

Project Update: March 2018

In December 2017, we presented results from our first season of field work at the II Latin American Bat Conference (COLAM) in El Salvador. The focus of this presentation was to show how *Myotis chiloensis* and *Histiotus* sp. select their roost in central Chile and Patagonia according to environmental conditions, and how those species use torpor to live in both hot and cold environments. Communicating on how bats rely on torpor in Chile helps researchers throughout Latin America understand how *Pseudogymnoascus destructans* - the fungus causing WNS - may affect bat populations far beyond North America.

Immediately after the conference we began our second field season in Karukinka, Tierra del Fuego, where we radio-tracked five *Myotis chiloensis* and 10 *Histiotus magellanicus*. This year we significantly increased our data on the roosting ecology and ecophysiology of these southernmost bats. All bats radio-tracked roosted in large lenga trees (*Nothofagus pumilio*). We located over 20 day roost trees and collected a variety of habitat measurements from each tree for later description of roosting behaviour and ecology. We also successfully collected skin temperature from many of our radio-tagging bats.



Gonzalo presenting preliminary data, collected with the assistance of the Rufford Foundation, and the II Latin American Bat Conference (COLAM) in El Salvador.



Gonzalo radio-tracking *Myotis chiloensis* and *Histiotus magellanicus* in Karukinka National Park, Chile.



Swabbing a *Myotis chiloensis* to collect DNA of micro-flora and fauna on the wings, and later screening for the presence of the white-nose syndrome fungus.