



L'ATELIER
technique des espaces naturels

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REGIONAL PROJECT FOR THE DEVELOPMENT OF MARINE AND COASTAL PROTECTED AREAS IN THE MEDITERRANEAN REGION (MEDMPA)

RECOMMENDATIONS FOR THE ELABORATION OF A NATIONAL PLAN TO DEVELOP MARINE PROTECTED AREAS IN SYRIA (SUPPLEMENT TO THE DECEMBER 2004 REPORT)



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The ATEN requested additional information from the Syrian national experts who submitted their reports in December 2004. They were received in part during the first ten days of January 2005.

Information pertaining particularly to the expert's report presented by Dr Adib SAAD, Director of the University of Tishreen's Marine Sciences laboratory (Lattakia – Syria) is of special importance as it enables points that hitherto had not been developed to be expanded upon.

- 5. THE AL SANAWBAR A JABLEH SECTOR

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Part of the Jableh beaches (Photo A.SAAD)

A major site for marine turtles:

Several publications refer to the presence of marine turtles in Syrian waters, namely south of Lattakia (Kasperek 1995, Godley *et al.*, 2003).

More recently, the site was the object of an ecological monitoring campaign for sea turtles in July and August 2004 by a Syrian and Greek team.

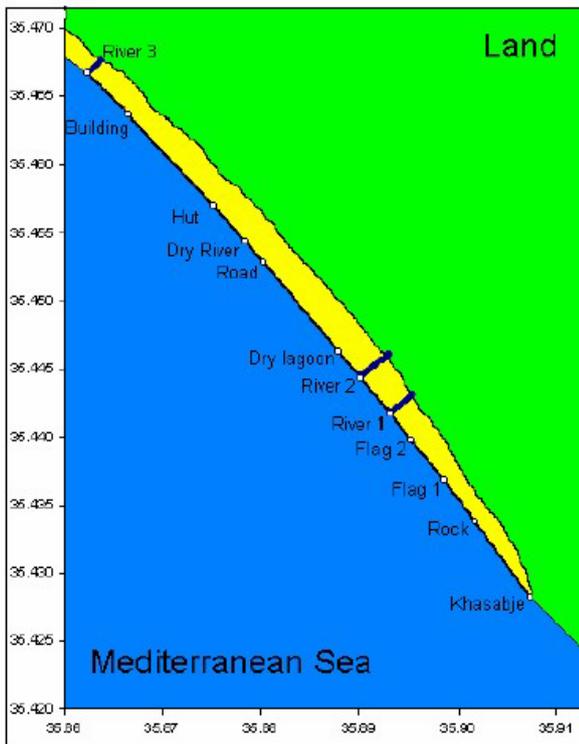
A report on the work undertaken entitled "Rees A., Saad A., 2004. Report on the status of marine turtles in Syria, 2004. Focus on nesting beach investigation. Tishreen University Laboratory of Marine Sciences. 169p."

The results reveal a total of 104 Green turtles (*Chelonia mydas*) nests with a reproduction success rate of 33 to 40% depending on the sectors.

336 juveniles were contacted during this period; 295 individual green turtles (*Chelonia mydas*) and 17 individual loggerhead turtles (*Caretta caretta*), plus 24 undetermined individuals.

24 turtle corpses were also identified in the Jableh sector.

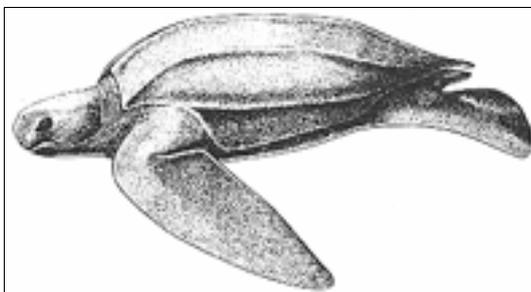
The nesting zone covers a line 7.5 km south of Lattakia with the following coordinates: 35.428°N, 35.907°E to 35.467°N, 35.862°E



Juvenile Chelonia myda, Jableh beach, August 2004. Photo A.SAAD

Thus, this site constitutes the 6th most important nesting site for the Green turtle (*Chelonia mydas*) in the Mediterranean and approximately 6% of the nesting population of this species in the Mediterranean.

The leatherback turtle (*Dermochelys coriacea*) was seen for the first time in Syria in July 2004 on the Jableh coast, caught in a fishing net and released alive (Rees *et al.*, 2004), thereby confirming the major importance of this part of the Syrian coast for marine turtles.



Dermochelys coriacea according to Riedl, 1986



photo : Mathieu Foulquié

Chelonia mydas (Photo M. Foulquié)

The study undertaken during the summer of 2004 also identified the main threats to the turtle population of this zone: predation by dogs, fox and the crab *Ocypodes cursor*, beaches flooded by seawater, direct human destruction, waste and vehicles on the beach, urban lighting and plastic objects in the sea.



*Predation of a turtle nest by a dog.
Photo A.SAAD*

Other species of heritage value:

Several species of fish have been identified in this sector, with mostly small sized individuals for the sparidae.

Bass (*Dicentrachus labrax*) was identified in this sector and is still considered an endangered species (Sbaihi *et al.*, 1994).

Several species of serranidae seem to be present in the waters south of Lattakia and add to the interest of the site: *Epinephelus aeneus*, *Epinephelus coatea*, *Epinephelus marginatus*, *Epinephelus haifensis*, *Mycteroperacca rubra*.

It may be noted that the latter species is considered quite rare in the Mediterranean and figures on the (1996) IUCN red list of threatened species in the DD (Data Deficient) category.

The heritage value of this part of the Syrian coast therefore amply justifies the creation of a Marine Protected Area, the primary aim of which would, in the short term, be the protection of the marine turtle egg laying sites.

- 6. THE SOUTHERN SYRIAN COAST (SYRIAN / LEBANESE COAST)

The rapid exploration undertaken during the summer 2004 mission (Rees and Saad) did not lead to the discovery of marine turtle nesting sites.

However, four (4) Green turtle shells were found between Tartous and the Lebanese boarder (Rees and Saad, 2004).

This zone is especially mentioned as a spawning ground for species of coastal fish, namely the serranidae (Saad, 2004) such as *Epinephelus aeneus*, *Epinephelus coatea*, *Epinephelus marginatus*, *Epinephelus haifensis*, *Mycteropecca rubra*. This latter species, rather rare in the Mediterranean, is particularly interesting and would require further investigation, notably using scuba diving and interviews with fishermen.

The interest of the coastal wetlands of the Nahr Al Kabir Aljenouby estuary is confirmed because the Soft shelled turtle (*Trionyx triunguis*), species figuring in Annex II of the SPA protocol and living in freshwater or slightly brackish water, is mentioned as being present.



The Trionyx triunguis turtle

Additional scientific data should nevertheless be obtained (exact status of *Trionyx triunguis*, batrachians, birds, insects, flora...) and the creation of a mixed coastal and wetlands / Syrian waters – Lebanese waters protected area could then be justified (For example, Ramsar status if the eligibility criteria are met).



The Syrian Southern frontier

- **7. THE LEBHAS ISLANDS**

It was not possible to undertake a reconnaissance mission within the MedMPA programme in these islands situated south of Arwad Island and scientific data seems to be scarce.

Recent information was gathered from fishermen and by doctor Abid SAAD. This site and its surroundings could be a particularly favourable site for populations of serranidae and particularly *Epinephelus aeneus*, *Epinephelus costae*, *Epinephelus marginatus*, *Epinephelus haifensis*, *Mycteroperca rubra*.

Some of the *Epinephelus marginatus* caught have been large sized individuals whereas individuals fished in other sectors are very often juveniles or sub-adult.

The species *Mycteroperca rubra*, which is quite rare in the Mediterranean, has also been mentioned in this sector.

These new elements should lead to the undertaking of complementary field missions, especially underwater diving and surveys amongst fishermen in order to confirm the interest of the Lebhas islands for marine biodiversity.



Mycteroperca rubra (Photo A.SAAD)



Epinephelus marginatus (Photo A.SAAD)

ADDITIONAL RECOMMENDATIONS TO CONTINUE THE ELABORATION OF A NATIONAL PLAN

The completion of a national plan for the development of Marine Protected Areas in Syria would require complementary investigations in the following areas :

- A complete study of the nesting sites south of Lattakia (biology, tracking, threats, awareness building amongst the public)
- Study of the captures of turtles by fishing gear
- Additional sub-marine investigations in the Lebhas islands sector
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- Survey amongst fishermen and underwater fishermen operating around the Lebhas islands
- Analysis of the fishing effort on the Lebhas islands, Jableh and the Lebanese/Syrian boarder.

ANNEX

Additional documents consulted

*Rees A., Saad A., 2004. Report on the status of marine turtles in Syria, 2004. Focus on nesting beach investigation. Tishreen University Laboratory of marine sciences. 169 p.

*Rees A., Saad A., Jony M; 2004. First record of a Leatherback turtle in Syria. Marine turtle Newsletter 106:13.

*Godey B.J, Broderick A., Glen F., Hays G. 2003 Post nesting movements and submergence patterns of loggerhead marine turtles in the Mediterranean assessed by satellite tracking. Journal of Experimental marine biology and ecology 287 (2003) 119-134

*Kasperek M. 1995. The nesting of marine turtles on the coast of Syria, Zoology in the Middle East 11,51-62

*Sbaihi M., Saad A, Hureau J.C., 1994. Etude biosystématique des poissons téléostéens dans les eaux côtières de Syrie. Thèse de magistère, Tishreen University, 246 p.