Piping Plovers

Sleeping Bear Dunes National Lakeshore – Post-Program Lesson Plan



Grade Levels: 3-5
Setting: Classroom
Classroom Equipment
Needs:

- Documents Camera
- Projector
- Internet Access

Duration: 1 hour

Standards Addressed:

3rd Grade

LS1.B: Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.

LS4.D: Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

4th Grade

ESS2.E: Living things affect the physical characteristics of their regions.

5th Grade

LS2.A: Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life

Materials Needed:

Paper, crayons, colored pencils or markers, chart paper, Piping Plover signs

Vocabulary: piping plover, endangered, habitat, ecosystem, prey

Introduction: Welcome to the Sleeping Bear Dunes National Lakeshore. This post-lesson will serve as a wrap up activity focused on engaging students in protecting the Piping Plovers and building a foundation for engagement with citizen science.

Essential Question: Why is it important to protect the piping plovers?

What impact do people have on the Piping Plovers survival?

Enduring Understanding: What factors impact the survival of Piping Plovers and what role do people play? **Objectives:**

After completing this program students will be able to:

- Persuade people to take actions to protect Piping Plovers
- List ways people can help protect Piping Plovers
- Identify threats to Piping Plovers habitats

^{*}If you are unable to print these or other materials for this lesson, please contact the Education Technician at slbe_education@nps.gov and ask for a packet to be mailed to your school.*

Piping Plovers

Sleeping Bear Dunes National Lakeshore – Post-Program Lesson Plan



Introduction (5 minutes)

Ask students to recall important information about Piping Plovers from the past two lessons.

- 1. What do Piping Plovers need to survive and breed?
- 2. What are some of the factors that impact their ability to do so?
- 3. What role do humans play?
 - a. Teacher note: You may choose to quickly review the information from the Prezi.

Main Activity (45 minutes):

- 1. Tell students, today they are going to create a poster that can be used to help protect the Piping Plovers Nesting area.
- 2. Show students examples of signs already used. Discuss with students what makes a sign effective? Create a list of items needed to create an effective sign. After drafting your class list, you may choose to show students the rubric for evaluating their posters.
- 3. Tell students they need to pick a focus for their signs- For example: Keep your dog on a leash, Watch your step, or Don't feed gulls.
- 4. Each student will create a poster that can be hung to help educate people about making choices that will help protect Piping Plovers breeding areas.
 - a. Teacher note: The main activity may be scaled up for down depending on your grade level and technology access. Please read through the optional extension suggestions below and choose the activity that best meets your needs. The activity may also be completed in partners or groups.

Closure (10 minutes):

- 1. Have students use the rubric to self-evaluate their posters.
- 2. Allow students to present their posters with a focus on what their goal message is and why they think their poster will be effective.

Optional Extensions:

- 1. Use the information learned from the series of Piping Plover lessons to educate younger students by putting on a play about protecting Piping Plovers Nesting Area.
- 2. Create a video that can be shared on the Sleeping Bear Dunes National Lakeshore YouTube challenge about protecting Piping Plover on the beaches.
- 3. Create a brochure to educate the public about Piping Plovers and protecting their nesting areas on the beach.
- 4. Have students write a story about an individual Plover's Journey. Use http://www.greatlakespipingplover.org/plover-stories as a reference for individual Piping Plover's stories.
- 5. Send scans or pictures of posters to slbe_education@nps.gov and they can be posted in the gallery on the Sleeping Bear Dunes National Lakeshore's website

Additional Tasks to Explore:

Piping Plovers



Sleeping Bear Dunes National Lakeshore – Post-Program Lesson Plan

<u>https://scistarter.com/finder-</u> Use this link to find a local citizen science project for students to engage in.

<u>http://www.greatlakespipingplover.org/plover-stories</u> - This site tells individual Piping Plover's stories.