

ACTIVITY

solutions

overview

The text and graphics from the *Transformation of the Biosphere Wall* in the Hall of Biodiversity provide information about the negative ways in which humans have changed their environment.

Use this activity with the *Transformation of the Biosphere Wall* graphics online. An interactive shows the uneven global distribution of population and consumption. Threats to the world's biodiversity are presented:

- urbanization and agriculture
- overfishing
- introduced species
- damage to soils and freshwater
- global environmental change: acid rain; marine oil pollution; air pollution; coastal flooding
- deforestation

The effects these issues have on human health and human cultures are discussed. The information available includes maps, many of which show historical changes.

Ask students to work in pairs or groups of three. Invite them to choose an issue from the list above that interests them. They should:

- read the information on the issue and study the maps
- write three sentences about how the issue has changed over time
- compare the effects on different parts of the world
- summarize their observations in a paragraph

When they have finished the task, students should share this work with the rest of the class.

Working in the same groups and concentrating on U.S. examples, students should research one concrete example of the issue. Ask them to:

- investigate and list the ways in which the issue has affected the environment they chose
- find out about ways that people dealt with this issue 50 years ago. Why did they come up with the solutions they did? What were the different factors they had to consider in finding solutions? Did they always turn out to be good solutions?
- research who is looking for solutions to this problem today and what kind of solutions they have come up with
- come up with an additional solution of their own

Students should present their work to the rest of the class, focusing on the history of the issue in the U.S. and the complexity of finding solutions to problems.