This article should be cited as: Margaritoulis D., Dimopoulos D. 2012. Two in one: a proposal for the creation of a new marine park, combining the two most important nesting areas in Greece. Pages 35-38 in Proceedings of the Third Mediterranean Conference on Marine Turtles (Editors: M.N. Bradai, P. Casale). Barcelona Convention - Bern convention - Bonn Convention (CMS). Tunis, Tunisia. 130 pp.

# TWO IN ONE: A PROPOSAL FOR THE CREATION OF A NEW MARINE PARK, COMBINING THE TWO MOST IMPORTANT SEA TURTLE NESTING AREAS IN GREECE

# **Dimitris MARGARITOULIS & Dimitrios DIMOPOULOS**

ARCHELON, the Sea Turtle Protection Society of Greece, Solomou 57, Athens

### ABSTRACT

Greece holds about 60% of all loggerhead turtle nests made within the monitored areas in the entire Mediterranean Sea. The most important nesting areas in Greece are found in Laganas Bay on Zakynthos Island and Kyparissia Bay in western Peloponnesus. These two nesting areas, lying 70 km apart, host 63% of all loggerhead nests made annually in Greece and 37% of the ones made in the Mediterranean. Concerning conservation, Laganas Bay enjoys adequate protection by means of a National Marine Park, established in 1999, covering a terrestrial part of 4,500 ha and a marine part of about 9,000 ha. Kyparissia Bay, besides being an important nesting area, contains also a diversity of exceptional natural, anthropogenic and archaeological features, which have led to the designation of four NATURA 2000 sites along the Bay. However, the "NATURA 2000" status bears little significance to conservation because the only provision foreseen is the obligation for elaboration of Environmental Impact Assessments for construction works above a certain magnitude. Herein the creation of a combined new Marine Park is proposed, to incorporate these two important areas into one management unit, and thus assist in the long-term, sound conservation of this natural asset of Greece. The new extensive National Marine Park will be unique in the Mediterranean and will definitely extend the boundaries of sea turtle conservation.

### INTRODUCTION

ARCHELON's long-term monitoring projects have documented precisely the main nesting areas of the loggerhead turtle in Greece. Greece holds about 60% of all loggerhead nests made within the monitored areas in the Mediterranean Sea (Margaritoulis et al. 2003). The "major" nesting aggregations in Greece are found in the following areas (in descending order of nesting level): Zakynthos (Laganas Bay), Kyparissia Bay, Rethymno, Lakonikos and Bay of Chania (Margaritoulis et al. 2003). Of these, only Zakynthos has been granted a specific protection status. After a long and intense campaign by several NGOs and pressure towards the Greek government by the Council of Europe (Bern Convention) and the European Union (EU), the Zakynthos nesting and inter-nesting habitats were eventually assigned the status of a National Marine Park in 1999 (Dimopoulos 2001). The other four "major" nesting areas are only included in the Natura 2000 network in the context of the EU's Habitats Directive (Dimopoulos et al. 2003). However, the "Natura 2000" status bears little significance to conservation because the only provision foreseen is the obligation for elaboration of Environmental Impact Assessments for construction works above a certain magnitude.

## THE NATIONAL MARINE PARK OF ZAKYNTHOS (NMPZ)

The NMPZ occupies a terrestrial area of about 4,500 ha on southern Zakynthos and the Islands of Strofadia (about 22 miles south of Zakynthos), and a marine area of about 9,000 ha covering the entire Laganas Bay, which is considered to be the critical inter-nesting habitat of the turtle population, plus an area outside the two promontories embracing the Bay. The Park discontinued its functioning from about April 2004 to August 2005, because of financial constraints. Its operation was resumed in August 2005 after the appointment of a new President and Management Board; now the Park seems to enjoy adequate governmental funding, political support and fruitful collaboration with ARCHELON and WWF Greece. Generally the Park's activities in the last few years can be judged as successful; however, more time is needed to establish locally a firmer position.

### THE KYPARISSIA BAY

Extending for more than 45 km of almost continuous sandy beach, this Bay is very important for sea turtles, as well as for a number of other features. The nesting area, second only to Zakynthos, hosts annually an average of 580 nests (range: 286-927, N=15 seasons) (Margaritoulis et al. 2003). Furthermore the Bay features the largest sand dune area in Greece, which is backed by a rare coastal forest managed by the Forest Service. The rivers Alfeios and Neda, both known from Greek mythology, cut through the beach and flow into the Ionian Sea. Off-shore Kyparissia Bay there are extensive <u>Posidonia oceanica</u> beds and frequent sightings of cetaceans have been recorded. These important natural features have been described in the four Natura 2000 sites designated along the Bay. In addition the area includes several archaeological sites; among them the ancient site of Olympia, cradle of the Olympic Games, and the temple of Apollo at Fygaleia.

### THE COMBINED NEW PARK

We hereby propose to combine the two areas into a large Marine Park (the Ionian Marine Park). The proposed Park will incorporate the existing area of the Zakynthos Park, and the entire Kyparissia Bay with its four designated Natura 2000 sites, the archaeological sites, and also the vast marine area in-between (Figure 1). The creation of the new Park will bring under protection status 63% of all turtle nests in Greece and 37% of all loggerhead nests made within monitored areas in the entire Mediterranean.

The main objectives of the proposed Park would be:

- To protect the natural environment on land and at sea.
- To protect the marine and terrestrial habitats of loggerhead turtles
- To protect the dune ecosystem and the coastal forest along Kyparissia Bay
- To protect the archaeological sites within the boundaries of the Park
- To provide incentives for local people towards eco-tourism and sustainable development.

According to Greek law, a Specialized Environmental Study must be undertaken to define all natural, cultural and economic assets in this area and design the Ionian Marine Park's protection goals and mandate. The extensive National Marine Park will be unique in the Mediterranean and will definitely extend the boundaries of sea turtle conservation.

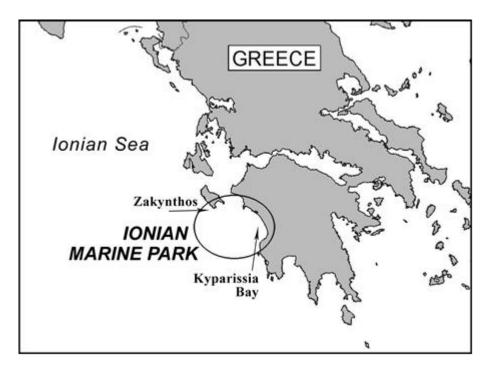


Figure 1. Indicative location of the proposed Ionian Marine Park.

# REFERENCES

**Dimopoulos D. 2001**. The National Marine Park of Zakynthos: A refuge for the Loggerhead Turtle in the Mediterranean. Marine Turtle Newsletter, 93:5-9.

**Dimopoulos D., Arapis T., Margaritoulis D. 2003**. Conservation perspectives of the major critical nesting habitats of <u>Caretta caretta</u> in Greece. Pages 116-119 in Proceedings of the First Mediterranean Conference on Marine Turtles (editors: D. Margaritoulis, A. Demetropoulos). Barcelona Convention - Bern Convention - Bonn Convention (CMS). Nicosia, Cyprus.

Margaritoulis D., Argano R., Baran I., Bentivegna F., Bradai M. N., Caminas J. A., Casale P., De Metrio G., Demetropoulos A., Gerosa G., Godley B. J., Haddoud D. A., Houghton J., Laurent L., Lazar B. 2003. Loggerhead turtles in the Mediterranean Sea: Present knowledge and conservation perspectives. Pages 175-198 in Loggerhead Sea Turtles (editors: A.B. Bolten and B.E. Witherington). Smithsonian Books, Washington DC. 319 pp.