

# **OCEAN EXPERT EXCHANGE EDUCATOR RESOURCES**

TOPIC - Secrets of Sargassum

FEATURED EXPERT - Dr. Brian Lapointe of FAU Harbor Branch Oceanographic Institute

### **RELATED LEARNING STANDARDS**

**OCEAN LITERACY PRINCIPLES** - <u>Principle #5</u>: The ocean supports a great diversity of life and ecosystems. <u>Principle #6</u>: The ocean and humans are inextricably interconnected.

#### **NEXT GENERATION SUNSHINE STATE STANDARDS -**

Recognize ways plants and animals, including humans, can impact the environment. SC.4.L.17.4: SC.5.L.17.1: Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. SC.7.N.1.5: Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. Describe and investigate various limiting factors in the local ecosystem and their impact on native SC.7.L.17.3: populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites. SC.8.N.4.1: Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. SC.8.N.4.2: Explain how political, social, and economic concerns can affect science, and vice versa. SC.912.E.7.8: Explain how various atmospheric, oceanic, and hydrologic conditions in Florida have influenced and can influence human behavior, both individually and collectively. Describe changes in ecosystems resulting from seasonal variations, climate change and succession. SC.912.L.17.4: Recognize the consequences of the losses of biodiversity due to catastrophic events, climate SC.912.L.17.8: changes, human activity, and the introduction of invasive, non-native species. SC.912.L.17.16: Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gasses, ozone depletion, and surface and groundwater pollution.

## SUPPLEMENTAL RESOURCES

- Reading ANGARI Foundation <u>Meet Brian Lapointe</u> (Grades 6-12)
- Reading Florida Atlantic University <u>Too Much of a Good Thing</u> (Grades 8-12)
- o Infographic NOAA National Ocean Service Sargassum: From Sea to Shore (Grades 6-12)
- o Resource Library GEO Blue Planet et al. Sargassum Information Hub (Grades 6-12)
- o Resource Library University of South Florida Satellite-based Sargassum Watch System (Grades 9-12)
- Resource Library CARICOOS <u>Sargassum Tracker</u> (Grades 9-12)
- o Citizen Science Program Florida International University Sargassum Watch (Grades 4-12)
- Reading NOAA CoastWatch <u>Sargassum FAQs</u> (Grades 8-12)
- Reading NOAA Climate.gov Extreme climate event in N. Atlantic may have kicked off Sargassum... (Grades 6-12)
- o Video Short Al Jazeera Atlantic Sargassum belt: Seaweed bloom affecting coast of Florida (Grades 6-12)
- o Video Short CBC News Tracking the massive mound of seaweed stinking up beaches (Grades
- o Video Short Smithsonian The Astounding Length of Seaweed in the Sargasso Sea (Grades 4-12)
- Video Short Nat Geo WILD <u>Seaweed Sanctuary</u> Florida Untamed (Grades 4-12)
- o Video Short Monterey Bay Aquarium Research Institute Big changes in the Sargasso Sea (Grades 6-12)
- Video nature <u>Drowning in seaweed: How to stop invasive Sargassum</u> (Grades 7-12)
- Video Shorts/Lessons PBS <u>5,000-mile-long mass of seaweed coming to shore</u> & <u>Sargassum Secrets</u> (Grades 6-12)
- Lessons NOAA Teacher at Sea <u>Sargassum Hide-n-Seek Unit</u> (Grades 3-5)
- Lesson NOAA Ocean Explorer <u>The Sea with No Shores</u> (Grades 5-6)

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