

The Degradation of the Rainforests

STEP 1 – QUESTION ANALYSIS

Questions concerning the degradation of the rainforests include: Why is rainforest degradation occurring? How much of the rainforest is in danger? Where is the largest deforestation occurring? What will happen to plant and animal species if deforestation continues to occur? What is being done to stop it? What are the long-term global concerns of deforestation? Who is causing deforestation to happen?

I searched the Library of Congress Subject Heading Index to find search terms that might be useful in locating information on the degradation of the rainforest. I used two words and looked up terms for each. For “rainforests,” I found as a broad term: forests and forestry; as a narrow term: rainforest – tropics, tropical rainforests, and rainforests; and as a related term: cloud forests. For “rainforest conservation,” I found as a broad term: forest conservation; as a used for term: rainforest conservation – tropics.

Synonyms found for the term “deforestation” include: clear cutting, denuding, and desertification. Synonyms for the term “degradation” include: extinction, destruction, annihilation and termination. The synonyms for “rainforests” include: tropical rainforests, Amazonian rainforest, and Brazilian rainforest.

STEP 2 – INFORMAL INTERVIEWS

In order to get a better understanding of what the general public knows about the deforestation of the rainforests, I conducted three informal interviews. I questioned three

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family members to find out what they knew about the degradation of the rainforests and its long-term effects on the world.

The first interview I conducted was with my sister, Melissa Garza. She is 28 and is a technology consultant for community banks. She knew that deforestation was a by-product of development and thought that 75 percent of the rainforests are in danger. She understands that plant and animal species will become extinct if something is not done soon. She believes that the governments in the countries where deforestation is occurring will protect the land. She also knows that the degradation of the rainforests will result in global warming, loss of oxygen and loss of species. She thinks that large corporations and developers are causing the most deforestation.

The next interviewee, my husband, Derrick Laiche, is 31 and is an MRI technician. He thinks that the deforestation has something to do with overpopulation. He believes 70 percent of the rainforest is in danger and thinks that plants and animals will be displaced, causing extinction. He also believes that nothing is really being done to stop it. He thinks that some global ramifications include too much carbon-dioxide being given off. He blames large corporations, especially illegal and legal logging companies, for the deforestation.

The final interview I conducted was with my mother, Patricia Garza, 50. She believes that large corporations are using the rainforests' resources for financial gain. She believes only 50 percent is in danger and that the Amazonian rainforest is in the most danger. She does not think that the species will survive. She thinks that different programs implemented by a small number of corporations and volunteer groups are

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helping to curb deforestation. She thinks that the biggest threat is global warming and loss of species. She thinks that deforestation is a result of the progression of humans.

STEP 3 – LIBRARY ONE STEP SOURCES

I looked up three terms in Random House Webster's Dictionary that I believed would help in my search: rainforest, extinction, and deforestation. Rainforest is defined as a tropical forest, usually of tall, densely growing broadleaved evergreen trees in an

area of high annual rainfall. Extinction is defined as the act of extinguishing.

Deforestation is defined as to divest or clear of forest or trees.

I continued my search by looking up tropical rainforests in the Encyclopedia Britannica. I found an extensive amount of information on the rainforests including facts on the effects on biodiversity and extinction related to the destruction of the rainforests. For example, tropical rainforests, more than any other ecosystem in the world, are experiencing habitat alteration and species extinction on a greater scale than at any other time in history. And not until the past century has widespread destruction of tropical rainforests occurred.

In the World Almanac and Book of Facts 2002 I found many disturbing facts on the deforestation of the world. For example, only one-fifth of the Earth's forest cover from 8,000 years ago remains unfragmented. And most of the surviving rainforests in the far North and the tropics are under threat.

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STEP 3 – LIBRARY TWO STEP SOURCES BOOKS

I accessed the online library catalog for the UHCL and searched for several terms that I thought would be relevant to my research using the search terms I identified in Step One. I first used the subject search to find titles related to “deforestation.” The query returned twelve relevant book titles including two of the books that I checked out: The Brazilian Amazon Rainforest: Global Ecopolitics, Development and Democracy by Luiz C. Barbosa; and Tropical Rainforest: Endangered Environment by John V. Cot.

Using Interlibrary Loan, I checked out two other books: Amazonian Deforestation and Climate edited by J.H.C. Gash and Blowing in the Wind: Deforestation and Long-Range Implications by V.H.N Sutlive, N. Altshuler, and M.D. Zamor.

NEWSPAPERS

I continued my quest for information via the Lexis Nexis Academic Universe database where I found several newspaper articles related to the deforestation of the rainforests in *The New York Times*, *Washington Post* and *USA Today*. The search terms used in these searches included deforestation and rainforests.

I found two articles from *The New York Times* in the Lexis Nexis database. (I know I was only required to find one.) The first was a Nov. 21, 2003, article by Larry Rohter. It discussed how the environmental movement that was supposed to take place with the election of Brazil's new President Luiz Inacio Lula da Silva in October 2002 has fallen by the wayside, causing environmentalists to call for his environmental minister's resignation. The second article was in the June 28, 2003, issue and was written by Tony Smith. This article discussed how satellite photos are showing that the Amazonian

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rainforest is disappearing at an alarming rate.

I also found an article from *The New York Times* on microfilm. It was an Oct. 11, 2000, article written by Larry Rother and talked about how the burning season in the Amazon had come earlier than the September start date. The burning, done by landowners, is done in order to make room for ranching and soybean farming. I used the book index to find the article on microfilm, and used the microfilm machine to print the article.

The next newspaper I found an article in was the *Washington Post*. This March 6, 2003, article, by Jared Diamond, explains why it is in our best interest to help those third-world countries whose citizens must clear their own land for their livelihood, against their better judgment.

In *USA Today* I found a Sept. 15, 1993, article that addresses the fact that multinational companies are trying to preserve natural resources, as well as those that continue to be cited for harmful practices.

PERIODICALS

BUSINESS PERIODICALS

I searched the database **Business Source Premier** for articles from business periodicals. The first article I found was in the magazine *In Business* titled “Buy Eco-friendly” by Delia Montgomery. This article discussed how consumers can buy eco-friendly products in order to curb deforestations.

The second article, found in *Xinhua* magazine titled “The Rainforests of Indonesia” by Anthony Ruffini talks about how Indonesia’s forest have undergone widespread deforestation.

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The third article, found in the *Jakarta Post* magazine titled “Why we should care” by Lewis Simmons discusses the long-term havoc the deforestation of Indonesia will have on the people, bio-diversity and the rest of the environment.

GENERAL INTEREST PERIODICALS

I continued searching the databases for general interest magazine articles in the **Academic Search Premier** database. I found three articles that were helpful in my research. The first article appeared in *Environment* magazine. It was titled “Herding Forests” by Michael Booth. The article discussed how the cattle industry in Brazil is to blame for the wide deforestation in that country.

The second general interest article is from *Environmental Magazine*. It was titled “The Impact of Amazonian Deforestation on Dry Season Rainfall” by Patricia Yates. The article concludes that rainfall occurrence is larger over the deforested and non-forested regions than over areas of dense forests.

The third article I found was written jointly by Eric Lambin and Helmut Geist. This article, published in the July/August 2003 issue of *Environment*, discusses how tropical deforestation varies depending on the region – Africa, Southeast Asia and Latin America.

PEER-REVIEWED ARTICLES

I found the peer-reviewed articles using **Academic Search Premier**. The first article titled “Fragments of the Forest” by Lawrence Patricks was published in the Jul/Aug 1998 issue of *Natural History* magazine. The article provided information

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the annual forest loss in the Brazilian Amazon: causes of forest loss; importance of seed-dispersing animals and pollinating insects on forest plants; causes of the greenhouse effect; and information on how to help save the rainforest.

The second article I found in Dec. 9, 2005, Vol. 310, issue of *Science* magazine. The article was titled “Restoration of Degraded Tropical Forest Landscapes” by David Lamb. The author discussed the current scale of deforestation in tropical regions and how the large areas of degraded lands now present underscore the urgent need for interventions to restore biodiversity, ecological functioning, and the supply of goods and ecological services previously used by poor rural communities. Traditional timber plantations have supplied some goods but have made only minor contributions to fulfilling most of these other objectives. New approaches to reforestation are now emerging, with potential for both overcoming forest degradation and addressing rural poverty.

The third article was titled "The Case for Rainforest Foragers" by Hu Barton from the Spring 2005, Vol. 44, issue of the *Journal of Archeology*. The article focused on matters related to *rainforest* foragers. The nature of hunter-gatherer occupation patterns and subsistence practices within the tropics is currently poorly understood. Finding the "hard evidence" of human occupation within *rainforest* presents many difficulties because sites are difficult to detect and the survival rate of organic material that might shed light on subsistence strategies is extremely low.

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STEP 4 – FORMAL INTERVIEW

I tried to locate many experts on the topic of deforestation, both through the reference books at the library as well as through the Internet sites, databases, books, magazines and newspapers. Unfortunately, I was not as successful as I had hoped to be. But, I did manage to get the two interviews required for this project. My efforts are documented below:

AUTHOR

Name: John Roper
Title: Author of Deforestation: Tropical Rainforests in Decline and a forest conservation consultant.
Method: E-mail
Successful: Yes
Interview: Roper said the world will be a poorer place, more genetically impoverished, with greater soil erosion, more flooding and it will have suffered a major climatic change from the release of carbon-related gases from the burning and decay of forest vegetation.

CONSULTANT IN THE FIELD

Name: Richard Donovan
Title: Chief of Forestry, SmartWood
Method: E-mail
Successful: No
Interview: n/a

Name: Michael Brune
Title: Executive Director of Rainforest Action Network
Method: E-mail
Successful: No
Interview: n/a

INTERNET SOURCE

Name: Glenn Barry
Title: President of Forest.org, Inc., a Web site devoted to reforestation efforts.
Method: E-mail
Successful: No
Interview: n/a

ENCYCLOPEDIA OF ASSOCIATION

Name: Heather ????????

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Title: Volunteer for Greenpeace
Method: Telephone
Successful: No
Interview: n/a

She told me that all of Greenpeace's forestry associates were in Oregon for a forest campaign and would remain there for the entire summer, and there was no one else there who could help me.

Name: Ned Leonard
Title: Director, Greening Earth Society
Method: Telephone
Successful: Yes
Interview: Ned Leonard of the Greening Earth Society has worked to help in the creation of forest reserves here in North America. His organization has helped to make the forests more productive. "This translates to more forest being brought back due to forestation," Leonard said. "Unless we think globally, act locally and take a long-term view, our children's lives and Earth's future are in jeopardy."

GOVERNMENT SOURCE

Name: David Simmons
Title: Director of the Environmental Defense Fund
Method: Telephone
Successful: No
Interview: n/a

STEP 5 – INTERNET

I used three search engines to find information on deforestation: Google, Yahoo and Excite. Through the Google engine, I found three resources related to my topic. The first was an article that had a question and answer section with Michael Brune, the executive director of the Rainforest Action Network. The next resource was from the Rainforest Alliance Web site. It included a list of the directors of the Rainforest Alliance and gave a limited amount of information I thought might be helpful in getting interviews. The third was a fact sheet from the Tropical Rainforest Coalition. And Doe,

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finally, I even found a fourth source from the World Resources site explained the state of the world's forests.

On the Yahoo search engine, I printed three articles, each about deforestation, its causes, and its long-term ramifications including change of climate, loss of rain, and loss of biodiversity. These articles came from the Earth Observatory site, an article on deforestation by Ralph Roberts, and papers written by scholars from Canada and India.

The last engine I searched for information on was Excite. Here I found an article written by John Revington on the causes of tropical deforestation, an article by John Roper, a forest conservation consultant, on Deforestation: Tropical Rainforests in Decline, and a Canadian Web site for CFAN-CIDA Forestry Advisers Network.

STEP 6 – INSTITUTIONAL DATA/SOCIAL DATA

INSTITUTIONAL DATA

Four reference indices that provided helpful contact information are available at the reference desk in the UHCL Neumann Library. The first, the Encyclopedia of Associations, carried information on private associations concerned with protecting the environment including the Greening Earth Society, Greenpeace, U.S. A., and Global Response. Washington Information Directory, allowed me to find information on

government agencies and private associations headquartered in Washington D.C. Here I found contact information for Friends of the Earth, Environmental Defense Fund and the Environmental Protection Agency – each concerned with environmental advocacy. The third source, the U.S. Government Manual gave me more extensive information on the EPA, with names of the directors and administrators as well as the heads of the program

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offices. I used Using Government Information Sources to find written resources as well as electronic databases and resources for the EPA. I was also able to send off for information on public lands and forests in the United States.

SOCIAL DATA

I used the **Lexis Nexis Statistical (Universe) database** to locate statistical data related to my research. I used the search term “deforestation” and found a chart on the deforestation and biodiversity from 1996 to 2000, including the amounts of forest area, average annual deforestation, the number of threatened species and nationally protected areas. I also found a chart on the percentage of change in annual deforestation as well as a chart on the “Global Estimates of Carbon Sequestration Through Land Use and Forestry Activities.” Finally, I copied a chart from the reference book **Statistical Abstract of the United States** (kept behind the reference librarian’s desk) concerning the production, exports and consumption of wood products in different countries from 1990 to 2002.

STEP 7 – SYNTHESIS

In addition to writing this report, I will now write a two- to three-page magazine article as per the requirements for this first research project.