

THE AMAZON: PARADISE LOST PART I



#3429

OPEN-CAPTIONED
BENCHMARK MEDIA

1997

Grade Levels: 9-13+

27 minutes

DESCRIPTION

Brazil's economic problems have encouraged the destruction of the Amazon River forests. Discusses reasons for clearing and burning the rain forest, its impact on the native populations, and speculates about its global effect. Also examines the unregulated gold rush along the Amazon and its tributaries and the effect mercury waste has in the river. Experts offer opinions and warnings.

Subject Area: Science

- Standard: Understands how species depend on one another and on the environment for survival
 - Benchmark: Knows ways in which humans can modify ecosystems and cause irreversible effects (e.g., human population growth, technology, and consumption; human destruction of habitats through direct harvesting, pollution, and atmospheric changes) (See Instructional Goal #3)
 - Benchmark: Knows relationships that exist among organisms in food chains and food webs (See Instructional Goal #3)

Subject Area: Geography

- Standard: Understands how physical systems affect human systems
 - Benchmark: Understands relationships between population density and environmental quality (e.g., resource distribution, rainfall, temperature, soil fertility, landform relief, carrying capacity) (See Instructional Goal #3)
- Standard: Understands global development and environmental issues
 - Benchmark: Understands the concept of sustainable development and its effects in a variety of situations (e.g., toward cutting the rain forests in Indonesia in response to a demand for lumber in foreign markets, or mining the rare sands along the coast of eastern Australia near the Great Barrier Reef) (See Instructional Goals #1, #2, and #4)
 - Benchmark: Understands why policies should be designed to guide the use and management of Earth's resources and to reflect multiple points of view (e.g., the inequities of access to resources, political and economic power in developing countries, the impact of a natural disaster on a developed country vs. a developing country) (See Instructional Goals #3 and #4)
 - Benchmark: Understands contemporary issues in terms of Earth's physical and human systems (e.g., the processes of land degradation and desertification, the consequences of population growth or decline in a developed economy, the consequences of a world temperature increase) (See Instructional Goals #3 and #4)

INSTRUCTIONAL GOALS

1. To study reasons the Amazon tropical rain forest is being destroyed.
2. To examine the reasons the Amazon River is being poisoned.
3. To present the effects of that destruction on the Amazonian ecosystem, on the health of its inhabitants, and on the global atmosphere.
4. To stimulate discussion of alternative forest management, conservation policies, and solutions to the Brazilian economic problems.

VOCABULARY

1. greenhouse effect
2. deforestation
3. fossil fuel
4. extinct
5. species
6. pharmacological
7. prospectors
8. feudal lord
9. regulated, regulation, unregulated
10. toxic
11. contamination
12. ecosystem

BEFORE SHOWING

1. On a map, locate Brazil and the Amazon. Identify the country's natural resources and climate. Estimate its population.
2. Discuss environmental concerns.
 - a. What have people done to cause environmental problems?
 - b. In the past, why have people done things to damage the environment?
 - c. Why do people continue to do things to damage the environment?
 - d. What have people done to slow down or reverse environmental damage?

DURING SHOWING

Discussion Items and Questions

1. View the video more than once, with one showing uninterrupted.
2. Pause the video to answer onscreen quiz questions and to discuss onscreen facts.
3. Rank the following statements in the order of importance. Discuss the different priorities.
 - a. The destruction of the Amazon tropical rain forest is of major concern.
 - b. The Amazon River's pollution from gold mining is of major concern.
 - c. The consequent global warming from the destruction of the Amazon tropical rain forest is of major concern.
4. Who is responsible for solving the problems of the Amazon River and the Amazon tropical rain forest?

AFTER SHOWING

Discussion Items and Questions

1. Discuss the beauty and riches in the Amazon.
 - a. What plants grow in the Amazon?
 - b. What animals live in the Amazon?
 - c. What is the value of the natural resources in the Amazon?
 - d. What are the seasons in the Amazon?
2. Discuss the problems in the Amazon.
 - a. Why are farmers and settlers burning down the rain forest in the region?

- b. At the current rate of deforestation, how long will the Amazon tropical rain forest last?
 - c. Why is the burning of the Amazon rain forest a hazard for the entire planet?
 - d. Why is the Amazon ablaze day and night?
 - e. Why is the number of species that will become extinct with the loss of the rain forest a serious problem?
 - f. What are the potential uses for humanity of the rain forest's plants and animals?
 - g. How do gambling and "easy money" related to gold mining contribute to the Amazon's problem?
3. Describe the two processes of gold mining in the Amazon.
 - a. List the risks involved in gold mining.
 - b. Decide if the risks are worth the end result.
 - c. Evaluate the effects of gold mining on the environment.
 4. Discuss the possible solutions in the Amazon.
 - a. Can the Amazon be saved or is this paradise lost?
 - b. What are the needs of the cattle ranchers?
 - c. How can the Brazilian government pay off its huge foreign debt?
 - d. What are the transportation needs of Brazil?
 - e. How does the increase in Brazilian population influence what happens in the Amazon?
 - f. What has been done to discourage deforestation?
 - g. How effective is the decision to grant rubber tappers a large reserve?
 - h. What regulations of deforestation and gold mining are needed? How could they be enforced?
 - i. Should the United Nations have an environmental peacekeeping force?

Applications and Activities

1. Imagine living in Brazil and obtain information to answer the following questions.
 - a. As a Brazilian citizen, how does the deforestation of the Amazon tropical rain forest and gold mining influence daily life?
 - b. What is the cost of living? What job opportunities are available?
 - c. How important is modernization (highways, running water, electricity, indoor plumbing, reliable transportation) to daily life?
 - d. What is the difference between deliberate simple living and poverty?
2. Plan a trip to Brazil.
 - a. Consider the effects of tourism on the environment.
 - b. Plan how to have uncontaminated food and water.
 - c. Arrange to visit points of environmental interest.
3. Research related topics.
 - a. Argue for and against the existence of the greenhouse effect.
 - b. Compare the current Amazon gold rush with the California Gold Rush in the 1800s.
 - c. Investigate the life of Chico Mendez.
 - d. Determine if environmental factors influenced decisions to give Native Americans reservations in the United States. Compare with giving the rubber tappers reserves in Brazil.
 - e. Investigate the discoveries of penicillin and aspirin. Hypothesize what life would be like without them.
5. Research Minamata disease.
 - a. Why is this disease named after Minamata, Japan?
 - b. What is the treatment for the disease?
 - c. How big a health problem may this become for Brazilians and for people living outside Brazil?

- d. How could mercury enter the food chain?
 - e. How does bacteria transform mercury into an organic form?
 - f. How does the Brazilian government enforce the ban on mercury?
4. Create a plan for solving the problems in Brazil.
 - a. Using the rubber tappers as an example, consider how the economic riches can be coaxed, rather than bulldozed, out of the Amazon.
 - b. What responsibility should feudal lords like Big Joe have in solving the Amazon's problems?
 - c. Debate the benefits of involving those people directly affected by environmental decisions in making the policies.
 - d. Debate the following quotes:
 - (1) "I think that . . . the pollution is going to stop when they run out of gold deposits which are economically feasible to mine."
 - (2) "If you don't stand for something, you'll fall for anything."
 5. Decide who is responsible for solving the problems in the Amazon.
 - a. Why are all of the experts on the video male?
 - b. What is the Amazon Research Institute? What is their bias? Who disagrees with them?
 - c. Why do ecologists, biologists, and anthropologists care about what is happening in the Amazon?
 - d. Who has legal right to the Amazon?
 6. Devise ways that any viewer may contribute to solving the Amazon problems.
 - a. What products could be boycotted?
 - b. How would planting trees offset the rain forest deforestation?
 - c. What organizations are actively working to preserve the Amazon?
 - d. What organizations are actively working to improve Brazilian citizens' quality of life?
 - e. What can be done to educate more people in and out of Brazil about the problems and solutions relating to the rain forest?
 - f. What career paths could be pursued to benefit the environment?
 7. Survey the local community to find what people know about the Amazon, what they are already doing to help, and what they would be willing to do to help.
 8. Plan a day to highlight the Amazon rain forest problems and solutions so that everyone can participate in helping to solve the problem.
 9. Write a letter from or a diary entry by the following Amazon characters:
 - a. land gold miner
 - b. water-based gold prospector
 - c. diver for Amazon gold
 - d. a child living in a Amazon gold-mining floating "town"
 - e. Amazon Research Institute employee
 - f. biologist
 - g. anthropologist
 - h. politician
 - i. Amazon rain forest settler
 - j. cattle rancher
 - k. logger
 - l. rubber tapper
 - m. Big Joe
 - n. Chico Mendez
 - o. Brazilian government official responsible for enforcing the ban on mercury

10. Apply the following quote to the rain forest problems: “If you don’t stand for something, you’ll fall for anything.”

RELATED RESOURCES

Captioned Media Program

- Brazil #2455
- South America: Brazil and the Northern Countries #2581
- Buying a Rainforest #3016
- Orang-utan: The Man of the Forest #3064
- Goldrush and the Settlement of California #2481
- Rachel Carson’s Silent Spring #3287

World Wide Web

The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and “kid-safe” sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

- RAIN FOREST MATERIALS <http://www.bcrescue.org/mainlinks.html>

Contains several articles about rain forests and their ecology and links to other sites focusing on rain forest flora, fauna, conservation, and ecology.

- MYSTIC RAIN FORESTS <http://www.geocities.com/RainForest/Vines/1009/main.htm>

Inviting visuals and easy navigation, including frequently asked questions and links to other sites.

- THE BEST OF RAIN FOREST <http://www.geocities.com/RainForest/9900/topof/>

The Best of the Rainforest links recommended by The Mining Company.

- ZOOM RAIN FORESTS <http://www.zoomdinosaurs.com/subjects/rainforest>

Coverage from Disney. Excellent color graphics. Very kid-friendly. Offers sophisticated coverage in a simple and understandable format.



**PLEASE RETURN LESSON GUIDE
WITH VIDEO**

**Lesson guide also available
online at *www.cfv.org***

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