

Educator's Guide for *Sea Without a Shore:* *Life in the Sargasso*

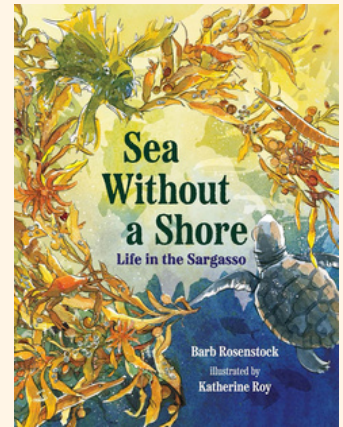
By Barb Rosenstock

Illustrated by Katherine Roy

Educator's Guide by Lorraine Leddy



Norton Young Readers



About the Book

From bryozoans and snails to shrimps, eels, swordfish, and whales, the Sargasso Sea provides a home to countless types of marine life, thanks to the prevalence of microalgae called sargassum. Following a single blade of this extraordinary seaweed as it grows and spreads, readers see what it provides for the sea's organisms: a base for hydroids and tube worms to filter and feed, shelter for anemones and nudibranchs and their nutritious waste, hunting grounds for crabs and amphipods, and a source of nourishment and protection for the fish, birds, whales, and reptiles that feed on these smaller creatures.

Through a widening scope on this intricate interdependence, Barb Rosenstock celebrates one of our planet's most diverse and important ecosystems and the unassuming seaweed that sustains it. Gorgeously illustrated with Katherine Roy's rich, eye-catching artwork, *Sea Without a Shore* is as fluid and rhythmic as the currents that shape this tidal home.

About the Author

Barb Rosenstock is the author of multiple children's picture books that combine deep research and playful language. Her book, *The Noisy Paint Box*, illustrated by Mary Grandpré, received a Caldecott Honor. Other titles include *The Mystery of the Monarchs*, *Otis and Will Discover the Deep*, *The Secret Kingdom*, and *The Camping Trip that Changed America*. Awards include an Orbis Pictus Honor and a Sydney Taylor Honor, as well as numerous national, educational, and state recognitions. Barb loves sharing stories and inspiring students in schools and libraries across the country. She lives with her family near Chicago.

About the Illustrator

Katherine Roy is the award-winning and best-selling author and illustrator of science-based books for children, including the Robert F. Sibert Honor Book *Neighborhood Sharks: Hunting with the Great Whites of California's Farallon Islands*, *How to Be an Elephant: Growing Up in the African Wild*, and *Making More: How Life Begins*. She is also the illustrator of numerous other books, including *Otis and Will Discover the Deep*, by Barb Rosenstock, *Red Rover*, by Richard Ho, and *The Fire of Stars*, by Kirsten W. Larson. She lives with her husband and sons in western Oregon, where she is busy writing and drawing her next books.

Educator's Guide for *Sea Without a Shore: Life in the Sargasso*

Vocabulary

currents
algae
vast
filtering

fertile
coaxing
cowering
mimic

scavenge
slinks
basking
migrate

Before reading, choose some of these words to introduce, discuss, and define with readers.

During reading, stop to notice these words in context. Connect to definitions and clarify understanding.

Discussion Questions for Interactive Read Aloud

When using *Sea Without a Shore: Life in the Sargasso* for interactive read aloud, discuss any and all of the following questions to prompt deep thinking with your students.

Before Reading

- What do you know about the sea? What's the difference between an ocean and a sea? (Allow connections to personal experiences as well as prior knowledge from science or social studies.)
- Looking at the cover, we can see the subtitle of this book is "Life in the Sargasso." What kinds of creatures do you think might live in the Sargasso sea? Let's think back to this subtitle as we read the book today.

While Reading

- In your own words, what did we learn about how Sargassum forms? Let's look back at the illustrations and explain what is happening.
- Let's use our map to find where the Sargasso is located. What do you notice? What questions do you have about what it might be like to live in Bermuda near the Sargasso?
- What facts did the author share that interested you?
- Now that you know how many creatures live on and around Sargassum, what questions do you have about the seaweed?



After Reading

- Why do you think the author wrote *Sea Without a Shore: Life in the Sargasso*? What message do you think she is trying to share with young readers who pick up this book?
- What fact about the Sargasso surprised you most as we read?
- What questions do you still have about the Sargasso? Where could you go to find answers?
- What do you know about bodies of water near where we live? What questions do you have about life in our local pond/river/lake/sea/ocean?
- Who do you think should read this book and why?

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Sparking Inquiry

After reading, encourage readers to create the T-chart below in a reader's notebook. Readers can fill in the chart with newly learned facts and follow-up questions. Providing readers time to share their learning with others and research new questions sparks inquiry and supports developing content knowledge.

My New Learning About the Sargasso

Ex. I learned young Sargassum weeds grow from breaking off of old Sargassum weeds.

Questions I Have About the Sargasso

Ex. I wonder how life in the Sargasso changes with the different seasons.

Writing Prompts

- How is the Sargasso unlike other seas? In your response, include 3 key details from *Sea Without a Shore: Life in the Sargasso*.
- How does Sargassum support other life in the Sargasso? In your response, include 3 key details from *Sea Without a Shore: Life in the Sargasso*.

CCSS.ELA-LITERACY.RI.2.3

Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

CCSS.ELA-LITERACY.RI.3.3

Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

CCSS.ELA-LITERACY.RI.3.7

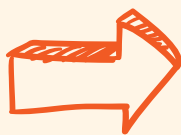
Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

Analyzing Text Structure

Depending on the grade level of your students, you can use *Sea Without a Shore: Life in the Sargasso* to analyze text structure as a whole-class, small group, or independent activity. Consider how the author uses **cause & effect** and **comparison** to tell the story of how life survives in the Sargasso.

Cause

“Circling with the currents, floating around and around turning into a sturdy place . . .”



Effect

“for tiny creatures to settle. Crusty bryozoans. Feathery hydroids. Spiraled tube worms.”



Unlike other seaweed, the Sargassum...



Like other ocean animals, the tiger shark...



Unlike other seas, the Sargasso...

CCSS.ELA-LITERACY.RI.3.8

Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).

CCSS.ELA-LITERACY.RI.4.5

Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

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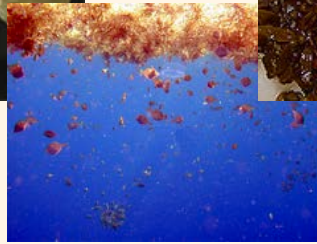
Biodiversity in the Sargasso Sea

Observing and analyzing images of plants and animals can help students compare the diversity of life in different habitats. Students can use the thinking stems below to analyze these and other images from the National Oceanic and Atmospheric Administration's expeditions to the Sargasso Sea.

I see...

I think...

I wonder...



NGSS 2-LS4-1.

Make observations of plants and animals to compare the diversity of life in different habitats.

Animals & Habitats

The illustrations in *Sea Without a Shore: Life in the Sargasso* depict many of the animals that call the Sargasso Sea home. Learners can research creatures mentioned in the text: snails, anemones, shrimp, pipefish, humpback whales, tiger sharks. What makes the Sargasso Sea a great place for these animals to live? Learners can note the attributes of the Sargasso as a habitat where these creatures can survive well.



NGSS 3-LS4-3.

Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

Movement of Matter

In *Sea Without a Shore: Life in the Sargasso*, we learn about the Sargassum, "which keeps floating, around and around, turning into a fertile place . . . for slow creatures to graze."



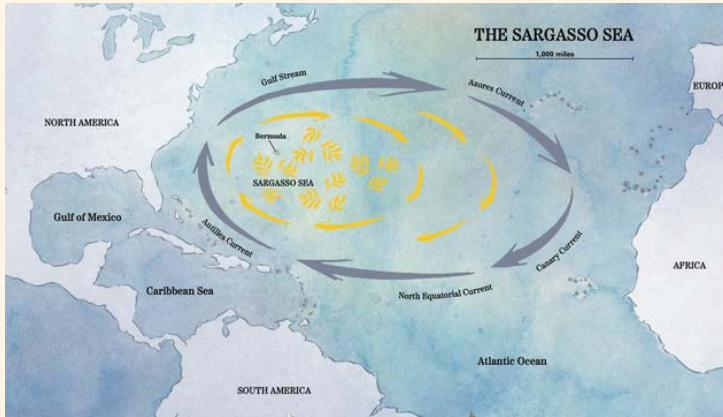
Learners can research the food web in the Sargasso Sea. How does matter move among plants and animals? What decomposers are present? Learners can use post-its on each page of *Sea Without a Shore* to share their findings.

NGSS 5-LS2-1

Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

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The Sargasso Sea & Geography



After reading *Sea Without a Shore: Life in the Sargasso*, learners can take a closer look at the map within the back matter. Knowing that there is only one land mass within the Sargasso Sea can help readers understand the environmental characteristics of Bermuda. Learners can also use [Google Street View](#) to look at images from the Bermudan coastline, as well as satellite imagery of the region. Together as a class, you can discuss the maps and images before reading the Research Note in the back matter. While you read the Research Note together, consider how the geography of Bermuda allowed the author and illustrator to conduct research.

C3 Framework D2.Geo.2.3-5.

Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their environmental characteristics.

Sargasso Sea Policies

Because the Sargasso Sea does not belong to any one country alone, it has been challenging to pass policies to protect it. As a social studies exploration, have students research:

- how the governments of 10+ countries came together to pass a political statement called the Hamilton Declaration
- what additional political actions can be taken to protect the Sargasso Sea



Photo Credit: Sargasso Sea Commission

C3 Framework D2.Civ.13.3-5.

Explain how policies are developed to address public problems.

Taking Action

In *Sea Without a Shore: Life in the Sargasso*, Sylvia Earle writes in the afterword: “All life on Earth depends on a healthy ocean, and learning about it, loving it, and protecting it is important to everyone, everywhere, all the time.” After reading the book and researching how the Sargasso Sea can benefit from protection, have students work independently or with a peer to write a letter to state or federal representatives urging them to uphold the Hamilton Declaration and protect all bodies of water.



C3 Framework D4.7.3-5.

Explain different strategies and approaches students and others could take in working alone and together to address local, regional, and global problems, and predict possible results of their actions.

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Art Inspired by the Sargasso Sea

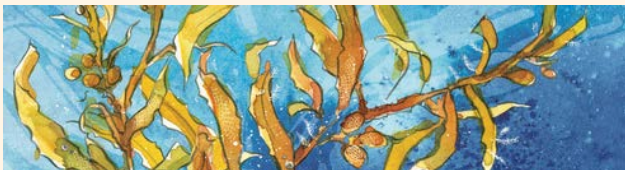


After reading, have students think about the many generations of people who have been inspired by the Sargasso Sea. Students can analyze art inspired by the Sargasso Sea to see how it connects to the information they learned in the book. Then, students can create their own artwork inspired by a field trip (either real or virtual!) to a body of water near where they live. For more artwork inspired by the Great Lakes, [see this article](#).

The image at left is entitled “Sea Life in the North Atlantic.” It was painted by Edward Roper in 1873 and is now in the public domain. Have students spot the organisms they learned about in the book. Then, when creating their own artwork inspired by a body of water near them, encourage them to include multiple types of creatures as well as think about what might appear on the horizon.

Technology and Sargassum

In the back matter of *Sea Without a Shore: Life in the Sargasso*, readers learn how too much sargassum can cause challenges for coastal ecosystems. Scientists are working to develop tools to remove or sink the excess Sargassum. Have students research some of the things that have been tried (e.g. making products out of Sargassum, removing Sargassum that has washed ashore, etc.). Then, learners can write about their own solutions to the problem. Have learners present their solutions to a small group for feedback, then revise their ideas.



Thank you for reading this Educator's Guide! For more about the book, please visit the author's website by clicking the link below:

www.barbrosenstock.com

Happy reading and learning!

