

Project Update: January 2017

November 2016 – January 2017

- **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. A second field trip was conducted to “Topes de Collantes” (localities #3 of the project) in conjunction with Antonio Cadiz.
2. At this locality (the only one currently known to be infected by the fungus), we found only one juvenile of *Peltophryne longinasus dunni* (Figure A). Neither females nor males were detected during the sampling period after thoroughly monitoring the breeding area. This individual was located in exactly the same stream where eight years ago a dying male of the species was found. We also sampled this juvenile for the presence of the fungus (Figure B).
3. During this second visit to Topes de Collantes no tadpoles of *Peltophryne longinasus dunni* were found after monitoring several small streams.
4. As it was accomplished during our first fieldtrip to this locality, we successfully collected water samples at *Peltophryne longinasus dunni* breeding habitat in order to test for the presence of the free-living stages of the fungus in the natural environment (Figure C). Following the previous protocol, four spatial replicates of the sampling were taken.
5. Different water parameters were measured *in situ* in both localities: temperature (measured continually for a period of 24 hours), pH and conductivity (Figure D). Here, four spatial replicates in *Peltophryne longinasus dunni*'s breeding habitat were taken as well.
6. All samples are been kept in -20°C and soon we will start processing them in the laboratories to test for the presence of the fungus both in swabs and in water filters.

Additional activities related to Goal I:

In addition to our main monitoring activity with *Peltophryne longinasus dunni*, we also took swab samples of three additional frog species: *Eleutherodactylus casparii*, *E. dimidiatus* and *E. greyi*. These species were selected because their habitat partially overlaps with that of *Peltophryne longinasus dunni*. We sampled 10 individuals of each of these species (Figure E).

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

Activities performed during the period:

1. As we have been doing during the course of our project, prior to our visits we

interacted with local authorities of both the protected area and touristic agencies. They have sustained a receptive and cooperative interaction with the project and us. Additionally, in this visit we provided general information about the local values in regard to Amphibian and Reptile fauna that they requested from us during our previous visit.

2. We also printed and distributed additional educational posters to educate local settlers about the importance of amphibian in nature, showing the relevance of the Cuban fauna and to teach how to protect this fragile group of animals.
3. We also designed a poster about *Peltophryne longinasus*.
4. We continued interacting with local settlers in order to get a better picture about their level of knowledge related to our target species. Five more local settlers were interviewed during this visit (Figure F), and this time two of them knew about our target species because they are the local staff that have been working for the touristic agency for many years in the area. All of them were very receptive toward our project and the necessity of protecting this species.
5. Additional high-quality photos of the target species, its habitat, as well as of different species of amphibians, were taken.



Photos by Antonio Cádiz Díaz. Figure A. Juvenile of *Peltophryne longinasus dunni*; Figure B. Swabbing juvenile of *Peltophryne longinasus dunni*; Figure C. Taking water samples at *Peltophryne longinasus dunni* breeding habitat; Figure D. Measuring water parameters at *Peltophryne longinasus dunni* breeding habitat; Figure E. Sampling other species of frogs & Figure F. Interacting with local settlers.