

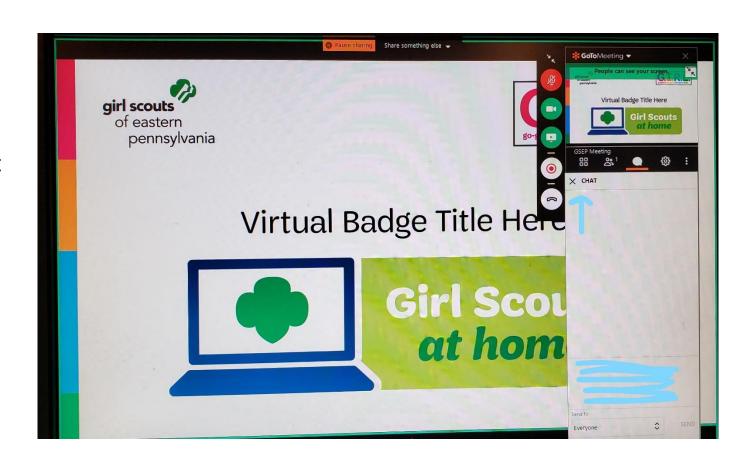


# Eco Explorer



# How will this Virtual Troop Meeting Work?

- On the right side of your screen, there is a control panel. You should see a microphone, a video camera and a chat bubble.
- When we sing together, you will want to click on your microphone so it is green. Then everyone will be able to hear you.
- If you have a webcam, clicking on it will let everyone else in the meeting see you too.
- The Chat Log looks like a cartoon thought bubble...see it underlined in red? You can type questions or comments into the chat log and everyone will be able to see what you write!



### Girl Scout Promise & Law

#### **Girl Scout Promise**

On my honor,
I will try, to serve God,
and my country, to help
people at all times,
and to live by the Girl
Scout Law.



#### **Girl Scout Law**

I will do my best, to be honest and fair, friendly and helpful, considerate and caring, courageous and strong, responsible for what I say and do, to respect myself and others, respect authority, use resources wisely, make the world a better place and be a sister to every Girl Scout.



Today we will be working on steps 1 to 3 of the badge requirements.

Step 1. Meet an Eco Explorer
Step 2. Explore Biodiversity
Step 3. Investigate a global
ecosystem issue

To receive the badge you will be required to complete two additional steps. The details will be provided in the post workshop email.

### Eco Explorer

Welcome Senior to the Eco Explorer Virtual Badge. In five small steps you can learn how you can make a big impact on the future of the world.

Let's start with a little science.



### Ecosystem

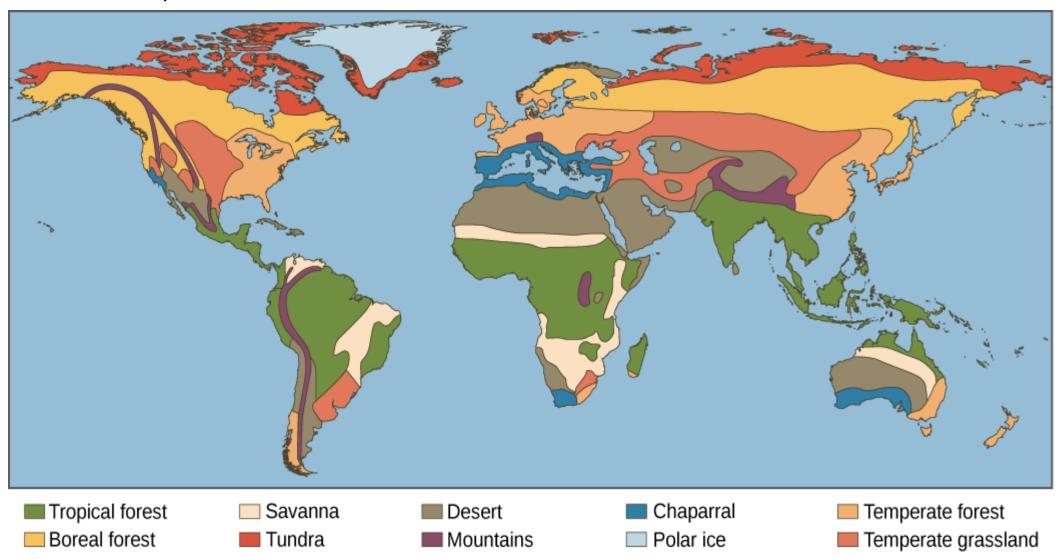
An ecosystem consists of a community of organisms together with their physical environment.

• Ecosystems can be small, such as the tide pools found near the rocky shores of many oceans

Or very large, such as the Amazon Rainforest in South America.



Ecosystems can be grouped into broad categories called *biomes*. The map below shows the broad distribution of biomes on Earth.



# **Abiotic vs Biotic**

**Abiotic** 

Sunlight
Soil
Non Living Things
Climate
Temperature
Humidity
Minerals
Water

Biotic factors rely on Abiotic factors to survive **Biotic** 

Living Things
Animals
Phytoplankton
Plants
Microbes
Fungi
Bacteria

An ecosystem can be divided into two parts.

Abiotic and Biotic

Linking these parts together are two major forces: the flow of energy and the cycling of nutrients within the ecosystem



Meet some Eco Explorers

Sylvia Earle

## 2. Let's explore Biodiversity.

### Biodiversity

What is biodiversity and why is it important?

Biodiversity is the variety of life in a particular habitat or ecosystem where each species, no matter how small, all have an important role to play

Imagine if we only had grapes for lunch everyday. It would get boring. With biodiversity we get a larger variety of fruits to eat.



#### Biodiversity includes three main types:

Diversity within Species (Genetic Diversity)

Diversity Between Species (Species Diversity)

Between ecosystems (Ecosystem Diversity)















3. Let's explore an ecosystem and one of the issues effecting it today.

# What could go wrong?



The Leatherback sea turtle's main diet is Jellyfish.











The plastic bag is wrapped around the turtle's neck.

These ropes are wrapped around the turtle's neck arms and legs.

This is a plastic fork stuck in the turtle's nose.



# Upcycling!









Now its your turn.

Steps 4 and 5 of this badge are for you to explore the issues effecting an ecosystem today and to present it to your community. More details will be provided in the post workshop email.

Thanks for joining us today! Remember to use your resources wisely and recycle. Think before you grab that plastic bottle.



We must all work together to make the world a better place.