

To the Class of '55,

Feb. 3, 2019

My name is Sarah Palmer, I am a senior at Cornell College with a major in environmental studies and wildlife conservation. This year, I received funding in the form of a scholarship to partake in the Flying Fox Conservation course on the island of Mauritius for the month of January. Due to this scholarship, I was able to extend my stay in Mauritius and will be in the country for a total of two months. While here, I am conducting active research on the fruit bats that will hopefully further our scientific understanding of this animal and the role it plays within the environment. My research focuses on gut retention times and understanding what types of fruit the bats eat, which seeds they ingest, how long those seeds stay in their systems, and how likely a seed is to germinate once passed by a bat. This research will allow me the chance to gain field work experience, make connections for further career possibilities, and start to build credit as a reputable scientist within this field. Without your generous contribution to my time here, none of this would be possible. Thank you!

While here on Mauritius, the class and I have been working with a local NGO named Ecosystem Restoration Alliance (ERA) to understand what projects they have in place for handling the fruit bats and other issues with the ecosystem here. The largest problem in dealing with fruit bats is the conflict between humans and the animal. The fruit bats eat the commercially grown fruit that the fruit growers work so hard to produce. The bats are also loud and messy when doing so. The government doesn't fully understand how many bats are actually here on the island, or how to minimize the conflict between the two interactions. ERA is working to produce a more efficient way of netting trees and deterring bats from orchards. They are also working very hard to restore the natural and endemic forest species to provide habitat for the bats to go live in naturally and away from humans. We have been shadowing the work that is done here and the various experiments that are taking place.



(A captive Mauritian fruit bat named Misty we had the chance to observe closely)

We have learned that there is not an easy solution to this problem. On one hand, the bats are vital to the success of an ecosystem and produce high levels of biodiversity on the island. These bats are only found here on this island – nowhere else on the entire planet. The natural and endemic forest has been reduced to only two percent left on the island due to deforestation and farming needs for people. This leaves the bats with nowhere to go and fewer food sources. They are also listed on the red list for endangered species. On the other side, the bats here produce severe amounts of damage every year to orchards and trees in yards at homes. They are seen as a nuisance and appear to be very high in numbers on the island. They are loud and produce a huge mess after feeding. The general public wants to see the continuing of government culls to help reduce the issues. Our class has spent many hours talking about how to handle such a situation as this, where both sides have valid points and there needs to be a middle point found. This type of work is not easy and we are learning that it requires lots of patience and understanding towards both sides. We are also learning how important it is that science stays unbiased. Scientists are supposed to be unbiased and

remain neutral in decisions. We are getting good practice at having to remain neutral and listen only to the findings that we are seeing. This course has given us the ability to really understand what fieldwork is like and what it takes to run an NGO.



(The newest method for netting trees is completely encasing them under a shelter of nets as this protects from 100% of bat damage. ERA is trying to show local growers that this method is the most effective.)

For me personally, this experience is allowing me to do so much more with my college experience in these two blocks. While still being a student and getting college credit, I am actually in the field working and gaining hands on experience. This opportunity will allow me to stand apart from other applications for future job positions and make me far more creditable when wanting to do future research. I am taking research that I already conducted earlier in my studies and am able to compare it with the research I will be doing while in Mauritius. This kind of experience is scientifically worthy of being published and even setting future career opportunities in the scientific



community. I would not be able to be here without the generosity of the scholarship donation.



(Wild bats through a pair of binoculars. This was the first time the whole class was able to observe bats within their roost site.)

When you donate funds to students, it not only gives them an opportunity to do and experience things they wouldn't have been able to before, but it also helps open doors for them in the future. I am one of those students that is benefitting greatly from both sides of that outcome. I want to thank you for making all of this possible for me. It

means the world to me to have the privilege to be on such an amazing adventure and to be learning so much!

Thank you so very much!

Sarah Palmer '19



(The whole class discussing our findings after conducting an exit roost survey. We split the sky into various parts, recorded the number of bats we observed, then added them together at the end. Here, we are discussing whether this was the best method or not, and how do we continue to reduce the level of error for the following nights.)