



Queensland News

Rainforest Live

October 6, 1997

Volume 2, Number 3

LINKING CLASSROOMS AROUND THE WORLD TO RESEARCH SITES AROUND THE WORLD

What is the Rainforest Worth?



Chris Habetler
Pomona College
Sept. 24, 1997
Commercial Uses
of the Rainforest

No one is sure how much the rainforest is worth, but one thing is for sure, we couldn't live without it. A place like the rainforest does so many things for the world and many people don't realize it. Things like paper in your notebooks, the wood in your pencils, or the wood in furniture and houses could be made from trees that were cut down from the rainforest. Here, the wood from the trees in the rainforest can be used as fuel for heating water, and plants can be used as food for animals—humans too! So these are ways in which we directly use the forest. Other direct uses might be



utilizing the rubber or coffee from the rainforest. Things like these are easy to put a price on because they are processed and sold and then bought for a price. Also people who go on vacation pay money to visit the rainforest. These are ways the rainforest might make money.

But what about things that the rainforest does for us that are not bought, sold, or processed? Things like oxygen that the plants produce or how the rainforest affects our weather are very important to us—in fact you cannot live without oxygen! Can you put a price on the beauty of the rainforest? Could you put a price tag on the enjoyment you get from walking through the rainforest and seeing the plants and animals found there? Trying to figure out how many dollars these things are worth is almost impossible, but that does not mean they are not valuable, does it?

QUOTABLE QUOTE

“When one tugs at a single thing in nature, [s]he finds it attached to the rest of the world.”

John Muir

So far the rainforest has been found to contain many plants that help heal sick people—like anti-cancer drugs. There are possibly many more cures for diseases in the rainforest that we have not found. Scientists are trying hard to find them and are going as fast as they can, but what we need to do is make sure that the rainforest does not get cut down too quickly. If the scientists have the time they need to explore and do research on rainforest plants then they may be able to find all of the medicine the rainforest holds.

The rainforests of the world have many uses, some we can count in dollars and some, like medicine, satisfaction, and climate, we can't. Such a diverse and valuable place seems like a place worth saving. Who knows what else we might find in the big green treasure chest, we call the rainforest?

EXTRA! EXTRA!

- 9/26** Lectures on Biodiversity and Environmental Policy in Ecotourism. Warrawork and Ultimate Frisbee in the afternoon.
- 9/27** Field Exercise: cassowary survey in the Bartle Frere Area. A couple of students had run-ins with stinging trees.
- 9/28** Hurray! Students day off!
- 9/29** Students conduct cassowary scat surveys and work on DR (directed research) proposal write-ups.
- 9/30** Bird quiz before breakfast. Another field exercise, conducting cassowary scat surveys. Time to work on DR proposal write-ups.
- 10/1** Spent the day working on case study project write-ups.

Student Journals



Mary Spaulding
Bucknell University
Sept. 24, 1997
Cassowary Calls

Today we returned from our three day field trip to Mission Beach. The focus of our trip was to learn more about the endangered cassowary. During our trip we tried to get a cassowary to respond to a recording of a cassowary territorial call. In a real life situation, a cassowary would make a loud noise to proclaim his/her territory. We sat quietly in the rainforest and played this tape very loud. Unfortunately, we did not get a response like we had hoped, but we were experimenting with a new method in hopes of learning more about the cassowary and its behavior.

While we were sitting on the ground waiting to hear or see a cassowary, a skink came out of nowhere and started eating the pesky march flies that were bothering us. I was amazed to see how close this tiny salamander-like creature came to my feet. It was very fascinating to see the skink up close. Later that afternoon we did see two cassowaries—a male and a female together in the rainforest. They were very quiet and slowly moved away when they saw us coming. It was great to finally see two of the creatures we have learned so much about.



Ecy McIlvain
Connecticut College
Sept. 29, 1997
Case Study

The first section of our program is based on a case study about the declining cassowary population in the Wet Tropics. In an effort to assist the Department of Environment in their attempt to protect a cassowary who lives at Lake Barrine, we spent one day last week looking for cassowary scats. The idea is that we will be able to determine the cassowary's regular hangouts and the components of his diet by examining his scat.

We were paired up and sent out to survey transects of 100m in width and varying lengths. Robin and I began the laborious trek through our transect with our notebooks, pencils and marking tape. Having spent all of our other hikes on trails and being used to the relatively open forests of the North Eastern United States, we were surprised at the heavy undergrowth. Long vines called "wait-a-whiles" stretch up to the branches of the larger trees. The barbs on long thin tendrils which hang off of them help the vines to catch and anchor on surrounding trees allowing them to grow taller. They also caught on our clothes and back packs and skin. They were everywhere and made for slow going, hence the nick name wait-a-while! Some of our friends experienced another hazard of the Rainforest; the stinging tree which has large heart shaped leaves covered with spikes. We had been warned that contact with these would cause severe pain which could last for months. Those who ran into them definitely attested to this.

These two plants made our exploring tricky but also very exciting! I turned to Robin at one point after disentangling myself from a wait-a-while tendril and exclaimed "We are in the rainforest!" It is so neat to be out here, bush-walking through the forest.



Sarah Picard
Bates College
Sept. 25, 1997
Kennedy Bay Hike

On Monday after we arrived at Mission Beach, we went on a hike along the coast to Kennedy Bay National Park. Joan Bentrupperbaumer, a biologist who studies cassowaries, served as our guide. She took us to Kennedy Bay because it is where she first studied cassowaries.

The hike was beautiful with incredible views of Dunk Island and the Pacific Ocean. We hiked through the rainforest which comes all the way down to the water, through mangrove forests, and on to sand and rock beaches. We stopped along the way so Joan could tell us about various problems related to the management of the cassowaries such as fence lines and the clearing of land. At one stop we saw our first wallaby, which is a smaller version of a kangaroo.

At our final stop we sat on the beach and discussed National Parks in Australia, how they are taken care of by officials and how they can be improved. Joan also showed us one of the plants that the cassowaries eat along the beach. We hiked back on the same trail returning to the place where we camped the night before just in time for dinner!



Q&A

Q. What do you think about living in the rainforest so far?

Joan C., Fairbanks, Alaska, USA

A: Of all the possible places to live, I've found the rainforest to be filled with the most life. From the early morning dawn chorus of bird calls, to the thick vegetation surrounding our cabins,



the rainforest is home to thousands of different plants and animals. King Parrots, honeyeaters, and silvereyes are

just a few of the birds we find every morning in the trees around the center.

When entering the forest, vines and branches entangle the trees and plants into a giant jungle gym. The sounds of birds, scattering rodents, pademelons (small kangaroos), and other small mammals, combined with the rustle of leaves and branches, causes my ears to be constantly alert and aware of the life around me.

The presence of all the sights and sounds is energizing and peaceful. To be surrounded by these wonders every day has given me a personal satisfaction and appreciation for the importance of maintaining the rainforest, if only for its natur-



al beauty and energy. The unique relationship between all the plants and animals within the rainforest, and the tremendous number of species essential to our existence found only in the rainforest, make it an especially important area to preserve. However, living here has made me value the rainforest simply for its ability to energize and share its life with anyone.

Robin Cheney

Q. Do you get to take any field trips? If so, why and where do you go?

Brendon Lee, Boston, Massachusetts, USA

A: Field trips are a very important part of the School for Field Studies curriculum. Because the school is located in the Wet Tropics of Queensland, there are many opportunities to visit multiple sites containing many different kinds of plants and animals. Some of the field trips last a few hours, others last an entire day, and others last several days. The field trips usually consist of a lecture from a professor or a local expert followed by a hike to explore the local flora and fauna. Field trips are very interesting and one of the most exciting aspects of living in Australia.

In the past few weeks, we have been on several field trips. We visited the site of an experimental corridor, a plot of land that is designed to connect two forests which have been separated by farm land. The purpose of the corridor is to allow animals to

travel between the separated forests. It contains many plantings of different types of trees which are normally found in the rainforest.

Another afternoon we hiked along an old logging road to see Stockwellia trees. The Stockwellia were discovered in the 1970's and are a very primitive rainforest tree. They have enormous trunks because they are very old. We also visited a Wet Schlerophyll forest. Schlerophyll plants have very thick leaves and grow in response to fire. The Wet



Schlerophyll forest has three different types of Eucalyptus trees and is the habitat for nocturnal mammals called gliders. The gliders are similar to the flying squirrel in North America. This past week we spent three days at Mission Beach to study lowland rainforest and the cassowary. The cassowary is a large, flightless bird that is endangered because of the clearing of the forests for agriculture.

These are just a few of the field trips that we have taken. Throughout the semester, we will probably visit many other sites in Queensland. Through these field trips, we will have a better appreciation for the diversity of environments that surround our school.

Jonna Derbenwick

Want to send a question?

Email us at

rain@sitalive.com

**Faculty Essay****Josh Farley****Faculty, Ecologist****October 1, 1997**

The most rewarding aspect of teaching at the School for Field Studies is the opportunity to participate in restoring degraded ecosystems, rather than simply struggling to prevent further degradation. Most people know that tropical rainforests are being destroyed at a rapid pace, and our powerlessness in the face of this threat can be disheartening. Too much bad news about the environment can make people feel powerless and apathetic. Here in tropical Australia, it is a different story. Both government and community are collaborating to restore rainforest on public and private land. In many places there is an 'us versus them' mentality, the conservationists versus the farmers and developers. Here, however, farmers whose fathers clear cut the forest are eagerly replanting trees along their water ways (both to restore the ecosystem and to increase their profits) since trees provide shade and shelter for their cattle, wind breaks for their crops, and cleaner water for themselves and their animals.

In many academic institutions, the primary goal of research is to produce publishable articles. Here, while much research does lead to articles, the primary goal is to grow rainforests. You never know if people are reading and valuing your research, but the trees we plant are already attracting birds and other animals, shading out exotic weeds, and in many ways improving the quality of life here on the Atherton Tablelands. In the not too distant future, as people learn the value of rainforests, other countries will begin to restore some of their degraded land. Our research means that these countries will not need to start from scratch, but rather can apply what we have learned here. The time saved may mean the difference between extinction and life for many species and ecosystems.

Home Connection: Products of the Rainforest

Go on a walking tour of your home looking for products from the rainforest. Make a list of the items you find. Things on your list might include woods, houseplants, spices, fruits, vegetables, fibers, medicines, oils, gums, and resins. Do you use any of these items on a regular basis? Could you substitute any of the items with another item? Discuss the importance and uniqueness of the items along with thoughts on the possibility of undiscovered products of the rainforest. Are any of these products helping to sustain the rainforest or destroy it? One last question to think about, what led you to believe that the item might be a product of the rainforest?

Glossary:**fauna:** animal life**flora:** plant life**habitat:** the place where a plant or animal lives

1. What is a corridor and what is its purpose?
2. What type of medicines have been discovered in the rainforest?
3. What are some things that cause problems with the management of the cassowary?
4. Why are some of vines in the rainforest called "wait-a-whiles?"

Site's Log**10/1/97****TIME:** 8:30 a.m. AEST

(Australian Eastern Standard Time)

AIR TEMP: 21° C**RAINFALL:** 0 mm**WX:** cool and overcast**KEY:**

°C=degrees Celsius

mm=millimeter

1. A corridor is a plot of land connecting two separated forests which allows animals to travel between the separated areas.
2. Anti-cancer drugs.
3. Fence lines and the clearing of land.
4. They have barbed vines that catch on clothes, backpacks and skin causing those who walk through the forest to move at a slower pace.

Answers to Quiz

Oct. 6, 1997

Volume 2, No. 3

© 1997 Ocean

Challenge, Inc.

All rights reserved.

Send us your questions!**phone** (800) 890-3049 or 617/357-0055**e-mail** rain@sitalive.com**WWW** www.sitalive.com**fax** 617/357 - 0056**mail** Ocean Challenge, Inc.
20 Park Plaza, Suite 424
Boston, MA 02116