

Reviews in Fisheries Science



**Current knowledge on commercially important fish stocks of Buenos Aires Coastal Ecosystem**

Journal:	<i>Reviews in Fisheries Science &amp; Aquaculture</i>
Manuscript ID	BRFS-2016-0043.R2
Manuscript Type:	Review
Date Submitted by the Author:	n/a
Complete List of Authors:	Fainburg, Leandro; Instituto de Investigaciones Marinas y Costeras (IIMYC, CONICET-UNMDP) Fernández Iriarte, Pedro; Instituto de Investigaciones Marinas y Costeras (IIMYC, CONICET-UNMDP); Universidad Nacional de Mar del Plata Facultad de Ciencias Exactas y Naturales
Keywords:	Marine fishes, population structure, Argentine sea

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## **Current knowledge on commercially important fish stocks of Buenos Aires Coastal Ecosystem**

Running head: Current knowledge of commercial fish stocks

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**Abstract.**- This paper provides a literature review of studies dealing with the stock assessment of eight bony demersal fish exploited on Buenos Aires coast (35°S - 41°S). The objective was to determine the existence of population differences between fish sampled in the Río de la Plata estuary and El Rincón areas using biological data. The results obtained from the analysis of most phenotypic and environmental characteristics, indicated, to a large extent, the presence of two stocks. By contrast, all genetic studies identified a single genetic unit in the study area. In this sense, the phenotypic variation owing to environmental influence was larger than the neutral genetic variation detected. Indeed further studies on the genetic basis of differentiation using more neutral or adaptive markers are required to distinguish local populations. In addition, genetic monitoring of marine fishes plays a key part on the conservation of biodiversity, allowing managers to estimate effective population numbers, and assess the changes in variability that could be affecting long term sustainability.