

# **Geoarchaeological Studies at Gray's Reef National Marine Sanctuary, Georgia's Atlantic Bight.**

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**Abstract:** Studies at Gray's Reef, a National Marine Sanctuary, in the Atlantic Bight off Georgia, have included baseline geological-geophysical mapping of the reef's lithostratigraphy; as well as paleontological; palynological, geochronological and archaeological research. All these lines of evidence have contributed to a broad paleoenvironmental picture of the prehistoric coastal plain in the late Pleistocene and early Holocene. More correctly a rock live-bottom area rather than carbonate structure, the "reef" has undergone exposure and drowning during Pleistocene

sea-level cycles. Determining the timing and affect of these transgressions and regressions can be assessed by the recovery and study of the biocenose - floral and faunal - together with geochronological studies of sediments (and inclusions) using luminescence and carbon age determination techniques. Geological coring of sediments and their description, extraction of inclusions within these cores and extensive diver survey of the reef for paleontological and archaeological materials will be described and discussed.