



In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy
Kyle Strongin

Will defend her prospectus

**Aligning Conservation Priorities and Policies with Current Threats in the
Gulf of Mexico**

Abstract

Marine ecosystems are being impacted by various threats; however, quantification of the impacts of threats on species and ecosystems are often conducted at different scales, depending upon stakeholder needs. Global-scale species or ecosystem assessments, such as those conducted by IUCN, often can mask the impact of local or regional threats within the context of global conservation priorities even as conservation policies are generally implemented at the local or regional scale. This work aims to identify the global and regional threats currently impacting species and ecosystems present within the Gulf of Mexico. Highlighted threats will be incorporated into an ecosystem model to estimate how they impact food web dynamics in the Gulf of Mexico. This model will be the first of its kind to incorporate data from more than 1200 species occurring in the Gulf including all marine bony shorefishes, marine reptiles, complete clades of select marine invertebrates, marine birds, marine mammals, and chondrichthyans. Comprehensive analyses of these groups is important for an improved understanding of the functioning of the Gulf of Mexico food web. As commercial fishing has already been identified as an important ongoing threat in the Gulf of Mexico, various conservation policies exist to address this issue. However, current attitudes of commercial fishers toward these policies are largely unknown. Therefore this work will also address the impact and adoption of conservation policy into commercial fishing practices. Properly framed conservation efforts are more likely to be widely accepted and successful moving forward when there is an improved understanding on how policies can impact fishers both economically and through changing practices.

Thursday, May 10, 2018
11:00 am
Wrigley Hall, Room 481

Faculty, students, and the public are invited.

Supervisory Committee:

Beth Polidoro, chair
Leah Gerber, member
Steven Saul, member