



Using sound to gain ecological insights from aquatic ecosystems

Abstract: Active acoustic technologies are commonly used in stock assessment for deriving estimates of biomass and abundance for commercially exploited fish species. Additionally, they offer the opportunity to address ecological questions in aquatic ecosystems that present challenges for sampling. I discuss a collaborative research program focusing on the deep-pelagic of the Gulf of Mexico following the Deep Water Horizon oil spill to characterize the dynamics and the composition of the greatest migration on the planet. The implications of this work are considered in the context of developing a better understanding their role in the biological carbon pump and to investigate possible effects of the DWH oil spill. While commonly used in deeper waters, active acoustic technologies can be implemented to study ecosystem dynamics in shallow coastal habitats. I present ongoing work in the Everglades demonstrating the ability to quantify fish associated with mangrove habitats along a salinity gradient and explore relationships with traditional survey techniques.

Bio: Dr. D'Elia has an MS degree in environmental science. She graduated from the "Environmental Management and Analysis of Marine Ecosystem", program at University of Palermo in 2007 and she earned her PhD in 2012 at the University Ca' Foscari in Venice. She worked at the National Research Council of Italy in the Department of Anthropogenic Impacts and Sustainability in the Marine Environment, before joining FIU where she is currently a Post-Doctoral researcher in the Marine Ecology and Acoustics Laboratory at FIU under Dr. Kevin Boswell.

Featuring:

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**3:00 pm Friday, November 1st,
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Wertheim Conservatory: WC-130
Modesto Maidique Campus
11200 SW 8th St, Miami FL 33199

This event is free and open to the public

Department of Earth & Environment

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