

Innovation Case Study

Brazilian Amazon Field Intensive



Carla Eisemberg, Post Doctoral Fellow

CONTEXT

A field based course is offered to undergraduates and post-graduates students to learn about the applied research and sustainable wildlife management programs undertaken in the Brazilian Amazon. This field intensive was offered for the first time during the 2016 summer semester. It aims to prepare students for careers on conservation and wildlife management not only nationally, but also internationally.

RATIONALE

Brazil and Australia are famous for their beautiful tropical regions. Both regions have a rich wildlife, with species surprisingly related to each other due to ancient Gondwana connections. At the same time most of these areas are known for their challenges in the field of conservation and sustainable development due to their remoteness.

In 2016, Charles Darwin University (CDU) has introduced a Brazilian Amazon Field Intensive. We training future professionals who will be aware of diversity of perspectives and the challenges of balancing sustainable development and conservation in highly diverse areas such as Northern Australia and Amazon. The exchange of experiences and ideas between those working in similar regions but in different parts of the globe will lead to the development of new approaches with the aim to overcome the logistical complexities imposed by these locations. Students will become leaders in the field of education of sustainable development in tropical remote regions.

"This intensive was above my expectations. It captures every single conservation aspect from the ground up. The inclusion of local people, businesses, schools, law enforcement agencies and rangers. It was a complete conservation program."



are
the

DESCRIPTION

Sixteen students participated on the first Brazilian Amazon Field Intensive. The great majority were CDU students with only two cross-institutional students from ANU and Western Sydney University. The fourteen CDU students were enrolled on undergraduate courses or postgraduate programs at the School of Environment:

- Undergraduate courses
 - Bachelor of Science
 - Bachelor of Environmental Science
- Postgraduate Programs
 - Graduate Certificate in Spatial Science
 - Bachelor of Science Honours
 - Master of Environmental Management

The Brazilian Amazon Field Intensive is a result of collaboration between CDU, INPA (National Institute for Amazon Research) and AIHA (Amazon Society of Ichthyologists and Herpetologists) and it took place in Manaus and the Rio Trombetas Biological Reserve in December 2016. A similar course has been in the curriculum of Brazilian postgraduate students from INPA for over 20 years but this is the first time it was offered in English for an international audience. Sixteen students had the opportunity to join this 12 days expedition. Australian students were officially enrolled in a “Professional Practice In Science” unit.

Initial lectures and tutorials were based at the National Institute for Amazon Research. Lecture themes will range from general (Amazon ecosystem, hydrology, wildlife threats) to specific (i.e.: Amazon vertebrate fauna, turtle biology and conservation). While in Manaus, students visited the rainforest areas surrounding INPA and Adolpho Ducke Forest Reserve, where manatees, agouti, iguanas, among many other species were observed. Students also had the opportunity to see the famous “meeting of the waters”, where the Solimões River meets the Negro River to form the Amazon River. On the third day students started the trip downstream to the Biological Reserve of the Trombetas River (REBIO Trombetas), where the practical component of the course took place. This boat trip took three days. Meanwhile students participated in tutorials and discussions.



Staying and studying at the REBIO Trombetas is an unique experience since it is a Brazilian Biological Reserve, which is an area officially closed for conservation, where communities of Indians and Quilombolas (traditional villages formed by slave descendants) live. Only outsiders involved in research and management are allowed to enter (special permits will be provided for students in this course). This is an area of high wildlife and cultural diversity, where conservation and management projects have been taking place since the 60's. While in the REBIO, students learned the basic methods on how to study and manage riverine turtles, as well as learning about the activities developed by rangers and local communities. Among the field technics learned during this course were turtle nest monitoring and turtle vocalization using hydrophones,



"I thought it would be focussed heavily on fieldwork, data collection, analysis and stats. It was a nice surprise for the course, including social, environmental and economic issues. It was a nice balance. A wonderful experience learning and applying knowledge in the field. This could easily become a flagship course for CDU."

After the end of the practical components students left the REBIO Trombetas and travelled by boat upstream, back to Manaus. During this trip, students prepared their reports and presentations. As part of the field intensive activities, students are directly collaborating with the production of chapters of a book entitled "Introduction to Wildlife Conservation in the Brazilian

Amazon" and each chapter will be authored by a group of students. Copies of the book will be distributed to Brazilian and Australian Universities. The production of this book enhanced student engagement since they saw the result of their efforts return as a concrete achievement.

IMPACT

We received two grants to help students to cover their costs. The Council on Australia Latin America Relations (COALAR) awarded the field intensive \$ 40,000 AUD, while the Turtle Conservation Fund awarded the initiative \$5,000 USD. Overall, all students considered the experience very positive. Thirteen students filled and submitted anonymous feedback forms. When requested to rate the Field Intensive from 1 (very bad) to 10 (Excellent), four students ranked the course as 9, eight students ranked the course as 10 and one student ranked the course as 11. When asked in the form if they would recommend the course to friends and colleagues, 100% of the students responded "yes".

"I have taken so much away from this trip compared with others. It has open my mind up at how similar northern Australia is with the Amazon. It also gave me a new perspective on how serious the threats are in the Brazilian Amazon and the need for conservation."

Photos and stories about the field intensive are available at our [Facebook page](#).

Tags: *Employability, International, Industry Engagement, CDU*