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FIRST RECORD OF THE COPPER SHARK *CARCHARHINUS BRACHYURUS* (GUNTHER, 1870) IN THE TYRRHENIAN SEA

PRIMA SEGNALAZIONE DELLO SQUALO RAMATO *CARCHARHINUS BRACHYURUS* (GUNTHER, 1870) IN MAR TIRRENO

Abstract - First record of the copper shark Carcharhinus brachyurus (Gunther, 1870) in the Tyrrhenian Sea The shark was a mature male of 164 cm total length long, caught by trammel net on 12 August 2004 close to the harbour of S. Nicola l’Arena (North Sicily). Clasper grooves were open with observable terminal cartilages and hypopiles.

Key-words: Carcharhinidae, Carcharhinus brachyurus, Tyrrhenian Sea, first record, Mediterranean Sea.

Introduction - *Carcharhinus brachyurus* (Gunther, 1870) (Pisces, Carcharhinidae) is widely distributed in tropical, subtropical and warm temperate waters in all the oceans. It is a pelagic species living on the shelf from the surface to about 100 m depth (Serena, 2005). Records in the Mediterranean derive mainly from the Alboran Sea, the Algerian Basin and the Strait of Sicily (Morey and Massuti, 2003). Some specimens were also caught in the north-western Mediterranean (Ligurian Sea) between the end of the XIX and the beginning of the XX century (Garrick, 1982; Orsi Relini, 1998). In the early Eighties of the last century, Vacchi et al. (1996) reported a pregnant female (TL 260 cm), caught in the Gulf of Baratti, which must be attributed to the Ligurian Sea. Only two records were reported for the Eastern Mediterranean: the first in Northern Adriatic, again in early XX century (Garrick, 1982), and the second off Rhodes coast (Aegean Sea) in 1990 (Ferguson, 1994). This note reports the first catch of the species in the Tyrrhenian Sea.

Materials and methods - The specimen was caught by trammel net in the coastal water close to the harbour of S. Nicola l’Arena (Palermo) (approximate coordinate φ=38°02’00”N, λ= 13°36’45”E), along the northern coast of Sicily on August 14th 2004. The specimen was measured, according to Compagno (1984), photographed and stored in the collection of Wilderness studi ambientali in Palermo.

Results - The shark showed a general bronze-brown colour, with a pale area on the lateral-ventral portion of the pre-caudal fin and darker edges of most of the fins. The specimen was a mature male of 164 cm total length. Claspers were extended well beyond the posterior edge of the pelvic fin and their internal structure was hard and ossified. It is worth noting that clasper grooves were open with observable terminal cartilages and hypopiles. Main biometry and meristics characteristics will be used for future meta-analyses.

Conclusions - According to Compagno et al. (2005) males are mature when they measure between 200 and 229 cm of total length. The specimen found in the Tyrrhenian Sea is the smallest mature male of the literature, although available information concern specimens caught outside the Mediterranean. The occurrence of *C. brachyurus* in the Tyrrhenian Sea expands its known distribution to the whole western Mediterranean, at least within the latitude 40° N. This meridian is considered as the north-
ernmost border of the species’ range in the Eastern Atlantic Ocean, while the taxon does not occur to date in the western Indian Ocean (Compagno et al., 2005). Relationships between Mediterranean specimens and Atlantic ones are still a debated question (Cigala Fulgosi, 1983; Orsi Relini, 1998; Morey and Massuti, 2003). According to Compagno et al. (2005), a seasonal migration is known for this species, but very little changes occur between adjacent regional populations. Since 1881 thirty six specimens, including the present record, were reported for the Mediterranean (Morey and Massuti, 2003). They include 11 females, 18 males, 4 unsexed specimens, 3 juveniles. The occurrence of new-born juveniles, pregnant females and mature males in the Mediterranean suggests the presence of a Mediterranean population, which has its “core” in the western Mediterranean, whose size and distribution range can vary in relation with climatic changes.

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References


