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PRESENCE OF *Mola mola* (TETRAODONTIFORMES, MOLIDAE) IN GUAMBLIN ISLAND (44°50' S, 75°07' W), CHONOS ARCHIPELAGO, SOUTHERN CHILE

*Presencia de Mola mola (Tetraodontiformes, Molidae) en Isla Guamblin (44°50' S, 75°07' O),
Archipiélago de los Chonos, Sur de Chile*

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INTRODUCTION

The South Pacific oceanic zones are the least known of all pelagic areas of the world (Pierrot-Bults, 2003), and the studies in Chilean archipelago region (41°- 54° S) are still scarce.

The fish family Molidae (Class Osteichthyes: Order Tetraodontiformes) comprises three genera with four species, named *Masturus lanceolatus*, *Ranzania laevis*, *Mola mola* and *Mola ramsayi* (Parenti, 2003; Nyegaard *et al.*, 2018). *M. mola* is found in all oceans of the world (Houghton *et al.*, 2006), and even though is an epipelagic and widespread species, little is known about abundance, habitat preferences and

factors driving its distribution (Breen *et al.*, 2017), which raises interesting ecological questions (Pope *et al.*, 2010).

Porter (1904), Oliver (1930), Kong *et al.* (1985), Brito (2003), and Fernández *et al.* (2016) have reported *M. mola* in Chilean waters. The finding of one specimen of sunfish from Guamblyn Island, a locality in Chilean Patagonia, will help build a better understanding of the species distribution around South America.

MATERIALS AND METHODS

Guamblyn Island (44°50'S, 75°07'W) is the westernmost and the most exposed island

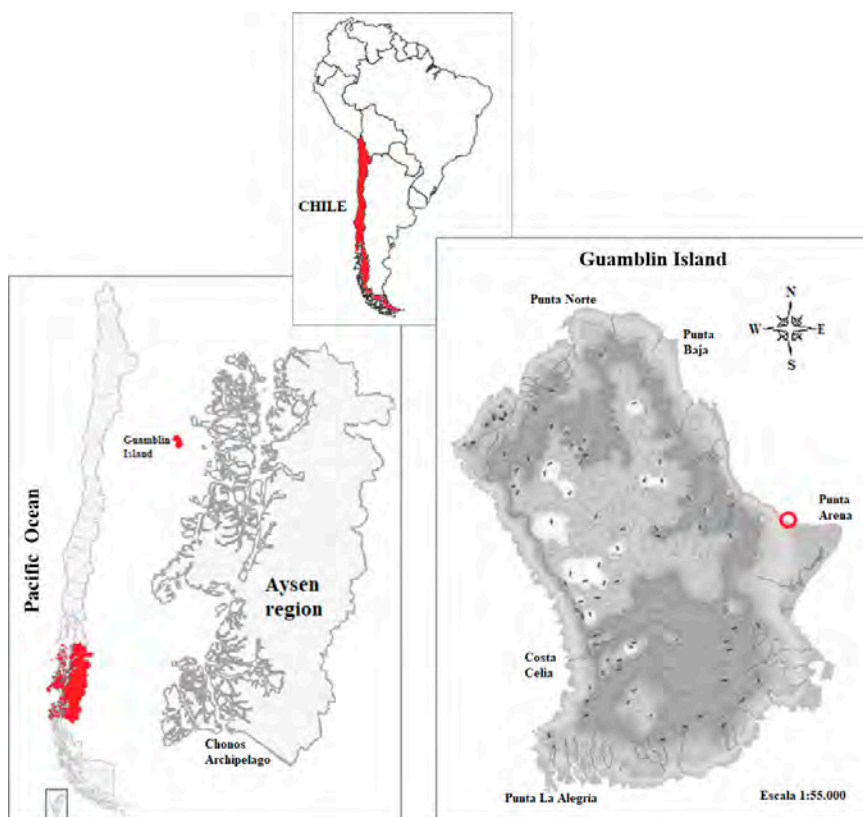


Figure 1 - The geographic location of Guamblyn Island in Southern Chile. The red circle shows the area in which the sunfish was found.

of the Chonos Archipelago. It is located 90 nautical miles northwest of Puerto Aguirre (Aysen Region), and its access is only by sea. During a scientific expedition to the island, a stranded specimen of sunfish (unpreserved) was found near Punta Arena (Figures 1, 2 and Table 1), and identified as *M. mola* (Fraser-Brunner, 1951).



Figure 2 - Stranded specimen of *Mola mola* in Guamblin Island, Southern Chile.

RESULTS AND DISCUSSION

Strandings of *M. mola* (Linnaeus, 1758) at Guamblin Island representing a new location. This study increasing the known geographic distribution for *M. mola* in Chilean waters, showing the southernmost record in the Pacific (44° S).

The specimen from Guamblin Island could have stranded because atmospheric-oceanic changes produced by El Niño causes stress or locomotion difficulty stemming from exhaustion. Thus, to investigate the occurrence of sunfish in this biogeographic region new ichthyological expeditions, fishery surveys or satellite tracking are needed; as well as collaborative efforts targeted to understand long-distance migrations, population structure and the effects of incidental bycatch.

Table 1 - Morphometric and meristic characteristics of *M. mola* from Guamblin Island compared with specimens from Chilean literature. "--": not available.

LOCALITY	Guamblin Island (44°S)	Tomé (36°S)	Las Cruces (33°S)	Coliumo (36°S)	San Vicente (33°S)	Tongoy (30°S)
Morphometric characters (mm) and ratios (percent of TL)	Present study	Fernández <i>et al.</i> (2016)	Brito (2003)	Oliver (1930)	Oliver (1930)	Porter (1904)
Total length (TL)	885	700	955	900	2690	2000
Head length	374 (42.3)	--	305 (31.9)	--	--	--
Pectoral length	129 (14.6)	--	133 (13.9)	--	--	340 (17)
Prepectoral fin length	388 (43.8)	--	323 (33.8)	--	--	--
Predorsal fin length	583 (65.9)	--	545 (57.1)	--	--	--
Preanal length	576 (65.1)	--	510 (53.4)	350 (38.9)	980 (36.4)	980 (49)
Eye diameter	57 (6.4)	--	42 (4.4)	40 (4.4)	120 (4.5)	67 (3.4)
Meristic characters						
Pectoral fin rays	12	--	12	--	--	--
Dorsal soft rays	--	--	16	--	--	--
Anal soft rays	--	--	16	--	--	--

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