

ACTIVITY

spectrum of habitats

overview

Ecosystems all over the world are under threat due to human activity. This exercise will familiarize students with a range of biomes, initiate discussion about the biomes and the threats they face, and ask students to consider possible solutions.

Nine biomes are featured on these materials from the Hall of Biodiversity's *Habitat Video Wall*:

- tundra
- deserts
- temperate boreal forests
- tropical forests
- grasslands and savannas
- coral reefs and coastal wetlands
- freshwater wetlands, rivers, and lakes
- oceans
- islands

The global distribution of each biome is shown on a map of the world. Human threats to the biome are written in red on the map. Accompanying text provides information on global percentage coverage, ways in which the ecosystem benefits humans and other species, and a description of the biome that includes information about the animal and plant life it supports.

1. Investigate a biome

Lead a brief discussion to define the term biome (entire communities of interacting organisms in a single major ecological region). Brainstorm examples. (Use the list above as a guide.)

Divide the class into pairs. Download copies of the biome maps and distribute one map to each pair of students. Ask students, working with their partners, to:

- read the text and look closely at the map showing biome distribution
- compile a list of three pieces of information about the biome that are new to them
- list three concerns they have about the health and future of the biome
- come up with a possible solution that might alleviate human impact on this biome

Ask pairs to present their work to the rest of the class. Keep a list of possible solutions for each biome.

As an extension, students may investigate changes in the biome over time. What did it look like 50 years ago? One hundred years ago? What might they predict for the future, based on their knowledge of possible solutions?

2. Biomes of the U.S.

Provide students with blank maps of the United States. Working with the same partner and working on the same biome, ask them to:

- map the U.S. distribution of the biome
- using books and the Internet, find out about threats to the biome in the U.S.
- gather as much information as they can about solutions that people have come up with
- compare their U.S. biome to a similar biome in another country. What are the differences/similarities? How comparable are the threats to and/or solutions for each biome?
- suggest additional solutions

3. Local biome

Encourage students to learn about their local environment:

- what is their local biome(s)?
- where can they find evidence of it?
- what kind of threats does it face?

Arrange a field trip to investigate a local ecosystem. If possible, invite an expert to come along, someone with knowledge of the local flora and fauna: a graduate student from a local college, an informed parent or grandparent, a local scientist, a staff member from a nearby museum or science center.

As a class project, challenge students to find out about environmental projects to preserve their local ecosystem. Get involved in one of these projects as a class, or encourage students to get involved in a project that interests them.