

## Project Update: October 2017

I am working with a Malagasy Masters student from the University of Antananarivo, Yasmireilda Richards, and four local guides to study lemur responses to fragmentation and ecological stress. At the time we received the grant in August 2017, we had just begun data collection in the forests surrounding Daraina. We have been searching for *Eulemur coronatus*, which are behaving more nocturnally than previously described, and after speaking with local guides, hunting of the species appears to be far greater than we imagined. Thus, to protect *E. coronatus* from hunting, we have been given the opportunity to collar and study another species in the area. Fanamby, the local NGO that we are partnering with, recommended that we examine the behavior and physiology of *Propithecus tattersalli*, the critically endangered golden crowned sifaka, a sympatric species to *Eulemur coronatus* that are found only in the Daraina region. The golden crowned sifaka is an umbrella species in the region and understanding how fragmentation impacts their social behavior and health will also aid in making conservation decisions for *coronatus* and other lemurs in the area.

In September 2017, we began following groups of *P. tattersalli* in edge and interior habitat in five forest fragments (Solanampilana, Bekaraoka avaratra, Binara, Antsaharaingy, and Ampondrabe) that range from extremely dry to humid. We have used physical characteristics such as crown shape, ear markings, fur distribution, and scars to individually identify lemurs to enable us to collect behavioral data and fecal samples on an individual level. Although, our primary focus is now on golden crowned sifakas, we are still opportunistically collecting *E. coronatus* faeces to analyse for stress hormone levels. We have also been working with teachers and students in Daraina's secondary school to educate students about lemur conservation, teach English lessons, and we have painted a world map on the school.

To summarise, we have had minor challenges in the field, but we have established golden crowned sifakas as the most appropriate species to collar and we continue to have positive collaborations with locals.

