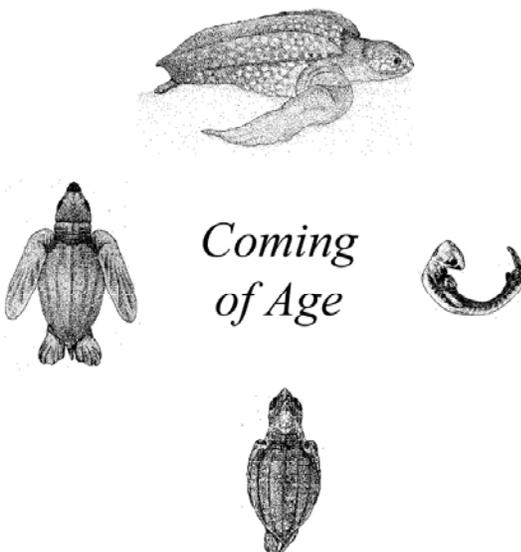




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Michael S. Coyne & Randall D. Clark

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75 Virginia Beach Drive  
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## INVOLVING LOCAL COMMUNITIES IN A NATIONAL STRANDING NETWORK: THE CASE OF CRETE

Aliki Panagopoulou, Dimitris Margaritoulis, and Dimitrios Dimopoulos

ARCHELON, The Sea Turtle Protection Society, Solomou 57, GR-104 32 ATHENS, Greece

### INTRODUCTION

Crete with an area of 8,261 km<sup>2</sup> is the largest island in Greece and also the 5th largest in the Mediterranean. The discovery of three important loggerhead (*Caretta caretta*) nesting sites (Rethymno, the Bay of Chania and the Bay of Messara) between 1989 and 1990 by ARCHELON - the Sea Turtle Protection Society of Greece led to the initiation of a long-term monitoring and conservation programme (Margaritoulis et al., 1992). A Management Plan, compiled in 1997, determines the socio-economic background and suggests a strategy towards the long-term protection of sea turtles in the area, involving the local community (Irvine, 1997).

### THE NATIONAL SEA TURTLE STRANDING NETWORK

Despite the existence of both national and international legislation protecting sea turtles, many are found stranded in Greece, with injuries primarily resulting from fishing activity. In 1992, ARCHELON formed the Sea Turtle Rescue Network in co-operation with the Ministry of Mercantile Marine. The objectives of the Rescue Network include collecting information on live and dead strandings throughout Greece. This information revealed the large number of turtles requiring rehabilitation treatment, which resulted in the establishment of ARCHELON's Rescue Centre in Glyfada, Athens in 1994 (Kopsida et al., 2000).

This presentation discusses how the Rescue Network operates on the island of Crete and how the local community has been involved in reporting sea turtle strandings.

### SEA TURTLE STRANDINGS ON CRETE 1996-2000: COLLECTION & PRELIMINARY EVALUATION

Once a sea turtle is found dead or injured, a "stranding sheet" is completed. The stranding sheet provides information as to the location, circumstances and fate of the turtle. Photographs, thus enabling a fairly accurate evaluation of the cause of stranding, usually accompany records. All stranding sheets are subsequently forwarded to Athens and entered in a central database in order to be able to analyse the information collected. In cases of injured animals, arrangements are made with the help of ARCHELON for the turtles to be transported to the ARCHELON Rescue Centre as soon as possible. Dead animals are recovered and disposed of by the local authorities.

A rapid assessment of strandings recorded on Crete between 1996 and 2000, have provided ARCHELON with valuable information as to the particularities of the situation on the island.

1. There is a significant increase in the number of sea turtle strandings recorded over the last 5 years. The turning point was 1998, when the total number of strandings bounced from 11 to 28. During 2000 there were three times as many strandings as in 1996 (Fig. 1).
2. The percentage of injured turtles reported in 2000 is larger than previous years (1996: 16.7%, 2000: 37.5%) (Fig.1).
3. Sea turtle strandings take place all year round, with an increase

during the nesting/hatching season (May to October) (Fig. 2).

4. Strandings reported are currently spread all around the island, often in areas far away from those regularly monitored by ARCHELON.

All these factors have made it necessary for ARCHELON to incorporate the local community in the National Sea Turtle Stranding Network, in order to ensure accurate data collection and to be in a position to transport all injured animals to ARCHELON's Rescue Centre in Athens for treatment and rehabilitation.

### ACTIVE MEMBERS OF THE NATIONAL SEA TURTLE STRANDING NETWORK ON CRETE

#### 1. Port Authorities

Since the Ministry of Mercantile Marine was instrumental in the operation of the Rescue Network, the local Port Authorities became directly involved in the collection of stranding information. A circular containing information on first aid and handling of injured, sick, weak and dead sea turtles was handed out by the Ministry of Mercantile Marine to all Port Authorities in 1999. There are 12 Port Police Stations on Crete, which are ARCHELON's principal contacts for stranding reports. In 2000, 62.5% of the total strandings were reported by the Port Authorities, the remaining percentage being shared between ARCHELON members (21.9%) and locals (15.6%).

#### 2. Research Institutes

ARCHELON collaborates with the Institute of Marine Biology of Crete and the Natural History Museum of Crete. They report cases of turtle strandings and are actively involved in sending injured sea turtles to ARCHELON's Rescue Centre.

#### 3. Local Environmental NGO's

Local environmental NGO's are mainly involved in the transportation of injured sea turtles to the Sea Turtle Rescue Centre for treatment and rehabilitation. The most important ones, The Environmental Initiative of Hania (West Coast) and the Environmental Team of Sitia (East Coast), have assisted ARCHELON in transporting 26.9% of the total cases of injured animals over the last three years.

#### 4. Diving Schools, Sailing Clubs

They report sea turtle strandings and are available in cases of sea turtles trapped in rivers or lagoons. They are also a good source of information for sea turtle sightings all around the island.

#### 5. Concerned individuals

The publicity obtained through media coverage of sea turtle strandings, as well as the intense public awareness programme carried out by ARCHELON has resulted in the local community becoming interested in the plight of the sea turtle and being willing to get involved in the protection of this endangered species. During

2000, 69.2% of turtles found injured have been transported to ARCHELON's Rescue Centre thanks to the voluntary contribution of those individuals.

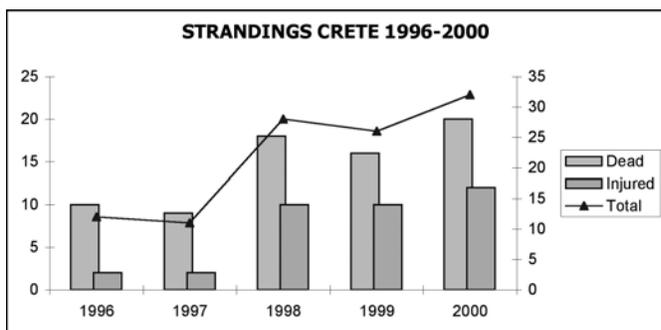
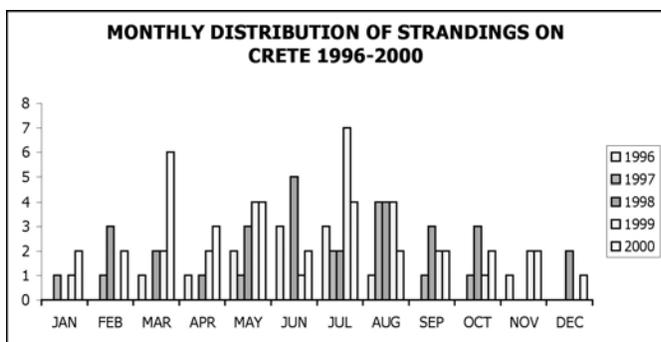


Figure 2. Monthly Sea turtle stranding analysis for Crete between 1996 and 2000.



**CONCLUSIONS**

Thanks to the participation of the port authorities, research institutions, environmental organisations and individuals, ARCHELON has managed to:

1. Receive information about strandings even in areas that are not regularly monitored by ARCHELON.
2. Have a clear picture as to the major causes for sea turtle mortality all around the island, which improves ARCHELON's conservation policy on the island.

3. Get a clear indication of how the local community increasingly supports the effort to protect sea turtles and their habitats.

Figure 1. Total number of turtles reported dead or injured on Crete between 1996 and 2000

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