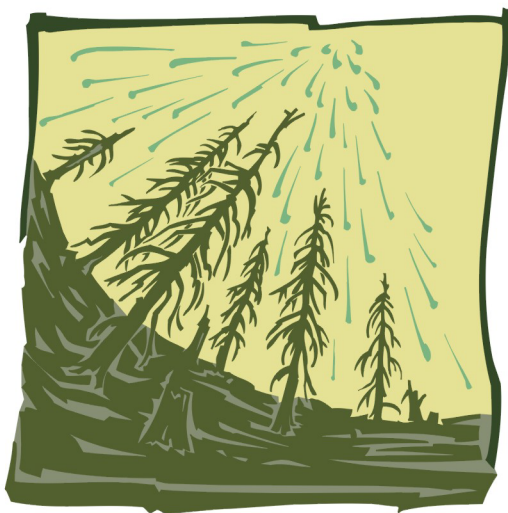


THE AMAZON: PARADISE LOST PART II



#3430

OPEN-CAPTIONED
BENCHMARK MEDIA

1997

Grade Levels: 9-13+

23 minutes

DESCRIPTION

Examines factors which threaten Amazon tribes, such as colonizing settlers, the gold rush, disease, the iron ore industry, and deforestation. Experts offer opinions and suggestions to finding a balance between economic development and environmental destruction. Brazil's enormous debt and the theme of national sovereignty are driving forces behind clearing the Amazon rain forests.

ACADEMIC STANDARDS

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 Goals #1 and #2)
 - Benchmark: Knows relationships that exist among organisms in food chains and food webs (See Instructional Goals #1 and #2)

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 Goals #1 and #2)
- 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 rutile sands along the coast of eastern Australia near the Great Barrier Reef) (See Instructional Goals #1, #2, and #3)
 - 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 #1, #2, and #3)
 - 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 #1, #2, and #3)

INSTRUCTIONAL GOALS

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

VOCABULARY

1. industrialization, industrial
2. genocide
3. encroachment
4. ethnobiologist
5. indigenous
6. habitat
7. charcoal
8. smelter
9. commercial forests
10. hectares
11. national sovereignty
12. poacher
13. extinct
14. recalcitrant
15. transmitter
16. speculation
17. sustainable systems
18. genetic stock
19. pharmacological
20. subversives

BEFORE SHOWING

1. Locate the Amazon on a map.
 - a. What are the natural resources of Brazil?
 - b. What is the population of Brazil?
 - c. What is Brazil's climate?
 - d. What is the size of the Amazon rain forest?
2. Discuss environmental concerns.
 - a. What have people done to cause environmental problems?
 - b. How have Western governments and citizens been running the world's environment for the past several centuries?
 - 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. Pause the video to answer onscreen quiz questions and to discuss onscreen facts.
2. View the video more than once, with one showing uninterrupted.
3. Rank the following items in the order of importance:
 - a. the Brazilian government's debt
 - b. the indigenous people's ways of life

- c. the Brazilian people's right to earn a living through cattle ranching, iron mining, and charcoal production
- d. the biodiversity of the Amazon rain forest

AFTER SHOWING

Discussion Items and Questions

1. Discuss the biological resources of the Amazon.
 - a. Describe crocodiles in the Amazon.
 - b. Describe the relationship of crocodiles to other Amazon animals.
2. Discuss the problems in the Amazon.
 - a. Debate if the alternatives in the Amazon are planned development or destruction.
 - b. Determine how national sovereignty has exacerbated the Amazon problems.
 - c. Contrast the immediate benefits of deforestation with the long-term consequences.
 - d. Debate whether in the long term there is more money in preserving the rain forests than in deforestation.
 - e. Consider the reasons Brazilians may be sacrificing the long-term productivity in the Amazon for a few years of quick profit.
 - f. How much time is available to revise the economic system to maintain the forest?
3. Discuss the indigenous peoples in the Amazon.
 - a. List ways that the indigenous peoples of the Amazon area are being affected by development.
 - b. Consider the effects of the gold rush on the Amazon and its indigenous peoples.
4. Discuss industry in the Amazon.
 - a. What is the function of railroads in the Amazon?
 - b. How is iron mined?
 - c. How is charcoal produced?
 - d. What is the relationship between charcoal and pig iron production in the Amazon?
 - e. How do hydroelectric dams influence the Amazon?
 - f. If iron mining and smelting remain unchecked for 250 years, what will happen to the Amazon?
5. Discuss general solutions to problems in the Amazon.
 - a. What can be done to protect the environment?
 - (1) How could Brazilian laws that protect the environment be enforced?
 - (2) What would be the benefits of putting heavy taxes on the profits from reselling lands?
 - (3) How would the government's decision not to accept cattle pasture as a claim to land slow deforestation?
 - (4) What are *sustainable systems* and how can the government favor them?
 - b. What can be done to provide needed economic development?
 - (1) What is the value of commercial forests?
 - (2) How could resource management financially enrich Brazil?
 - c. How can a balance be found between economic development and environmental conservation?
 - (1) What are the chances of getting wildlife to live in harmony with human beings?
 - (2) How can Brazil maintain the natural resource base of the Amazon?
6. Discuss the roles that different groups have in solutions to problems in the Amazon.
 - a. How have American newspapers influenced Brazil?
 - b. What role do children play in conservation efforts?
 - c. How have the indigenous peoples of the Amazon worked for their civil and land rights?

- d. How do the indigenous peoples use, conserve, and increase the wealth of the forest?
 - e. What steps has the Brazilian government taken to slow the degradation?
 - f. How does the fact that Brazil has a democracy influence solving the problems in the Amazon?
7. Discuss the role of biologists in solving environment and economic problems in the Amazon.
- a. In what vital statistics are biologists interested?
 - b. How do biologists check an animal's progress?
 - c. What are the risks for an Amazon biologist?
 - d. What is a biologist's role in natural resource management?
 - e. What kind of information is biologist Bill Magnusson hoping to provide to the government and businesspeople?
 - f. Why would resource management focus on managing money and people rather than animals?

Applications and Activities

1. Imagine living in Brazil.
 - a. As a Brazilian citizen, how would 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? What are the unemployment and poverty rates?
 - c. How important would modernization such as highways, running water, electricity, indoor plumbing, and reliable transportation be 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.
 - d. Plan visits to historic and contemporary places of importance to Brazil's indigenous people.
3. Research related topics.
 - a. Compare biologist Bill Magnusson and "Crocodile Dundee."
 - b. Investigate the training required to do the work of biologists in ecosystems throughout the world.
 - c. Consider the role that children have played in other movements: the Nazi regime, the Chinese Cultural Revolution, and the acceptance of diversity.
 - (1) What is the difference between education and propaganda?
 - (2) Whose decision is it what children should be taught in schools?
 - d. Compare the histories of the indigenous peoples in Brazil and in the United States of America.
 - e. Investigate the influence of dams on ecosystems around the world.
 - f. Differentiate between the effects of pneumonia on the indigenous peoples of Brazil and the effect of smallpox on the indigenous peoples in North America.
 - g. Identify ways that native people have for centuries been preserving their natural habitats throughout the world. Include modern and historic methods.
 - h. How does the colonization of the Amazon differ from the historical colonization of the United States of America?
4. Create a plan for solving the problems in Brazil.
 - a. Consider the influence of journalists and biologists.
 - b. Recommend ways to continue economic development and colonization with reduced impact on the environment. Include use of indigenous knowledge and natural resources.

- c. Hypothesize alternative models and ideas about how to utilize, manage, and conserve natural resources, including animals, plants, and soil systems.
- d. Recommend alternate fuel sources that could be used to convert iron to pig iron.
- e. Investigate the feasibility of commercial forests.
- f. Imagine ways to reduce the Brazilian national debt.
- g. Devise alternate ways of turning a profit from the forest without burning it down.
5. Imagine that the United States of America has not been colonized or developed.
 - a. Plan colonization of the United States. Consider natural resources, indigenous peoples and the need for economic development.
 - b. Devise an advertising campaign to recruit settlers.
6. Debate the following quotes.
 - a. "I wouldn't have anybody killing anything but that's not realistic."
 - b. "... the further you are from people, generally, the safer you are."
 - c. "The developed countries who destroyed everything that they had that was beautiful; but they destroyed it to put in another system. . . . we've got beautiful things from technology."
 - d. "The . . . complete destruction [of the rain forest] is still far from inevitable."
 - e. "[Children] . . . have a very superficial view of the problem."
7. Write a newspaper editorial entitled, "The Amazon is Ours" from the following viewpoints:
 - a. a Brazilian who believes in national sovereignty
 - b. a Brazilian environmentalist
 - c. a non-Brazilian environmentalist
 - d. a Brazilian child
 - e. a Brazilian indigenous tribal leader

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
- Vertebrates: Reptiles (Revised) #2334
- Inquiring Into Life #2189
- Rachel Carson's Silent Spring #3287
- What is Biology? #3533

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 RAINFORESTS <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 RAINFOREST <http://www.geocities.com/RainForest/9900/topof/>

“The Best of Rainforest” links recommended by The Mining Company.

- ZOOM RAINFORESTS <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***

National Initiatives Team

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