State of the Invasion

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Lionfish (Pterois volitans) have been commonly found in the waters surrounding St. Croix and the US Virgin Islands for six years now, and it has become common to see lionfish while diving. This study used data collected over the course of two months including 290 lionfish specimens, analyzed the behavior and habitat preferences of lionfish along the west end of St. Croix. I dove twelve sites in depths ranging from 4 to 37 meters, generally following a compass bearing from a predetermined set of coordinates, however I limited my maximum depth to around 37 meters due to safety and time constraints. The bottom composition of most of the sites was hard bottom, sand, or reef. The relief of the terrain ranged from completely flat to canyons 1.5 meters deep. While diving, I recorded information on the habitat and conditions the fish were in (depth, bottom composition, and amount of structure) and information on the lionfish themselves (group size, approximate length, behavior, and color). When analyzing the data, I found that the majority of lionfish were found between the depths of 15.2 and 19.8 meters. About half of the lionfish found were solitary and 25% were found in groups of two. More than half of the lionfish found were in the open hovering around 0.5 meters above the bottom. Five percent of the lionfish were alert and wary of divers, suggesting that they had been shot at before. The average size of the lionfish found was 30.4 cm. Further studies could test sites around the rest of St. Croix, as this project focused on the west end, as well as going to greater depths to observe the lionfish there.

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