

A Deep-Sea Fish of Nightmares Strays Into Shallow Waters from the New York Times by Victor Mather

<https://www.nytimes.com/2025/02/12/science/black-seadevil-anglerfish.html?smid=url-share>

Ocean Literacy Essential Principles and Fundamental Concepts connection:

Number 5: The ocean supports a great diversity of life and ecosystems. **G** There are deep ocean ecosystems that are independent of energy from sunlight and photosynthetic organisms. Hydrothermal vents, submarine hot springs, and methane cold seeps, rely only on chemical energy and chemosynthetic organisms to support life.

Number 7: The ocean is largely unexplored. **A** The ocean is the largest unexplored place on Earth—less than 5% of it has been explored. The next generation of explorers and researchers will find great opportunities for discovery, innovation, and investigation.

A marine biologist off the coast of Tenerife in the Canary Islands captured the first image of a live adult black seadevil anglerfish near the ocean's surface. He is a scientist who was there to research sharks with a group called Condrik Tenerife. This article brings awareness and ocean literacy to an area of the ocean that goes greatly unexplored due to its depth and necessity for technology to aid in exploration. The article begins by describing the alien world that is the angler fish's natural habitat and how life adapts to live in these depths without light. The article then highlights the scientists hypothesis that the "fish's roaming might have resulted from illness, an unusual current or its fleeing a predator." The article ends with the value in protecting this space.

A Plastic That Fully Decomposes In Soil And Seawater

By Shariqua Ahmed

Ahmed, Shariqua. "A Plastic That Fully Decomposes In Soil And Seawater." *DOGOnews*, DOGO Media, Inc., 14 Feb. 2025, Web. 16 Feb. 2025. <https://www.dogonews.com/2025/2/14/a-plastic-that-fully-decomposes-in-soil-and-seawater>

Ocean Literacy Essential Principles and Fundamental Concepts connection:

Number 6: The ocean and humans are inextricably interconnected. **D** Humans affect the ocean in a variety of ways. Laws, regulations, and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, nonpoint source, and noise pollution), changes to ocean chemistry (ocean acidification), and physical modifications (changes to beaches, shores, and rivers). In addition, humans have removed most of the large vertebrates from the ocean. **G** Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.

This article provides a solution to the human created 400 million tons of plastic produced annually plastic pollution problem which is a new plastic created by a team of Japanese scientists. This plastic fully degrades in soil or seawater. The new material “dissolves like a sugar cube in water” unlike regular plastic which just breaks down into small microplastics. This article provides a Ted talk video “What really happens to the plastic..” which explains the journey of plastic and how it ends up in our oceans and poses a problem for humans and life in our oceans, takes a 1000 years to break down, and poisons our ecosystems in the ocean. Students can become ocean literate to the plastic pollution problem and see that science has alternative solutions to the convenience that many in our world desire to reduce, reuse, and recycle plastics while simultaneously advocating for future replacement of existing toxic plastics. Students can even learn to advocate and lobby for funding to help “increase production and make this new plastic affordable for everyday use” a current goal of the team of scientists.

Seabound Aims To Cut Cargo Ship Emissions With Pebbles

By Marcela Bonet

Bonet, Marcela. “Seabound Aims To Cut Cargo Ship Emissions With Pebbles.” *DOGOnews*, DOGO Media, Inc., 11 Feb. 2025, Web. 16 Feb. 2025. <https://www.dogonews.com/2025/2/11/seabound-aims-to-cut-cargo-ship-emissions-with-pebbles>

Ocean Literacy Essential Principles and Fundamental Concepts connection:

Number 3: The ocean is a major influence on weather and climate. **A** The interaction of oceanic and atmospheric processes controls weather and climate by dominating Earth’s energy, water, and carbon systems.

Number 6: The ocean and humans are inextricably interconnected. **D** Humans affect the ocean in a variety of ways. Laws, regulations, and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, nonpoint source, and noise pollution), changes to ocean chemistry (ocean acidification), and physical modifications (changes to beaches, shores, and rivers). In addition, humans have removed most of the large vertebrates from the ocean. **G** Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.

This article highlights the problem of greenhouse gas emissions and how they are affected by ocean shipping. Seabound is a company that created technology that can capture 95 % of a ship's emissions. Another problem our ocean's face is sea levels rising. Global warming is a main contributor to that problem. Human demand from global trade is a small but mighty contributor to global warming due to the carbon emissions given off by massive cargo shipping around the world. A carbon capture system has been created by pebbles of calcium oxide "quicklime pebbles" to offset this problem using existing cargo ships and converting them to a more environmentally friendly solution. Becoming ocean literate would bridge the connection that our ocean and climate are interconnected and greatly influenced by our carbon footprint and how humans should lessen that footprint at all costs.

The World's Largest Iceberg Is On The Move Again!

By Marcela Bonet

Bonet, Marcela. "The World's Largest Iceberg Is On The Move Again!" *DOGOnews*, DOGO Media, Inc., 06 Feb. 2025, Web. 16 Feb. 2025. <https://www.dogonews.com/2025/2/6/the-worlds-largest-iceberg-is-on-the-move-again>

Ocean Literacy Essential Principles and Fundamental Concepts connection:

Number 5: The ocean supports a great diversity of life and ecosystems. **E** The ocean provides a vast living space with diverse and unique ecosystems from the surface through the water column and down to, and below, the seafloor. Most of the living space on Earth is in the ocean.

Number 6: The ocean and humans are inextricably interconnected. **D** Humans affect the ocean in a variety of ways. Laws, regulations, and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, nonpoint source, and noise pollution), changes to ocean

chemistry (ocean acidification), and physical modifications (changes to beaches, shores, and rivers).

This article informs the reader about the worlds largest iceberg A23a is on the move after many months spinning in the Antarctic waters. It is twice the size of London and weighs over a trillion tons. It is headed toward a remote island in South Georgia in the South Atlantic which is home to penguins, and fur and elephant seals. The Iceberg was thought to have melted away by now but it has not. The fear of impact with this remote island will be its effects on South Georgia's animals which could potentially affect them from getting food. This article brings awareness to the diverse life in the area of South Georgia and how global warming and the iceberg breaking away may affect these animals.

[U.S. News](#)

Scientists are racing to discover the depth of ocean damage sparked by LA wildfires

by [DORANY PINEDA](#)

Updated 12:43 AM EST, February 16, 2025

Ocean Literacy Essential Principles and Fundamental Concepts connection:

Number 6: The ocean and humans are inextricably interconnected. **A** The ocean affects every human life. It supplies freshwater (most rain comes from the ocean) and nearly all Earth's oxygen. **B** The ocean provides food, medicines, and mineral and energy resources.

Number 4: The ocean makes Earth habitable **C.** The ocean provides nutrients for life to exist on earth.

https://apnews.com/article/california-ocean-wildfires-los-angeles-pollution-ash-aff1102887e86b6e524a7ec2b027b564?utm_source=copy&utm_medium=share

This article written by Dorany Pineda highlights concerns of damages that our Pacific Ocean may face due to the LA wildfires. Environmental groups are concerned with debris and toxic chemicals running off into the ocean due to runoff from rainfall and how this will affect the food supply of marine organisms and the food chain. "Dinasquet and colleagues are working to understand how far potentially toxic ash and debris dispersed across the ocean, how deep and fast they sunk, and over time, where it ends up." Immediate testing of the waters downgrades closure to ocean water advisory nearby. Becoming ocean literate to the concerns highlighted in this article will inform others how

the materials used to build our homes can eventually end up in our oceans and potentially affect our food sources and health.

Marine Fungi Could Eat Plastic Pollution, Helping to Clean Our Oceans and Beaches

Learn more about the marine fungi that could be conditioned to help clean up Hawai'i's beaches.

By Monica Cull

<https://www.discovermagazine.com/environment/marine-fungi-could-eat-plastic-pollution-helping-to-clean-our-oceans-and>

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The article begins by describing the beauty of the Hawaiian landscapes surrounded by our beautiful blue waterways. The author then moves on to describe how plastics are the most pressing form of pollution in the ocean which can be detrimental to marine species and their habitat. A new study was conducted by researchers from the University of Hawai'i (UH) at Manoa where they discovered a fungus from a nearshore environment that may have the ability to break down plastics which has been published in Mycologia. Marine fungi is a term that many are not ocean literate about and only 1 percent of marine fungi are known to science. This fungi was found in corals, seaweed, sand, and sponges from Hawai'i's nearshore. Findings found that 60% of the fungi collected from the ocean had some ability to eat plastic and transform it into fungi. The article ends by highlighting the problem of plastic pollution to those who may not be aware. This article offers ocean literacy and informs about the potential for unexplored marine fungi to bring a solution to our plastic pollution problem.