

Department of Marine Ecosystems and Society Seminar Series

**Why razing rays won't save our bays:
understanding the validity and the consequences of
mesopredator release in coastal ecosystems**

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Harbor Branch Oceanographic Institute**

DATE: Friday, 01/17/2020 Time: 10:30 am Location: SLAB 103



Abstract: Known for their large-scale migrations, massive surface schooling behavior and impressive durophagous (shell-crushing) capabilities, the cownose, eagle, and bat rays have long fascinated naturalists and researchers across the globe. As remarkable predators of molluscan shellfish (clams, scallops, oysters, and conchs), the purported increase in ray abundance and range expansion along US east coast has raised concerns of resource managers tasked with restoring stocks of overexploited bivalve species. In this talk I discuss the controversy surrounding a “mesopredator release” hypothesis that ultimately led us here, and how certain species of rays may have been wrongfully attributed to shellfish collapse. Additionally, I will touch upon a major transition in perception from eradication to conservation of these extremely vulnerable mesopredators, which arguably provide a suite of important ecological services. Finally, I will discuss novel passive acoustics methods being used by my lab group to quantify the foraging behavior and impacts of rays on benthic communities.

Bio: Dr. Matt Ajemian is an Assistant Research Professor with Florida Atlantic University's Harbor Branch Oceanographic Institute. Dr. Ajemian earned his PhD in Marine Science at University of South Alabama and Dauphin Island Sea Lab in 2011 and spent four years as a post-doc and research scientist with the Center for Sportfish Science and Conservation at the Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi. Over the course of his career Ajemian has developed expertise in ichthyology, ecology, and fisheries science and has covered topics such as feeding ecology, habitat use, movement behavior, fisheries impacts, and bycatch. He now leads the Fish Ecology and Conservation Lab at FAU-HBOI, and as lead PI develops, conducts, and directs research.

