Reps + Amps Methodology - February 27th 2019

In the rainforest we will be studying Chytrid fungus and we will be using different methods to track reptiles and amphibians that have survived the major wave of the disease that has moved North from South America and is counting through Central America and into North America.

Throughout the two-week period the 2019 Reps and Amps team went on daily hikes, collecting specimens and filling out data sheets of information on the animals that we caught. The data sheets require specific information on the animals and the conditions of their capture. Some conditions that need to be recorded upon capture are country, province, locality, elevation, location description, date, weather, percent cloud cover, time, and air temperature. The information on the actual animal includes species (latin name), common name, sex, age, weight,coloration, snout-vent length, total length, and activity. Other noteworthy details are method of collection/observation, and any photographic images.Some methods of collection include capturing by hand, by using a rubber band, by noose, or by pitfall trap. Methods of observation could be but are not limited to open observation, observation through binoculars, or observation of vocalizations. These approaches are effective in several different ways. The procedures executed during the expedition, however primitive, were very effective. The team would do at least two hikes

Every day… one before noon and one after dark. The difference in temperatures and light

intensity allowed the team to observe a wider variety of species. Most species were collected by hand and put in Ziploc bags to be carried back to camp and catalogued. The more venomous species were collected using a snake hook and were put in a snake bag. Between collection and cataloguing, the specimens were kept in their Ziploc bags and hung on a clothesline (this method does not harm the animals when executed properly).This allowed for organization and easy access to the species needed. They would wait on the line until they were catalogued and photographed, then they would be released in the same spots they were collected at.

For the safety of the animals, the team tried to record and photograph each specimen within twenty-four hours of their capture. The more venomous species would be released by the team leader (Twan Leenders) at an undisclosed location. The sensitive species such as the Crowned Tree Frog would be released close to the location where they were found so that they would not be disturbed. To record the data on the species, the team would first identify it through noting key features and looking in the field guides for a match. When the species was known, the team would take notes on the conditions and characteristics listed above (data sheets). The data compiled from these individual observations is relevant to the observation of trends. This data can then be compared to the observations of past teams in order to detect long-term trends in species population, distribution, and behavior.