PhD Dissertation
Department of Environmental Science and Policy
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Defense Date and Time: May 1, 2023, 10:00am-12:00pm
Defense Location: Exploratory Hall 3301 and Zoom
Title: Evaluation of innovative and passive monitoring techniques to detect endangered and cryptic marine mammals

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ABSTRACT

In comparison to terrestrial mammals, marine mammals face greater threat levels while being disproportionally understudied. Manatees (*Trichechus spp.*) are examples of marine mammals that are considerably difficult to detect, especially where these species are illegally hunted, due to their cryptic nature and ability to inhabit heterogenous aquatic environments. Therefore, existing methods to detect these species may not be sufficient to accurately survey populations to obtain information critical to establishing effective conservation efforts. This dissertation evaluates two new methods to detect cryptic manatee populations including the use of drones and environmental DNA from residual saliva remaining on foraged upon aquatic vegetation.