



Queensland News

Rainforest Live

October 13, 1997

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LINKING CLASSROOMS AROUND THE WORLD TO RESEARCH SITES AROUND THE WORLD

Natural Beauty Becomes Source of Income...



Robin Cheney
Univ. of Vermont
October 2, 1997
Ecotourism

Many natural areas around the world are growing centers of ecotourism, providing money for local communities based on mere appreciation of the natural beauty of an area. Development in these valued areas is limited, and often centered around the environment itself, thereby acting as a significant conservation mechanism. Local communities benefit from ecotourism through related jobs and the money dispersed into the local economy from visitors. Rather than use areas like rainforests for timber and other resources, the attraction of tourists becomes a source of income, while it also leaves the



environment intact. If rainforests, coastal reefs, and other environmentally attractive sites become centers of tourism, they will encourage recognition of the importance of preservation of the area, and discourage destructive development and expansion.

On the other hand, ecotourism still remains a type of development, and will have a negative impact on the environment. The increase in hotels, restaurants, and other facilities for the visitors will mean clearing of the land, and increased human populations often cause stress on the land itself.

Although nature trails are often established through forests, heavy concentration of people can cause damage to surrounding vegetation and threaten the animal populations in the area. Scuba diving, snorkeling, boating, and other activities in coastal reefs can cause damage to the reef and the animals that live

QUOTABLE QUOTE

*“In wilderness
is the
preservation
of the
world.”*

Henry David Thoreau

there. In general, the presence of humans in these areas, which increases with ecotourism, causes disturbances in ecosystems and unnecessary interferences with the plants and animals that live in the area.

Although ecotourism is preferable to the clearing of land for industrial or agricultural purposes, it still conflicts with preservation of the land. Even though education regarding the status and management of the environment is a beneficial aspect of ecotourism, the impact of tourism on natural areas is still damaging and destructive. If ecotourism can be established with the very minimum necessary development to support the industry, as well as limits on the number of visitors allowed, it may remain a suitable option. Ideally, we will need to preserve our remaining wilderness areas through national parks and protected territory, without declaring them tourist centers.

EXTRA! EXTRA!

- 10/3** Students take case study exam in the morning. Will spend the afternoon doing warwork and playing sports.
- 10/4** Everyone is working on directed research all day out in the field!
- 10/5** Students day off! Everyone will be heading out to Emerald Creek for hiking and swimming.
- 10/6** Lecture on water catchment management and aboriginal land management with George Davis. Afternoon field trip to George Davis' land.
- 10/7** Another afternoon field trip. We will be visiting the Bromfield Swamp with guest lecturer Mark Heaton.



Student Journals



Noel Kemmerer
Univ. of Vermont
October 5, 1997
A Busy Week at Warrawee

We finally completed the first case study! We had a long week of work; a bird quiz, cassowary case study project, first exam and the directed research proposals due. With only five computers and thirty-two students, computer time was of real value. A little burned out, we all survived the first crunch here at Warrawee. As a way to blow off a little steam, we went to a drive-in movie in Cairns.

The next day we were up early to begin our Directed Research. I am working with sixth grade students at Yungaburra State School. Mary, Leah and I are planning activities, field trips and games to teach the students about the values of the rainforest. Ultimately, we hope to create a multimedia web site that will teach school children around the world about the rainforest.

On our day off we journeyed to Emerald Falls to swim and relax. This dry sclerophyll forest was full of termite mounds that were up to five feet tall! We hiked up to the rocky pools where we played under waterfalls and slid around on the slippery rocks. It was the perfect way to end a very busy and tiring week.



Pedro Marques
Amherst College
October 6, 1997
Stinging Trees

Since I've been in Australia I've seen some beautiful sights; waterfalls, a platypus, rainbow colored birds and butterflies. I've smelled great and pleasing smells—nectar, exotic fruits, celery and lemon trees, even the weeds smell good. The food here has also been great. I've even eaten an ant that tasted like a sour apple.

But not everything in the rainforest is pleasant, as we found out on our trip to Lake Barrine last week. We were hiking through the rainforest on the edge of the lake looking for cassowary scat. Chris and I were having a difficult time negotiating all the lawyer vines. They have this name because, like lawyers, they stick to you and dig little needles under your skin. They're also called wait-a-whiles, because you'll be waiting for a long time if you think the little needles will just fall off you.

After we got past the wait-a-whiles, Chris and I stopped, looked at each other and yelled! Chris was standing on top of a stinging tree which was touching both his knees and there was one on my arm. These trees sting with small, almost invisible needles that bury in your skin and sting for a long time. Chris and I ran back to the car as fast as we could to get the first aid kit.

You see, the only way to get rid of the stinging tree's sting is to put really sticky stuff on your skin and then yank it off. We used a hair removing product, Nair because it gets the stingers out of our skin. All the leg and arm hair where the stingers were also came off, which hurt a lot. We are fine

now and our arms and legs are a little less hairy, but we are more aware of one of the dangers of the rainforest.



Jon Kusumi
Pomona College
October 6, 1997
Cassowary Signs

After a hurried week spent taking exams, we took a field trip on Sunday to Lake Barrine—a National Forest that surrounds a large lake. The lake was a volcano a long time ago, but the volcano became extinct (no more lava) and rainwater filled the crater. Now there is also a dense forest there.

Our job while on our trip was to search the forest for signs of cassowary birds and the fruit they eat. When the cassowary walks in mud it leaves footprints, large three toed prints showing that it has long claws and scales, which look like dinosaur tracks. They also leave lots of scat or bird waste filled with fruits and seeds. Trees often grow from these seeds. Unfortunately, after several hours, we did not find any prints and few scats. It is likely that the bird isn't eating fruit because tourists are feeding it candy and other unnatural foods. This is bad for the bird and the trees that grow in the scat.

During the search, we ran into wait-a-while vines with fish hook-like barbs, and stinging trees with their stinging needles. Many people were stung. We were all tired and scratched up with little to show for our work. We ended the day on a bright note with a cool swim in the lake. However, that soon ended when a three foot long eel swam up to Pedro's leg and everyone leaped out of the water. Overall, we had an eventful and exciting day.



Q&A

Q. What do you eat on a typical day? Who prepares the food for all of you?

Kristen L., Jonesboro, Arkansas, USA

A. Actually, meal preparation and consumption at the Center is not as exotic as you might think.

Various cereals including Just



Right, Mueslix, and Corn Flakes, breads, and fruits are usually readily available at breakfast time. On Sunday, however, a larger breakfast consisting of eggs, bacon, pancakes, etc. normally awaits us. This meal is prepared by the students with help from some of the staff.

Once the clock strikes twelve pm, the students are usually already waiting in line for lunch. A typical lunch includes lots of veggies, lunch meats, and sometimes leftovers from the previous nights dinner. Lunch, like breakfast, is prepared by the students and the staff.

Dinner, on the other hand, is cooked by Peter, the cook at the Center. He does a great job preparing the meals. Homemade pizza, lasagna or stir fry normally awaits the hungry students at 6:00 pm. I hope you have a better idea of our eating patterns here at the Center. They are probably very similar to your eating patterns in America!

Lisa Blair



Q. How is it living by the rainforest? Do the birds wake you up?

Mr. Utech's Class, Boca Raton, FL, USA

A. Living by the rainforest has been the most unique experience of my life so far. It is the most peaceful, relaxing, beautiful scenery that anyone could imagine. Because we are surrounded by rainforest, we often come across species that you would not normally see in the United States, which is quite a treat. There is a creek that runs through the area of rainforest we live near. I personally go on hikes as often as I can to absorb this soothing atmosphere. The trees are so incredibly tall and they are so dense. It's not like any kind of forest I have ever seen.



As far as the birds go, they are extremely loud in the morning. They wake up around 5:30 am and don't stop chirping until about 7:30 am. Generally they don't wake all of us up. I think it's because we have gotten used to them. Sometimes I lay in bed listening to them trying to identify whose call belongs to who. One of my favorite things about this program is that the rainforest is our classroom. It is everywhere we look and every time I venture into it, I see something else I have never seen before.

Bekki Stevens



Q. How big are the trees?

Mr. Utech's Class, Boca Raton, FL, USA

A. Here in Australia the trees come in all shapes and sizes. The tallest trees in our rainforest grow to be about 200 feet. The biggest tree I've seen yet is a Strangler Fig tree about four miles from the Center for Rainforest Studies. The Strangler Fig gets its name from the way it wraps around and around a larger tree when it is still a young vine. The vine then hardens and out-competes the host



tree by stealing most of the nutrients from the soil through a complicated root system. This root system is actually sent down from the Fig's origin high up in the canopy. Eventually, the host tree dies and the Fig continues to grow on its own around the rotting host. Soon the Fig tree is left with a hollow center that you can actually stand in. The Strangler Fig tree near our Center is so big they call it "The Cathedral Fig." It is about 155 feet tall, that's twelve stories high! The tree's canopy, or the leaf-layer, is the size of two Olympic size pools and its root system is twice as large!! It would take over 50 students, hand to hand, to reach all the way around the Fig. The Cathedral Fig is large enough to house animals like tree kangaroos, possums, snakes, lizards, tropical birds, bats and thousands of insects, all at one time.

Marah Studer



Research Update: October 1, 1997

Sarah Picard

Dry Season Diet and Food Availability of the Cassowary at Lake Barrine National Park, Queensland, Australia

Since 1994, a cassowary has lived in Lake Barrine National Park. During the dry season the bird is often seen being hand fed on the side of the road. It is dangerous for the cassowary to look for handouts because it could be killed by a passing car, and it is dangerous for people to feed it because it may become aggressive if food is not offered. It has been suggested that the cassowary relies on handouts during the dry season for its food.

SFS students did a survey of Lake Barrine National Park to look for cassowary scat and fruits in order to determine the cassowary's diet at this time of year as well as to determine food availability within the park. To perform the survey we, the students, were split into pairs, and each pair walked a transect, or a straight line away from the lake looking for scat and fruit. Transects were placed every 100 meters along the trail which divides the lake.

Forty two transects were surveyed in all. They ranged in length from 20 to 800 meters with a mean length of 181 meters, and covered 7.61 kilometers. During our survey we found one scat between one to three weeks old, and four to five scats around four weeks old or possibly even older. In total, we found fruits in 9 of the 42 transects.

The lack of scat found at Lake Barrine National Park suggests that the cassowary's diet at this time is primarily human handouts. When cassowaries consume few fruits and a large amount of human produced food, their scats are liquid and less likely to be found. In addition, fruits were located on only nine of the forty two transects. This suggests that there are few food resources available to the cassowary, and that it may be forced to look for handouts. As a result, in order to move the cassowary away from taking food handouts and the hazards associated with it, some sort of management is required. Suggestions include relocating the bird as well as setting up feeding stations away from the road.

Home Connection: Australian Animal Quiz

Make a list of the different types of animals mentioned in this issue of Queensland News (you may want to include past issues too!). Create an Australian animal quiz featuring two questions about each animal's most interesting attributes. For example: What type of body covering does it have? What kind of food does it eat? How does it travel through the forest? As a bonus, find more information in the encyclopedia or on the Internet about an Australian animal that has not been mentioned in the newsletter. Have friends and family members take the quiz! How did they do?

Glossary:

canopy: the strata of trees that are 60 to 90 feet tall in the rainforest

ecotourism: using natural resources as a basis for tourism



1. What is scat and how does it help the rainforest?
2. Where does a strangler fig get its name?
3. What do they call the 155 foot strangler fig near the Center?
4. Do you think ecotourism helps or harms the environment?

Site's Log

10/8/97

TIME: 1:30 p.m. AEST

(Australian Eastern Standard Time)

AIR TEMP: 27° C

RAINFALL: 0 mm

WX: hot, sunny and muggy

KEY:

°C=degrees Celsius

mm=millimeter

1. Scat is bird waste filled with fruits the bird consumes. Trees and plants germinate from the seeds found in scat.
2. It is called a strangler fig because it wraps around and around a larger tree. The vine takes over the tree, steals the nutrients from the soil and eventually kills the host tree.
3. "The Cathedral Fig."
4. Answers will vary.

Answers to Quiz



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