



**Khaled bin Sultan
Living Oceans
Foundation**

STANDARDS

- **CCSS:** RST.9-10.1, 3, 4, 5, 7, 8, 10; RST.11-12.1, 3, 4, 10; SL.9-10.1, 2, 3, 4, 6; SL.11-12.1, 2, 3, 4, 6; HSN.Q.A.1; HSS.IC.A.1
- **NGSS:** HS-LS1-2, HS-LS2-6
- **OLP:** 1.B, 5.B.1, 5.B.5

ONLINE CONTENTS

- [Ecology Quiz](#)
- [What Is Ecology? Video](#)
Ecology explores living things, plus the way they interact with one another, and their physical surroundings. A coral reef is a very special type of home, it provides nourishment and shelter to an amazing range of living creatures. They interact with non-living things like rocks and sand, ocean currents, temperature, and much more. A vast web of living and non-living things makes up the ecology of coral reefs.

ECOLOGY

This lesson is a part of the *Ecology* unit, which explains what ecologists study and how it applies to coral reefs. Below is a summary of what is included in the entire unit.

UNIT CONTENTS

A. [Background Information](#)

- Ecology
- Biological Hierarchy of Life
- Ecological Levels of Organization

B. Lessons

[Watch it! What is Ecology?](#)

- A worksheet to accompany the [What is Ecology?](#) video

[Factors of the Reef](#)

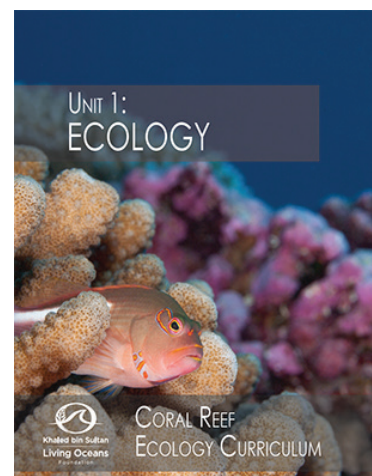
- A lesson to differentiate between inference and observation

[Backyard Ecosystem](#)

- An activity to perform a biological survey of an outdoor area

[Read It! Lionfish: Scourge of the Caribbean](#)

- A worksheet to accompany the [Lionfish: Scourge of the Caribbean](#) field blog



READ IT!

TEACHER'S NOTES

AUTHOR

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LEARNING OBJECTIVES

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

MATERIALS

- Internet access
- Lionfish: Scourge of the Caribbean* blog (<http://www.lof.org/lionfish-ccourge-of-the-caribbean/>)
- Read It! Scourge of the Caribbean** 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, 4, 5, 8, 10; RST.11-12.1, 4
- NGSS Practices:** 6, 7, 8

PROCEDURE

- Have students read *Lionfish: Scourge of the Caribbean* blog (<http://www.lof.org/lionfish-ccourge-of-the-caribbean/>).
- 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! Scourge of the Caribbean** 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!

SCOURGE OF THE CARIBBEAN

INSTRUCTIONS:

1. Read *Lionfish: Scourge of the Caribbean*, a blog from our Jamaica mission (<http://www.lof.org/lionfish-ccourge-of-the-caribbean/>).
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. How does the first paragraph tie into the rest of the blog (what is its purpose)?
2. What is the problem with lionfish in the Caribbean?
3. What conclusion was made by the author? Cite specific textual evidence to support this.
4. Did the author fully support his claim? Explain why you think this.
5. *Invasive species*, *native*, and *lionfish derbies* 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. How does the first paragraph tie into the rest of the blog (what is its purpose)?
This is background information about the author's location. It helps connect the reader to the information in the rest of the article.

2. What is the problem with lionfish in the Caribbean?
They are an invasive species. They do not have any natural predators in the area and eat large amounts of native populations, so their population is increased as native populations may be decreasing.

3. What conclusion was made by the author? Cite specific textual evidence to support this.
Lionfish are a problem in the Caribbean so we should try to eradicate them. Students should have specific quotes to back up this claim, which may vary but might include the following:
 - **"Conscientious divemasters spear them at every opportunity..."**
 - **"...a small patch reef with a resident lionfish had 79% fewer new juvenile fishes than one without..."**
 - **"Scientists fear that the lionfish, with its booming numbers and aggressive tendencies, will lower reef diversity by pushing native species into worse habitats..."**

4. Did the author fully support his claim? Explain why you think this.
Answers may vary. Be sure they explain their reasoning.

5. *Invasive species*, *native*, and *lionfish derbies* are specific vocabulary for the topic of this blog. Define them below.
 - **Invasive species: a species that is not native to an area that is causing harm to the ecosystem.**
 - **Native: naturally belonging to the area described.**
 - **Lionfish derbies: a competition where the goal is to collect as many lionfish from the area as possible in order to remove them from their invaded territory.**

6. Write a sentence of your own creation that connects the three words from #5, above.
Lionfish derbies are competitions where lionfish, an invasive species, are collected to try to save native species from a decrease in population.
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.
8. Do you notice any bias in this writing? If so, what?
Answers may vary, but should mention that it is written from a conservationist stand-point.
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.

