

Species Discovered from Cerro Chucantí

<http://adoptabosque.org/new-species/>

Preliminary field surveys of Cerro Chucantí by the Smithsonian Tropical Research Institute (STRI), the University of Panama, and biologists from around the world continue to reveal the presence of unique flora and fauna. Some of these species have never been found before in the country of Panama, while others were undescribed species completely new to science. Thus far, a new species of spider, a salamander, a frog, a snake, a few insects, and a couple of new plant species have been discovered at Cerro Chucantí.

We have acknowledged the presence of at least seven new amphibian taxa and two reptiles (pending description). Three of these species have been described by biologists in recent years: a Salamander (*Bolitoglossa chucantiensis*), a Tink frog (*Diasporus majeensis*) and a Centipede Snake (*Tantilla berguidoï*). Because of the extremely restricted distribution of the Tink frog and Centipede Snake, which are only found near the peak of Cerro Chucanti, they are both proposed to be Critically Endangered based on IUCN Criteria.

A species of Barychelidae (*Strophaeus sebastiani*), a trap door spider, has been discovered and described by Roberto J. Miranda & Sergio E. Bermúdez.

A new species of Neotropical ant in the genus *Myrmelachista*, was discovered. These ants have a symbiotic relationship with *Lauraceae*, the avocado family. Another species of ant; a small predaceous ant, which lives in leaf litter and rotting wood, in genus *Strumigenys* was discovered.

Two new species of long-horned beetles (Family Cerambycidae), *Tessaropa elizabeth* and *Anelaphus cordiforme* have been discovered at Chucantí.

Biologists are also discovering new species of plants at a rapid pace. Panamanian botanist Rodolfo Flores and collaborators published an article in February 2017 describing a new Heliconia (*Heliconia berguidoï*). In the last few months Flores has submitted formal descriptions of two new plant species from Chucantí (Lauraceae, Rubiaceae). Botanist Orlando Ortiz and collaborators have recently described two new Araceae species from Cerro Chucantí: *Anthurium chucantiensis* and *Anthurium annularum*, both considered Critically Endangered. Dr. Thomas Croat, a world authority from the Missouri Botanical Garden, recently reviewed other specimens from Chucanti and estimates that there are at least six other undescribed Araceae in this pristine cloud forest, waiting to be discovered and described.

Neotropical Flyways Project Overview

<http://adoptabosque.org/neotropical-flyways-project/>



Ictinia mississippiensis migrando encima del Sendero la Gloria

Close to 300 species of migratory landbirds, whose combined populations represent more than one billion individuals, migrate between the Neotropics and North America. Migratory songbirds are important because they provide services such as pest control and seed dispersal, but many of these neotropical migrants have been experiencing concerning levels of population decline over the past few decades.

If we are to reverse this trend, we must understand the factors contributing to their decline – yet we still know nearly nothing about these species in their migratory environments. Of all the periods of the life cycle, migration is the least understood and, yet, at the same time it is when the majority of mortality occurs. To fill this critical gap in our knowledge of the needs of migratory birds, ADOPTA is assisting the Neotropical Flyway Project to identify migration routes, key stopover or staging regions where the energy for migration is obtained, and the relative quality of the different habitats used.



Although it's only a small part of the total project, Panama is a unique location for this type of study. The narrow geography – about 50km (30) at the narrowest point – tends to concentrate migrants into larger groups than observed elsewhere, making observation and collection much easier. In addition, Panama is expected to be a point of arrival and departure for species that migrate directly through the Caribbean Sea. By using a variety of survey methods including transect, point, and feeding counts, over 250,000 individual birds have already been observed from over 60 species, including 14 species of concern. Although most species seem to be feeding solely on insects, some also use fruits to gather energy.