



**Khaled bin Sultan
Living Oceans
Foundation**

STANDARDS

- **CCSS:** RI.6.8-8.8, RST.6-8.1, RST.6-8.8, RST.6-8.10, SL.6.1-8.1, SL.6.4-8.4, SL.6.5-8.5, WHST.6-8.8, WHST.6-8.9; RST.9-10.1, 2, 4, 5, 7, 8, 10; RST.11-12.1, 2, 4, 10; RI.9-12.8, SL.9.1-12.1, SL.9-12.4, SL.9-12.5, WHST.9-10.8, WHST.11-12.8, WHST.9-10.9, WHST.11-12.9
- **NGSS:** MS-LS2-3, MS-LS2-4, MS-LS2-5; HS-LS2-7, HS-LS-4.D, HS-ESS3-3, HS-ESS3.C, HS-ESS3.D, HS-ETS1.A-B, HS-ETS1-2, HS-ETS1-3
- **NGSS Practices:** 6, 7, 8
- **OLP:** (grades 6-8): 5.A.1, 5.A.3, 5.A.4, 5.A.6, 5.A.16, 5.A.21, 6.A.1-A.11, 6.B.1-B.4, 6.C.1-C.4, 6.D.1-6.D.21, 6.E.1-6.E.15; (grades 9-12) 6.A.1, 6.A.3-A.6, 6.B.1-B.6, 6.C.1-C.3, 6.D.1-D.19, 6.E.1-.14

ONLINE CONTENTS

- [*My Wish: Protect Our Oceans*](#) Dr. Sylvia Earle discusses the rapid decline of the ocean and the need for more protection.
- [*Corals and MPAs*](#) Learn about Marine Protected Areas and how they can help protect coral reefs.

CONSERVATION

This lesson is a part of the *Conservation* unit, which describes different actions that people can take to manage and conserve coral reefs. Below is a summary of what is included in the entire unit.

UNIT CONTENTS

A. [Background Information](#)

- Introduction
- Mitigating Threats
- Stakeholder Involvement
- Education & Outreach
- Monitoring
- Enforcement
- Restoration

B. Lessons

[Watch It! My Wish](#)

- A worksheet to accompany the [*My Wish: Protect Our Oceans*](#) video

[Watch It! Corals and MPAs](#)

- A worksheet to accompany [*Our Living Oceans, Episode 5: Corals and MPAs*](#) video.

[Lesson 1A: Explore a Hope Spot](#)

- An activity that explores an existing Hope Spot. Students learn about ecosystem disruptions and services, and the reasons that make this place special.

[Lesson 1B: Nominate a Hope Spot](#)

- An activity where students nominate a new Hope Spot that needs protection. Students present their proposed Hope Spot to their classmates who act as the “Hope Spot Council,” deciding if it should be approved.

[Lesson 1C: Advocate for MPA](#)

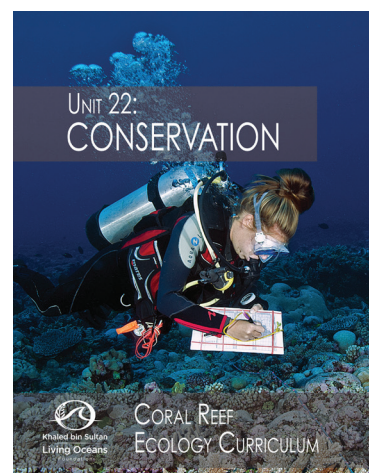
- Write a compelling letter that advocates for the creation of their proposed MPA to a stakeholder or group of stakeholders.

[Lesson 1D: Manage an MPA](#)

- An activity that creates a management plan for the three most important actions that are crucial to conserve their proposed MPA.

[Read It! Maori Conservation](#)

- A worksheet to accompany the [*Traditional Māori Conservation Methods Help Protect Reefs in the Cook Islands*](#) blog.



READ IT!

TEACHER'S NOTES

AUTHOR

- Amy Heemsoth, Khaled bin Sultan Living Oceans Foundation

LEARNING OBJECTIVES

- Read, interpret, and comprehend a blog.
- Determine how to responsibly use the internet for collecting and responding to information.

MATERIALS

- Internet access
- Traditional Māori Conservation Methods Help Protect Reefs in the Cook Islands* blog (<http://www.lof.org/traditional-maori-conservation-methods-help-protect-reefs-in-the-cook-islands/>)
- Read It! Maori Conservation** student worksheet

INTEGRATING SUBJECTS

- English Language Arts

PRIOR KNOWLEDGE

- Students will have prior knowledge about bias and how to critique the validity of websites.

STANDARDS

- CCSS:** RST.9-10.1, 2, 4, 5, 8, 10; RST.11-12.1, 2, 4, 10
- NGSS Practices:** 6, 7, 8

PROCEDURE

- Have students read *Traditional Māori Conservation Methods Help Protect Reefs in the Cook Islands* blog (<http://www.lof.org/traditional-maori-conservation-methods-help-protect-reefs-in-the-cook-islands/>).
- While reading, instruct students to take notes, connecting the information to their prior knowledge. They can note things that they agree and disagree with. A space, called *Notes*, is provided for this on the **Read It! Maori Conservation** student worksheet.
- Ask students to analyze the blog to determine the elements (like tone or visual design) and content that they like and dislike. Remind students to explain why they like or dislike each element they mention. There is also a space provided for these answers on the student worksheet.
- Have students answer the questions on their worksheet. When they are looking for definitions, they should use the context from the blog, our glossary, or other online resources. You may want to set rules distinguishing other websites or resources that they are allowed to access.
- If you set up an online community for your class, have the students post their comment(s) from the last question and allow them to respond to each other. If you do not have an online community, have the students share their comment(s) with each other, either orally or by passing their written responses around the classroom.

READ IT!

MAORI CONSERVATION

INSTRUCTIONS:

1. Read *Traditional Māori Conservation Methods Help Protect Reefs in the Cook Islands*, a blog from our Cook Islands mission (<http://www.lof.org/traditional-maori-conservation-methods-help-protect-reefs-in-the-cook-islands/>).
2. While reading the blog, take notes and connect it to your prior learning. Note things that you agree or disagree with. There is a space, below, for this.
3. Next, document what you like and dislike about this blog into the space below. Be sure to pay attention to things like style and tone, along with the content and visual design. Be sure to *explain* what it is that you do or do not like about each element.
4. Answer the questions.

NOTES

LIKES

DISLIKES

1. What is the central idea of this blog?
2. Describe the two different conservation efforts being used to protect coral reefs in the Cook Islands.
3. What conclusion was made by the author? Cite specific textual evidence to support this.
4. Did the author fully support her claim? Explain why you think this.
5. *Marine Protected Area (MPA)*, *ra'ui*, and *conservation* are specific vocabulary for the topic of this blog. Define them below.

6. Write a sentence of your own creation that connects the three words from #5, above.
7. Is this blog a reliable source for scientific information? Why or why not?
8. Do you notice any bias in this writing? If so, what?
9. Describe three things that you learned while reading this blog entry (they do not have to relate to the central idea).
10. Construct a comment to post in response to this blog. Remember that a good comment makes connections, asks a question, or gives an opinion in a respectful manner. You might want to quote the part of the blog that you are specifically referring to. Don't be afraid to disagree with another writer, but be sure to explain yourself and remain polite.

1. What is the central idea of this blog?

One way to mitigate the decline of coral reefs is through implementing marine conservation methods such as Marine Protected Areas (MPAs) and *ra'uis*, locally managed conservation methods.

2. Describe the two different conservation efforts being used to protect coral reefs in the Cook Islands.

The Marae Moana Marine Park was set up in the Cook Islands to protect their commercial fisheries within 50 nautical miles of shore; however, the park does not manage the nearshore areas where local communities are fishing. These nearshore areas are managed by the communities using a method of traditional Polynesian conservation called a *ra'ui*. This method of conservation is overseen by the chiefs and community leaders who establish the marine regulations, which are agreed upon and carried out by local communities.

3. What conclusion was made by the author? Cite specific textual evidence to support this.

A combination of conservation efforts may be necessary to protect coral reefs and the communities that rely on them. Students should have specific quotes to back up this claim, which may vary but might include the following:

- **"Marine protected areas (MPAs) can range from being small locally-managed conservation areas, to large internationally recognized protected areas..."**
- **"The Marae Moana management plan primarily targets commercial fishing, prohibiting commercial fishing within 50 nautical miles of shore."**
- **"...communities in the Cook Islands have turned to traditional Māori conservation methods, such as establishing a *ra'ui*, to protect their reefs and nearshore fisheries."**
- **"Marine protected areas are important in conserving not just the reef ecosystems, but the traditions and livelihoods of the communities that rely on them."**
- **"While large parks such as the Marae Moana play an important role in conserving ocean species, effectively managing nearshore ecosystems could potentially have more of an impact on the local communities."**

4. Did the author fully support her claim? Explain why you think this.

Answers may vary. Be sure they explain their reasoning. Suggested answer: The purpose of this blog is to inform the reader that multiple approaches may be necessary to conserve coral reefs. The author explains the two different conservation methods being used in the Cook Islands to protect them. She clearly describes that both methods are necessary because they protect different areas around the Cook Islands.

5. *Marine Protected Area (MPA)*, *ra'ui*, and *conservation* are specific vocabulary for the topic of this blog. Define them below.

- **Marine Protected Area: A marine conservation tool that defines a geographic area of the ocean with set rules that states what is, and what is not, allowed in the area.**
- ***Ra'ui*: A traditional Polynesian method of managing natural resources on land and in the ocean, in which chiefs and community leaders agree on conservation actions that are implemented by communities.**
- **Conservation: The act of preserving, protecting, and managing the natural environment to protect species, their habitats, and ecosystems from degradation.**

6. Write a sentence of your own creation that connects the three words from #5, above.
Marine Protected Areas and *ra'ui* are conservation methods used in the Cook Islands to protect their coral reefs.
7. Is this blog a reliable source for scientific information? Why or why not?
Yes. This is a first-hand account of what the author has seen. It is from a reputable organization that is based on scientific research. It also links you to the author's credentials. Further, the author provides additional documentation from her organization that includes scientific research on coral reefs in the Cook Islands.
8. Do you notice any bias in this writing? If so, what?
Answers may vary but may note that it seems factual and not emotional.
9. Describe three things that you learned while reading this blog entry (they do not have to relate to the central idea).
Answers may vary.
10. Construct a comment to post in response to this blog. Remember that a good comment makes connections, asks a question, or gives an opinion in a respectful manner. You might want to quote the part of the blog that you are specifically referring to. Don't be afraid to disagree with another writer, but be sure to explain yourself and remain polite.
Answers may vary.

