

New record of *Gymnura altavela* (Linnaeus, 1758) in uruguayan waters (Chondrichthyes, Gymnuridae)

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Abstract. Two mature male specimens (800 mm DW, 5000 g weight; 900 mm DW, 5500 g weight) of Spiny butterfly ray *Gymnura altavela* (Linnaeus, 1758) were caught by a coastal bottom trawl net off Uruguay coasts (Cabo Polonio, Rocha) in February 2012. According to the literature, these specimens are rare for the Uruguayan waters.

Keywords: Gymnuridae, *Gymnura altavela*, new record, Uruguay, South Western Atlantic.

INTRODUCTION

The Spiny Butterfly ray, *Gymnura altavela* (L., 1758), is a wide-ranging batoid fish distributed in tropical and warm temperate continental brackish waters at a depth range of 5-150 m (McEachran & Capapé, 1984; McEachran & Dunn, 1998). In terms of habitat selection, the species prefers sandy and muddy substrata, and feeds on fishes, crustaceans, molluscs and plankton (Vooren et al., 2007).

G. altavela is an ovoviviparous matrotrophic species, gestation lasts about 6 months with 4 to 7 embryos produced per female (McEachran & Capapé, 1984; Alkusaairy et al., 2014).

The maximum reported size is 220 cm in disc width (DW) (Musick et al., in Vooren et al., 2007) but according to Cousseau et alii (2007) in the S.W. Atlantic Sea the maximum was a female of 1.50. Most likely the size of specimens caught in the 1950s were greater than those the recently captured. (see Fig. 1, La Coronilla, Uruguay). With respect to the occurrence of *G. altavela* in Uruguayan waters, the limited number of records (Bigelow and Schroeder, 1953; Nani, 1964; Figueiredo, 1977; Stehmann, 1974; Gosztonyi, 1981; Cousseau et al., 2007), confirms its rare appearance.

MATERIALS AND METHODS

Two specimens of *Gymnura altavela*, locally known as Mariposa, were caught on February 21, 2012 by trawl net of the Montevideo's fishing boat "Flopy I" 18 miles SE from Cabo Polonio, Rocha Department, Uruguay (approximate coordinates 34°32'00" S - 53°32'00" W) on sandy-muddy bottom at 20 m depth. The two specimens were identified according to McEachran & de Carvalho (2003). Specimens were measured for disk width (DW) to the nearest mm following Capapé et alii (1992) and El Kamel et alii (2009) and weighed to the nearest gram; clasper length (CL, mm) of the largest specimen was measured according

to Collenot (1969) from the forward rim of pelvic girdle to tip of clasper; examined for the pattern of colours and photographed (see Fig. 2). The largest specimen was freeze dry prepared and stored with the label number Ga1 in the Wilderness studi ambientali collection of Palermo, Italy. The smaller was registered in the collection of Elasmobranch Research Belgium as ERB 994 (Fig. 3 a-b); only the voucher was deposited in the Brussel IRScNB collection. A DNA sample of this specimen was stored in the collection of the Muséum National d'Histoire Naturelle, Paris - Station de Biologie Marine de Concarneau, France (F.H. Mollen, *in litteris*).

RESULTS

The first specimen of *Gymnura altavela*, a mature male was 53.5 TL 800 mm DW, 5000 g weight. The second, a mature male was 900 mm DW, 5500 g weight. In both specimen the

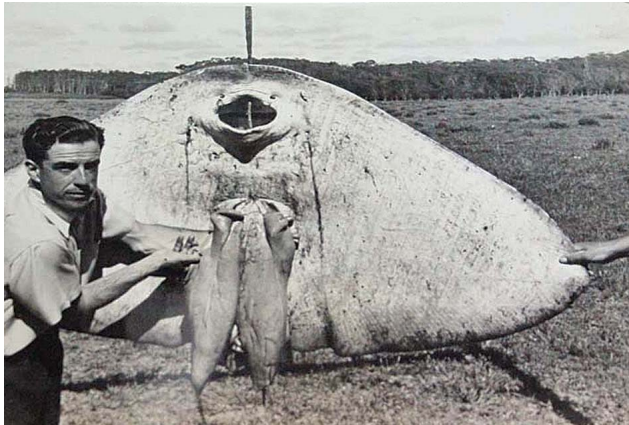


Fig. 1 – A specimen of *Gymnura altavela* caught in the 1950s at La Coronilla, Uruguay.



Fig. 2 – The specimens of *Gymnura altavela* caught on February 21, 2012 by trawl net 18 miles SE from Cabo Polonio, Rocha Department, Uruguay.

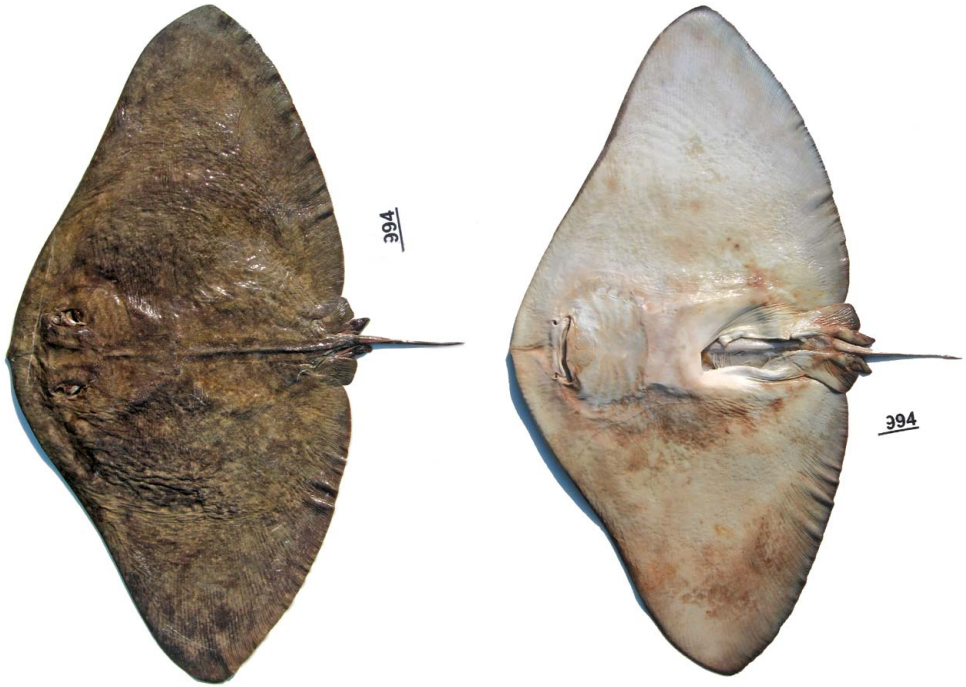


Fig. 3a-b – The smaller specimen of *Gymnura altavela* was registered (L., 1758) in the collection of Elasmobranch Research Belgium as ERB 994.

claspers were elongated, calcified, and rigid, and were slightly longer than the pelvic fins. The larger specimen had 80 mm CL.

CONCLUSIONS

According Cousseau et alii (2007) the last specimen of *Gymnura altavela* recorded in the area, only 15 miles NW from our capture point (approximate coordinates 34°17'00" S - 53°37'00" W - 17 m depth) was a juvenile male (76.0 TL; 108 DW). The colours pattern of the our fresh specimens was: dorsal surface brown-olivaceous reddish on posterior margin of disc, with small dark or whitish spots, pelvic fins also brownish. Slightly darker between the eyes, along the center of the body and the length of the tail. Tail with darkish transversal strips on dorsal surface. Caudal sting beige. Belly off-white to beige. Morphology, measurements and colour are in agreement with Bigelow & Schroeder (1953), Tortonesi (1956), Bini (1967), McEachran & Capapé (1984). Coastal fishing pressure is intense in the Southwest Atlantic and it is inferred to have undergone similar declines elsewhere. This species is assessed as Critically Endangered in the area (Vooren *et al.*, 2007).

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RIASSUNTO

Nuovo rinvenimento di *Gymnura altavela* (Linnaeus, 1758) in acque uruguaiane (Chondrichthyes, Gymnuridae)

Il 21 febbraio 2012 due maschi maturi di *Gymnura altavela* (Linnaeus, 1758) sono stati pescati con una rete a strascico al largo di Capo Polonio, Dipartimento di Rocha, Uruguay, ad una profondità di 20 metri, su fondale sabbioso-fangoso. Secondo i dati di letteratura questa specie è da considerarsi rara per le acque uruguayane.

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