

Internship Report: Eleanor Robson

Ecosystem Service Investigation in Bogotá, Colombia

Supervisor:	Prof. Jürgen Breuste
In-Country supervisor:	Mr. Henry Garay
Duration:	Six (6) months
University:	The Australian National University
Title of project:	Characterization of the Socio-Ecological System of Bogotá and the Eastern Andean Hills: Beginnings of an Integrated Ecosystem Service Evaluation
Aim of project:	<ul style="list-style-type: none">- Synthesize available information to create general overview of ecosystem services provided by Eastern Hills to Bogotá- Identify knowledge gaps for future research in ecosystem service framework- Present outsider reflections on difficulties in environmental management
Personal aims:	<ul style="list-style-type: none">- Create research piece of practical use in local context- Gain experience in professional setting, outside of academic context- Increase understanding of environmental governance difficulties in a developing country

In my last year of my undergraduate degree at the Australian National University, I discovered the Society for Urban Ecology on a day when I was feeling particularly directionless about what I wanted to do post-university. I had traveled around South America the year before and fell in love with Colombia, so when Prof. Breuste suggested that I could complete an internship in Bogota, I was convinced. In collaboration with Prof. Breuste and my in country supervisor, Mr. Henry Garay, we decided that I would do a six month project, from the end of February until the beginning of September 2015.

In this time, I have learnt a great deal from my time at Mr. Garay's company, EcoNat, and in collaboration with a Colombian public-private research body, the Alexander von Humboldt Institute. My research centered on the ecological, economic and social values, expressed as *ecosystem services*, that the Eastern Hill Range provides to the city of Bogota. The main aims of my project developed over time as a process of understanding what research was needed and what my strengths were. I wanted to create a piece of work that would not

just be self serving as a research process, but a useful product that could be used to improve environmental governance. Mr. Garay, Dr. Andrade (my mentor in the Humboldt Institute) and I decided that I would focus my efforts on creating a piece of work that would explore the importance of the Eastern Hills to the city of Bogota as a provider of wellbeing and environmental benefits. Given that a complete ecosystem service evaluation requires expertise in many areas and a lot of data and time, I came to create the first part necessary for an evaluation, which would serve as part of the foundation of future work in the area. As such, *my final product was a socio-ecological characterization of the relationship between the Eastern Hills and Bogota.*

The creation of the output emerged from an iterative process, and the form of my project and my mindset changed significantly, various times. At first, I learned about the institutional and jurisdictional context of Colombia. I then set about doing an ecological characterization of the various ecosystem services provided by the Hills, and the characterization of demand on the part of the city. The last parts pertained to the history of land use in the area and recommendations for the encouragement of ecosystem services as a land use framework into the future. As such, my document is composed of the following components:

- Introduction and methodology
- Ecosystem Service Supply by the Hills
- Ecosystem Service Demand by the City
- Socio-Ecological Trajectory
- Socio-Ecological Characterization
- Discussion and Suggestions

Some important themes of my project were socio-environmental conflict, management problems and difficulties, valuation of elements of different natures, and collaboration with involved actors and community. I finished my project in late August in collaboration with a variety of formal and informal mentors and experts in the field, and presented the research at the First International Symposium on Urban



A meeting between EcoNat and the Humboldt Institute in organizing the Symposium

2015. Being my first presentation in a public forum, this was quite a challenge but also one which I am proud to have completed.

In addition to my research project, I assisted in the organization of the International Symposium on Urban Ecology in Latin America which took place on the 8-10 of September. This was also invaluable as an exercise in professional work and event organization, and has endowed me with practical skills in team work, communication in Spanish, learning what components are necessary in the organization of a major event and generally learning from colleagues who had much more experience than me in working in a consultancy.

Given that a key deliverable in my characterization was the identification of major knowledge gaps, I endeavor to continue researching this topic at greater depth in 2016. As part of a specialization thesis undertaken at the Australian National University, I will be looking into the social, cultural and human ecosystem services associated with the Eastern Hills from the perspective of normal Bogotan citizens. This is intended to be a preliminary study into land use values and preferences of the city's citizens, given that I found very little publicly available information in this area. I will be returning to Bogota for two months to collect qualitative data, in collaboration with the academic and professional contacts that I have made during my SURE internship in 2015.

I can confidently assert that my SURE internship at EcoNat has been significant in my professional, academic and personal development post-university, and has greatly influenced my intentions for future work. I have not only gained career experience, but made friends and developed in a personal sense. I would like to take this opportunity to particularly thank Mr. Henry Garay, Prof. Jürgen Breuste, Dr. Germán Andrade and Dr. Martina Artmann for their support and encouragement.



Birthday celebrations at the EcoNat office for a colleague, Maria Paula.

