

BIRD REFLECTION ASSIGNMENT

To do in class after the field trip, before the final classroom presentation

1. **Students will read a couple paragraphs to reflect on topics introduced over the course of the school year.** The reading is available on the next page and online at oceanconnectors.org/resources.

The reading contains new vocabulary, indicated by *italics*, so it is best if teachers read the material in advance and prepare to work through it with the children.

2. After reading, **students respond to the reflection questions inside their journals using complete sentences.**
3. Please review the answers together in class.
4. This lesson covers 6th grade Common Core State Standards in ELA/Literacy, and Next Generation Science Standards MS-LS2-1, MS-LS2-2, MS-LS2-4, and MS-LS2-5.
5. **Project Based Extension: Have students work in groups to make a presentation** to inform an audience of public officials, students, investors, fishermen, natural resource managers, or the general public (choose one) about protecting birds and habitats.

Let students choose the format of their presentation from one of the following: PowerPoint, theater performance, movie, persuasive essay/letter, or news/radio broadcast.

To gather information for their presentation, encourage students to reach out to Ocean Connectors, the U.S. Fish & Wildlife Service, the San Diego Zoo, their local City/County office, and Scripps Institution of Oceanography.

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This year you learned about birds, their habitats, and how people can help protect both for the future. Birds are highly vulnerable to climate change, habitat loss, and pollution. Human activities and developments have resulted in the destruction of coastal environments in many areas of the world, thus reducing the amount of habitat space for birds to nest, *forage*, and take shelter. Humans also create pollution that causes negative impacts at many levels of the food web. Pollution can include things such as oil, chemicals, pesticides, and trash. Pollution travels through the *watershed*, which is an area of land where water collects and drains into a larger body of water, like a lake, bay, or ocean. Water drains from the highest point in a watershed down to the lowest point, known as *sea level*. Everyone lives in a watershed.

Habitat restoration is one way people are trying to undo past damage to the environment. Habitat restoration can involve litter removal, invasive plant removal, watering, applying mulch, and native plant *revegetation*. In addition to providing space, food, and shelter for birds, some native plants also help filter our water and trap carbon. *Invasive* plants are harmful because they compete for space with native plants and they change the dynamics of the natural ecosystem.

You can help coastal watersheds simply by picking up trash in your own neighborhood. Responsible pet owners always clean up after their dogs and cats because pet waste contains bacteria (poop pollutes!). When you visit natural areas, remember to stay on marked pathways and trails to minimize your impact. Finally, try to reduce your carbon footprint by walking, biking, and taking public transportation as much as possible.

Answer the questions below in your journal using *complete sentences*.

1. List 3 examples of pollution and explain how they are dangerous to birds.
2. What is a watershed?
3. What is the purpose of habitat restoration and how does it help wildlife?
4. List 3 parts of the habitat restoration process.
5. Why are invasive plants harmful?
6. How do you think ecosystems of today differ from ecosystems of the past?

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Answer Key

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Answer the questions below in your journal using *complete sentences*.

1. List 3 examples of pollution and explain how they are dangerous to birds.

Examples of pollution include oil, chemicals, pesticides, trash, and anything that does not belong in the ecosystem. Birds sometimes get tangled up or eat trash, pesticides contaminate the water supply, oil and chemicals can make their prey sick, etc.

2. What is a watershed?

A watershed is an area of land where water collects and drains into a larger body of water.

3. What is the purpose of habitat restoration and how does it help wildlife?

The purpose of habitat restoration is to undo past damage to the environment. Habitat restoration creates more space, food, clean water, and shelter that animals need to survive.

4. List 3 parts of the habitat restoration process.

The habitat restoration process may include litter removal, invasive plant removal, watering, applying mulch, and native plant revegetation.

5. Why are invasive plants harmful?

Invasive plants are harmful because they compete for space with native plants and they change the dynamics of the natural ecosystem.

6. How do you think ecosystems of today differ from ecosystems of the past?

Ecosystems of today are less natural and more developed as a result of human activities. Humans have altered the environment in so many ways that it is difficult for some wildlife to adapt and survive.