

DAAD PROMOS – Experience report

Majors, minors and degree	<i>Ms.Sc. Forest Sciences – Wildlife & Biodiversity</i>
Number of semesters	<i>5th Master semester</i>
Host country	<i>Madagascar</i>
Semester, thesis or internship abroad	<i>Thesis abroad</i>
Start and end date	<i>15.11.2021 – 10.02.2022</i>
Host university or institution	<i>Centre ValBio, Ranomafana</i>
Identification code	<i>MDG-2021-1MMSC-m</i>

Leaving and research conditions



Madagascar is a country of wide and pure nature landscapes, with tons of treasures but a very poor population that only relies on destroying those to farm and make coal. The wildness is always harder to find. This contradiction challenges me since a very long time as I try to find a way how to reconcile both nature and humans in a sustainable way. Wildlife here is unique in very different ways and attracts biologists of all over the world. My purpose was to study the rainforest ecosystem and more specifically the relationship of the carbon within its trees and the presence of the biggest frugivorous monkeys (3 different lemur species). At the same time, I could discover how works an international research center, the close-by and wonderful national park of Ranomafana, and their relation to the local communities. But how did I come to that? A researcher from Madagascar made an intervention in one of our Master modules and I got very interested by her topic: the relation of some lemurs with their habitat would be like gardeners with their fields. Lemurs improve the germination and dispersal of tree seeds and doing so participate in shaping the forest ecosystem. Fascinating! I contacted her a few weeks later and she helped me find a working thesis topic. At the end, we could organise a field trip for biomass data collection to the research institute Centre ValBio, in the middle of the rainforest, south-east from the country. People from there were very responsive and helping but the country was closed to foreigners since nearly 6 months (covid shot down). I had to wait all summer long for the borders to open again. Then a classic tourist visa of 2 months obtained at the airport that I extended of 1 more month at the “ministère de l’interieur” in the capital was enough. French is the administrative language but only spoken by some people and within towns. The big majority of the island speaks Malagasy (the local language of the centre region), and a lot of dialect

exists. So, its good to have someone who can speak both your language and Malagasy, to get the most of your trip. For me it was even essential to make the project work in the field and avoid complications. Learning a few words of Malagasy also helps, as the local people are really pleased to see that foreigners are that much interested. Anyway, this is part of cultural exchange and immersion! For transport, the bus is a cheap and quite uncomfortable way to travel within cities and the country. It can take long hours before you get to the destination: enough time for discovering the landscape along the destroyed roads. That's how the locals travel, and I mostly did the same, as I was nearly always with a local guy I knew. About culture, there is a lot of traditions, beliefs, and taboos, it is advised to be respectful and patient, but the people here is kind and joyful so that problems are often avoided. In terms of taboo there are sometimes very strict (and "strange") rules that must be followed, even more in the rural world, another reason to be with a local you know and you can exchange with. Infrastructure is very poor, so that classical offices that could inform foreigners are often lacking, but internet and mostly facebook (used a lot here) are rather good sources of recent information.



I had the luck to work with patient and experienced people, that was a key to the success of the project, even if sometimes communication was not clear. The only drawback here is that a lot of Malagasy people are often so willing to help, maybe it is part of the culture, that they do not say "no": the team may need a break, the trip is much longer than admitted or the food reserves are nearly empty, but everything appears fine. That was something that required quite some attention, even if most of the time all went fine. On expedition in the park, we first installed a camp on a relatively central site on the first day and then get to the work in the surrounding rainforest for a week or so. The kitchen place is the heart of the camp because it stays dry around the fire that burns nearly all day long. All lunches are taken collectively at that place and consists

nearly always of rice with beans, sometimes noodles and vegetables. At 9 am at the latest: hike to the next inventory points somewhere in the forest, guided by the local guide, the two technicians of the Centre ValBio, and the GPS. Small break around 12 and back to the camp at 4-5 pm. The rhythm was rather good but quite tiring (walking all day long in the rainforest), so that only 2 to 3 botanical plots were inventoried per day. Hopefully the 2 technicians of the research centre knew very well the tree species of the park, so that it took them maximum 1 minute for identification, and we never had to take sample for further work at the centre.

The international research centre (Centre ValBio or CVB) where me and the helping botanist were based is a modern station with beds for about 100 researchers and their assistants, genetic and technology labs, multiple offices for the staff and meetings, a restaurant, a garage, storage rooms, a big parking, and all that in the middle of the jungle! It was rather cheap to stay over there for the comfort and quality of research that can be held. The station staff is also helping a lot and even if always busy they take time to answer questions. A very

nice place to start and plan field work. The forest around is impressive: trees and plants of all shapes and colours with giant lianas carrying tens of orchids species, lemurs dancing in the canopy and strange fruits and flowers falling from nowhere, followed by giant rainbow butterflies. Frogs are everywhere, and so are insects, but hopefully no dangerous snakes on the island! Humidity also is omnipresent, even more at this period of rainy and tropical storm season (you may have heard of the cyclone Batsirai), causing sometimes big floods and tricky situations for the expedition. This is something I leaved: to sleep like a baby, well dried in my tent, and wake up in the morning to discover that the small river next to the camp had doubled of size and my neighbour had been flooded! Lesson: always think ahead in time of the tent situation and build strong channels around to evacuate streaming water...



Success and lessons

As said before, research conditions at the centre were at an occidental level. On the field I can say now that this highly depends on the team and the material you have. Hopefully both were carefully planned with the centre and the help of my supervisor, and the experience of my colleagues was invaluable. Before my arrival, I was put in contact with a young botanist and this person was a precious help at the end, not so much in botanic but as intermediate to communicate clearly between team members or locals and myself. He also appeared to be a good comrade and a door open on all aspects of the local culture.

At the beginning I was scared that the team would not make it because some where not fit enough, but then we started to see how the group works, what rhythm was more appropriate and as we knew ourselves better, by the end it was just a pleasure to go explore the jungle all together. The last site was the most challenging: nearly no paths and no previous experience of the team there, a lot of rain and fatigue accumulated. But the determination and a positive mindset helped us go through. I finally experienced that working in team in the jungle is essential: each one has its strength, its role, and this is critical to sustain energy and preserve the will to go on. Patience is a big plus in an intercultural context where communication is never easy, but also not to put the stakes too high and remain down to earth in terms of objectives and realisations. Trust in all team members was not so strong at the beginning but work pays, we inventoried 70 plots throughout the park, and I think we were all happy with ourselves and each other by the end of this unforgettable adventure. All in all, the stay was mostly well prepared. I would have 2/3 comments though. First, I did not pay enough attention ahead in time to the research permit made with the ministry of environment, and it appeared that I could not do a part of my research as I intended to because it was not clearly stated on the permit. Hopefully that was only a small part of the big picture, but we had to find a B plan in urgence, and this caused quite some stress. Second, we had an awful hike day because we did not anticipate enough me and one of the technicians responsible for the organisation: 9 hours of non-stop walk with some heavy rain, lot of leeches, big slippery slopes, and at the end a camp installation. Last, I took way too

many cloths with me and that was quite a burden on the field! All those issues are somehow a matter of anticipation: it is hard to think of everything before being confronted to the problem, but it is important to take time for each step of the journey preparation. Now, this was only the half of my thesis work, after data acquisition I must analyse it and elaborate on results. But more generally, Madagascar, biodiversity conservation and sustainable development are together a never-ending story that for sure this stay helped in finding some answers. Also, I learned a little of Malagasy which is still a good start to better involve myself within locals.

Madagascar and its people are very attaching and full of lessons on life. There is a huge gap between this island and western Europe. As we often had to sleep in the middle of villages for 1 or 2 nights, I could discover from very close how rural people live: in very hard and simple conditions. This is difficult to see in a neutral way, without being deeply touched, but it also carries some sense of respect, indulgence, and try of understanding.

I highly recommend such an intercultural and immersive experience: this is a must to better feel the world and act in full consciousness. Not following the classic tourist paths and leaving next to if not directly with local people enables to really appreciate the culture and share something strong. That is possible everywhere on earth, even more with the DAAD and partners, to whom I am very grateful.

