Earth Day

NATIONAL GEOGRAPHIC

AN EDUCATOR AND FAMILY

GUIDE TO EARTH DAY

Photo: Enric Sala.

EARTH DAY

Earth Day, celebrated on April 22 each year, began in the U.S. in 1970. In 1990 it became a global celebration with 141 countries around the world focused on the needs of our planet. Earth Day is a unifying day—everyone can participate and every action matters!

National Geographic is excited to dive into the ocean for Earth Day 2021. Use this guide to take learners on a virtual ocean exploration—whether they are learning online, in-person, or in blended settings—equipping them with the attitudes, skills and knowledge to take action in their homes, schools, or communities. These resources can be accessed from any device and can be used independently or collaboratively.

READY TO EXPLORE?

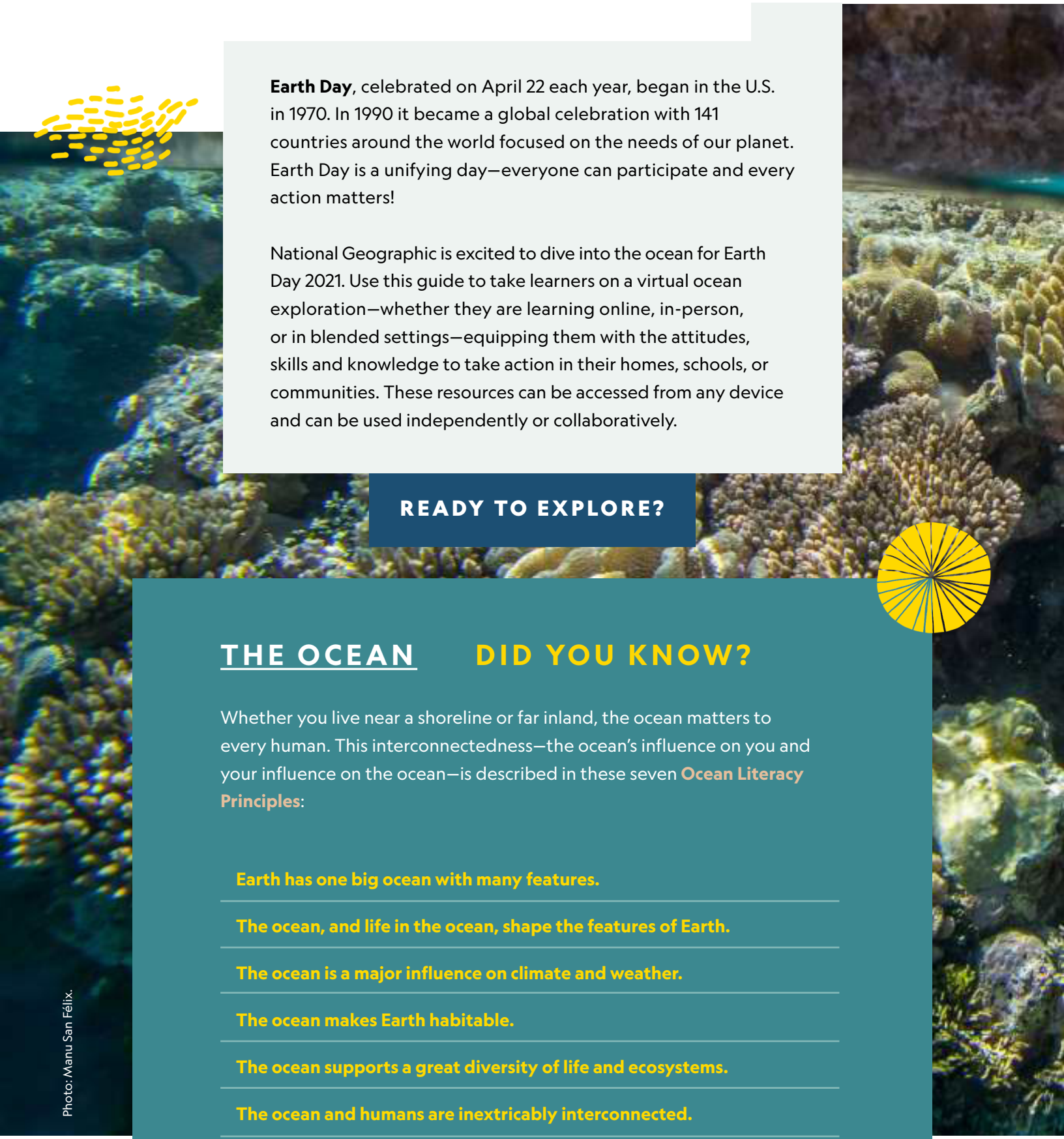

Photo: Manu San Félix.

THE OCEAN DID YOU KNOW?

Whether you live near a shoreline or far inland, the ocean matters to every human. This interconnectedness—the ocean's influence on you and your influence on the ocean—is described in these seven **Ocean Literacy Principles**:

- **Earth has one big ocean with many features.**
- **The ocean, and life in the ocean, shape the features of Earth.**
- **The ocean is a major influence on climate and weather.**
- **The ocean makes Earth habitable.**
- **The ocean supports a great diversity of life and ecosystems.**
- **The ocean and humans are inextricably interconnected.**
- **The ocean is largely unexplored.**

QUICK START GUIDE WITH LINKS

Start your exploration here! Click on the links for different ways to read, watch, play, and learn about the ocean. Continue through the guide to learn more about these unique offerings.

PG 4

EXPERIENCE THE OCEAN

Explorer Classroom | **Ages 4-14+**

Virtual Field Trip

Citizen Science

PG 6

WATCH, PLAY, AND LEARN

Videos & Interactives | **Ages 4-8**

Videos & Interactives | **Age 8+**

MapMaker

Maps & Infographics | **Ages 4-8**

Maps & Infographics | **Age 8+**

Kahoot!

A Deeper Dive: More Ocean Resources

PG 8

READ

Explorer Magazine

#GenGeo Ocean Leaders

Book List

BY GRADE LEVEL

ELEMENTARY SCHOOL

Explorer Classroom | **Ages 4-8**

Citizen Science

Videos & Interactives | **Ages 4-8**

Maps & Infographics | **Ages 4-8**

Kahoot!

Explorer Magazine

Book List

MIDDLE SCHOOL

Explorer Classroom

Virtual Field Trip

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HIGH SCHOOL

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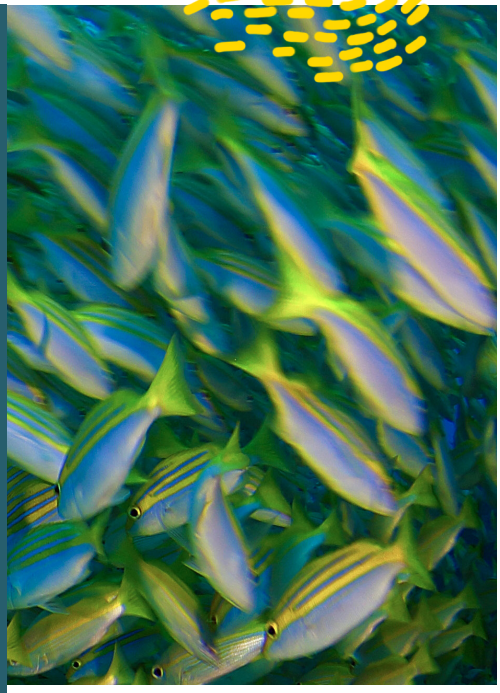
#GenGeo Ocean Leaders

Photo: Enric Sala.

EXPERIENCE THE OCEAN



EXPLORER CLASSROOM

Dive into Explorer Classroom and meet National Geographic Explorers in the field while they are doing their work! Whether it's from onboard an ocean expedition, direct from a lab, or from a research site anywhere in the world, you can connect with an Explorer live on YouTube or watch on demand via a **collection of past episodes**. Every Explorer Classroom has a downloadable guide to help make the most of each session. Register for a chance to ask questions live on camera, or type them into the moderated YouTube chat bar. Explorer Classroom is available for young learners ages 4-8 and older learners ages 9-14+.

| EXPLORER CLASSROOM | AGES 4-14+

VIRTUAL FIELD TRIP

Join an adventure into the deep blue with Explorers **Brian Skerry**, **Salomé Buglass**, and **Sruthi Gurudev**. See what it takes to capture a photograph of a whale pod and what whale culture can teach us. Then journey to the Galápagos Islands to learn how remote operated vehicles (ROVs) give us an unprecedented view of landforms called seamounts. And finally, learn what "eco-journalism" is from one of our youngest Explorers and how she's building a community of like-minded young people through digital media.

Photo: Manu San Félix.

CITIZEN SCIENCE

Around the world people of all ages engage in citizen science—participating in projects in which volunteers and scientists work together to answer real-world questions. Becoming a citizen scientist is a great way to learn more about scientific processes and concepts while contributing to authentic research.

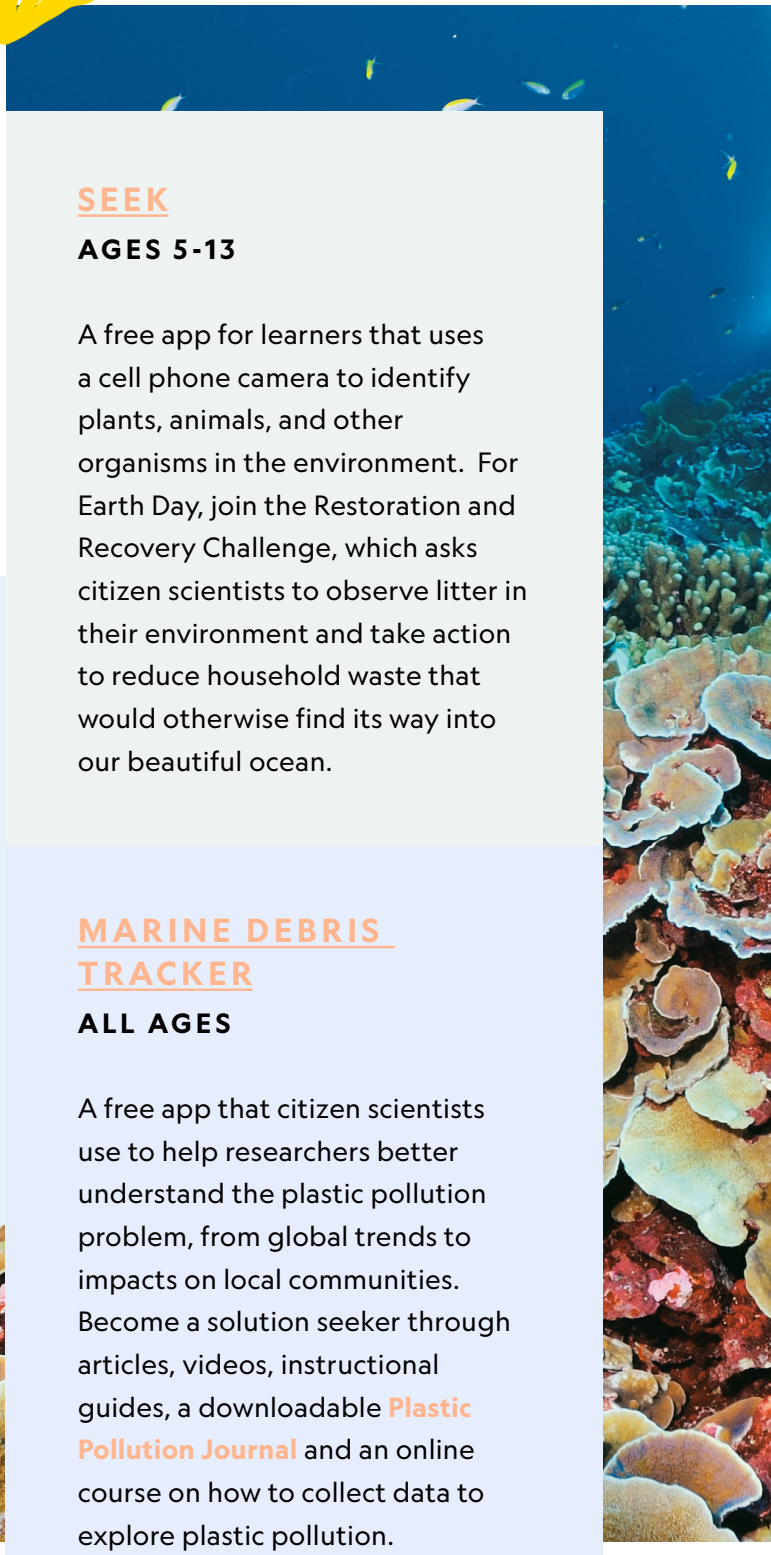
There are several fun citizen science tools and projects that allow you to learn more about the ocean and help protect it:

Photo: Brian Skerry.

iNATURALIST

AGES 13+

A free app that helps learners age 13+ identify organisms they observe and connects them with a community of over a million scientists and naturalists working to better understand and protect nature. For Earth Day, check out ocean inhabitants here and virtually travel to any part of the ocean.



SEEK

AGES 5-13

A free app for learners that uses a cell phone camera to identify plants, animals, and other organisms in the environment. For Earth Day, join the Restoration and Recovery Challenge, which asks citizen scientists to observe litter in their environment and take action to reduce household waste that would otherwise find its way into our beautiful ocean.

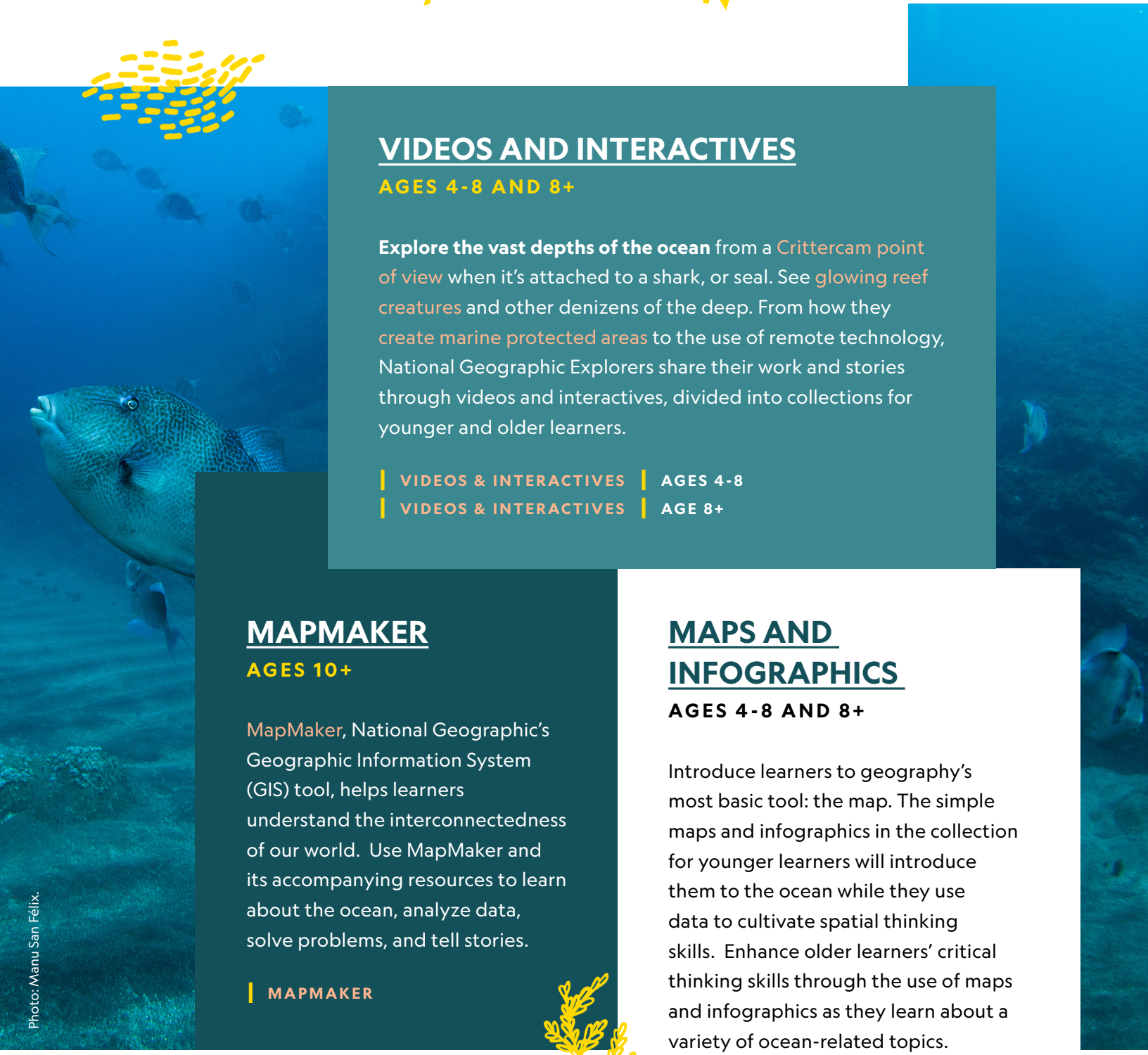
MARINE DEBRIS TRACKER

ALL AGES

A free app that citizen scientists use to help researchers better understand the plastic pollution problem, from global trends to impacts on local communities. Become a solution seeker through articles, videos, instructional guides, a downloadable Plastic Pollution Journal and an online course on how to collect data to explore plastic pollution.

Find more resources on using Seek and iNaturalist here.

WATCH, PLAY, AND LEARN



VIDEOS AND INTERACTIVES

AGES 4-8 AND 8+

Explore the vast depths of the ocean from a Crittercam point of view when it's attached to a shark, or seal. See glowing reef creatures and other denizens of the deep. From how they create marine protected areas to the use of remote technology, National Geographic Explorers share their work and stories through videos and interactives, divided into collections for younger and older learners.

| VIDEOS & INTERACTIVES | AGES 4-8
| VIDEOS & INTERACTIVES | AGE 8+

MAPMAKER

AGES 10+

MapMaker, National Geographic's Geographic Information System (GIS) tool, helps learners understand the interconnectedness of our world. Use MapMaker and its accompanying resources to learn about the ocean, analyze data, solve problems, and tell stories.

| MAPMAKER

MAPS AND INFOGRAPHICS

AGES 4-8 AND 8+

Introduce learners to geography's most basic tool: the map. The simple maps and infographics in the collection for younger learners will introduce them to the ocean while they use data to cultivate spatial thinking skills. Enhance older learners' critical thinking skills through the use of maps and infographics as they learn about a variety of ocean-related topics.

| MAPS & INFOGRAPHICS | AGES 4-8
| MAPS & INFOGRAPHICS | AGE 8+

Photo: Manu San Félix.

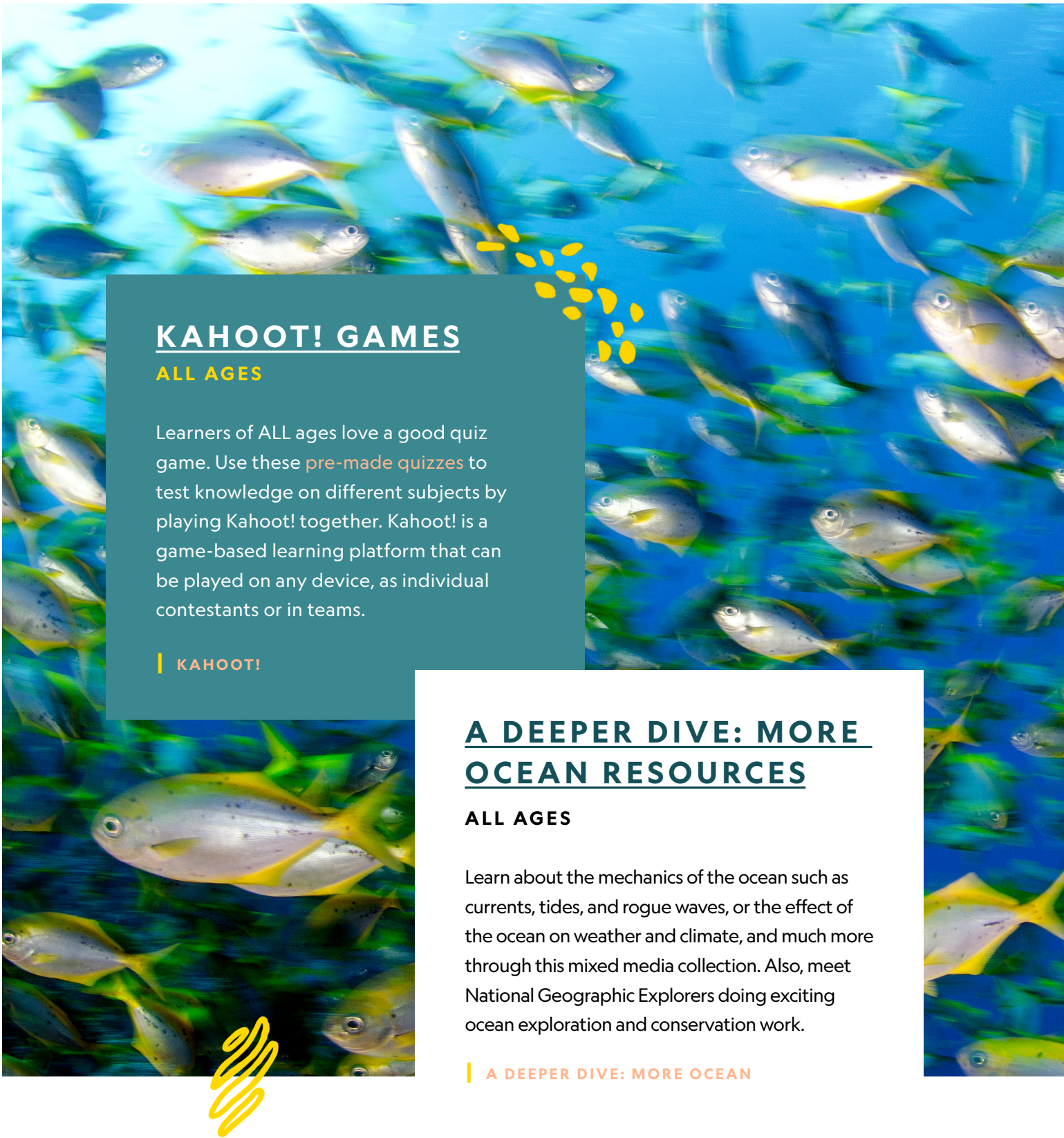


Photo: Enric Sala.

KAHOOT! GAMES

ALL AGES

Learners of ALL ages love a good quiz game. Use these pre-made quizzes to test knowledge on different subjects by playing Kahoot! together. Kahoot! is a game-based learning platform that can be played on any device, as individual contestants or in teams.

KAHOOT!

A DEEPER DIVE: MORE OCEAN RESOURCES

ALL AGES

Learn about the mechanics of the ocean such as currents, tides, and rogue waves, or the effect of the ocean on weather and climate, and much more through this mixed media collection. Also, meet National Geographic Explorers doing exciting ocean exploration and conservation work.

A DEEPER DIVE: MORE OCEAN

READ

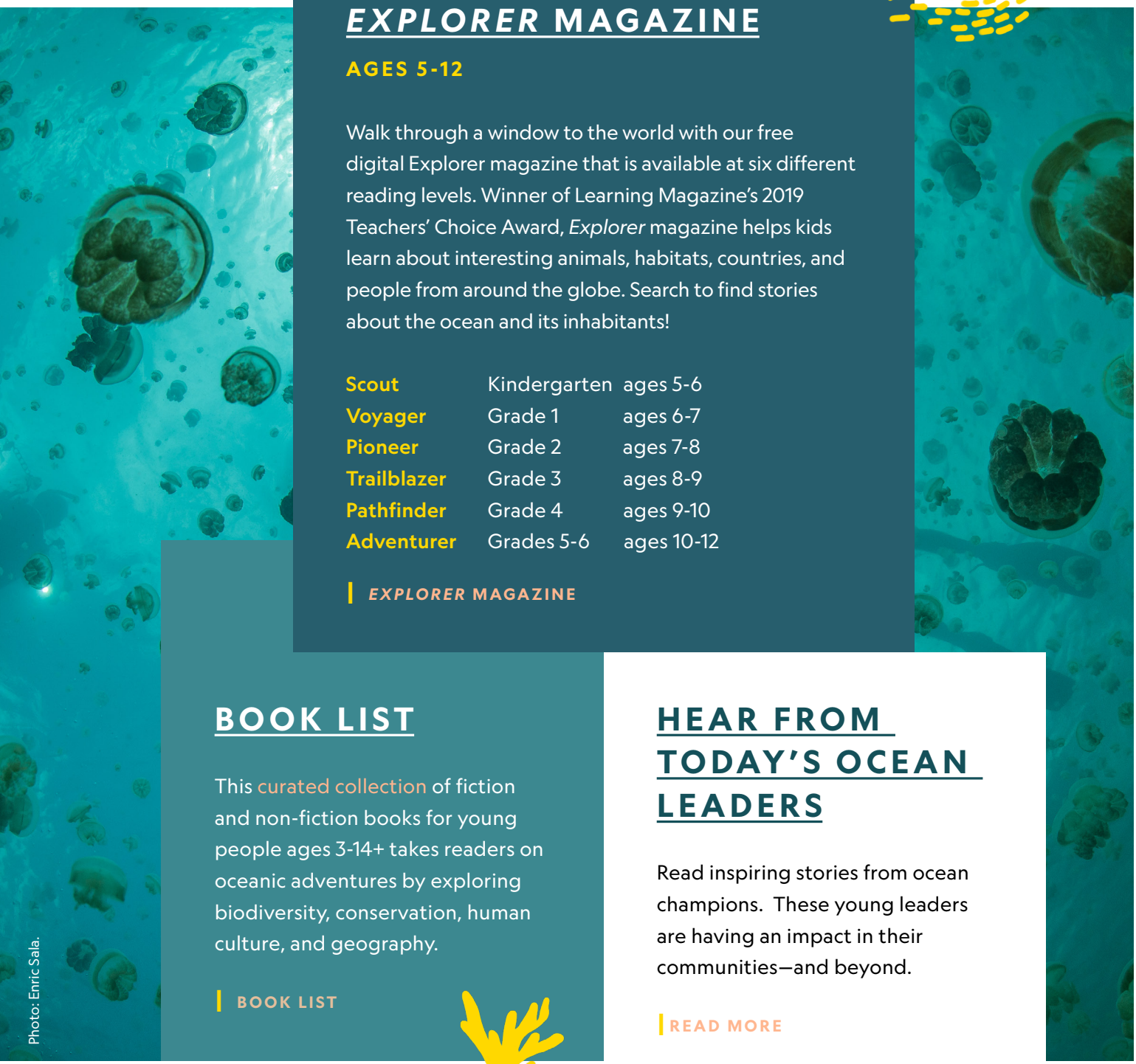


Photo: Enric Sala.

EXPLORER MAGAZINE

AGES 5-12

Walk through a window to the world with our free digital Explorer magazine that is available at six different reading levels. Winner of Learning Magazine's 2019 Teachers' Choice Award, *Explorer* magazine helps kids learn about interesting animals, habitats, countries, and people from around the globe. Search to find stories about the ocean and its inhabitants!

Scout	Kindergarten	ages 5-6
Voyager	Grade 1	ages 6-7
Pioneer	Grade 2	ages 7-8
Trailblazer	Grade 3	ages 8-9
Pathfinder	Grade 4	ages 9-10
Adventurer	Grades 5-6	ages 10-12

EXPLORER MAGAZINE

BOOK LIST

This curated collection of fiction and non-fiction books for young people ages 3-14+ takes readers on oceanic adventures by exploring biodiversity, conservation, human culture, and geography.

BOOK LIST

HEAR FROM TODAY'S OCEAN LEADERS

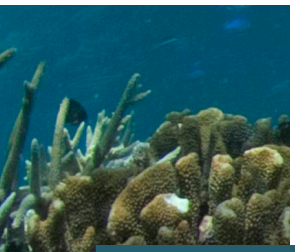
Read inspiring stories from ocean champions. These young leaders are having an impact in their communities—and beyond.

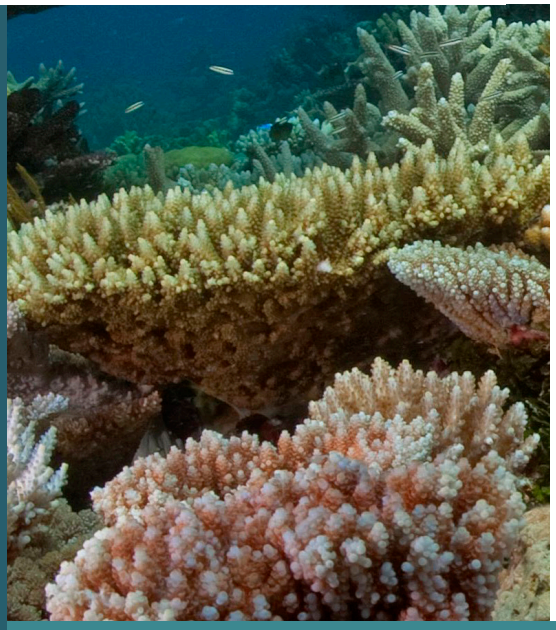
READ MORE

LEAD AND ACT

"I believe we need to protect the ocean every day, not just when an environmental catastrophe happens."

-**Prashant Mohesh**, National Geographic Young Explorer





YOUTH

TAKE #GENGEO STORYTELLING FOR IMPACT: PHOTOGRAPHY

AGES 16-25

A photographic story can change the way viewers think, feel, and act. They bring viewers to new places, introduce them to new people, and create empathy for the planet and those who live on it. In this short, self-paced online course created by National Geographic in partnership with Adobe, experience the power of photography and learn how to create your own story.

REGISTER TODAY!

FOLLOW #GENGEO

AGES 13+

We believe that young people are key to addressing the planet's most pressing problems. #GenGeo is a growing community of young people who are forging connections and taking action for our planet. See what young people around the globe are doing to illuminate and protect the wonder of our world.

Photo: David Doubilet.

EDUCATORS

JOIN THE NATIONAL GEOGRAPHIC EDUCATOR COMMUNITY

Community is at the forefront of everything we do. We invite you to connect with fellow educators who, like you, are leaning in to take education further with your students and communities.

TO GET STARTED:

Follow us on FACEBOOK and TWITTER to stay updated and connected with all things National Geographic Education. A few hashtags to share your work and stories with one another:

#ThatsGeography - Inspired by the wonders of our world and the people that inhabit it, this conversation is for anyone who wants a deeper and more nuanced understanding of all that geography encompasses.

#ExplorerMindset - A quick way to share ideas and resources to cultivate an Explorer's Mindset in your learners.

#ConnectingFurther – A way to find other National Geographic educators. Include your interest areas and expertise so others in the community will be able to connect.

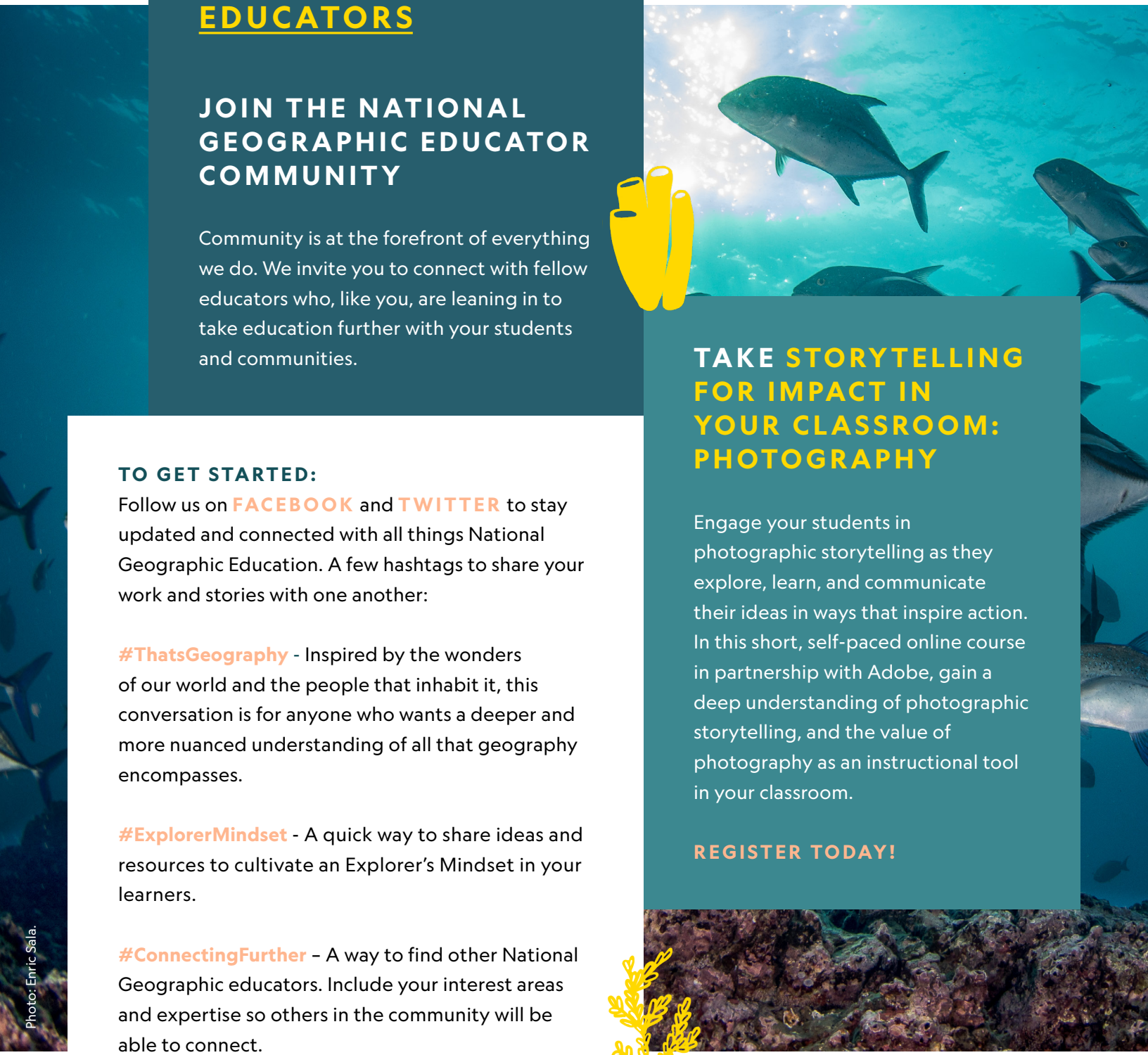


Photo: Enric Sala.

TAKE STORYTELLING FOR IMPACT IN YOUR CLASSROOM: PHOTOGRAPHY

Engage your students in photographic storytelling as they explore, learn, and communicate their ideas in ways that inspire action. In this short, self-paced online course in partnership with Adobe, gain a deep understanding of photographic storytelling, and the value of photography as an instructional tool in your classroom.

REGISTER TODAY!