Project BT 2013-2014 - December 7th, 2013

This year we are revamping Project O (Orthoptera). This years team: Coleman Walker, Jay Hopkins, Nate Langh, and our team leader Shawn Mullen are working to transcend the perceived limits of Costa Rican Bioacoustic Recording. We are still keeping the focus on Orthopterans and recording their calls, but our team is diversifying our focus to recording not only Orthopterans, but Birds, Amphibians, and Mammals as well, adding to the Macaulay Sound Library at Cornell University. We are collaborating with the other groups and forming lists of attractive species that the sound library needs for when we take our journey into the feild later this coming February.

Our jobs, as a team, this year is ambitious. Practically starting from scratch, Project BT, is collecting Field guides and familiarizing ourselves with the tools, insects, and software. We are also adapting several Orthoptera recording techniques, and doing extensive research to be ready for Costa Rica. Our research today aids future researching processes. To one day be able to enter any habitat, record the surroundings, run the sound through a database, and be able to see a diagnostic of the habitats heath is very exciting and only a few years from becoming reality.

Project O had been running for 3 years, however now we are changing it to Bioacoustics & Telemetry.

Our Goals this year:

1. to add to the Macaulay Library's birds, reptiles, and amphibian sound database by working with the other groups and what they catch while in the field.
2. to discover a new method of recording and identifying Orthopterins and other sound producing insects of Costa Rica, hopefully adding to the Macaulay Library sound database.
3. to use the science of radio telemetry to track many of the recorded birds, reptiles, amphibian, and Orthopterins to better document their habitat borders.

There is a lot the world doesn't know about earth's beautiful Rainforests. Peering through an open door of infinite possibility is a daunting thing; but we cannot turn back, don't want to turn back. Follow us through the door, we will have a lot to share.

Methods and Materials 2014 - January 28th, 2014

As our departure day nears, project BT (Bioacoustics and Telemetry) is working every day to finalize our methods and materials. We have come up with multiple new ways of recording that we will be trying at the Forman School base which will give us new measurable variables for our research. Our team leader, Shawn Mullen, has bought multiple crickets from a pet store which are staying in an animal cracker jar. We have ordered corrugated plastic which we will use to make different environments for the crickets. The new parabolic mic that our wonderful Wendy Welshans was able to get us will be used to get stronger recordings from Orthoptera. We may even be able to get a recording of a bullet ant's call. After recordings are taken, they will be processed into Raven Software on a Glacier computer. Thanks to the computer, we will be able to process recordings in the field without risk of loss to our data. The team has ordered multiple new field guides for identification. The telemetry equipment we will be using is mostly the same as it was last year, but we did add a very small collar so we can track more species.