

Session 02

Upwelling at the Senegalese coast: A suitable spawning area of small pelagic fish species

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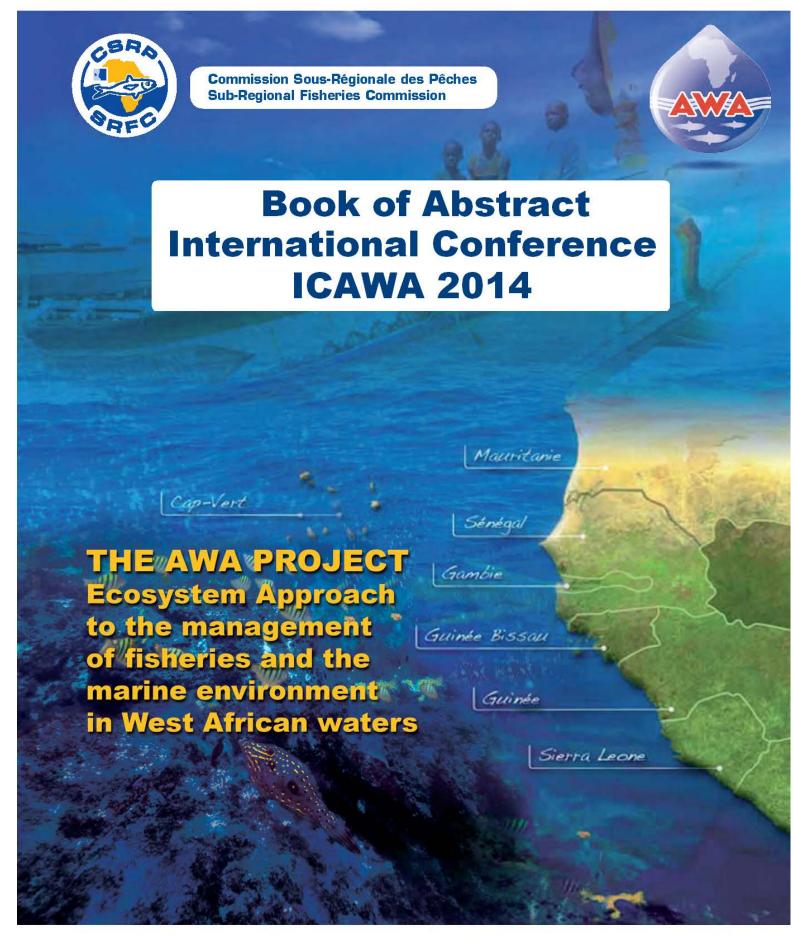
Abstract

The Canary Current Ecosystem (CUE) is known to be one of the most productive marine regions of the world ocean heavily exploited by regional and international fisheries. Small pelagic fish species migrate long distances to find suitable spawning areas along the CUE. A suitable spawning area has been suggested south of Senegalese Cap Vert peninsula (15°N). Here, hydrographic and ichthyoplankton sampling were performed during the upwelling season in April 2013. Larval fish distribution patterns show that the inshore area (between the upwelling core and the coast) is characterized by an enhanced spawning activity. The further offshore the lower the larval fish abundances and the higher the difference in larval assemblages. The inshore assemblages are dominated by small pelagic species like sardinella and anchovies, further offshore horse mackerels and foureyed sole occur in high densities, while in oceanic regions low larval densities and higher proportions of mesopelagic species occur. In accordance to sustainability and ecosystem protection there is a need in investigating recruitment processes representing an important basis for regions which are under high exploitation. Variability in recruitment of populations is often less the spawning stock all the more the variability of ecosystem drivers in early stages of fishes.

Keywords: ichthyoplankton, spawning, recruitment, small pelagic, sardinella, CCLME; Senegal

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