

Jellyfish Scientist

Maude Delap and Her Mesmerizing Medusas

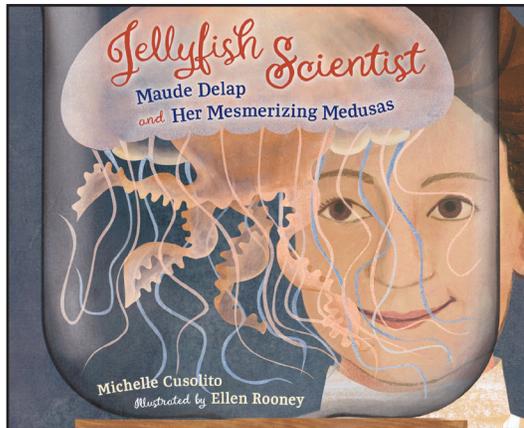
ACTIVITY KIT

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"A compellingly told story of a quietly brilliant feminist figure."

—Kirkus Reviews



978-1-62354-581-9 HC
by Michelle Cusolito
illustrated by Ellen Rooney

About the Book

In 1800s Ireland, a woman named Maude Delap scooped a jellyfish out of the water and changed the face of marine biology forever. She became the first person to successfully raise a jellyfish in captivity through its full life cycle and laid the foundation for research still ongoing today. Her story is an inspiring testimony to the power of persistence and curiosity.



About the Author

Michelle Cusolito is the author of *A Window into the Ocean Twilight Zone: Twenty-Four Days of Science at Sea*, *Diving Deep: Using Machines to Explore the Ocean*, and *Flying Deep: Climb Inside Deep-Sea Submersible Alvin*, which also won the 2016 PEN New England Susan P. Bloom Children's Book Discovery Award. She has worked as a fourth grade teacher, a curriculum specialist, and an adjunct professor. She lives in southeastern Massachusetts.



About the Illustrator

Ellen Rooney is an illustrator, designer, and artist. She is the illustrator of *The Astronomer Who Questioned Everything: The Story of Maria Mitchell*, *The Heart of the Storm: A Biography of Sue Bird*, and *Her Fearless Run: Katharine Switzer's Historic Boston Marathon*.

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Discussion Questions

Use these conversation starters to get kids thinking and learning.

Pre-reading

1. After looking at the cover of the book and reading the title, ask kids what they think *Jellyfish Scientist* is about. Write their responses on chart paper.
2. Open to the endpapers and show them to the kids. What do they see happening here? Why do they think the author and illustrator put these images here instead of in the actual story? Does this give another clue about what happens in *Jellyfish Scientist*?

Post-reading

1. Revisit the predictions kids made before reading. What predictions (if any) were correct? Did *Jellyfish Scientist* surprise them?
2. What is a life cycle? Discuss the parts of the jellyfish life cycle. How is it different from other life cycles that kids are familiar with, such as plant or mammal life cycles?
3. This story takes place in Ireland in the years 1899 and 1900. What else was happening in the world at this time? What did scientists at this time know about marine life?
4. Why did Maude want to raise a compass jellyfish in captivity? What were some of the challenges she faced? How long did it take for Maude's jellyfish to complete a full life cycle?
5. Throughout this book, what tools do you see Maude using to raise and study her jellyfish? What tools do you think a modern scientist would use to conduct a similar study?
6. Read "Maude Delap (1866–1953) Her Life and Work" in the back matter. How did Maude's research affect the field of marine biology? Why were her accomplishments unusual for a woman of her era?
7. Read the author's and illustrator's notes in the back matter. What kind of research did Michelle Cusolito and Ellen Rooney do to create this book? Did any of their discoveries surprise you?

Draw from Nature

Use this activity to encourage observation and understanding of natural organisms. This a great extension exercise for a field trip to a zoo, botanical garden, or aquarium, but can also be done as a classroom or homework exercise.

Materials

- Drawing materials for each student
- A copy of page 4 of this kit, “Draw from Nature,” for each student
- A selection of natural organisms for the students to draw (leaves taken from the schoolyard; chicks or butterflies being raised as a life cycle project by your class or another class; a class pet; or the plants, animals, and insects available on a field trip to the zoo, botanical garden, aquarium, or other suitable destination)

Procedure

1. **Connect to the text.** Turn to the spreads in *Jellyfish Scientist* where Maude Delap is drawing her observations of a compass jellyfish. Discuss as a class: Why did Maude draw her jellyfish instead of taking pictures? Do scientists today still illustrate their observations? What makes a scientific illustration different from other kinds of illustration?
2. **Distribute materials.** Ensure each student has drawing materials and a copy of page 4 of this kit, “Draw from Nature.”
3. **Review the task.** Invite students to draw an organism from the selection available. Ask the class what features they think a scientific illustration should depict. Ask students to label their drawing with the name and features of their organism, such as *leaves*, *stems*, *seeds*, and *roots* for a plant.
3. **Work time.** Give students time to complete their task and circulate to answer questions and offer support.
3. **Reflection.** Invite students to share their illustrations in small groups. Did students find their observation of the organism changed as they drew it? Do they feel they understand the organism better now?

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Draw from Nature

Name: _____

Date: _____

Use the space below to draw an animal or plant from life! Don't forget to label your drawing.

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Life Cycles Side by Side

Use this activity to develop deeper understanding of the differences in various plant and animal life cycles.

Materials

- Writing materials for each student
- A copy of page 6 of this kit, “Life Cycles Side by Side,” for each student

Procedure

1. **Connect to the text.** Show the class the endsheets of *Jellyfish Scientist*. What do they see happening on these pages? What is a life cycle?
2. **Examine the jellyfish life cycle.** Referring to the diagram on the endsheets, fill out one side of the T-chart on page 6 of this kit, “Life Cycles Side by Side,” together as a class with the stages of the jellyfish life cycle. Fill in the name of the organism at the top of the chart. Students may include a thumbnail sketch of each stage as well as its name.
3. **Compare and contrast with other life cycles.** Invite the students to each choose another organism—such as a dandelion, butterfly, or cat—and fill out its name and the stages of its life cycle on the other side of the chart. This step will require research time in the school library or on a classroom computer.
4. **Reflection.** Invite students to present their T-charts in small groups or to the class as a whole. How is the life cycle of the jellyfish like or unlike the life cycle of their chosen organism?

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Life Cycles Side by Side

Name: _____

Date: _____

A large empty grid for drawing or writing, defined by a vertical line on the left and a horizontal line at the top.

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Word Search

Name: _____

Date: _____

E H Y U A C K P E
T R S L B P H L T
A D R D S O T M S
P L A N U L A E O
O A M R Z Y N D H
I R O B I P E U N
S V L T S W U S X
N A E P H Y R A I
H P N E O T Q O L

MEDUSA

POLYP

PLANULAE

EPHYRA

LARVA

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Further Reading

Enrich the reading experience and extend learning by pairing *Jellyfish Scientist* with these other resources!

Jellyfish & Marine Biology

Brooks, Susie, and Dawn Cooper. *Ocean Emporium: A Compilation of Creatures*. Charlesbridge, 2019.

"Cnidarians: Moon Jelly Life Cycle." Shape of Life, Sea Studios Foundation, 2001. www.shapeoflife.org/video/cnidarians-moon-jelly-life-cycle.

Cusolito, Michelle, and Nicole Wong. *Diving Deep: Using Machines to Explore the Ocean*. Charlesbridge, 2022.

"Jellyfish" National Geographic Kids. <https://kids.nationalgeographic.com/animals/invertebrates/facts/jellyfish>.

Leaf, Christina. *Jellyfish*. Bellwether Media, 2019.

"The Phases of the Moon Jelly." Monterey Bay Aquarium, January 27, 2016. www.youtube.com/watch?v=14x7aJSLvjA.

Seal, Julia. *Bloom*. Sunbird Books, 2022.

Shasha, Mark. *Night of the Moonjellies*. Purple House Press, 2017.

Women in STEM History

"Maude Delap Heritage Trail: Finding Maude Delap." LIVE (Llŷn Iveragh Ecomuseum), Jane Sheehan, January 7, 2022. www.discoveriveragh.ie/initiatives/finding-maude-delap.

Ahmed, Roda, and Stasia Burrington. *Mae Among the Stars*. HarperCollins, 2020.

Hansen, Amy S, Wanda Díaz Merced, and Rocío Arreola Mendoza. *Wanda Hears the Stars: A Blind Astronomer Listens to the Universe*. Charlesbridge, 2025.

Keating, Jess, and Marta Álvarez Miguéns. *Shark Lady: The True Story of How Eugenie Clark Became the Ocean's Most Fearless Scientist*. Sourcebooks, 2017.

Robeson, Teresa, and Rebecca Huang. *Queen of Physics: How Wu Chien Shiung Helped Unlock the Secrets of the Atom*. Sterling Children's Books, 2020.

Stemple, Heidi E. Y., and Emily Paik. *She Sells Seashells: Mary Anning, an Unlikely Paleontologist*. Charlesbridge, 2024.

Valdez, Patricia, and Felicita Sala. *Joan Procter, Dragon Doctor: The Woman Who Loved Reptiles*. Alfred A. Knopf, 2018.