



Announcing A Seminar Presentation on Wednesday November 20th, 2019 at 3:00 pm - 4:00 pm in North Hall 102 at The University of New Haven

Putting animals in their place: fish in the context of estuarine and marine habitats

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Abstract: usual The relationships between organisms and the physical spaces they occupy are complex and variable, shaped by the attributes of these places. Coastal systems remain poorly understood relative to terrestrial environments despite their ecological importance and proximity to many of the world's high density population centers. My research has focused on improving understanding of nearshore ecosystems through investigating the relationships between organisms, often fish, and the estuarine and marine habitats they use, and describing and mapping coastal habitats. Using available data to characterize estuarine and marine habitats provided important context to studies of the spatial behaviors of two highly mobile fish species, striped bass (*Morone saxatilis*) and Atlantic cod (*Gadus morhua*), revealing variance in individual fish responses to shared environments that coincided with diverging vital rates. These subtle distinctions in patterns of habitat use are often not possible due to the availability of habitat data at resolutions relevant to observed phenomena. On-going efforts to increase available information on Long Island Sound's seafloor by combining existing and newly collected data have led to the identification of rare epifaunal communities as well as important changes to benthic habitats. This information is being used to identify ecologically significant areas during the development of a state-guided marine spatial planning process for Connecticut. Characterizing how animals use habitats and the influence habitats have on individuals, populations, and communities is vital to both understanding our natural world and managing human impacts on natural environments.

Further Information

Refreshments will be provided starting 2:30pm For further information, please contact Dr. Yasanthi Kottegoda or Dr. Phaniel Mariano at the Department of Mathematics and Physics, YKottegoda@newhaven.edu, pmariano@newhaven.edu.