

## STATUS OF WESTERN MEDITERRANEAN SEA TURTLES

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RESUME - *Sur la base d'une série d'interviews conduites en 50 différents ports le long de la côte de la Méditerranéenne Occidentale en 1978 on peut conclure qu'il y a un abattage annuelle de 5000 tortues de mer au minimum. Faute de plages de ponte on doit supposer de migrations vers/de l'Atlantique et la Méditerranéenne Orientale, comme il est confirmé par des observations de groupements printaniers sur ces routes. Une opération de marquage a été réalisée le long des côtes italiennes et grecques.*

Because of the peculiar ecological characteristics of the Mediterranean the local populations of the sea turtles probably have some adaptive modifications in their biology in comparison with oceanic populations.

The scientific literature almost completely ignores this interesting organisms living in the Mediterranean. Our knowledge of the subject seems to be paradoxically committed to a kind of oral tradition. We need detailed informations on reproduction areas and period, adult distribution during the year, migratory behaviour and so on. Up to date an organic research by specialists lacks almost completely.

The investigation promoted for 1978 (Sea Year) by the IUCN has the undeniable merit of awaking the interest on these animals: organic research are being started by scientific institutions in Tunisia, Cyprus, Turkey, Greece (Argano, 1978; Geldiay, 1981; De Metrio, Petrosino, Tursi, 1982; Margaritoulis, in press).

The target of investigation, committed to us by IUCN in 1978, was a definition of the status of Western Mediterranean Sea Turtles in view of a conservation program.

An inquiry was directly carried out in 50 harbours along the West Mediterranean coast: discussions with group of fishermen, where possible of old age, approximative evaluation of the fishing-fleet of the harbour (also cautiously using official data), inquiry on the main types of fishing, on the fish markets, on the tourist markets.

The number of sea turtles killed in every harbour depends on the type of fishing and not on the harbour size. Their catch chiefly by drifting-gillnets, long-lines and trawling-fisheries, is in general accidental and the killing is almost always occasional.

The result is that about 5000 sea turtles (mostly *Caretta caretta*), as a minimum, are killed in this area every year.



Fig. n° 1

Visited harbours. Killings

•	harbours where the turtles killed range from 0 to 10 per year
—	" " " " " " " " 10 to 100 " "
→	" " " " " " " " 100 to 500 " "
△	" " " " " " " " 500 to 1000 " "
▲	" " " " " " " " more than 1000



Fig. n°2

Reproduction areas

—	occasional
→	occurrence is sure but of limited interest
▲	" " " and of high interest
△	not sure occurrence but the area is of great interest

The threat for survival of the sea turtle in Western Mediterranean is probably increasing considering the general loss of the ecological quality of this sea since the post-war period, but it is impossible to have trustable indications on the subject: for instance if the fishing techniques were without any doubt less destructive in the past, nevertheless the interest for sea turtles flesh by coastal people was higher. Certainly the destruction for touristic purposes of reproduction sites had great importance on the biology of western Mediterranean sea turtles.

A systematic direct survey locating reproduction areas was also carried out. The areas of some interest are the sandy beaches of South Sicily (Eraclea Minoa, Siculiana and Macconi beach), beaches of the Ionian Islands (Greece), eastern coast of Tunisia. Besides this indications some other restricted reproduction areas are founded along West coast of Sardinia, Lampedusa Island, Ionian and Adriatic coast of Apulia, Ionian coast of Greece.

Being difficult to accept that the relatively restricted reproduction areas located in this Mediterranean sector can produce the number of turtles slaughtered, we suggest that the turtle's population of Western Mediterranean includes, for the most part, individuals coming from the eastern sector through the Sicilian Channel and, in part, from the Atlantic.

Informations about groups moving in springtime near Gibraltar and southward along South Tyrrhenian coasts have been collected by a postal file card system.

A tagging program is in act. 48 turtles have been tagged in July-August 1981 in Zakynthos. One of these has been recaptured after 44 days at more than 500 miles northward from tagging point (dashed line in Fig.1). In addition, some forty turtles occasionally caught in different parts of Italian coast have been tagged and released.

#### REFERENCES

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