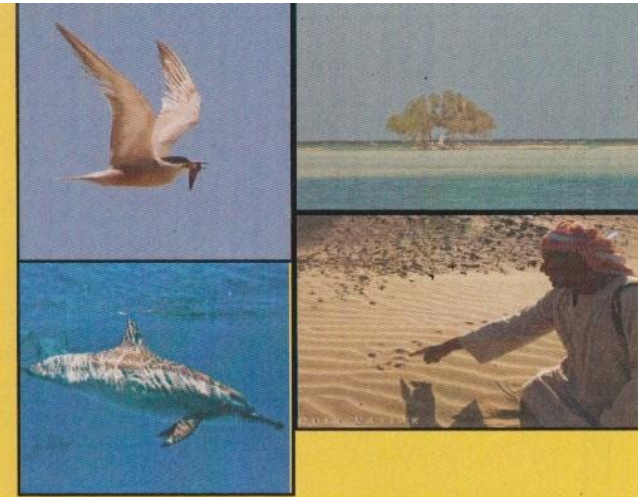
piece of the heaven, crystal water surround by stands of Mangrove trees which holds nests of Ospery. Don't miss interact with Local people there and buy some beautiful handicrafts from them.



TAKE NO THING
LEAVE NO THING ..

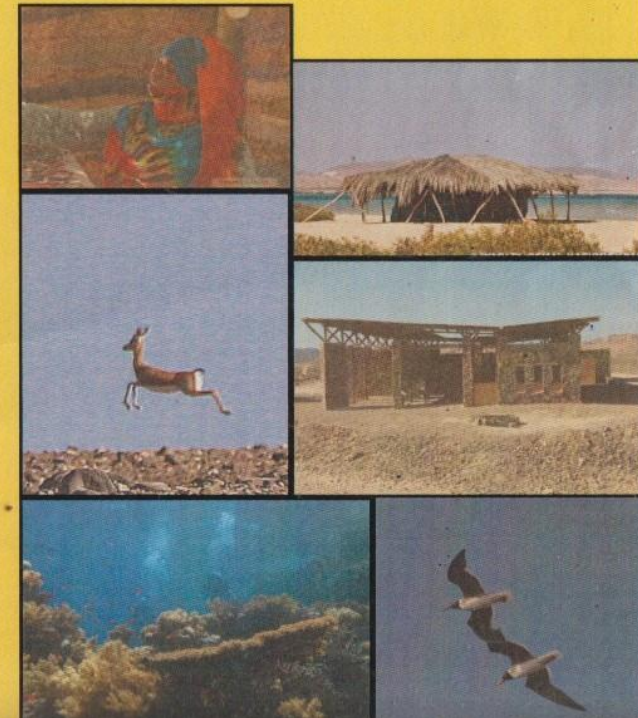


All copy right reserved for Wadi El-Gemal National Park,
ABDULRAHMAN.SHAABAN@HOTMAIL.COM



WADI EL-GEMAL NATIONAL PARK

Discover The Nature



ABDULRAHMAN SHAABAN