

# Faunal communities of the Big Bend seagrass meadows

## Introduction:

Imagine a seagrass meadow the size of a football field. How many shrimps, crabs, fishes and other marine animals could this meadow support? Would the animals be evenly dispersed across the seagrass meadow or would there be other patterns of organization? Now try to imagine a seagrass meadow, and the animals within it the size of 726,000 football fields! This is the estimated size (approximately  $3{,}000~\rm{km2}$ ) of one of the largest seagrass meadows in the world, located in the Big Bend of Florida.

- 1. Spatially characterize the communities of fish and macroinvertebrates across the Big Bend region and identify subregions of different seagrass habitats and animal
- communities.
  Elucidate important variables that contribute to patterns identified by Objective 1.

 $\begin{tabular}{ll} \textbf{Approach:}\\ We use beam trawls towed at 100 locations per year. All captured \end{tabular}$ animals are identified and measured. We are also collecting data on environmental parameters that may affect the animal communities

Seagrass meadows serve as nursery, feeding and refuge habitats for many marine species. Indeed, Florida seagrass meadows are inhabited by a diverse and abundant population of animals, including many that are economically important – to commercial and recreational fisheries – and 120 species of fish and 37 species of macro-invertebrates identified as "species of greates conservation need" by the Florida Comprehensive Wildlife Conservation Strategy. Management and conservation efforts directed for these species require information on their distributions and relative abundances within Florida seagrass meadows.

**Location:** Florida's Big Bend

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This project was funded by the State Wildlife Grants Program under Florida's Wildlife Legacy Initiative.











