

A Cashu Nut Returns!

By Jessica Groenendijk

Generally, when somebody calls you a 'nut,' it's not exactly flattering. When you're called a 'Cashu Nut', it means the same thing: you're crazy. But, more specifically, you're crazy about Cocha Cashu and it's a compliment. If you're a Cashu Nut, you have spent time - conducted research or worked - at the Cocha Cashu Biological Research Station, in Manu National Park, Peru. You have run the gauntlet and been deemed worthy of joining the ranks of the fortunate few.

Carol Mitchell is a Cashu Nut. She is a native of the state of California, completed her Bachelor's degree in Zoology at the University of California in Davis, and received a Masters and Doctorate in Ecology and Evolutionary Biology in Princeton University in New Jersey. Her theme? The ecology and behavior of squirrel monkeys (*Saimiri boliviensis*) at Cocha Cashu, with Dr. John Terborgh as academic assessor.

Between 1983 and 2003, she participated in studies of the ecology of primates, small mammal biodiversity, impacts of hunting by indigenous people in protected areas, and impacts of hydrocarbon exploration in pristine tropical forest areas in southeastern Peru. Carol now works as sub-Director of Sciences at the Centre of Natural Resources in Everglades National Park in the South of Florida.

Earlier this year and in view of her expertise and Cashu history, we invited Carol to visit the Station in late September as a guest instructor of our annual Tropical Ecology and Field Techniques Course. This course plunges twelve Peruvian graduate students into the heart of the rainforest and trains them to complete individual research projects within a period of three months. Since its start in 2013, the course is funded by the Wallace Research Foundation and a private donor and has rapidly become a source of great pride for the Station.



Carol departed from Cashu on 13 October. The photo above shows her (right) with Peruvian artist and fellow guest instructor, Oscar Vilca (left), as they headed back to 'civilisation.' Shortly after, we took the opportunity of interviewing Carol about her experiences at Cashu, then and now:

Carol, why did you originally choose Cocha Cashu as the location for your primate research?

I wanted to study the social behavior and ecology of monkeys in an ecosystem that was not affected by people. In areas that are hunted it is really difficult to get close to and observe the natural social behavior of monkeys because they flee and avoid people. Cocha Cashu provided that opportunity.

Did your first Cocha Cashu experience help to further your career? If so, how?

Yes! I liked Cashu, Manu and Madre de Dios so much I continued to look for work that kept me in the forest. I did a post doc with the University of Florida, with field work in Manu. Next I started managing projects, for WWF and then for Conservation International, all in Madre de Dios. It is THE BEST.

What did you think of your recent Cocha Cashu experience?

It was wonderful. The day after we arrived, a harpy eagle perched and stayed in a tree just across the lake for more than four hours. The otters spent three days on the lake. Every day we saw monkeys. I know some aspects in the Park are changing, and that is to be expected. BUT, I was really happy to see the station is super-improved, and that the area is still very much protected.

Cocha Cashu provides opportunities for research that really cannot be found anywhere else, given the long history of ecological and behavioral research at the station, and because the fauna is unafraid of people. Opportunities for direct observation of ecology and behavior are tremendous. The fact that we have remote ways to track things (i.e. satellite tags, camera traps, DNA analysis of scat, etc.) is really cool, and helps a lot, BUT it does not replace direct observation of animal behavior. Opportunities for other kinds of basic research are also huge (aquatic systems, climate change effects in an ecosystem with minimal human impact, hydrologic systems and riverine ecology, landscape ecology, etc.)

In terms of applied research, there are excellent opportunities as well. The [Master Plan for Manu National Park](#) (2013-2018) has identified major management issues, and prioritized research. Cocha Cashu is an ideal place to work on a number of these priorities.

How do you think SDZG-Peru is doing regarding management of the Station?

Very well. The new buildings (house, kitchen) are very, very nice, and the tent sites are much improved! Really great to have internet. There is a constant emphasis on sustainability, with waste and energy management being the top issues. We were given a good briefing/tour of the station and how it functions. And I can't even begin to describe the improvement in the food. Just let me say "soufflé de coliflor, cayhua rellena, y lomo saltado"... Unbelievable.

Where can we improve? (infrastructure, services, courses, outreach, etc.)

Outreach to researchers:

- There is a need to get the historical data from Cashu, and make at least some of it available to returning or new researchers. That's one of the great strengths of the station – the long history of research.
- If you get many more researchers, which is desired, then the internet has to be improved.

Transport to/from by boat is good. Car transport can be improved: there are very good vans available, and especially for individuals who are donating time to the station, improving the ride in and out of Atalaya would be good. Don't get me wrong, I know exactly how far this has come from the time we rode on top of potatoes, tomatoes, timber and yucca! However, given that there are very comfortable and safe options available with the tourism industry, they should be accessed.

A huge improvement would be to increase the communication and connectivity of work with other stations in the area, and to consider Cashu as a critical element in the research needed to help manage not only Manu National Park, but the larger protected ecosystem between Cusco, Madre de Dios and Ucayali.

What were your general impressions of our *Tropical Ecology and Field Techniques* course and the students?

The students were very good. The course has some excellent basic goals – to get students familiar with field research, to make sure that students not only have the science information but also understand that communication through writing and art is critical to conservation science, and to make sure that students are able to follow the scientific method from identification of a question through development of a hypothesis and research design. This last is super important and needs to be continued.

Having paid teachers would improve the course 200%. At this point you get very good people, but the course is dependent on their time, and the students are subject to a varying panoply of instructors. Ideal would be to have 2 full time paid instructors, and then the mixture of other teachers who are doing it on a volunteer basis. Right now, the development of the course seems a bit ad hoc; meaning that because the content is dependent on when volunteer instructors arrive and leave, it doesn't necessarily have a flow from beginning to end.

What would be the most important advice you'd give to future Cocha Cashu researchers?

Just get there. Undertake a one month trip at first, to understand the place and what you will need to truly develop your work. Then plan for longer term. Check it out and you will find a million things to work on.

How do you envision Cocha Cashu's future?

Cocha Cashu holds a critical place in the research needed to help manage not only the lowland areas of Manu National Park, but also the larger protected ecosystem between Cusco, Madre de Dios and Ucayali. I envision Cashu as a place that provides information on how the forest, the river and the fauna function with minimal influence from people. And I see Cashu and the most highly protected areas of Manu NP as THE place to study ecosystem resilience, providing information on the costs and benefits of maintaining a complete web of life, from the physical components through the biological aspects of the system.

Carol, thank you so much for your time and contribution to the course, it was a great pleasure to have you back at Cocha Cashu, and we hope you will return soon!