

Sargassum management master plans: University of Florida IFAS Extension agents create partnerships to turn mountains of trash into cash

Since 2011, huge influxes of sargassum, a brown macroalgae, have been inundating Florida beaches. Sargassum provides numerous ecological benefits; however, these unprecedented accumulations are negatively affecting nearshore environments and tourism. Many coastal counties are developing sargassum management plans as these summer influxes are likely the “new normal”. The cost of sargassum removal is high and landfill fees can exceed \$500 per truckload. In Monroe County alone, the Tourist Development Council estimates the economic impact from a severe sargassum year could be \$20 million and 300 lost jobs. As a result, there is a need to find economical methods for sargassum removal and reuse. A bi-coastal team of 6 University of Florida IFAS Extension faculty developed a pilot study in cooperation with 3 city governments, 4 county governments, parks and recreation departments, a nuclear power plant, and a botanical garden to evaluate the viability of composting sargassum for use as a landscape soil amendment. More than 30 master gardeners, students, and citizens volunteered >135 hours to assist with the 5-month replicated study in Sarasota, Monroe, Martin, and St. Lucie counties, Florida. Our results were compared to commercially available compost using metrics of soil health and fertility at 3 locations in coastal Florida to compare site-specific differences. The partnerships created, and knowledge gained, have contributed to sargassum management master plans within those counties. The ability to utilize sargassum for landscaping valorizes a product that is currently sent to landfills, and could save local governments hundreds of thousands of dollars per year.



Shelly Krueger

Shelly Krueger is Extension faculty at the University of Florida IFAS Extension and the Florida Sea Grant agent in the Florida Keys since 2013. Florida Sea Grant is a UF-based program that supports research, education and extension to conserve coastal resources and enhance economic opportunities for the people of Florida. Shelly Krueger provides science-based education for Florida’s coast on a broad range of topics including sargassum, sponge ecology, water quality, citizen science, and stony coral tissue loss disease. Shelly Krueger obtained her bachelor’s degree at Georgia Tech and a master’s degree in marine science from Savannah State University.

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