## Project Update: May 2016

**Goal # 1.** To determine the prevalence of the fungus *Batrachochytrium dendrobatidis* in four populations of *Peltophryne longinasus*, as well as in its breeding habitat.

Activities performed during the period:

- 1. We conducted a field trip to "Sierra de San Carlos" (locality #2 of the project).
- 2. We sampled the skin of 15 male's adults of *Peltophryne longinasus* in their breeding habitat, a small stream in the mountains. Males were actively calling along the stream's edge, above small rocks and vegetation. No females were found during the sampling period.
- 3. We also found several tadpoles of *Peltophryne longinasus*, which confirm the recent breeding activity of the species.
- 4. A new threat to *Peltophryne longinasus* was identified. At our arrival, a large area of forest had signs of an intense fire. Thanks to our interaction with local settlers we knew that the cause for this fire is already unknown, but surely the intense drought that is affecting Cuba is increasing the risk of fire.
- 5. We successfully took water samples at *Peltophryne longinasus*'s breeding habitat in order to test for the presence of the free-living stages of the fungus in the natural environment. Four spatial replicates of the sampling were taken.
- 6. Different water parameters were measured *in situ*: pH, conductivity and temperature (measured continually for a period of 24 hours), also with four spatial replicates in *Peltophryne longinasus*'s breeding habitat.

## Additional activities related to Goal I:

Following the recommendations of RSG' reviewers, during this fieldwork we sampled the skin (using swabs) of 10 additional individuals of another amphibian species, which are also highly linked to water bodies.

**Goal #2.** To develop educational activities in order to rise awareness about the value of amphibians, and the potential negative impact of the fungus.

Activities performed during the period:

- We interacted with local settlers in order to get a better picture about their level of knowledge related to our target species. Five persons were interviewed during this visit, and to our surprise, they knew nothing about *Peltophryne longinasus*. Nevertheless, they were very receptive toward our project and the necessity of protecting this species. Another positive point was that local settlers have a very strong feeling of possession in relationship to the natural environment, which facilitates the reception of our ideas.
- 2. We designed and printed a poster whose main purposes are to educate about the importance of amphibian in nature, show the relevance of the Cuban fauna and to teach how to protect this fragile group of animals. Thus, the poster was given to the people interviewed and was also donated to their local Centre of Entertains, where public activities are frequently developed.

3. During the fieldwork, high-quality photos of the target species, its habitat and its tadpoles, as well as of different species of amphibians, were taken. These photos will be used for future educational activities.

## Figures:



Figure 1: *P. longinasus longinasus* in its breeding habitat.



Figure 2: Fire affecting *P. longinasus longinasus* habitat.

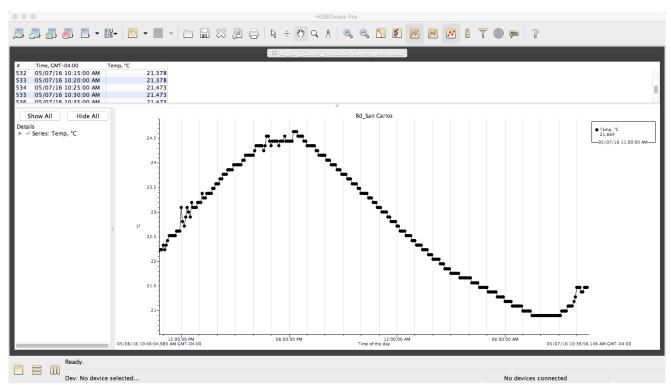


Figure 3: Variation in water temperature (°C) during 24 hours in *P. longinasus longinaus* habitat.

## Photos



