

## Project Update: August 2019

From July 19<sup>th</sup> to 27<sup>th</sup> 2019 we carried out our first field survey expedition to The Serranía de los Paraguas. The expedition team was led by Dr. Jhon Jairo Ospina-Sarria from Calima Foundation, and included four undergraduate students and one professional from the Universidad del Valle. This expedition was planned and managed through collaboration between Serraniagua Corporation and Calima Foundation.

During our 9-day exploration, we found the climate exceptionally wet (daily rains and the area was bathed in clouds during day and night). Nonetheless, there is evidence of some dry streams or with reduced flow. The expedition visited 15 sites in the Serranía de los Paraguas, which were surveyed along transects during the day and night. In the field, geographic coordinates were determined using two hand-held GPS satellite receivers. Besides, we used a digital recorder (TASCAM DR-05) to record the advertisement calls of the frogs. In order to measure the microhabitat air temperature, we used a portable digital thermo-hygrometer.

As a result of our expedition, 24 amphibian species were registered; one limbless amphibian, one salamander, and 22 frogs. Of these, currently 10 species are threatened according to the IUCN Red List, (IUCN 2019) as follows: Near Threatened (*Bolitoglossa walkeri*); Vulnerable (*Centrolene heloderma*, *Pristimantis calcaratus*, *Pristimantis silverstonei*); Endangered (*Pristimantis angustilineatus*, *Pristimantis phalatus*, *Pristimantis ptochus*, *Pristimantis quantus*); Critically Endangered (*Pristimantis kelephus*, *Pristimantis molybrignus*). In addition, we recorded for first time the advertisement calls of five frog species.

In this first expedition, we identified the deforestation as the main factor affecting the diversity of amphibians in the Serranía de los Paraguas. Although the Serranía de los Paraguas has vast primary forests (forests that have not been disturbed by human activity), the decreasing of forest cover continues in some sites. Deforestation occurs mainly as a consequence of wood exploitation and by the necessity to open areas to the establishment of cattle ranching.



Expedition team.



Fieldwork.



Left: *Pristimantis molybrignus* (Critically Endangered). Right: *Pristimantis silverstonei* (Vulnerable).



Left: *Centrolene heloderma* (Vulnerable). Right: *Pristimantis quantus* (Endangered).

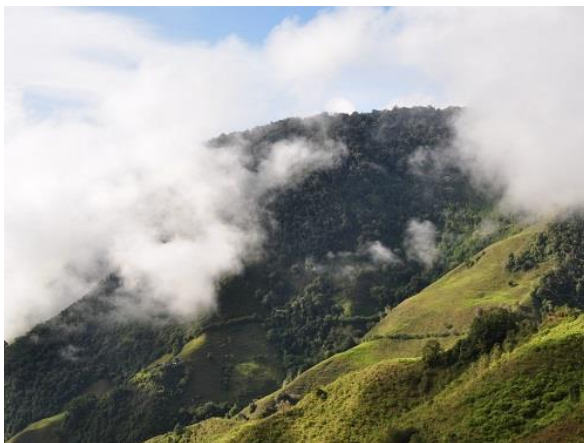




Left: *Pristimantis phalarus* (Endangered). Right: Caecilian – *Caecilia subdermalis*.



Left: Salamander – *Bolitoglossa walkeri* (Near Threatened). Right: *Pristimantis kelephus* (Critically Endangered).



Left: Deforestation and cattle ranching. Right: Serranía de los Paraguas