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The Conservation of the Darwin Toad (Melanophryniscus montevidensis) Populations, Uruguay

In partnership with The Science Faculty, UDELAR, Raúl Maneyro

by Daniel Núñez

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Objective 3

Amphibians decline is something that is affecting a lot of species worldwide. 40% of the species of amphibians are globally threatened in the IUCN red list. The emerging diseases like chytridiomycosis, climate change, habitat destruction and fragmentation are the main causes of the decline of this group. M. montevidensis (Darwin toad) faces a lot of these threats, if nothing is done probably it will go extinct in the wild.

There are some important locations or regions that need to be maintained as a natural protected area and to create new natural protected areas to the conservation of the species and the specific populations. We were able to visit the Natural Reserve of Rocha Lagoon, an important habitat for the reproduction of the Darwin toad. Other natural reserves like Laguna Garzón, Laguna de Castillos, Cabo Polonio need to make more efforts for the conservation of the populations they have. For example, more educational work would help for the conservation of the species, but that is not enough. The Darwin Toad (M. montevidensis) habits in small ponds of approximately 12 meters and 20 cm depth, a perfect example of microhabitats. Because of its reduced distribution more microhabitats need to be addressed as natural protected areas. These microhabitats are important not only for its obvious conservation, but also, for preserving a genetic variability of the different populations.

The future investigation and identification of locations for the populations of the species are the key for the survival of the Darwin Toad. While we were in Montevideo, Raul Maneyro recently with other investigators were able to identify one of the last locations in Montevideo, in the International Airport of Carrasco. This was a population that was discovered a few years ago, and protecting populations and microhabitats like this is the future for the species. Also trying to understand more the behavior of the species can help us improve the understanding of it. We were able to observe a lot of activity of individuals at night and with no rain, a behavior that is not normal or that hasn't been seen too much in this species. This might answer to new conditions, the species is adapting to less rain? Climate change is affecting the behavior patterns of it? Investigation and trying to answer more questions about the species is what scientists have to do in the near future.

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Current populations records of Melanophryniscus montevidensis (AmphibianWeb)

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