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First record of Kemp's ridley sea turtle, *Lepidochelys kempii* (Garman, 1880) (Cheloniidae), from the Italian waters (Mediterranean Sea)

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Abstract. In this work the authors describe the first case of *Lepidochelys kempii* stranding (Garman, 1880) happened in Italian waters (Sicily, Messina) and considered to be the fifth in the entire Mediterranean Sea. A young individual was recovered with a longline hook in its oesophageal.

Keywords. *Lepidochelys kempii*, Kemp's ridley turtle, Italian waters, Mediterranean Sea.

Lepidochelys kempii lives in tropical and subtropical seas in western Atlantic Ocean. In spite of its recent increase in population, it is still regarded as one of the most threatened sea turtle species worldwide (IUCN, 2009; Márquez, 2001; Márquez et al., 2005; TEWG, 2000).

The nesting areas are almost entirely concentrated in a single location within the Gulf of Mexico, a few miles southward the Tropic of Cancer, and especially in the regions of Tamaulipas and Veracruz in Mexico (Heppell et al., 2005; Márquez, 1994, 2001; Márquez et al., 2005; Oliver and Pigno, 2005; TEWG, 2000; Tomás et al., 2003a).

After the nesting, both adult and juvenile turtles usually head northwards, particularly for the north-western atlantic coast of the United States, considered to be the most important feeding and nursery area (Heppell et al., 2005; Márquez, 1994, 2001; Márquez et al., 2005; TEWG, 2000).

Incidental scattering of *Lepidochelys kempii* recorded in north African and north Europe coasts can be caused by the Gulf Stream System (Gyory et al., 2008; Márquez, 1994; Márquez et al., 2005; Pascual, 1985).

Lepidochelys kempii strandings records are extremely rare in the Mediterranean Sea. Brongersma and Carr (1983) made the first identification of Kemp's ridley turtle on a turtle

that had been seized off the island of Malta in October 1929 (Brongersma and Carr, 1983) (Fig. 1, Table 1). The second record of *Lepidochelys kempii* in the Mediterranean Sea occurred in France at Valras-Plage (Hérault) (Oliver and Pigno, 2005) (Fig. 1, Table 1). The capture of a Kemp's ridley turtle was then reported in Tabarca (Spain) in October 2001 between the island and the beaches of Santa Pola (Alicante) (Tomás et al., 2003b) (Fig. 1, Table 1). The fourth most recent record dates back to July 2006 and occurred in Spain, nearby the Turia River in the south of Valencia harbour (Tomás and Raga, 2007) (Fig. 1, Table 1).

On August 19, 2009 in Capo Peloro Messina (Italy) was found stranded sea turtles by the Coast Guard (38°16'00"N 15°39'08"E) (Fig. 1, Table 1). The turtle was taken into the Regional Wildlife Recovery and Sea Turtles Center of the Sicily Wildlife Fund Comiso (Ragusa) for appropriate care. Operators immediately noticed turtle phenotypic differences and concluded that it was a young subject of *Lepidochelys kempii* after a careful analysis based upon biometric parameters (SCL 27.8 cm; SCW 25.2 cm; TSCL 37.5 cm; HW 5.50 cm; weight 2.85 kg). It was the fifth record in the Mediterranean Sea and the first in

AUTOR	COUNTRY	YEAR	MONTH	LENGTH cm	WIDTH cm	WEIGHT Kg
Brongersma et al.	Malta	1929	October	SCL 29.4	SCW 28.2	----
Oliver et al.	France	2001	July	SCL 33.4	SCW 32.3	----
Tomás et al.	Spain	2001	October	CCL 32.3	CCW 31.9	4.60
Tomás et al.	Spain	2006	July	CCL 28.1	CCW 28.0	2.43
Insacco et al.	Italy	2009	August	SCL 27.8	SCW 25.2	2,85

Fig. 1. Locality records for the Kemps' ridley turtle.

Italy. The inspection evidenced: white bright green skin, triangular head with 2 pairs of prefrontal scales (Fig. 2 B, C), front legs with 2 pairs of nails (Fig. 2 D), the shell showed spherical shape (Fig. 2 A) and consisted of 5 dorsal shields (Fig. 2 A), 5 costal pairs (Fig. 2 A), 12 marginal pairs (Fig. 2 A), 4 inframarginal pairs (Fig. 3) and 4 pairs of Rathke scent glands pores for each inframarginal shield (Fig. 3) (Márquez, 1990). During the clinical examination, the Kemp's ridley turtle showed a 3 cm longline hook in the oesophagus. Diagnosis suggested the execution of an esophagotomy in order to extract the foreign body. The operation was successful and the animal is finally on the way to recovery, waiting to be returned to wildlife.

Mediterranean records showed that it's a juvenile (Table 1) undoubtedly coming from the Atlantic ocean, thereby confirming the theories related to the Gulf Stream System (Márquez, 1994; Gyory et al., 2008). We suspect, with Tomás and Raga (2007) that many

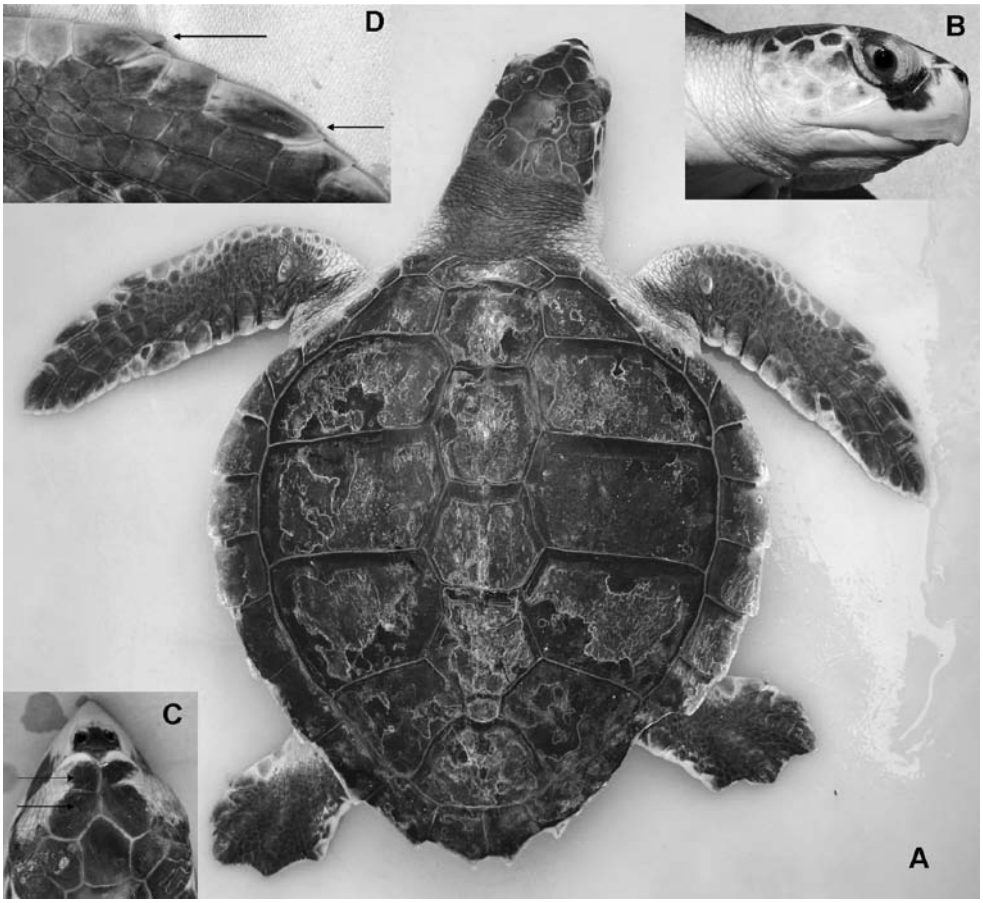

Fig. 2. *Lepidochelys kempii* specimen (see text for explanation to figure).

Fig. 3. Position of the Rathke scent glands pores

operators, particularly if non-experts, are likely to mistake young *Lepidochelys kempii* turtles for young *Caretta caretta* subjects, thereby distorting recent case histories in the Mediterranean Sea. A more significant presence of Kemp's ridley turtles in the Mediterranean is therefore to be regarded as quite probable.

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