

2016 Mammals Team - November 23rd, 2015

We were very excited when we discovered that the Rainforest Team is adding mammal research to our project this year. We knew that our School had not done mammal research in a while and we were thrilled to get it started again. After in-depth research, we found out that no one has ever tracked the mammals we are looking for in Costa Rica. Caroline Herdje '16 and Maureen Harris '16 wanted to be a part of the Mammals Team because we love animals and wanted to learn more about them, especially the ones in Costa Rica, where we will be going in early March. There are so many mammals in the rainforest and we want to find out more about them and their habitats. While in Costa Rica, the Mammals Team will also be doing a population inventory. This is seeing what there is in a specific area.

We hope to track the Baird's tapir, common grey four-eyed opossum, watson tree rat, vesper rat, dusky rice rats, coatimundi, and the vested anteater. Every tracking method varies on the species of the animal. There are a variety of ways to track animals on the ground. One of the methods we will use is an infrared laser camera. These cameras use laser technology that capture detailed images and can send the data from miles away. The cameras are mounted on branches deep in forest. We will check their data twice a day for two weeks. Another method we will be using is the tracking pad. After the animal is caught, we would attach a device to its collar, and will be able to see the animal's movements. We are trying to figure out a way for the collar to fall off naturally because it would be hard to catch the same animal again. Another method we will be using is telemetry, which is an automated communication process in which it tells the measurement of data from far away sources by wire, radio, or special equipment for monitoring. Furthermore, we also use traps as a method of tracking. These traps help us catch animals close to their natural habitat. The traps are also very useful for taking measurements and making scientific observations. Furthermore, using an accelerometer will be beneficial when we are in Costa Rica. An accelerometer is an instrument for measuring acceleration using the vibration of a machine, building, or other structure. Additionally, we plan to use collars and home range usage for tracking the accelerometer. The last method we will use for on-ground trapping is a mist nest for bats. The net is set up in such a way that when the bats move to try and escape from the net, the net moves in a different way and entangles the bat.

Eighty percent of all species live in Central America. We hope to find out as much information as we can regarding the mammals in the rainforest and are hopeful that our equipment and ways to trap them will work. We are setting up six different cameras to take pictures during the day and night so we don't miss anything. Doing our research will help us identify what type of species live in a certain animal and how much movement they do each day and where they go. Below are the pictures of the animals we want to catch.

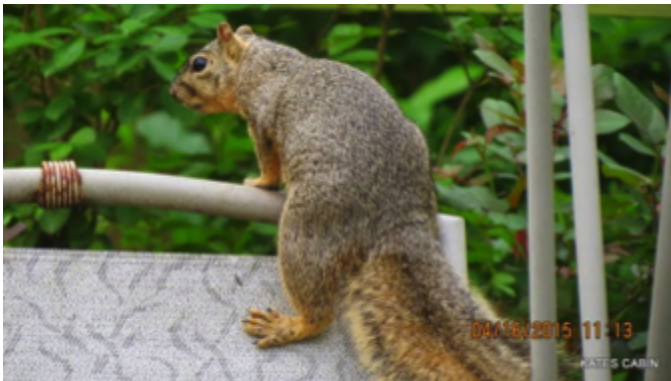
Baird's tapir



Common grey four-eyed opossum



Watson tree rat



Vesper rat



Dusky rice rat



The vested anteater



Coatimundi



Mammals Team Questions - January 13, 2016

Hey guys! We are very excited as we prepare to head into the rainforest! The deeper into our research we go, the more questions we have. Some of our questions are:

1. How are we going to get the accelerometer back after we put it on the animal?
2. What animals will we come in contact with?
3. How do we operate an infrared laser camera?
4. What is the function of a tracking pad?
5. How will an accelerometer help us with our research?
6. Which method is going to be most efficient to track the mammals?
7. Will we see more mammals at night or during the day?
8. What do the mammals mostly eat?

We hope we will track down a lot of animals there, and be able to use all of the tracking methods. There are 46 days until we go! We will keep you updated as we continue our preparation for our trip. If you have any questions, please leave a comment!

-Caroline and Maureen

Mammals Team: 17 days! - February 11th, 2016

We only have 17 days until we leave for Costa Rica, so we've been reading some tips from past Mammal teams on what it's like down there. We have gathered the following helpful hints!

- Build a sturdy observation cage
 - The best bait is soap, chocolate, sunflower seeds, and meat
 - Bring enough anesthesia
 - Bring correct size synergies
 - Wake up early enough to net bats in the morning
 - Put a net checking bag together with tape measure, scissors, Fiona Reed Book, frisk mater, and dissecting kit
 - Take lots of pictures!
 - Have fun :)
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