Inside this Issue

Señor Tim's Tales 1-3
Species Profile 3
Wisps from the Cloud Forest 4-5
Foundation Update 6
Be Our Guest 6-7
Newsletter Notes 7
Foundation Support 8
Membership / Donation Form 9
Mission & Board 10

Calendar of Events

Cloud Forest Birding Tours
based at
Reserva Las Gralarias
Dates:
20-27 October 2013 - 8 days
20-30 November 2013 - 11 days
Contact
jalyons593@gmail.com
for details.

Señor Tim’s Tales
by Tim Krynak, President

We started at about 4:30 p.m. hiking to Five Frog Creek. The goal was to explore this stream at night with Henry, an employee of Reserva Las Gralarias, and the resident amphibian expert. After walking about an hour we arrived at the upper site and stopped briefly to view the parcel of property that is our focus of the Five Frog Creek Headwaters Project. I snapped some photos of the deforested section for upcoming presentations then continued, soon arriving at the creek.

With the sun about to set we traveled downstream to begin the survey working back upstream. It was not long before we began to hear the first frog calls. Henry had already located some egg masses hanging like jewels from large leaves. It was early in the breeding season for these amphibians and was difficult to find frogs; however, we were rewarded with one male Golden Flecked Glass Frog, a critically endangered species. Continued on Page 2

Photo credits: All photos by Tim Krynak from the LGF slide show
Continued from Senor Tim’s Tales page 1

We found insects, lizards, flowers and birds while we slipped and slid on slippery rocks, climbed over logs and avoiding the nettles along the stream edge.

It was getting late and we were starting to get tired and with the long walk uphill back to the main reserve, we decided to start home. On the way I took a moment to record the sounds of the night. [http://www.lasgralariasfoundation.org/extras/SantaRosa_night.wav](http://www.lasgralariasfoundation.org/extras/SantaRosa_night.wav). With the background of the flowing Santa Rosa River you can hear three species of glass frogs (two critically endangered), several rain frogs (one endangered), and numerous insects. We returned just before midnight and the rain, reminding us this is the wet season on the west slope. Nearly 11 miles hiked. What a night!

I have organized my favorite photos in a slide program to demonstrate the vast biodiversity of the Santa Rosa River and surrounding forest that LGF is working to protect. Follow this link for over 200 images. [http://www.lasgralariasfoundation.org/extras/Five%20Frog%20Creek,%20SNS.pdf](http://www.lasgralariasfoundation.org/extras/Five%20Frog%20Creek,%20SNS.pdf)
Continued from Senor Tim’s Tales page 2

We can never thank everyone enough for supporting the mission of Las Gralarias Foundation as we move closer to our new goal in protecting the headwaters of Five Frog Creek! We are doing this for all that live near, in, and down river of this majestic little stream. Please consider helping us this year!

Photo credits: All photos by Tim Krynak from the referenced LGF slide show

Species Profile: Bugs in the Water
By Ed Krynak, LGF Board Member

Aquatic insects are found in almost every freshwater habitat, and often in great numbers. In a southern Michigan stream I found mean insect numbers ranging from 30,000 (ind/m$^3$) to 180,000 (ind/m$^3$) with one sample revealing midge densities over 600,000 (ind/m$^3$). Yet, other than mosquitoes, many people are surprised to learn there are “bugs in the water”.

These water bugs are essential for normal stream function. They help break down organic matter, they link primary production (algae and plants) to higher trophic levels (predators), and they help in nutrient cycling. Once it is time for these insects to mate, they emerge from the water as flying adults and become an important food source for spiders, birds, and bats; so not only fish enjoy a good bug meal.

The streams within Reserva Las Gralarias are no exception; aquatic insects abound. With limited sampling we have found algae eaters, leaf shredders, detritus collectors, and predators including the fierce looking hellgrammite (Megaloptera). For a buggy guy like me, everything was fascinating. However, one unique invertebrate stood out more than others. Buried beneath the rocks of fast moving water was a damselfly family found only in the new world tropics, Polythoridae. This tiny predator is more robust and has a thicker cuticle than most damselfly larvae, protecting it from the torrential flows of a tropic stream. In really high flows they are believed to seek refuge in the hyporheic zone (subsurface space between rocks). A thick cuticle and a habit of hiding subsurface can make oxygen transfer difficult. That brings us to the most unique characteristic of this damselfly family: lateral abdominal gills. Lateral abdominal gills in damselflies are considered a primitive respiration feature, a function most damselflies complete through their cuticle and caudal lamellae (three posterior leaf-like projections). This trait is found in only one other damselfly family, Euphaeidae found in the old world tropics. Now that is just plain cool.

(Information on Polythoridae and Eupaeidae: Pritchard, 1996)


Caption and Photo credit: Hellgrammite by Tim Krynak
For the first time in several years the weather was perfect for the 2012 Christmas Bird Count. On 15 December 2012 the Christmas count team, led by Dr. Harold Greeney, saw 105 species of birds in one day and in just one small area - 30 hectares out of our total 1063 hectares - at Reserva Las Gralarias (RLG)!

Highlights included an impressive dawn chorus by both Barred and Collared Forest-Falcons, followed by Beautiful Jay and Hoary Puffleg at the guest house, two very vocal Chestnut-crowned Antpittas behind the guest house (lowest elevation recorded on the reserve) as well as very vocal Yellow-breasted Antpittas throughout the reserve. Also seen were the Moustached and Giant Antpitta, Cloud-forest Pygmy-Owl, a female Club-winged Manakin building a nest, plus many males calling and displaying. A nest of Nariño Tapaculo with young was found (originally by Tiffany Linbo), two new species of tanager for the reserve list (Silver-throated and White-shouldered Tanager), numerous Chocó endemic Plate-billed Mountain-Toucan and Toucan Barbet, one Orange-breasted Fruiteater, Andean Cock-of-the-rock, and neotropical migrants Swainson’s Thrush and Blackburnian Warbler. It was a really fun and very successful bird count! In addition, thanks to two young birders we confirmed - finally! - the Scaled Antpitta as residents on the reserve, with two individuals calling and recorded in the lower western zone of the reserve in early January. So, that confirms our 5 resident species of antpitta in the genus *Grallaria* all within walking distance of the guest houses.

Also in December we began regular year-round frog surveys with our new RLG full-time employee, Conservation Projects Assistant Henry Imba, who has worked seasonally for the past three frog seasons. Even in a dry period in early December we recorded 7 species of frog in the genus *Pristimantis* calling around the guest houses: *P. eugeniae* (an endangered species), *P. parvillus, P. eremitus, P. verecundus, P. w nigrum, P. achantinus, P. calcarulatus* as well as glassfrog species *Centrolene peristictum* and, surprisingly, four egg masses of newly described *Nymphargus lasgralarias* in nearby creeks. By 13 January Henry had found in one small area of Kathy’s Creek 16 egg masses of *N. lasgralarias* being guarded by six males, with one male guarding six egg masses!! He also found *C. ballux*, another critically endangered glass frog species found only at RLG. Dr. Juan Guayasamin (a Las Gralarias Foundation (LGF) board member), recently graduated MSc biologists Amanda Delgado from Peru and Fernando Rojas from Venezuela also searched with Henry for a new species of *Pristimantis* recently discovered on the reserve. 

*Continued on Page 5*

**Captions & photo credits:**

Top right: Club-winged Manakin by Tim Krynak
Top left: Blackburnian Warbler by Tim Krynak
Bottom left: Orange-breasted Fruiteater by Tim Krynak
Bottom right: Egg mass of *Nymphargus lasgralarias* with soon-to-emerge tadpoles visible by Henry Imba
Continued from Wisps from the Cloud Forest page 4

Although they did not find it, they did manage to record the previously-unknown call of another species of *Pristimantis* as well as the call of yet another unknown species! Henry has continued to document the ongoing frog activity throughout the reserve and has already recorded some exciting results. By early February he had found three egg masses of *C. ballux* whose young tadpoles had hatched and also with SOS project assistant and MSc student Angela Mendoza of Cali, Colombia had found young “metamorfs” of our rarest frog *C. heloderma*, indicating that these two rare species, currently known from no other location, are successfully reproducing at RLG.

We also continued to document our nesting birds. A fascinating nest of Yellow-breasted Antpitta – only the second one ever documented (and both at RLG) - was photographed and filmed. The nest was originally discovered on a frog hike led by Henry with guests Roy and Laurie Averill-Murray.

And how exciting it was to host a number of our very good friends and LGF Board members!! Our LGF President Tim and Secretary Kathy Krynak along with Board member Ed Krynak and aquatic biologist Dr. Eric Snyder spent New Year’s and early January at the reserve. As always, they all worked day and night to document our birds, bats, frogs and aquatic creatures. We are looking forward to both Kathy and Ed’s final PhD dissertations in 2014 as well as Dr. Snyder’s tropical biology class to take place at RLG. We were delighted to greet LGF Founding Board member Dr. Jeff Miller and colleague Dr. Sunjaya Rao who returned to RLG after a brief visit last summer. Dr. Rao is now in Ecuador on a Fulbright Fellowship studying stingless bees while Dr. Miller is planning some future research in Ecuador on moths. Jeff was one of the first researchers to visit RLG in January 2005 and has been a friend and supporter ever since. Not only was it fun reminiscing but also he set up a mercury vapor light to check out our moth activity and get an idea of how it has changed in the past 8 years! Fun and interesting!!

We also welcomed many guests and returning friends such as Samm and Jock MacKay from Canada who again brought used binoculars as donations to our school programs. Thank you to them and the generous donors!! Our construction of the new 2-story storage/staff/researcher building on the site of the previous wooden building has continued non-stop and we are hoping it will be habitable by the time our summer 2013 students and volunteers arrive. And finally, with the winter rains we began planting all of the seedling trees and plants gathered months before and that have been growing in our pots. They are beginning now to look like a whole new forest!

And, as always, we have lots more to do!!

Captions and photo credits:

Left: Dr. Jeff Miller and Sunjaya Rao by Jane Lyons

Top Right: Rothschild’s Silk Moth on our outside wall by Jane Lyons

Bottom Right: A recently planted seedling of *Cedrela montana*, “Spanish Cedar”, a beautiful native hardwood of the cloud forest by Jane Lyons
Feliz Nuevo Año! Happy New Year! I am extremely happy to report that we are a quarter of the way to our goal of $150,000.00 to protect Five Frog Creek! Thank you all for your support! Let’s keep the momentum up. We need that mercury to rise and FAST! Remember, this land is available currently for purchase, meaning that whoever comes up with the money first wins… which doesn’t necessarily mean a win for the frogs. Let’s continue our mission to protect this biodiversity hotspot and blow the top off that thermometer!

I am also happy to report that the New Year was started off on the right foot with the annual Las Gralarias Foundation (LGF) board meeting conducted at Reserva Las Gralarias (RLG). The LGF board meetings are such a great time to reflect upon what we have accomplished and to set new goals for the upcoming year. Goal number one, protect Five Frog Creek! Through our land acquisition, education, and eco-tourism programs I know we can achieve this goal! In addition to updates on fundraising for the Five Frog Creek Headwaters Project, topics of our meeting included: the RLG water quality monitoring program, future fundraising efforts such as bio-blitzes to be organized at RLG, the extension of our education mission to include study abroad-college courses to be taught on-site, and the implementation of the RLG/LGF Scientific Research Policy. Stay tuned to future issues of The Hum… and www.lasgralariasfoundation.org for more information!

Be Our Guest: Trail Notes
By Nancy Charbeneau, Newsletter Editor

It seems like ages ago that we were at Reserva Las Gralarias (RLG), but it’s only been since the end of July in 2012! I was there with my husband and two other couples to explore the terrain and experience all the wildlife and plants we could at RLG before we headed off to the Galapagos Islands. What an adventure it all was!

On the day we arrived we took an afternoon hike on Parrot Hill trail with Jane. My husband and I noted how much all the trees and native landscaping has grown in just the three years since we had been there last. Along the trail we happened across a tarantula and brightly colored millipede. (pictures to right) We spotted a number of birds but it started to rain so we hurried back.

The next day it was still raining on and off, but being the intrepid souls we are, we all headed out anyway to see the waterfall with Tim Kell as our guide. The trail was challenging but we’re a bunch of pretty healthy 60+ year-olds so we made it without any problems. On the way there we saw a curious sight; Continued on page 7
Continued from Be Our Guest page 4

a shrub palm frond dancing vigorously with the rest of the vegetation around it still as could be. We noticed it again in another place on the way back but never found out what might have caused it even after quizzing the staff.

The waterfall was quite impressive with a clear Santa Rosa River gurgling over the rocks; so many pictures were taken! On the way back, some of us decided to continue with Tim down to the newly discovered hidden pools. The trail to the pools was even more challenging than the one to the waterfall but we made it to the idyllic setting, explored a bit then headed back because lunch was waiting. When we finally returned, we were told that we were the first visiting group to do the double hike! We all felt pretty good about it but were quite tired and ravenous!

The rest of the afternoon was spent drying out and watching all the brightly colored songbirds and hummingbirds outside of our abode. It’s easy to lose track of time doing this as there is always something going on! That evening, Vicki Liu coaxed a Kinkajoo out onto our patio for a treat of bananas. It was fun seeing this shy creature who is related to the coati and raccoon but have a prehensile tale and large eyes like a lemur.

The sun was up the next morning and much appreciated! After breakfast we headed out with Tim, this time to the challenging Canyon trail to try to see some parrots and toucans. We saw both in flight but none were kind enough to pose for pictures! Tim was called back just as we reached the place where they have been seen perching, so we searched for a while by ourselves before navigating our way back. Unfortunately, this was all the exploring time we had because we had to get ready for an early get-away the next morning. That evening, however, one of our group had a application called ‘Star Walk’ on her Ipad and, since her husband was an astronomer, we had our own little astronomical observation session with the other visitors and staff. The stars were incredibly bright up on the hill and somewhat strange to us from the northern hemisphere! We were able to locate the Southern Cross however; something we can’t see in Texas!

We left with some awesome memories, new information and insights about the diverse life and landscape of Reserva Las Gralarias plus some spectacular photos! We all agreed that it was a trip well worth takin!

Captions and photo credits:

Two birds on right: Blue-winged Mountain Tanager and Violet-tailed Sylph by Frank Sheppard

The Kinkajoo and the rest of the photos by Nancy Charbeneau

Newsletter Notes

By Nancy Charbeneau, Newsletter Editor

The deadline for the next Hum will be **Monday, June 3rd**. I look forward to receiving any and all submissions at: ncharbeneaulgf@gmail.com. Have a great spring!
Foundation Support
By Mary Ann Beauchemin, Membership

A special THANK YOU to all of our supporters!

Benefactors: Roy & Laurie Averill-Murray - greatest need
Mary Ann Beauchemin and Gary Gray - for Five Frog Creek, in honor of Jane Lyons
Bob & Pat Duffey - Land & Habitat Acquisition
Margaret B. Robinson - to further Jane Lyons’ work
Joan Strassmann - Land & Habitat Acquisition

Special Supporters: William M. Fiero - Five Frog Creek
Sujaya Rao—Wildlife Conservation

Contributing Friends: Nancy & Randy Charbeneau - Land & Habitat Acquisition
Bill Davis
Terry & Joanne Gorges
Athene Karis
Jay & Anne Raney
Bryan Sperry - Land & Habitat Acquisition in honor of Jane Lyons
Heidi Wintersteen – greatest need

New and Renewing Memberships: Roy & Laurie Averill-Murray, Mary Ann Beauchemin and Gary Gray, Nancy & Randy Charbeneau, Cheryl Ann & Fred Dinkelbach, Bob & Pat Duffey, Melissa & Sid Easley, Terry & Joanne Gorges, Naomi Honeth, Athene Karis, Deb Marcinski, Anne Melbohm, Jay & Anne Raney, Sujaya Rao, Margaret B. Robinson, Mary Salomon, Catherine Shambaugh, Bryan Sperry, Joan Strassmann, Heidi Wintersteen, Tim & Rocio Zajic

Additional Donation for the Five Frog Creek Headwaters Project: Constance Bodnar-Herron
Deb Marcinski, Anne Melbohm, Tim & Rocio Zajic

Special Gifts & Thanks: Mike & Sue Clark – for taxi service
Dr. Harold Greeney, RLG Christmas Bird Count Leader
Samm & Jock MacKay for their donation of 7 pair of used binoculars for our school programs

Volunteers: Marty Calabrese – our fantastic Webmaster
Steve Waldron and Darcy Barry our Facebook page gurus- Facebook.com/ReservaLasGralarias
The Las Gralarias Foundation Board – for all the work they do for the foundation

Captions and photo credits:
Left: Golden Tananger by Frank Sheppard
Middle: Sickle-winged Guan by Frank Sheppard
Right: Gorgeted Sunangel by Frank Sheppard
Join the flock! Become a Las Gralarias Foundation Member!

100% of your membership and donations go to support Las Gralarias Foundation programs including habitat acquisition, restoration and management, environmental education, and field research. Over the past decade we have purchased over 1,000 acres of Andean cloud forest. We have turned pastures into woodland, provided meaningful employment to local people, sponsored conservation oriented field research, provided environmental education supplies and programs to local schools.

We can do even more with your help!

LGF Inc. is a 501©(3) organization
Please visit our website at: www.lasgralariasfoundation.org

Donation Categories
Please indicate the amount of your contribution in the line provided

SPECIFIC PROJECT DESIGNATION: Donations may be directed to a specific project by circling one of the following:

Habitat Purchase  Field Research  Environmental Education

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_______ SPECIAL SUPPORTERS: Donors of $500 — $999

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This Donation is a special gift (circle one): In Honor of  In Memory of

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Todays Date: _____________

** If you are an employee of a business that offers matching grants or own a business and would like to become a corporate sponsor, please contact Tim Krynak at tkrynak@aol.com for more information.

Please make check out to ‘Las Gralarias Foundation’ and send this form and check to:

Las Gralarias Foundation
24140 Gessner Road
North Olmsted, Ohio 44070

Or visit:
www.lasgralariasfoundation.org

You will receive a confirmation receipt and thank-you via email
The goal of Las Gralarias Foundation Inc. is to raise funds for projects and programs of Reserva Las Gralarias, located in the parish of Mindo, Ecuador, including the purchase of adjacent and nearby lands that will enhance protection for rare endemic birds, plants and other animals as well as supports reserve management, reforestation efforts, biological research, environmental education projects, scholarships, and appropriate tourism programs.