PROJECT UPDATES

Project ID: 42919-1

Title of Project: Basis for conserving the Santa Fe frog (*Leptodactylus laticeps*) in the South American Great Chaco.

Name of leader: Isis Agostina Dánae Ibáñez

The following results and advances are presented in alignment with the activities outlined in the original proposal.

Setting up the project activities.

We designed and printed brochures featuring key characteristics and threats of the Santa Fe frog, along with information about the citizen science program. In addition, we developed audiovisual materials and educational booklets to support the public engagement campaign.

We contacted six local leaders (Julio Zannutini, Paulino Díaz, Horacio Córdoba, Mauro Aquino, Andrés Vidal, Daniel Peréz) and five schoolteachers (Natalia López, Cinthia Verón, Sonia Corbalán, Violeta Sosa, Marcelo Ledesma) in Chaco and Formosa provinces to coordinate community meetings and school workshops as a first step towards conducting interviews and educational activities.

***Figure 1**. The Kururu Pytã Project brochure designed to engage local communities.*

Working in territories: First fieldwork period – November/December 2024

Surveys

Based on historical records from herpetological collections of Argentina, we carried out an extensive field campaign to detect the presence of the Santa Fe frog at historical localities across Salta, Formosa, and Santiago del Estero provinces in the Argentinean Dry Chaco.

We combined multiple sampling techniques to comprehensively study the species, including active nocturnal surveys conducted across eight historical localities (three sites per locality). In addition to recording occurrence data, we collected information on relative abundance and habitat characteristics. The occurrence data gathered will also be used to analyze associations with landscape-level features. Complementing these methods, we carried out preliminary testing of passive acoustic monitoring to enhance detection and monitoring efforts in the next fieldwork campaign. Furthermore, we continue investigating aspects of the species' reproductive biology, employing innovative technologies that are novel for this group of animals.

Figure 2. *Fieldwork conducted to detect* L. laticeps *individuals. Photos: Gabriela Agostini and Isis Ibáñez.*

Working in territories: Second fieldwork period – June 2025

Interviews

We conducted 87 semi-structured interviews with members of “criollo” and indigenous communities (Wichí) in Formosa and Chaco provinces. An indigenous interpreter assisted us with interviews of members of indigenous communities. The interviews explored local knowledge, perceptions, and uses related to amphibians—particularly the Santa Fe frog—as well as interest in conserving Dry Chaco ecosystems, including forests, grasslands, and wetlands. Information of this kind is typically used in studies of this nature to guide conservation strategies and design community engagement activities.

Figure 3. *Interviews with members of local communities. Photos: Camila Deutsch and Irene Negri.*

Public engagement campaign

We conducted 91 pre-public engagement campaign interviews with students and teachers in schools in the provinces of Chaco and Formosa. Additionally, we held three one-day workshops, which included educational activities using audiovisual materials and booklets about native amphibians, with a special focus on the Santa Fe frog.

We were delighted to welcome two new volunteers to the Kururu Pytã Project, bringing fresh energy and valuable expertise to our work. Mauro Aquino (Park Ranger, Parque Natural Provincial Fuerte Esperanza – Chaco) and Andrés Vidal (Park Ranger, Reserva Natural Formosa – Formosa) joined us to support project activities and help document Santa Fe frog records in protected areas across Chaco and Formosa.

Additionally, alongside activities in the territories, COANA's communication and education team worked on creating and sharing content for the project through COANA's social media channels (website, Facebook, Twitter, Instagram, and YouTube).

Figure 4. *Pre-public engagement campaign interviews and workshops in schools. Photos: Irene Negri and Isis Ibáñez.*

Figure 5. *Educational activities about native amphibians and the Santa Fe frog. Photos: Gabriela Agostini and Irene Negri.*

Data analysis

Surveys

We confirmed the current occurrence of the Santa Fe frog at eight surveyed localities. Furthermore, we detected and collected habitat data of 58 individuals. Preliminary results indicate that species occurrence was associated with well-preserved forests with predominance of tree and shrubland species such as Palo santo (*Gonopterodendron sarmientoi*), Vinal (*Neltuma ruscifolia*), and Cardón Moro (*Stetsonia coryne*).

This information will contribute to identifying habitat preferences and applying niche modeling to assess the current distribution and the severity and extent of habitat loss as a threat to the Santa Fe frog. Additionally, it will help to identify priority conservation areas for the species in the Argentinean Dry Chaco. To carry out these analyses, I undertook specialized training in the necessary software,

including Kaleidoscope Pro for passive acoustic data analysis and QGIS for spatial analysis.

Figure 6. *The Santa Fe frog individuals detected during active nocturnal surveys. Photos: Gabriela Agostini.*

Figure 7*. Habitat identified of the Santa Fe frog: Forest of Palo santo (*Gonopterondendon sarmientoi*) and Cardón moro (*Stepsonia corine*). Photos: Isis Ibáñez*

Citizen science

We collected a total of 32 citizen science records from iNaturalist platform (18), Google Form (5) and WhatsApp (9).

Interviews

Preliminary results indicated that hunting of the Santa Fe frog does not appear to be common, either for trafficking or human consumption. However, some people expressed aversion to the species, mainly due to its striking coloration and defensive behavior. The interviews revealed limited knowledge about native amphibians among local communities. However, there was a strong awareness of the close relationship between these animals and water bodies, as well as a recognition of the importance of managing and conserving wetlands—both natural and artificial—since these are viewed as critical resources for local people and their livestock. Additionally, most respondents valued native forests as important resource bases and expressed interest in their conservation.

Figure 8. *Local people showed us water bodies within their territories during interviews. Photo: Camila Deutsch.*

Communication of Results

I was invited to join the IUCN Amphibian Specialist Group in Argentina this year. Subsequently, I presented the Kururu Pytã Project and its conservation efforts in Dry Chaco at the Argentine scientific congress “VIII National Congress on Biodiversity Conservation” (May 2025), during the symposium titled “Conservation Actions by the IUCN Amphibian Specialist Group in Argentina.” Additionally, I plan to present the advances and results of the Rufford project at the “Latin American Congress of Herpetology” (Costa Rica, February 2026).

On the other hand, I am currently in the initial stages of writing a scientific paper that will present the results on the habitat use/selection of the Santa Fe frog in the Argentinean Dry Chaco, which will fill a critical knowledge gap and provide valuable information to support future conservation efforts in the region.

Figure 9. *Dissertation in the VIII National Congress on Biodiversity Conservation. Photo: Lucía Embrioni.*