## BUILDING RESILIENT LIVING SHORELINES WITH LOW-COST, LOW-IMPACT ALTERNATIVE MATERIALS AND METHODS

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Looking for a low-cost, low-weight, and plastic-free substitute for oyster bags? Ever wonder how deep you really should be planting marsh transplants? Thinking about using shell types other than oyster culch? You are not alone! Here, we present the results of several alternative materials and methods experiments conducted in our living shoreline projects in Florida's Gulf coast. Topics will include oyster reef performance across water depths and three shell substrate types, results from early tests of a low-weight, low-cost, low-carbon footprint, and plastic-free alternative oyster spat settling substrate to concrete forms, and marsh planting depth experiments that cover both low and high marsh planting zones. Results from these experiments are being applied in nearby living shoreline projects in Cedar Key, FL and can help reduces costs and impacts of living shoreline projects elsewhere.

**PRESENTER BIO:** Dr. Barry is a Regional Specialized Extension Agent at the UF/IFAS Nature Coast Biological Station. She specializes in coastal marine ecosystems and her extension programs focus on sustainable tourism, habitat restoration, and coastal literacy. She works with students and faculty in Florida Sea Grant, Fisheries and Aquatic Science, and Soil and Water Sciences Department on applied research projects.