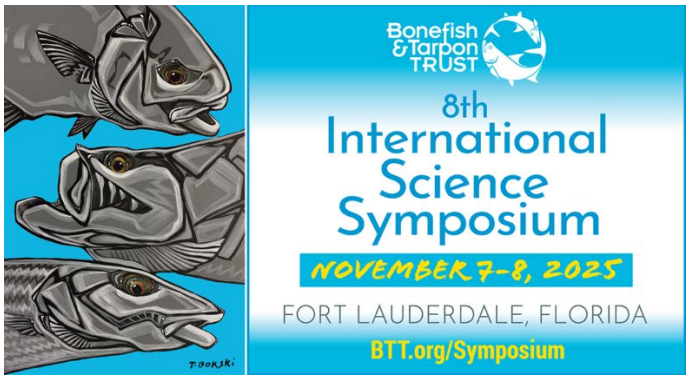


Recreational Fisher Local Ecological Knowledge Provides Information Applicable to the Management of an Anthropogenically Impacted Estuary

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Anthropogenic impacts to estuaries are increasing globally, and often exceed the capacity of resource managers to effectively quantify environmental changes, design and implement effective restoration programs, or assess ecosystem response to specific restoration projects. We interviewed recreational fishers to document spatiotemporal fishing effort over a 40-year period, analyzed commercial fishing landings, to qualitatively compare the data to seagrass monitoring estimates of aerial coverage and percent cover over a four-decade period for the Indian River Lagoon, Florida (USA). Fisher effort and landings mirrored declines in seagrass percent cover, which preceded declines in seagrass aerial coverage resulting from large-scale, harmful algal blooms. A super-bloom was posited as the point of ecological collapse of the Indian River Lagoon. We recommend engaging stakeholders and incorporating local ecological knowledge into resource management programs to monitor and improve restoration outcomes by expanding the knowledge base from which decisions are made.

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