

Project Update: January 2023

Field and laboratory work update

In the 4 months since we started with the project "Confused Robber Frog (*Oreobates berdemenos*) as a model to assess and propose conservation efforts in the Southern Andean Yungas forest", we found ourselves with one of the driest wet seasons in the modern history of the Yungas cloud forest of northwestern Argentina. The activity of amphibians in general, and even more those of direct development such as the confused robber frog, depends to a great extent on the humidity conditions of the environment. In addition, the Yungas is an ecoregion with a marked seasonality between the dry season (April-September) and the wet season (October-March), so the lack of rain and humidity cause environmental conditions that are clearly different from those normally characteristic of this season. Due to this unusual dryness, the field work in search of the confused robber frog was arduous, mainly because the activity of this species was very limited in time, for which its location through the active auditory search method using playbacks did not give the expected results. However, despite all setbacks, we managed to find *O. berdemenos* individuals in three new PAs: Zapla Provincial Reserve, Baritú National Park, and the recently created PA Native Community El Arazay. The latter two are found in the northernmost of the distribution of *O. berdemenos*, while Zapla Provincial Reserve is the southernmost locality of the species. From the two first PAs, genetic material was collected, the individuals were measured and weighed; and in the three PAs the environmental conditions and GPS point of the encounters were recorded.

Currently, we are proceeding with the extraction and sequencing of molecular data necessary to analyse the connectivity of *O. berdemenos* between PAs. Added to the samples obtained in this field season, we are working with previous samples gathered in the framework of Dr. Mauricio S. Akmentins research. We purchased a new item for the molecular laboratory: a blue light transilluminator. It allows us to see if indeed, through laboratory work, it was possible to obtain the precious DNA. In addition, we purchased reagents kits and sequencing service from Macrogen, which will turn our biological molecular samples into analyzable data.

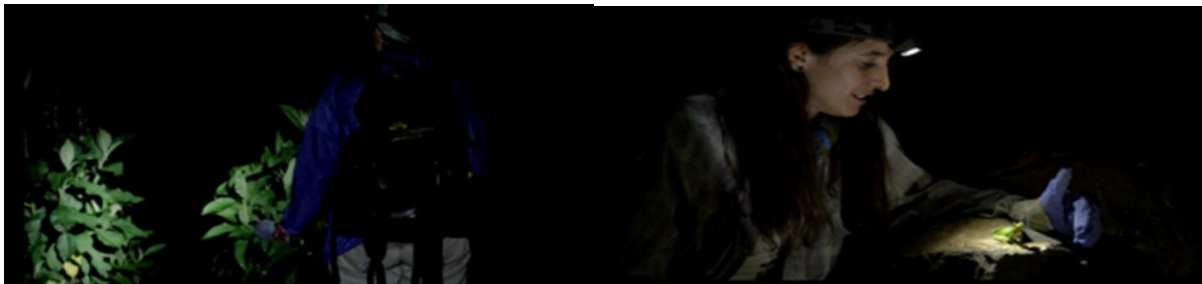
Dissemination

We developed the documentary concept and wrote the script. It will be composed of five chapters: (1) the first introduces the Yungas to the world, (2) the second shows the world of amphibians and *O. berdemenos*, (3) it continues with an episode about the threats that exist in the Yungas, (4) then it informs about the PAs that try to combat these threats and the importance of connectivity between them, and finally (5) the final episode is a compilation of different conservation projects in the Yungas and their different approaches on conservation. With the script already written, we proceeded to start generating the audiovisual material, reaching a total of 90% of the necessary material. We are currently in the editing process.

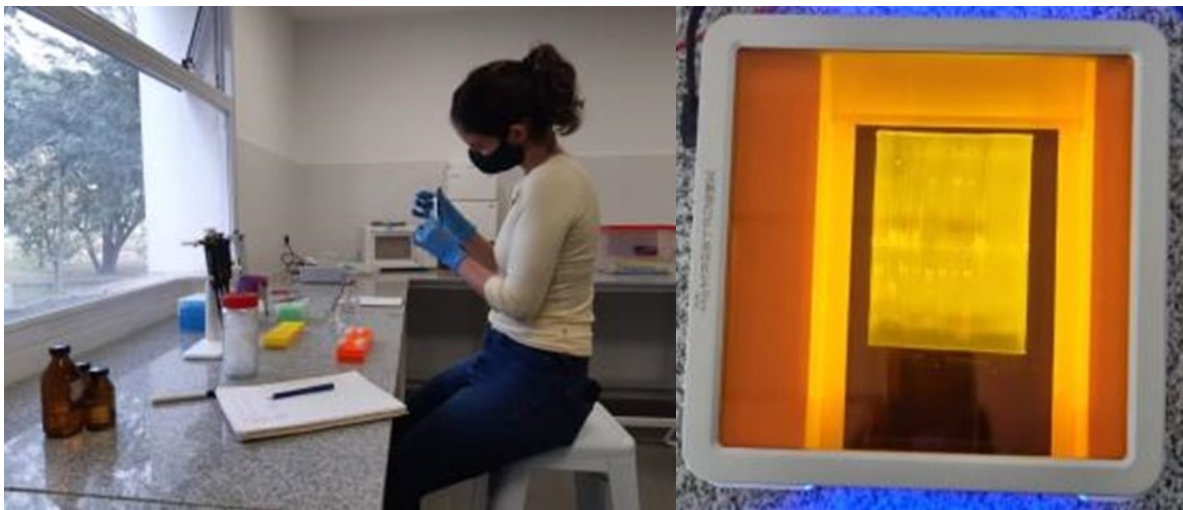
Furthermore, we started our activity on social media with Instagram @conservacion.yungas on November 19, 2022. We currently have over 600 followers, some of whom contacted the project to help in some way, for example by sharing data from research or offering help as a social communicator. We started the series "Did you know that?" with the first publication that introduces the Yungas. This format was very successful, reaching over 13,000 views so far. We already planned

and are editing more videos with the same format. Also, interviews were conducted with three different conservation projects, two park rangers and the representative of the Baritú and Lipeo communities; these are currently being edited and will be published soon as the opening of our YouTube channel.

Finally, on January 27th 2023 we participated in "Vacaciones con Conciencia", an event organised by the Environment and Planification Secretary of the San Salvador de Jujuy Government in reason of the International Day of Environmental Education and Actions in face of Global Warming. We worked with around 200 children and young adults, sharing knowledge regarding the amphibians that inhabit the Yungas and how global warming is endangering them and what we can do as individuals to create a more resilient scenario for the Yungas.



Active auditory search



Laboratory work



Confused Robber frog.



Symbolic picture that represents the connectivity and its importance



The Yungas Andean Forest and its exuberance





Some PAs visited during this season.





The documentary processes.







Amphibian fauna from the Yungas Andean Forest



Some threats that occur upon the Yungas Andean forest: intentional fires and expansion of agriculture border.



Social media content creation



International day of Environmental Education and Actions in face of Global Warming