



Post Fellowship Reporting - Project Summary

Report Title: Borneo biodiversity **Name:** Elizabeth Donahue and Kerry Anne Ryce-Paul

Other Team Members:

Program: New York City Program

Trip Dates: 11/30/-0001 - 11/30/-0001

Location Visited: Malaysian Borneo

Post Fellowship Reporting Template: PFR Template 01

Project Summary: On the fellowship, our team went to Malaysian Borneo. Our original intent was to observe biodiversity, as Borneo is known for having a great variety of species that exist nowhere else on earth. Being a large island, there are many ecologic and climatic factors that contribute to supporting a great diversity of species, and Borneo is often compared to the Galapagos islands, which are traditionally used to teach about biodiversity and the processes of evolution. We thought that looking at Borneo in the same way that scientists such as Darwin looked at the Galapagos would give us a larger knowledge base in teaching these concepts. We started out by climbing Mt. Kinabalu, the highest mountain in Southeast Asia, which proved to be quite a challenge. As we climbed, we traveled up through tropical rainforest, temperate forest, deciduous forest, and eventually bare rock where hardly any plant or animal life could be found. We were able to document the different species of plants and a few smaller animals, mostly insects, at each level. We can use this information when teaching our classes about ecosystems, biomes, and factors affecting climate, specifically altitude.

When we left Mt. Kinabalu and boarded a bus traveling from the west to the east of Borneo, we found our true inspiration and the focus of our curricular plan. As we traveled about 4 hours across the country on our way to visit the Sepilok Rehabilitation center, which is working to rehabilitate orphaned orangutans and to reintroduce them successfully into their habitat, the rainforest, we noticed that that habitat seemed to be missing. For four hours, we traveled through what should have been rainforest, but is now all palm oil plantations and factories. It was sad to think about what was missing, and the percentage of rainforest that is gone is shocking. We arrived at the rehab center and saw the work that is being done to try to revive this dwindling population. Borneo is one of only two places that have the proper factors to support these rare animals, and the palm oil industry is working to destroy those factors. The workers at the rehab center seemed truly devoted to their work, and are having small successes; however, it was interesting that no one ever spoke of the reasons why these animals were at the rehab center in the first place. After watching a documentary, which made no mention of why the orangutans are in trouble, we asked one of the women who works at the center about it. She told us that they are not allowed to mention anything about why the orangutans are endangered, and are specifically told to not mention the palm oil industry because it is doing so much for the economy in Borneo. We decided after this visit that we want to focus specifically on the palm oil industry and its effects on the orangutans.

Career Impact: The biggest challenges on this fellowship were being in someplace completely different than I have ever been and the physical challenge of climbing the mountain. After accomplishing the climb, I definitely feel more confident in facing everyday challenges.

Reigniting my passion for science was probably the biggest gain of the fellowship. Just seeing the diversity of life, the plants, animals, and environment reminded me of why I like science in the first place. Learning about the environmental destruction that is occurring reminded me of why students of science need to be active and aware of their own community and the world wide community, especially with the multitude of environmental challenges that face our society today.

So far, since I have not actually taught the unit, I have just been able to bring back interesting stories to my classroom. My students enjoy hearing about what I did and loved the pictures, especially of the baby orangutans. They also seemed inspired to learn more about other parts of the world – not one of them even knew where Borneo is – and some started talking about how they too would love to go far away and see different parts of the world.

Classroom/Community Impact: So far, the fellowship has influenced my classroom and school community through sharing stories and pictures. I think students' awareness of the world and environmental issues has been raised, but this has only been through casual conversation until the unit actually is taught.

As a mentor for the science department in the school, I have also been able to share stories and ideas with the other science teachers. Not only are they interested in using some of my resources, they are also starting to think about writing their own grants. Another result of the fellowship will be the community involvement and interaction between the two schools of our team. We plan to have our classes (one middle school, one high school) to meet and work together to plan a fundraiser for the rehab center.

Open Response: For right now, the only progress has been casual conversation with students and colleagues about the fellowship,

as well as planning with my team partner. I have also been planning with the credit recovery teacher, who needs an interesting and worthwhile science project for credit recovery students. We have been trying to incorporate the goals and activities from the unit into some sort of project that she can do with her students.

Quote: People need to know about the destruction happening to the rainforests in Borneo

Photos:



Rainforest in Borneo



top of kinabalu



macaques at rehab center



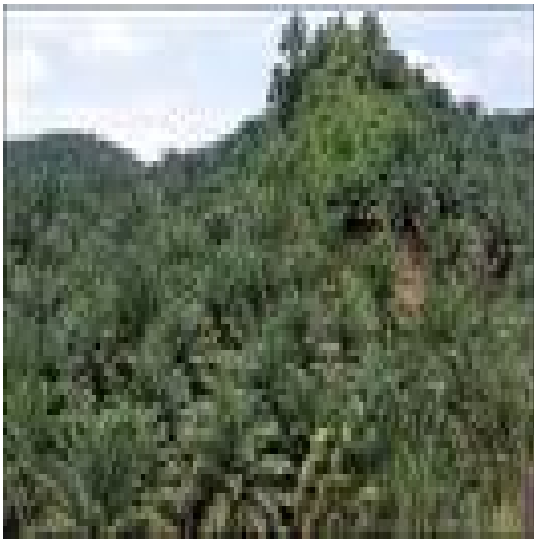
rehabbed adult male



feeding time at sepilok



source of palm oil



palm oil plantation



proboscis monkey in sukau