

PROTECTING EARTH'S ECOSYSTEMS

Grade Level	Ideal for 5 th grade Appropriate for ages 10-12	
Exhibition	<i>Abbot Hall of Conservation</i> <i>Restoring Earth</i>	
Time	1 hour	

Overview

In this exploration, students will investigate ways in which Field Museum scientists work with community members to promote healthy ecosystems and human societies. Students will analyze the methods used to address environmental issues and will then design their own strategies to protect local ecosystems.

Guiding Questions

What are some methods scientists and communities use to promote healthy ecosystems and human societies?

What are the benefits of practicing environmental conservation?

What can you do to support local environmental conservation efforts?

Key Words

Environmental Conservation - the protection of natural ecosystems and human societies

Habitat - the place where a plant or animal naturally lives or grows

Connections to Standards

Next Generation Science Standard

Disciplinary Core Idea ESS3.C: Human Impacts on Earth Systems

Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1)

Next Generation Science Standard

Disciplinary Core Idea ETS1.B: Developing Possible Solutions

Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. (3-5-ETS1-2)

Trip Tip: When students first enter an exhibition, encourage them to look around freely before asking them to concentrate on completing this guide. Becoming familiar with their learning space will help students focus.

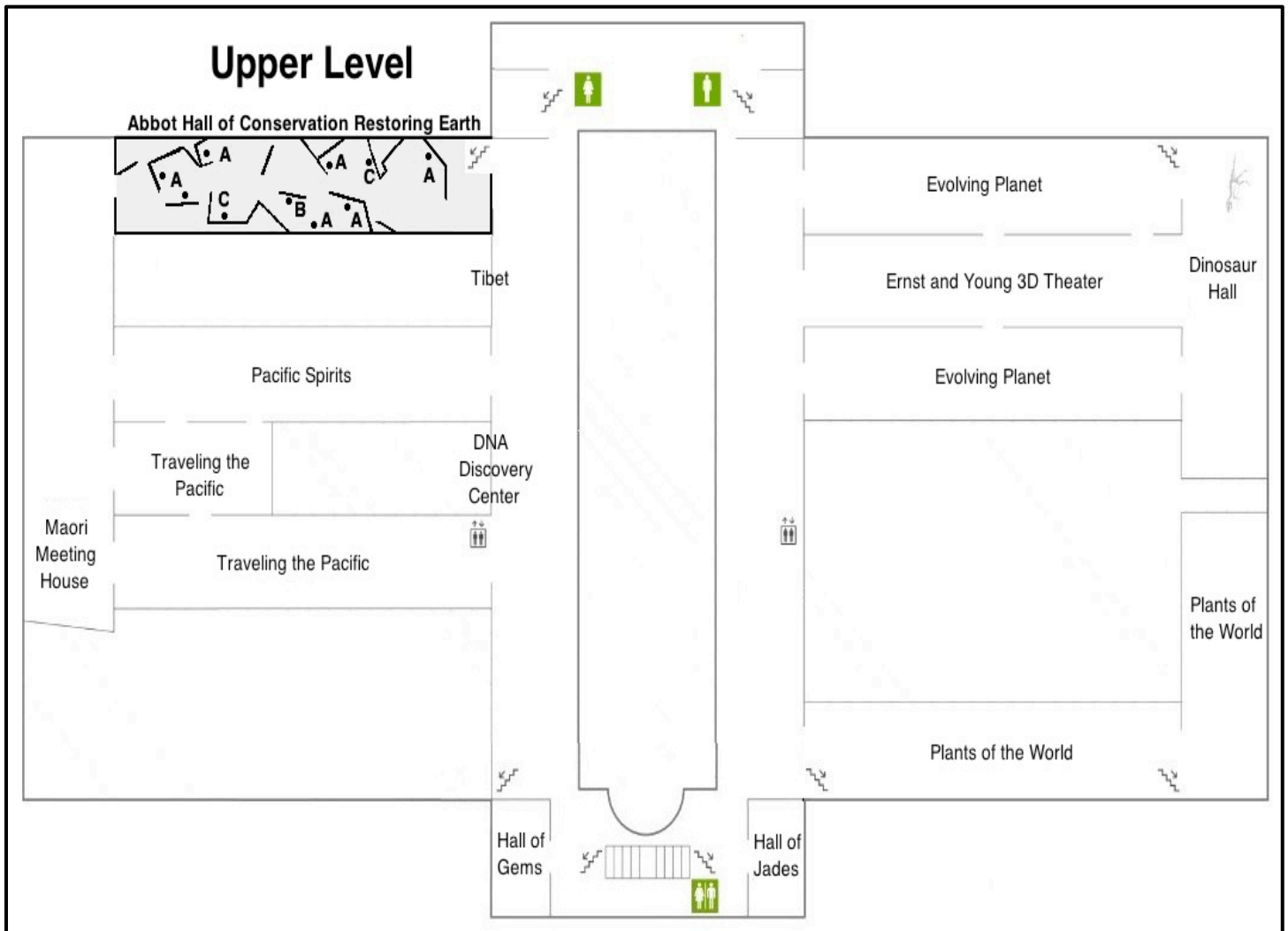
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Chaperone Guide

Map

Exhibition:

Abbot Hall of Conservation Restoring Earth (Upper Level)



If you have extra time, visit these related exhibitions:

Messages from the Wilderness (Main Level)

Evolving Planet (Upper Level)

Plants of the World (Upper Level)

Ronald and Christina Gidwitz Hall Of Birds (Main Level)

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Chaperone Guide

PROTECTING EARTH'S ECOSYSTEMS

Student Guide

NAME _____

Think (before you explore)

Imagine that during lunchtime at school you notice that most students throw their plastic water or soda bottles in the garbage. Why is this a problem? What is something you could do to change this?

At The Field Museum you will explore ways scientists and communities work together to protect and promote healthy ecosystems and societies.

Observe and Explain (in the exhibition) – Part A

Travel to the **Abbot Hall of Conservation Restoring Earth** exhibition located on the **Upper Level**.

a. There are 20 movies that play on 7 screens in the exhibition. **Watch** two or more of these movies to answer the prompts below.

b. List three things that scientists or community members do to protect and promote healthy ecosystems and human societies:

1. _____
2. _____
3. _____

Observe and Explain (in the exhibition) – Part B

Find the black case titled **Agriculture, Maintaining Forests, or Logging?**

Fill in the chart below by adjusting the knobs to match the **Highland** column. Then choose a **Midland** setting. **"Make it Rain"** and record your observations in the last column.

Highland	Midland	How does this affect the lowland?
Forest		
Logging		
Agriculture		

Talk about it! To reduce erosion and flooding in the lowlands, how should the midland and highland be used? Tell a friend what you think.

Trip Tip: Before you begin, find a bench or a spot on the floor. Give the students an overview of this activity and ask them the **Think** questions.

Trip Tip: Encourage students to walk around the entire exhibition before deciding which movies to watch. You can access all of the movies from this exhibition at: restoringearth.fieldmuseum.org/media.html

Trip Tip: About 5 to 7 students can explore this interactive at a time. Ask students to complete **Part C** while they are waiting for other groups to complete **Part B**.

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Chaperone Guide

Observe and Explain (in the exhibition) – Part C

Now, read about other stories of conservation.

Find the following scenarios within the exhibition, and complete the chart below.

The Majuna and the Aguaje Palm	Issue: What were scientists' concerns in this area?	
	Action: What change was made to improve the situation?	
	Results: What happened?	
Birds Migrating Through Chicago	Issue: What were scientists' concerns in this area?	
	Action: What change was made to improve the situation?	
	Results: What happened?	

Location Tip: This story is located just past the large movie screening area at the front of the exhibition. See the **Chaperone Guide Map**.

Location Tip: This story is located towards the back of the exhibition. See the **Chaperone Guide Map**.

Share and Compare (after you explore)

Think about an issue that affects the natural environment around your school or neighborhood. Below, describe the issue and ways that you can get involved.

The issue:	
I can be a part of the solution by:	
I can make others aware of this issue by:	
I might run into these challenges:	

For more information and to learn how you can become involved in local conservation efforts, visit: fieldmuseum.org/explore/department/ecco/get-involved

Trip Tip: In small groups, have students identify issues and possible solutions in the **Share and Compare** activity. Depending on time, this part can be completed in the exhibition or back in the classroom.

Trip Tip: To explore ways to get involved in local conservation efforts, visit: fieldmuseum.org/explore/department/ecco/get-involved

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