

From blue-eyed lemurs to blue-eyed ibis: conserving the unique wildlife of northwestern Madagascar.

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Q&A

Q: I'm curious about the decision to plant non-native trees...understanding the human/social aspect of keeping conservation economically beneficial to locals, etc. But could you go into a bit about discussions around those types of decisions?

A: The tree species chosen are based on: (i) species that have been used before in previous reforestation efforts by BZS and the AEECL, and hence are cultivatable in nurseries, (ii) species that are common in the major fragments of SIRNP, and (iii) those that are used by lemurs as either food and/or other functions (e.g., sleeping). While the planting of exotic species (such as mango (*Mangifera indica*) and jackfruit (*Artocarpus heterophyllus*)) in Madagascar's National Parks is generally not allowed, we acquired a Madagascar National Parks (MNP) permit to do so as part of our experimental reforestation work. These are species that have been observed to grow well in SIRNP's challenging environment, comprise a significant proportion of existing trees in the major forest fragments in SIRNP, and are a preferred food source for many of SIRNP's lemurs. Planted exotic species are expected to be felled at a later date once a native forest has become established under the canopy they provide.

Q: Hello, how can fresh graduates get to start a career? I am not talking about just voluntary positions but paid jobs. It is very hard at the moment given the circumstances.

A: Voluntary work is one way to support local conservation organisations, build skills and these roles can potentially lead to paid work. However, that isn't possible for everyone. It is a challenging time at the moment but there are still jobs being advertised on environment portals online so it is worth making sure you are registered to get updated when new roles come up. The ability to be flexible in terms of job role, skills, and location is also likely to help.

Q: In addition to the first question - would a student from a Computer Science/Machine Learning background be of any use to the project?

A: We need many different skills in conservation and computer science skills have definitely been used on other projects i.e., to automate species/ individuals from camera trap images or audio files. We haven't tried this yet and we may not have a big enough dataset right now but yes, potentially!

Q: Are your Madagascan teams able to continue the conservation work at the moment or is everything on hold? If so, is there any local support in place for those affected?

A: Fieldwork by our Malagasy teams is on hold for the moment. We continue to support them financially and with any other assistance that they may require.

Q: Hello from Madagascar, great talk. Thank you! related to the agroforestry, how you monitor it and the benefit is shared to the community?

A: Biodiversity in agroforestry plantations has been monitored using a variety of methods, including transects, point counts, and remote sensing (e.g. camera traps and bioacoustics recording). Currently we are working with a local co-operative of cacao growers that has many of the community involved. In the longer term we would like to incorporate elements which would benefit more of the community i.e., plant nurseries and reforestation activities.

Q: are you using eDNA to differentiate between species? is there a good DNA database for lemurs yet?

A: We are not using it yet but there are teams in Madagascar working on lemur genetics.

Q: Are the sacred ibis a sub-species of the sacred ibis found on the African continent?

A: It was originally regarded as a subspecies of the African sacred ibis but it is now considered a separate species (*Threskiornis bernieri*).

Q: You mentioned briefly about the presence of Zebu in the National Park and the detrimental affect on reforestation and whether they should be in the national park, I just wondered if you could elaborate on if this was the only issue, future projects around this issue, and the effect on local people if they were to be excluded, for example if this would change attitudes towards the project?

A: Zebu (and their grazing habits) generally have quite a negative effect on seedling growth and survival. However the aridity of the environment and the poor quality of the soil are other important contributing factors that make reforestation difficult in Sahamalaza. We would like to study the behaviour and roaming patters of zebu in the future, so that we can better understand their effects and come up with mitigation strategies in collaboration with local farmers.