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A SHOAL OF BLUNTNOSE SIXGILL SHARK *HEXANCHUS GRISEUS* (CHONDRICHTHYES: HEXANCHIDAE) FROM THE TUNISIAN COAST (CENTRAL MEDITERRANEAN)

SUMMARY

This paper presents the unusual capture of a shoal of *Hexanchus griseus* in the Strait of Sicily, close to northern Tunisia. In all, 21 specimens were collected. Their Total Length ranged between 180 and 220 cm, and Total Body Weight between 90 and 120 kg. The distribution of the species off the Tunisian coast and the conditions of the capture are discussed.

INTRODUCTION

Bluntnose sixgill shark *Hexanchus griseus* (Bonnaterre, 1788) is a large shark widely distributed in boreal, temperate, warm temperate and tropical waters from the Pacific, Indian and both sides of the Atlantic Ocean (Cook and Compagno, 2005). The species is known in the entire Mediterranean Sea, in both eastern and western basin, its distribution and some aspects of its reproductive biology were dealt by Capapé *et al.* (2003, 2004) who noted that it was sporadically caught from some marine areas, and conversely, commonly collected off the Algerian coast. Eastwards, off the Mediterranean coast of Turkey, the species appears to be commonly caught (Kabasakal, 2006; 2013; Basusta and Basusta, 2015).

Catches of *Hexanchus griseus* was previously cited in northern Tunisian areas at level of Eskerkis Bank (Capapé, 1987; 1989; Rafrafi-Nouira *et al.*, 2015). Conversely, Bradaï *et al.* (2002) noted that the species was more abun-

dant in southern Tunisian areas, mainly the Gulf of Gabès, than in the northern regions. Additionally, a specimen of *Hexanchus griseus* was accidentally captured by trawl targeting European pilchard *Sardina pilchardus* (Walbaum, 1792), approximately at a depth of 200 m, in the Gulf of Tunis. It was a large female having 3.5 m in total length (TL) and 220 kg in total wet weight, which carried 85 fertilized eggs removed from both uteri, indicating a pregnant state at the beginning of the gestation (Ounifi-Ben Amor *et al*., 2017).

Recently, on 10 June 2019, a shoal of *H. griseus* was landed at the fishing port of Kelibia, located in the North of the Cape Bon Peninsula, NE Tunisia. The description of the shoal and the comments on the condition of such unusual capture are presented in this paper.

MATERIALS AND METHODS

Following information provided by port authority from Kelibia, the present shoal of *Hexanchus griseus* was caught on 09 June 2019, by bottom longline targeting groupers. The captures occurred in the Strait of Sicily between Marettimo island, close to the W Sicilian coast, and the NE Tunisian coast, 37°67′98″ lat. N and 10°98′74″ long. E, at a depth of 700-1000 m approximately (Fig. 1).

All specimens were found dead when captured once landed on harbour deck, each specimen was measured by the fishermen for total length (TL) to the nearest cm and total body weight (TBW) to the nearest Kg. All specimens were rapidly opened and cut by retailers, to be sold in Kelibia fish market, and unfortunately, the sex of the specimens was not recognized.

RESULTS AND DISCUSSION

In total, 21 specimens were collected. Their TL ranged between 180 and 220 cm, and TBW between 90 and 120 kg (Fig. 2). They were easily identified as *Hexanchus griseus* from photographs provided by port authority (Fig. 2), on the basis of some characteristics, such as body stout, head broad, short and blunt snout, six gill slits, a single dorsal fin above fin base, upper jaw with 4 rows of front teeth, lower jaw with six rows of lower blade like, shaped teeth on each side, dorsal surface dark brown and belly beige. This description is in total accordance with Boeseman (1984) and Quéro *et al*. (2003).

These new captures of *Hexanchus griseus* from the Tunisian coast confirm the opinion of Cook and Compagno (2005) who noted that the species does not face to a drastic decline despite its *K*-selective parameters (Ebert, 1986; Capapé *et al*., 2004). Therefore, Cook and Compagno (2005) consider

the species as near threatened but not totally depleted. Additionally, Ounifi-Ben Amor *et al.*, (2017) have taken into account several records reported in the entire Mediterranean Sea since several decades and suggested that a non-negligible population of *H. griseus* is at present probably established in this sea. However, a strong monitoring of the species should be enhanced.

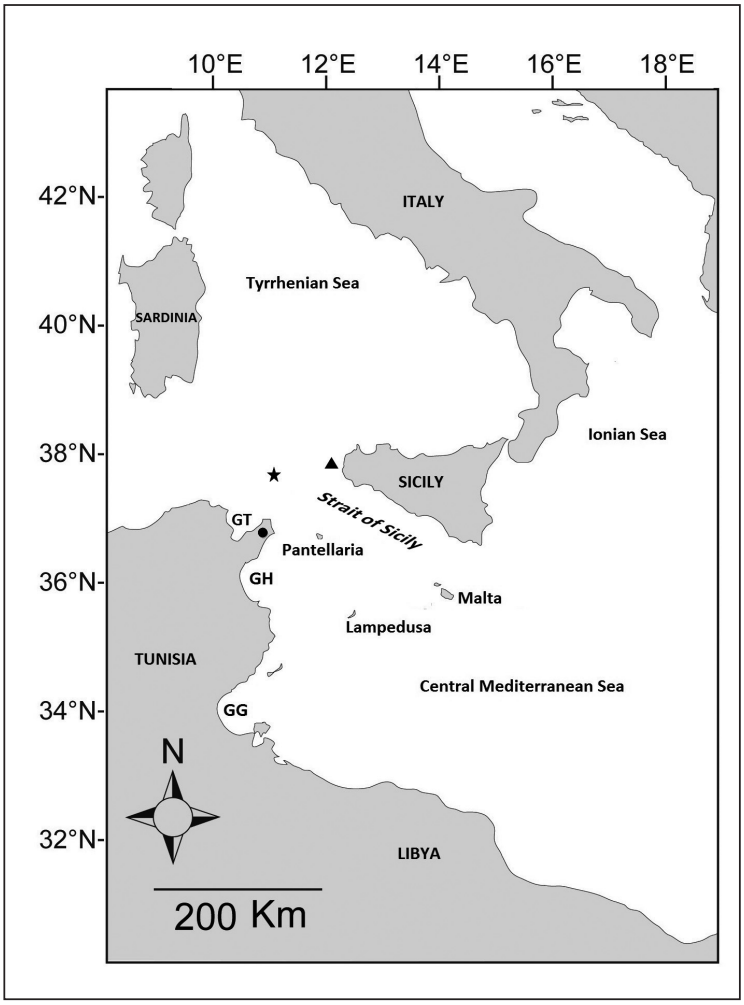

Fig. 1. Map of the central Mediterranean Sea, indicating the capture site of the shoal of *Hexanchus griseus* (black star) between Marettimo island (black triangle) and the NE coast of Tunisia, and landed at the fishing site of Kelibia (black circle). GT: Gulf ot Tunis. GH: Gulf of Hammamet. GG: Gulf of Gabès.

Fig. 2. Shoal of *Hexanchus griseus* landed on deck from the fishing site of Kelibia.

The capture of the present shoal indicates that *H. griseus* could not be exclusively considered as solitary shark and the species can live in shoal probably during reproductive period (Ebert, 1986; Capapé *et al*., 2004), or to check for preys, as it is probably the case for the present case. The flesh of *H. griseus* is not greatly appreciated for local consumption, and probably it is ichthyosarcotoxic and therefore dangerous for health due to its richness in oil (see Capapé *et al*., 1975). Following different information, the total shoal was auctioned at about 20,000 or 12,000 Tunisian dinars, approximately 6,400 or 4,000 €, so it appears the species has a low economical value. Additionally, it lives in deep areas poorly exploited by fishery. These patterns show that *Hexanchus griseus* is not targeted in the Tunisian waters, as other large elasmobranch species, and the capture of this shoal remains strictly accidental.

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