PRELIMINARY ANALYSIS OF SPATIAL AND TEMPORAL DIFFERENCES IN FISH POPULATIONS OFF GEORGIA'S COAST BETWEEN THE ARCHAIC PERIOD AND PRESENT DAY

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Abstract. Unique conditions exist along the Georgia coast due to its position along the South Atlantic Bight that makes estuaries in the region some of the most dynamic and highly productive environments in the Southeastern United States. Understanding the relative abundance and distribution of fishes in these systems is essential for gaining insight into the dynamics of a valuable ecosystem that may be in danger of degradation from anthropogenic impacts and climate change. This study compares the spatial and temporal variability of fishes found in the early archaic period with those found in the 17th, 20th, and 21st centuries along the coast of Georgia between Cumberland Sound and St. Catherines Sound. Modern samples, collected using seining and trawling within the estuary and inshore areas on the eastern side of the barrier islands, were compared to archaic collections on the islands and shell middens between the island and mainland. With few exceptions, highly ubiquitous species in the modern collections were also present in Georgia Bight archaeological collections. Sea catfishes, *Ariopsis felis* and *Bagre marinus*, were two of the species missing from the modern collections that were common in the archaic collections. The modern data exhibited seasonal patterns; however, characteristics such as abundance, biomass, diversity, dominance, distribution, and body size were dependent on location as much as on season. These insights may help direct regulations for timing and limits.