



Distribution and Abundance of *Hippocampus erectus* and *Hippocampus zosterae* in Florida Estuaries

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In order to manage seahorse populations, we first need to understand their basic biology and habitat preferences. The purpose of this project was to determine spatial distribution, abundance, size at maturity, recruitment, and seasonality of *Hippocampus erectus* and *Hippocampus zosterae* in seven major estuarine systems in Florida. Specimens were collected throughout each estuary using 21.3 m seines and 6.1 m otter trawls. Seahorses collected in the study ranged from 20 to 168 mm TL for *H. erectus* and 16 to 47 mm TL for *H. zosterae*. The primary habitat for both species were beds of submerged aquatic vegetation (SAV). Spawning occurred year-round for both species, but seasonal spawning intensity varied by latitude, with an increase in larger mature specimens in the spring. *Hippocampus erectus* were found state wide and was most abundant in Charlotte Harbor and Tampa Bay. *Hippocampus zosterae* were more abundant in the more southern estuaries, perhaps in relation to temperature. This species was most abundant in Florida Bay and was not present in Northeast Florida. Even if temperature did not play a role in the difference in *H. zosterae* abundance in these two systems, our results would not be surprising because there was no SAV in Northeast Florida. Florida Bay had the densest SAV coverage among the seven areas sampled. Overall, both species demonstrated the most stable populations in semi-enclosed shallow estuaries with medium to dense seagrass coverage.

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