

# **SEA Faculty Lecture Series**Drifting Oases of Life on the Deep Blue Sea

By Dr. Amy NS Siuda

### Free and Open to the Public

WHEN: March 16, Ipm

WHERE: Sea Education Association

James L. Madden Center

Lecture Hall

171 Woods Hole Road,

Falmouth, MA

#### **About the Lecture**

The North Atlantic subtropical gyre (Sargasso Sea), Caribbean Sea, and Gulf of Mexico host two species of the brown seaweed, Sargassum, that are unique in life history strategy and ecological function. Unlike other species of seaweed, S. natans and S. fluitans drift at the ocean surface and are never attached to the seafloor. Individual Sargassum plants are forced by ocean currents into aggregated mats that can resemble small islands. Ecologically and economically important organisms, including sea turtles, eel larvae and game fish, use Sargassum aggregations as nursery and feeding sites in the nutrient-poor open ocean. Sargassum also supports a specialized community of inhabitants, from fish to crabs, that have adapted to 'hide' within the weed. As a result, these drifting oases have been identified as biodiversity hotspots and are the focus of a new policy initiative to make the Sargasso Sea a high-seas Marine Protected Area. This lecture will introduce us to the Sargassum community and share how decades of scientific observations recorded during SEA Semester cruises are informing the management effort in the Sargasso Sea region.

## **Upcoming Lectures:**

April 13: Dr. Chuck Lea, Deep Sea Fish and Squid & the Open Ocean Environment

May 18: Captain Elliot Rappaport, Leadership
Training in the Marine Environment



#### **About the Lecturer**

Dr. Amy NS Siuda is Associate Professor of Oceanography at Sea Education Association (SEA) in Woods Hole, MA. Dr. Siuda earned her PhD in Oceanography from the University of Connecticut. Her research interests span organismal, population and community ecology of plankton. Dr. Siuda is currently involved in several research projects, including: studies of plankton diversity in the Sargasso Sea; understanding the distribution patterns of the drifting macroalgae, Sargassum natans and S. fluitans; and investigating selective grazing by copepods of microplastics contaminated with persistent, bioaccumulative and toxic (PBT) substances. Dr. Siuda also has extensive experience in undergraduate instruction and curricular development. Her teaching interests range from building scientific foundation and research skills to scientific communication and the intersection of science and policy. Dr. Siuda is Program Director and co-developer of the SEA Semester: Marine Biodiversity and Conservation program, an integrated problem-based science and policy curriculum to address real-world conservation challenges.