

Ledkovsky, Petra (1997). "Community structure of dominant epibenthic fishes *Fundulus heteroclitus* and *Gasterosteus aculeatus* among Pannes of different tidal heights at the Morse Mountain Salt Marsh, Phippsburg, Maine".

The abundance, distribution, and size frequency of *Fundulus heteroclitus* and *Gasterosteus aculeatus* throughout 3 different tidal heights of the Morse Mountain salt marsh. Minnow traps were placed in 3 different panels at each tide height, 800m, 1050m, and 1300m from the lower marsh edge. Plastic pans were embedded into the marsh surface to collect larvae that were too small to be caught in the traps, and were left out for 8 days. Three trappings of 24 hours each took place, and the fish caught were identified, measured for total length and returned to the pannes. No larvae were caught in the plastic pans. No significant relationship was found between position on marsh and fish abundance ( $p=0.07$ ), yet a significant trend was present among the size frequencies of the *Fundulus* among the tidal gradient; a higher % of and greater abundance of larger fish were found lower in th marsh. Further studies need to be done to determine why this trend occurred, perhaps investigating the stomach contents of the different sized fish at the different tide heights.