## Project Update: January 2019

In December 2018 my team and I finished Part 1 of our 2018-2019 field season bv visiting our last forest fragment, Solaniampilana (a dry forest northwest of Daraina). The biggest highlight of the field season was that we were able to work with over 20 local guides to follow a total of 54 golden-crowned sifakas. Based on preliminary findings, lemur home range size is significantly different between forests types and quality. An example of the difference between the matrix (edge habitat) and contiguous



(interior habitat) of lemur groups in the rainforest fragment of Binara is depicted to the right. We found that the lemur group in matrix habitat had a home range of 25.1 ha while the group in contiguous habitat had a home range of 4.7 ha. We anticipate that this difference is due to decreased food availability and quality at the edge of the fragment. We found similar results between the other lemur groups followed in moderate and dry forests, but not quite as drastic. We are currently analyzing fecal samples for glucocorticoid metabolites to determine if there is variation in stress responsiveness between the lemur groups.



Last week, we began Part 2 of our field season. From late January until April 2019 we are following six of the same lemur groups. We are revisiting Binara (wet forest), Bekaraoka (moderate forest), and Solaniampilana (dry forest): outlined in the map below. We are following the same two lemur groups within each fragment to determine differences in behaviour and physiology during the rainy season. Currently, we are in Bekaraoka following the contiguous group (n=8). We are

collecting fecal samples daily from all individuals, including the infant, and will also collect the top five consumed plant species to analyze nutritional intake.