


# The Echo

## Boots on the Ground

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If you're a bat biologist, chances are that the summer months mean it's time for field work - and lots of it! This past July, Jon Flanders, BCI's International Program Manager, went to visit several project partners to get a firsthand experience of their contributions to bat research and conservation.


*Courtesy of Jon Flanders/BCI*

Flanders first traveled down to the small town of Laguna, Mexico, to visit with Kristen Lear, a PhD student at the University of Georgia and BCI student scholar. Lear is currently working on how growing wild agave affects both bats and humans. Much of Lear's work involves conducting agave surveys in different habitats to estimate abundance, age structure, flowering times, damage by livestock, and human usage. Flanders was able to join Lear in her research by assisting in a night watch. This consisted of three teams tracking and filming bat visitation rates at flowering agave plants from 9:00 PM to 3:00 AM. The data collected at different sites is used to identify optimal foraging areas for pollinating bats.

About two hours away at El Infierno cave, Emma Gomez, an Assistant Professor at the Universidad Autónoma de Nuevo León and former BCI student scholarship recipient, was spending the summer monitoring Mexican long-nosed bat (*Leptonycteris nivalis*) populations. Gomez and her team collected invaluable data about the Mexican long-nosed bat populations. This included looking at genetic variability in bat DNA, and monitoring for heavy metal exposure in their diets. In addition, the team conducted acoustic monitoring, while also attaching PIT tags to the bats to track population movements between different roosting sites across the United States and Mexico.

Later, Gomez, along with Dr. José Maldonado, organized a colloquium to discuss the importance of pollinating bats, including *Leptonycteris nivalis*, and what can be done to protect them; Flanders was a featured speaker. This workshop drew a range

of participants: conservation groups, private landowners, and larger corporations. Flanders spoke of the importance in conserving habitats, using Leptonycteris yerbabuenae as an example - after decades of work by conservation organizations, academia, and larger land owners, the species is now no longer considered endangered in the United States and Mexico.

"The population was down to just few thousand individuals, and now is over 200,000 individuals. It's a great success story because it shows protecting bats from extinction is achievable and well worth the time and money we're investing in them," remarked Flanders.

*Courtesy of Jon Flanders/BCI*

Through the sharing of research, partnerships between organizations, and generous funding, the protection and conservation of bat species and their ecosystems can become a reality.