Project Update: December 2012

Field trips during the second semester of 2012

2012 was characterised by an intense drought that lasted until the end of September. Therefore, field trips were delayed due to the lack of anuran activity during most of the year. However, by August-September the rains became more frequent, and we proceeded with the field trips and surveys.

Date: 27th-29th August, 2012.

Site: Barra Grande and Laguna de Castillos (34º25'48'' S; 53º97'89'' W), Rocha, Uruguay

This site lies within the Biosphere's Reserve *Wetlands of Eastern Uruguay*, also a Ramsar Site. The landscape matrix consists of grasslands, whose main use are extensive cattle grazing.

The terrain is plain and shallow, and with the exception of those wetlands associated with the margins of the big coastal lagoons, most wetlands are temporary (autumn-winter), formed in ground depressions.

These wetlands are used by an important number of anuran species. Most representative are *Hypsiboas pulchellus*, *Scinax squalirostris*, *Scinax granulatus*, *Leptodatylus latrans*, *Pseudis minuta*, *Dendropsophus sanborni, Physalaemus gracilis*, and *Leptodactylus latinasus*. For all of these species we have recorded their calls and we either have pictures or video recordings of them. Other, less common species include *Rhinella arenarum*, *Rhinella fernandezae*, *Rhinella dorbignyi*, *Scinax fuscovarius*, and *Odontophrynus americanus*. Finally, a species that has been reported recently for the area (*Pleurodema bibroni*) after many years of not finding wild populations could probably be found on the area. However, we have not been able to record it, probably because this seems to be more of an explosive breeding species, after heavy summer rains.

Date: 16th October, 2012.

Site: Cerro de las Lagunitas (34º65'43'' S; 55º33'64'' W), Maldonado, Uruguay.

This was a day trip to a very particular location, where we had been earlier in 2012 looking for *Melanophryniscus pachyrhynus* (formerly *Melanophryniscus orejasmirandai* for the populations in this area, synonymized with *M. pachyrhynus* a few months ago).

Melanophryniscus species are very special toads for several reasons: they are quite small (2.5-3.0 cm snout-vent length), charismatic species, living in very restricted sites throughout Uruguay, mainly small hilly streams with flowing water, although a few species use shallow, ephemeral pools where they gather to breed. Also, three out of the six *Melanophryniscus* species reported for Uruguay are endemic.

Because they are explosive breeders and use such particular habitat characteristics, recording species from this genus is not easy. On a first trip to the site in July 2012 we had spotted a place which looked ideal for the presence of *Melanophryniscus pachyrhynus* but the weather conditions were not adequate. Thus, we were able to find the species on a later trip, right after a spring storm with heavy rains. We audio and video recorded several individuals and found tadpoles in the first stages of development, indicating that there had

been breeding activity at the site, probably after other heavy rain episodes. Besides *M. pachyrhynus*, we also found *Physalaemus gracilis* in amplexus, building foam nests, *Limnomedusa macroglossa*, and *Pseudopaludicola falcipes*.

Date: 1st-7th December, 2012
Site: Laguna de Salamanca (30°88'52'' S; 56°00'34'' W), and Paso de León (30°10'88'' S; 57°08'12'' W), Artigas, Uruguay.
These two locations are situated in the very northern part of the country; both are in the margins of Rio Cuareim, the natural limit between with Brazil in the north of the country. The Cuareim basin is rather underexplored and because the geography, vegetation and climate is quite different from the rest of Uruguay (there is a clear tropical and chacoan influence both in the flora and fauna, as opposed to the rather pampean biota in most of the country), the amphibian fauna is also quite distinct.

On this occasion we were able to detect and record three clear representatives of the northern anuran herpetofauna: *Scinax nasicus* (audio, video and photographs), *Lysapsus limellum* (audio, video and photographs), and *Leptodactylus chaquensis* (photographs). We also recorded *Dendropsophus sanborni*, *Pseudis minuta, Leptodactylus latrans, Hypsiboas pulchellus, Physalaemus biligonigerus.*

Date: 26th-28th December, 2012
Site: Balcones del Lunarejo (31º45'50'' S; 55º85'58'' W), Rivera, Uruguay
Balcones del Lunarejo is part of the Valle del Lunarejo Reserve. This is a hilly area, with creek forests among which flow several rivers and streams. On the date of our trip, the weather condition was rather stormy and warm, which favoured the activity of amphibians. Thus, we were able to record several species: *Phyllomedusa iheringii*, *Scinax fuscovarius, Hypsiboas pulchellus, Elachistocleis bicolor*, *Physalaemus biligonigerus, Pseudopaludicola falcipes, Scinax granulatus, Leptodactylus latinasus, Leptodactylus gracilis* and *Pseudis minutus.*

A point to highlight is that within this reserve there is a very small populated area, and some of the families in the area are becoming involved in ecotourism as a way of earning their living. Locals tend to welcome people that study the flora and fauna of the area, obtaining knowledge that can, in turn, add value to their entrepreneurship, particularly from a conservation point of view. We have established a collaborative relationship with one of these families and because they have children in school age, they can also tend a bridge to interact with the local rural school. For these aims we are working on the preparation of material that will serve both ecotourism and pedagogic ends to extend the knowledge and awareness on the importance of amphibians within ecosystems, and their conservation.

Further comments
This intends to be an interim report on the progress of the project *"Developing a baseline for amphibian monitoring through acoustic surveys in Uruguay, South America"*. Due mainly to weather conditions throughout most 2012, the activities planned for the year (sampling and monitoring, and posterior elaboration of information to distribute within local communities) have been delayed.

As stated before, we are beginning to interact with a people living within a reserve area in the north of the country, an experience that will serve as a pilot upon which to base further information give out.

Because we still have funds to carry out both the field and the elaboration of didactic materials, we would like to extend the deadline of the project until next September-October. In that way, we will have the opportunity to sample throughout the year, particularly in autumn and late winter-early spring 2013. Also, because school children are an important target of the project's information give-out, it is important to have enough time present our project to schools and to plan and carry out workshops with students.

As a general overview, so far we have recorded 21 out of the 48 anuran species native to Uruguay. This includes audio, video and photographic recording. In the forthcoming months, the project's result will probably represent the most complete media database of the anurans of Uruguay. A result that means a lot in terms of acquiring knowledge towards conservation.

Captions for attached images:

Plate 1. *Scinax nasicus* (a, b); *Phyllomedusa iheringii* (c); *Pseudopaludicola falcipes* (d); *Lysapsus limellum* (e); *Leptodactylus chaquensis* (f).

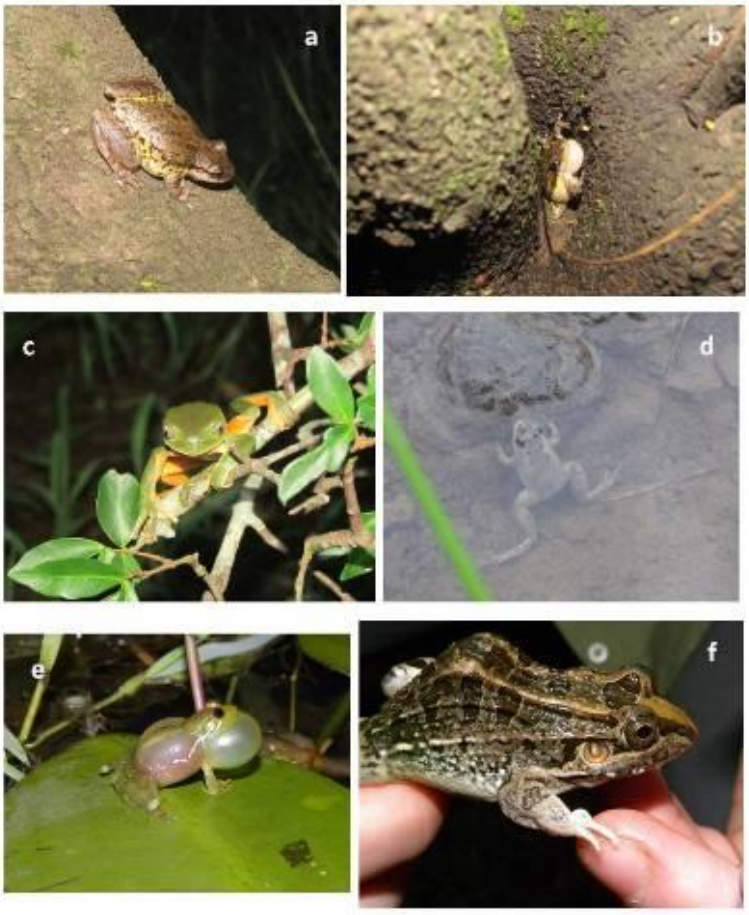

Plate 2. *Physalaemus gracilis* in amplexus (a); foam nest with eggs of *P. gracilis* (b); *Melanophryniscus pachyrhynus*; walking, vocalizing and belly view (c, d, e); *Limnomedusa macroglossa* (f).

Plate 3. Habitas and landscapes where the different species were found: Cerro de las Lagunitas, within the hilly chain of Sierra de Ánimas (a, b); Cuareim river (Artigas) at Laguna de Salamanca (c) and Paso de León (d, e); Balcones del Lunarejo: view of the landscape (f) and neighbours accompanying one of the frogging walks (g).