

## **Narragansett Bay Fishes: Who is Eating Who?**

Austin Humphries<sup>1</sup>, Jeremy Collie<sup>2</sup>, Maggie Heinichen<sup>2</sup>, Anne Innes-Gold<sup>1</sup> & Tyler Richman<sup>3</sup>

<sup>1</sup>Fisheries, Animal, & Veterinary Sciences, University of Rhode Island, Kingston, RI

<sup>2</sup>Graduate School of Oceanography, University of Rhode Island, Narragansett, RI

<sup>3</sup>Biology, Marine Biology & Environmental Science, Roger Williams University, Bristol, RI

With rising seawater temperatures, Narragansett Bay, RI has become a landing spot – or at least a pitstop – for a number of species that previously preferred waters further south. A perfect example is the striped sea robin. While they've been known to utilize the bay for decades, recent catch data suggests they are arriving earlier in the season and departing later each year than ever observed before. A major concern of this growing pattern is their predation of larval winter flounder, which are still small and vulnerable by the time sea robins are pouring into the bay. Striped sea robins are remarkably well-adapted benthic feeders, using their unique pectoral fin rays to stir up bottom sediments and flush various prey. As of now, there is very little diet composition data for this species, which was identified by the RIDEM as a data gap. An important component in understanding the ecological significance of striped sea robins is learning what they eat. My summer has been spent going out on the weekly GSO fish trawl, collecting sea robin samples, and bringing them back for dissections. I have also been catching them by rod and reel to sample water that cannot be reached by a trawl net (i.e. shallow or rocky conditions) to observe any potential spatialized diet shifts. Ultimately, the goal is to fill the present data gap so we can continue to learn about this species and its ecological impacts in Narragansett Bay.