A Second Sargasso Sea Near Florida Coasts

The old gardening adage "Right Plant; Right Place" applies to algae too. Sargassum, a macroalgae, has always found its way to Florida's beaches. But these have been relatively minor events, rogue rafts that escaped the oceanic gyre that creates the iconic Sargasso Sea in the North Atlantic Ocean. More recently, Sargassum has begun arriving *en masse* on the shores of South Florida, fouling beaches, disrupting the coastal economy, and forcing **public** <u>health advisories</u> due to the hydrogen sulfide created by decomposition. This Sargassum comes not from the Sargasso Sea but from a breakaway mass that has begun to perpetuate itself in the vicinity of the Equatorial Current, off the northern coast of South America extending toward Africa – a new more ominous second Sargasso Sea, perhaps being fueled by excess nutrients. (Ironically, at the same time governments and researchers are battling this second sea, referred to as the <u>world's largest Harmful Algal Bloom</u>, governments and researchers are exploring ways to protect the original Sargasso Sea – one of <u>Sylvia Earle's first "Hope Spots."</u>

Researchers at Florida Sea Grant have been begun addressing Sargassum, both as it impacts the coastal environment and economy of Florida and as a regional issue in the wider Caribbean. Led by Florida Sea Grant affiliate Ashley Smyth, Assistant Professor in Biogeochemistry at the UF IFAS Tropical Research and Education Facility, a Sea Grant team is studying the chemical composition of the sargassum arriving on Florida's shores to determine whether it is safe to repurpose as fertilizer for crops. Because the data is not available, and Sargassum is known to harbor arsenic, the nuisance seaweed is being transported to landfills at considerable expense. Smyth is receiving on-the-ground help from Shelley Krueger, Monroe County's Sea Grant Extension Agent, and Vincent Encomio, who serves as the Sea Grant Agent for Florida's Treasure Coast. More information on this project can be found <u>here.</u>

At the same time, Sea Grant Regional Specialized Agent for Water Resources Lisa Krimsky and Legal Specialist Tom Ankersen have been part of a Caribbean Regional Working Group looking at an international and regional approach to the issue and domestic legal impediments to such an approach. This project is facilitated by the National Sea Grant Law Center, the NOAA Center for Coastal and Marine Ecosystems, and the Harte Research Institute for Gulf of Mexico Studies at Texas A & M. The working group had begun planning a Caribbean-wide sargassum summit when the pandemic hit. The initial work of the group is summarized in a <u>fact sheet</u> <u>here</u>, which is provided by the newly established UF Center for Coastal Solutions, which is also a new partner of the Florida Sea Grant.