

On a Specimen of the Leatherback Turtle, *Dermochelys coriacea*
(Linnaeus, 1766), stranded at Mazara del Vallo (South-West Sicily)

Patrizia JEREB and Sergio RAGONESE

I.T.P.P., C.N.R., Via L. Vaccara 61, 91026 Mazara del Vallo (Italia)

The leatherback Turtle, *Dermochelys coriacea*, an Atlantic species with wide geographical distribution, though repeatedly found in Mediterranean waters (Crespo et al., 1988; Hachaichi & Rais, 1985; Maigret, 1986; Oliver, 1986) and occasionally in Italian waters (Bruno, 1970, 1978; Capocaccia, 1967; Di Palma, 1978), is still however a species whose capture constitute an uncommon event so that Petit's comment (1951): "... en raison de la rareté ... toute capture avec au minimum l'indication de date, des dimensions de l'animal et du sexe, mérite d'être signalée" is still valid.

As far as the southern coast of Sicily is concerned, records of this species are very sporadic and relative to the more eastern side (Bruno, 1970; Capra, 1949; Carli Pavia, in Di Palma, 1978); this which follows is the first documented sighting of a specimen of the leatherback Turtle on the western side of Sicily. The specimen, a male, was stranded probably because of a violent sea-storm on the coast of Mazara del Vallo on 5th April, 1987. It was found dead on the beach, although external examination revealed no wounds or particular signs of damage. It was measured (fig.1), transported to the Institute and kept frozen.

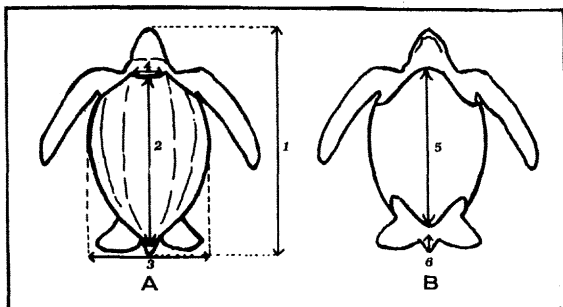


Fig. 1 - Measurements taken on the specimen of the loggerhead, *Dermochelys coriacea* (Linnaeus, 1766), following Duron-Duffrenne, 1978, modified as in Oliver, 1986. A: dorsal view; B: ventral view. 1: Total length = 202 cm; 2: Carapace length = 145 cm; 3: Carapace width = 70 cm; 4: Length between the foremost lateral keels = 28 cm; 5: Plastron length = 95 cm; 6: Tail length = 24 cm. (* = measurements taken on the embalmed specimen).

The post-mortem examination revealed a digestive system completely "clogged up" with residues of various sorts of plastic, the probable cause of death. Because of the scientific interest of the find in itself and of the stir created locally by the stranding of this Turtle, the specimen was embalmed by a French taxidermist and is at present preserved at the I.T.P.P. Considering the known presence, even if occasional, of this species in the Tunisian waters (Hachaichi and Rais, 1985) and the absence of documented sightings in the Sicilian Channel "sensu lato", an area widely swept by southern Sicilian trawlers, this record constitutes an event of particular interest which tends to confirm the migratory scheme proposed by Crespo et al. (1988). Entering the Mediterranean through the Straits of Gibraltar, the leatherback Turtle would follow the currents of warm water, spreading over in the Western and Central Mediterranean; on reaching the entrance of the Sicilian Channel, the Skerki Bank could form the point where the route divides, on one way to the north (Italian and Corsican waters) and on the other to the south (Tunisian waters).

The results of the post-mortem examination are also very interesting, tending to confirm what has often been referred to as one of the probable assumption on the ever more frequent cases of death of sea turtles: the ingestion of plastic. The carnivorous feeding of these animals, also including large zooplanktonic organisms such as jellyfish (e.g. *Rhizostoma pulao*) and the continuous increase of the quantities of plastic waste in the water, which could be confused with the former, especially when the water is turbulent or turbid, are obviously closely related factors, as this case seems to prove.

REFERENCES

- BRUNO, S., 1970. Anfibi e rettili di Sicilia (Studi sulla fauna erpetologica italiana. XI). Atti Accad. Gioenia Sci. Nat., Catania, vol. II: 1-144.
- BRUNO, S., 1978. Le tartarughe nei mari italiani e nel Mediterraneo. Natura Montagna 25(3):5-17.
- CAPOCACCIA, L., 1967. La *Dermochelys coriacea* nel Mediterraneo. Atti Acad. Liguria 24:318-327.
- CAPRA, F., 1949. La *Dermochelys coriacea* (L.) nel Golfo di Genova e nel Mediterraneo. Ann. Mus. Civ. St. Nat., Genova, 63:270-282.
- CRESPO, J., CAMINAS, J.A. and REY, J.C., 1988. Considerations sur la présence de Tortues luth, *Dermochelys coriacea* (Linnaeus 1758), dans la Méditerranée occidentale. Rapp. Comm. int. Mer Médit. 31(2):284.
- DI PALMA, M.G., 1978. Notizie sulle tartarughe marine in Sicilia. (Reptilia, Testudines). Il Naturalista Siciliano, S. IV, II(1-2):1-6.
- HACHAICHI, M. and RAIS, C., 1985. Captures de tortues luth (*Dermochelys coriacea*) dans les eaux tunisiennes. Bull. Inst. Oceanogr. Pêche Salambo 12:77-85.
- MAIGRET, J., 1986. Statut actuel des Tortues de mer en Méditerranée. Rapp. Comm. Int. Mer Médit. 30(2):243.
- OLIVER, G., 1986. Captures et observations des Tortues luth, *Dermochelys coriacea* (Linnaeus, 1766), sur les côtes françaises de la Méditerranée. Vie et Milieu 36(2):145-149.
- PETIT, G., 1951. Capture d'une Tortue luth à la Nouvelle (Aude). Vie et Milieu 2(1):154-155.