

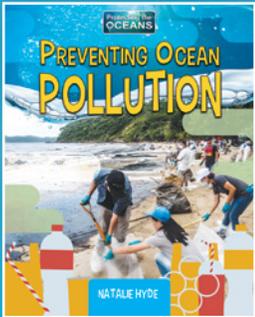
Protecting the OCEANS

In its Sustainable Development Goals for 2030, the United Nations states a healthy Earth requires healthy oceans—and life below water must be protected. Protecting the Oceans is a timely series that explains the threats to our oceans and explores ocean action being taken around the world. Readers will learn how we depend on oceans and what sustainable use of ocean resources looks like. They will also discover the effects of climate change and pollution on oceans. Each book uses infographics to clearly communicate key facts and figures, and highlights human efforts to protect oceans, inspiring readers to take ocean action in their communities. A free downloadable Teacher's Guide is available on the Crabtree website.

Specifications:

Reading Level: Grades 4-5
Interest Level: Grades 3-6
32 pages, 8 x 10", full colour

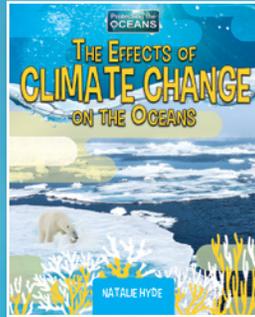
\$21.56 RLB
\$9.95 PAP



Preventing Ocean Pollution by Natalie Hyde

Most people have heard of the massive collection of debris in the Pacific Ocean or the damaging effects of oil spills on ocean ecosystems. But there are many other ways the world's oceans are being affected by pollution. This important title examines the sources of ocean pollution and the action being taken around the world to prevent pollution. Get inspired to take action in your community!

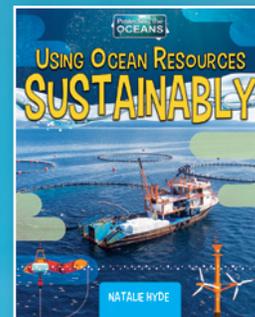
ISBN 978-0-7787-8201-8 RLB ISBN 978-0-7787-8205-6 PAP
ISBN 978-1-4271-2605-4 eBook



The Effects of Climate Change on the Oceans by Natalie Hyde

Climate change is one of the most serious threats to the world's oceans causing ecosystem damage, coastal erosion, and ocean acidification. This necessary title explores these effects and the worldwide efforts to reduce them. From youth leaders to global organizations, learn how people work together to protect the oceans from the effects of climate change—and get motivated to take action in your community.

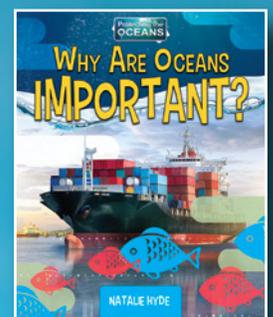
ISBN 978-0-7787-8202-5 RLB ISBN 978-0-7787-8206-3 PAP
ISBN 978-1-4271-2606-1 eBook



Using Ocean Resources Sustainably by Natalie Hyde

From food to economic opportunities, the ocean contains a wealth of natural resources that humans around the world depend on. But as we use these resources, we can negatively impact the ocean. Luckily, people around the world are creating ways to use ocean resources sustainably, so they will be available for years to come. In this interesting title, read about sustainable resource use and how you can take action in your community.

ISBN 978-0-7787-8203-2 RLB ISBN 978-0-7787-8207-0 PAP
ISBN 978-1-4271-2607-8 eBook



Why Are Oceans Important? by Natalie Hyde

Why are oceans some of Earth's most important resources? This title explores the many ways humans and other living things depend on oceans, from helping to clean the air and regulating the climate to providing work opportunities and healthy food. Readers will also learn how human activity affects oceans and become familiar with the call for more sustainable ocean use.

ISBN 978-0-7787-8204-9 RLB ISBN 978-0-7787-8208-7 PAP
ISBN 978-1-4271-2608-5 eBook

- Supports provincial language arts standards: Ontario reading standards Grade 4: Overall expectations 1, 2, 3
- Supports provincial science standards: Ontario Grade 4 Habitats and Communities 3.8, Grade 5 Conservation of Energy and Resources 1.1
- Supports provincial social studies standards: Ontario Grade 4 People and Environments B2.1, B2.2, Grade 5 People and Environments B1.1, B1.2, B1.3
- Supports UN Sustainable Development Goals initiatives
- Sidebars highlight the work of citizens around the world who work to protect the oceans
- Infographics communicate facts and figures in an engaging way
- Free downloadable Teacher's Guide

From Why Are Oceans Important?

LIVING IN THE OCEANS

Oceans may look empty, but they are full of life. Diverse marine life includes microscopic plants and animals that feed larger fish, mammals, and birds. Scientists say there are up to one million different species of animals in ocean.

Life in the oceans creates **food chains**. Tiny algae are eaten by tiny shrimp-like creatures. These are eaten by small fish such as sunfish. Small fish are eaten by bigger creatures such as squid. Squid are a favourite food of larger fish like tuna. Tuna are prey to sharks like the tiger or great white shark.

Coral and sponges that grow on the seafloor look like plants but they are also animals. As adults they do not move but grow in **colonies** to create reefs. Both corals and sponges grow slowly and provide structure for many other kinds of sea life such as clown fish and rockfish.

Humans learn a lot from ocean adaptations. Glow-in-the-dark products, for example, are inspired by bioluminescence.

Inspiring Adaptations

Creatures have adapted to living in all areas of oceans: shallow warm water, cold Arctic water and under crushing pressure at the ocean floor. In the darkness, some creatures communicate using light. This is called **bioluminescence**. Creatures create light using only chemicals in their bodies. Humans can learn from the way these creatures thrive in these environment. Ocean adaptation gives us insight on how we can adapt or build structures using techniques. We are still discovering new life forms in the oceans all time. Scientists have explored five percent of the world's oceans. This means there are many, many ocean life forms left to discover.

