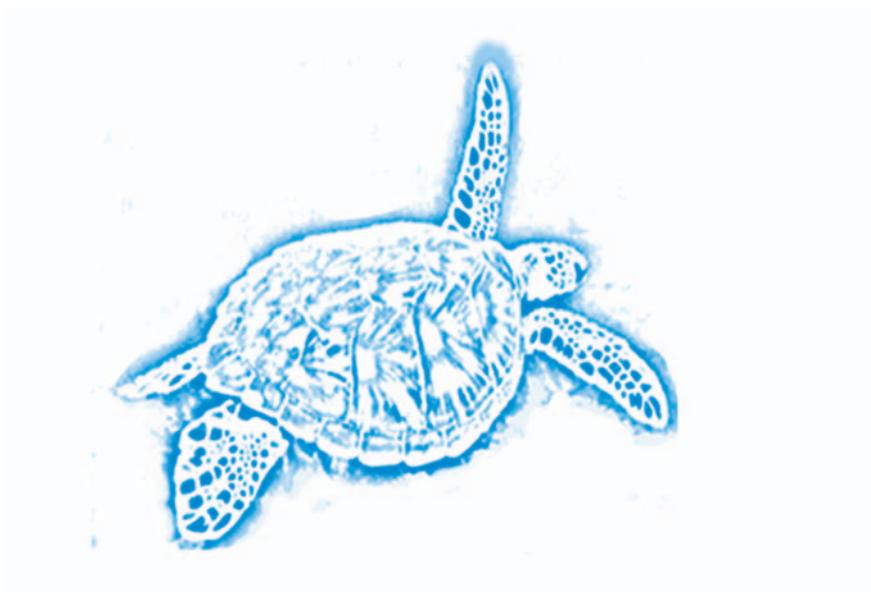


PROCEEDINGS OF THE FIRST MEDITERRANEAN CONFERENCE ON MARINE TURTLES

Rome, 24-28 October 2001

Editors:
Dimitris Margaritoulis
Andreas Demetropoulos



Barcelona Convention - Bern Convention - Bonn Convention (CMS)

Nicosia, Cyprus, December 2003

THE INVOLVEMENT OF LOCAL COMMUNITIES IN SEA TURTLE CONSERVATION: THE CASE OF EVROTAS DELTA, LAKONIKOS BAY, GREECE

Kostas TENEKETZIS and Dimitris MARGARITOULIS

ARCHELON, the Sea Turtle Protection Society of Greece, Solomou 57,
GR-104 32 Athens, Greece

INTRODUCTION

The involvement of local communities is essential in the implementation of management measures for the conservation of natural ecosystems. A legal framework adapted to the specific local conditions, incorporating natural environment and socio-economic parameters, is required for the effective management. However, for the long-term success of the management policies, it is essential to ensure local consensus and active involvement.

In the Mediterranean, where there is very often intense human activity in the ecosystems that require protection, it is only through the involvement of local societies that the success of the management measures will be safeguarded. The increasing economic pressure in southern Europe, that affects mainly the local economies that depend on agriculture and less those that rely on tourism, results in the reluctance of the local societies towards the implementation of management policies especially when these policies derive from national authorities.

Non-governmental organisations in most cases undertake the task to develop consensus and often proceed with the implementation of management measures at a local level. In countries such as Greece, where due to structural deficiencies the national mechanism is unable to encounter the increasing management demands (18% of the Greek territory has been proposed for inclusion in the European network NATURA 2000), non-governmental organisations are likely to be commissioned even for the elaboration of local management plans.

Herewith we present ARCHELON's project in Lakonikos Bay, southern Peloponnesus, as a case study for the involvement of local communities.

THE STUDY AREA

The Evrotas Delta forms one of the last remaining important wetlands in southern Greece and is proposed as a NATURA 2000 site comprising 5,820 ha.

Even though the Delta has suffered extensive destruction and considerable reduction in size due to human activities, today it is considered one of the last strongholds for wildlife in the area. Terrapins, freshwater snakes and more than 210 species of birds have been recorded, many of which are rare or threatened, like the imperial eagle and the black stork.

Until the eighties, the principal agricultural product in the area of Evrotas river was cotton which was traditionally grown even before the 18th century. This was followed by rice, to finally end up in the expansion of citrus fruits, olive trees, and vegetables. About 70% of the inhabitants in the Evrotas river basin are mainly occupied with agriculture, which takes up 63% of the land. Coastal fishing constitutes an important secondary activity.

DEVELOPMENT OF STRATEGIES

Lakonikos Bay is a “major” nesting area in Greece holding about 200 loggerhead nests annually (Margaritoulis 2000). ARCHELON has been running a monitoring project in the area since 1984. The project focuses on monitoring and protection of loggerhead clutches as well as public awareness actions. Over 600 volunteers from Greece and other countries have participated in the project.

The pillars of the project’s strategies in the area were:

- Long-term presence in the field. The fact that the project started and expanded gradually with limited resources and using volunteers as its main driving force gained local acceptance and appreciation.
- Intensive and persistent monitoring and protection. Our efforts to protect sea turtles, often under difficult conditions, gained the appreciation of the locals who became more aware of the importance of protecting this species and its habitats.
- Persistent social presence. The very existence of international volunteers in the local community helped develop local understanding and acceptance for our work.

PROJECT IMPLEMENTATION

During the last sixteen years, ARCHELON undertook the commitment to approach the local community (Sioris et al. 2000) and ensure its active involvement in the protection of sea turtles and their habitats in the area of the Evrotas Delta in the Bay of Lakonikos.

ARCHELON in its effort to gain the involvement of the local community, implemented various activities whose common characteristic is the multi-level intervention in the local community:

- Local schoolchildren. Environmental education projects were started in 1989.

Between 1997 and 1999, 52 presentations were carried out and 1,767 students aged 7-17 years participated.

- Fishermen. By setting up pilot programmes between 1989 and 1991 (Margaritoulis et al. 1992), the project started to intervene in order to tackle the problem of accidental capture of sea turtles in fishing gear. In co-operation with the local fishermen, 188 captures were recorded between 1997 and 2000.
- Visitors. During the summer beach patrols were carried out aiming to inform beach users, most of who live in nearby areas. During the summer months of 1998-2000, a total of 1,586 beach users were directly informed with the help of local schoolchildren.
- Cultural events. Project members participated in events organised by the local communities by conducting environmental education activities for children, slide shows, photo exhibitions, etc. Between 1998 and 2000, the project participated in 21 local events and conferences informing a total of 7,034 people.
- Local authorities. Realising the importance of interaction with the local authorities, consultation meetings were organised with the municipalities and the prefecture on the progress of ARCHELON's activities in the area. During the last three years ARCHELON has been actively involved in the preparation of protection measures for sensitive zones in the area of the Evrotas Delta (pollution, degradation of dune areas).

For the development and maximisation of the outcome of the above activities, the following factors played a significant role:

- The implementation of a LIFE-Nature project (1997-2000) ensured the acquisition of equipment and other material (scientific instruments, vehicles, communication tools, information material), facilities (seasonal Information Stations, the creation of the Environmental Centre and the Nature Trail in a nearby sand dune ecosystem, the establishment of the Communication Office for Fishermen), activities coverage (papers, conferences) as well as the necessary for legislative purposes studies (Management Plan, Special Environmental Study).
- Good and close connections with primarily the local, as well as the national press. The co-operation with the local radio stations provided the local community with immediate and direct information by means of press releases and live interviews with project members.
- ARCHELON's central office support, and specifically through its Secretariat, Volunteer Section, Environmental Education Programme, Rescue Centre and Stranding Network.

STRATEGIC RESULTS

Following the implementation of above main actions, some strategic results can be summarised as follows:

- Direct protection of sea turtles. Managing the problem of private and public light pollution on the nesting beach, as well as raising awareness and co-operation with fishermen has helped to reduce two of the most serious threats to sea turtles in the area.
- Restoration of sand dunes. The implementation of this activity (following a pilot project) on a larger scale with the active involvement of the local municipalities ensured the effective recovery of the degraded dune systems in the area of Evrotas Delta (Rebetz et al. in press).
- Public Awareness. With the support of the local municipalities bilingual informative material on the Evrotas Delta was issued, information stations and the Environmental Centre operated and several educational activities were carried out.
- Ecotourism infrastructure. The establishment of the Environmental Centre and the Nature Trail, realised with the support of the local municipalities by providing an old school and land, attracted hundreds of visitors every year. The municipalities are sharing the administration costs and are covering all maintenance and equipment costs of these facilities.

CONCLUSION

The project's strategy in the area has first of all managed to eliminate the principle threats to sea turtles and their habitats in the area of Evrotas Delta. It is important that these threats were not dealt with in the form of "external intervention" in the area, but with the involvement of the local community, which ensured the long-term viability of the solutions provided.

Moreover, the active involvement of people and local authorities in efforts to protect and sustain the environment creates new dynamics on a local level: the local community discovers the natural value of their area and reduces activities that may have a detrimental effect on it.

The preparation and partial application of a Management Plan as well as the Special Environmental Study (which contains the possibility of issuing relevant legislation) effectively ensures the establishment of appropriate mentalities and infrastructures for sustainable development in the area. Further, the active support of the local municipalities (Elos and Skala) is the vehicle that can guarantee a viable future for Nature and Man in Evrotas Delta and set an example for other areas in Greece and in the Mediterranean.

ACKNOWLEDGEMENTS

The project received at times financial assistance from European Commission in the context of various instruments (ACNAT, LIFE Nature). Permits to work with an endangered species were provided by the Ministry of Agriculture. We thank project personnel and volunteers who spent considerable effort to work closely with the local communities.

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