

## Biodiversity Immersion

### Tropical Studies Program Offers Unique Opportunities

By Kyle E. Harms and Christopher E. Carlton



Professor of biological sciences Kyle Harms censusing understory plants along a forest transect at La Selva field station. Photo by former Ph.D. student Saara DeWalt



*Leptochromus laselva*. Photo by former Ph.D. student Mike Ferro

*"The University recently joined a growing list of OTS member institutions that have become permanent members of the consortium, eliminating the substantial annual membership fee and helping ensure the long-term viability of OTS, its institutional partnerships, and its mission to promote science education and research in the tropics."*

A growing number of LSU graduate and undergraduate alumni have made lifelong memories during tropical field courses taught in Costa Rica through the Organization for Tropical Studies (OTS). Since 1964, LSU has been a member university in OTS. In fact, LSU was an inaugural member when the first few universities joined together to form the consortium that today comprises fifty-four universities and research institutions. Member institutions partner with OTS to provide their students, faculty, and others abundant opportunities to study and conduct research in the tropics.

The administrative home for OTS is Duke University. Courses and research are conducted primarily in Costa Rica, although venues have expanded recently to other countries, most notably South Africa. A second office in San Jose coordinates these activities, and most coursework in Costa Rica is conducted at three field stations, giving users access to the organisms and ecosystems in representative tropical habitats such as lowland rainforests, montane forests, and wetlands.

La Selva, the first field station acquired by OTS, is about a two-hour drive from San Jose toward the Caribbean lowlands. After passing through the perennially cloud-enveloped forests of Braulio Carrillo National Park, the road descends into steamy, lowland rainforests. La Selva protects and provides educational access to about 1500 hectares of that lowland forest – teeming with a diversity of insects, colorful birds, and more species of plants than there are in the entire state of Louisiana. On any day some seventy students, researchers, and other visitors can be found at the station.

The other two field stations are smaller than La Selva and farther from San Jose, providing abundant opportunities to immerse oneself in tropical biodiversity across a range of habitats. Las Cruces is located in a montane forest near the border with Panama and is also home to the Wilson Botanical Garden. Palo Verde lies close to the Pacific Coast and provides ready access to both dry forest and wetlands replete with bird life. Visitors at all three stations enjoy hot showers, three meals a day, Internet access, and state-of-the-art research equipment in the modern laboratories.

Of course, the main reason to go to OTS field stations is to study or conduct research on tropical organisms and ecosystems. Rubber boots are de rigueur at the field stations, since observing, collecting, experimenting, and otherwise enjoying tropical nature are all-weather, around-the-clock activities, which usually include getting one's footwear muddy.

During the past five decades scores of LSU students have traveled to Costa Rica to take OTS courses. The cornerstone of these course offerings is the graduate "Fundamentals" course in tropical biology, and students who take the course typically visit several sites, including national parks, OTS field stations, and other privately owned and managed areas. Students also have taken specialty courses covering diverse topics, including bat biology and tropical beetle diversity.

Professor of Entomology Chris Carlton, a delegate to OTS, and colleagues taught tropical beetle diversity during 2014 and plan to teach the course again during summer 2017. Students enrolled in the 2014 beetle course made several novel discoveries, including a new species of beetle that was named *Leptochromus laselva*, after La Selva field station.

Among other LSU faculty who have taught or helped teach OTS courses is Professor of Biological Sciences Kyle Harms, also an OTS delegate, who has served as a resource person for both graduate and undergraduate courses in Costa Rica. These courses appeal to our preference for active, hands-on learning. Field courses invariably contain elements of surprise and serendipity that break common misconceptions that science is a static body of facts and that science education is fact-driven memorization. Field courses create trajectories of novel inquiry and enlightenment that characterize scientific research and discovery.

Faculty, students, and researchers at OTS member institutions have priority access to OTS courses, student scholarships, and research stations, and membership provides these opportunities and benefits to all LSU faculty and students. LSU faculty have taught OTS courses, LSU students have taken OTS courses, and LSU researchers at all levels have conducted research at OTS research stations. Fortunately, these opportunities will remain available to the LSU community in perpetuity through the LSU-OTS partnership. Owing to the generosity of private donors and the foresight of key LSU administrators, the University recently joined a growing list of OTS member institutions that have become permanent members of the consortium, eliminating the substantial annual membership fee and helping ensure the long-term viability of OTS, its institutional partnerships, and its mission to promote science education and research in the tropics.

OTS has expanded its geographic scope as well as its conceptual breadth. New course offerings in human health – with an obvious emphasis on tropical diseases – are proving to be highly popular and successful. The “Global Health Issues Summer Program” in South Africa gives students an in-depth view into tropical health care. A new, semester-long course, “Environmental Change and Human Health,” offered this year in Costa Rica, is geared toward students who wish to gain first-hand experience understanding tropical diseases in the context of environmental change.

For more information, contact Kyle Harms (kharms@lsu.edu) or Chris Carlton (ccarl@lsu.edu).

 **ON THE WEB** [www.ots.ac.cr](http://www.ots.ac.cr)



Professor of entomology Chris Carlton overseeing beetle collection at La Selva field station.  
Photo by Richard Leschen

# SPECIAL OFFER

FOR LSU ALUMNI ASSOCIATION MEMBERS ONLY



*Tiger Rag* is proud to present a very special offer to you, the members of the LSU Alumni Association. Here's your chance, via an Association membership special, to purchase a one year subscription to *Tiger Rag* at a 25-percent discounted rate.

*Tiger Rag* is the premier LSU sports tabloid, updating you every week on what is happening in LSU athletics. We are excited about this partnership and we hope that you take advantage of this very special offer.

## SUBSCRIBE FOR ONLY

\$46<sup>75</sup>
\$44<sup>95</sup>

Includes LA Sales Tax for LA Residents      Out of State Residents

# A 25% DISCOUNT OFF ANNUAL SUBSCRIPTION PRICE!

Check enclosed      Total amount: \$ \_\_\_\_\_

Visa Card no. \_\_\_\_\_

MasterCard Exp. Date: \_\_\_\_\_      Signature: \_\_\_\_\_

*Please print*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_      State: \_\_\_\_\_      Zip: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Phone (H): \_\_\_\_\_      Phone (W): \_\_\_\_\_

Please mail form addressed to:

**TIGER RAG MAGAZINE**  
10500 COURSEY BLVD., SUITE 104  
BATON ROUGE, LA 70816

OR

Call **1-888-32-TIGER**  
With OFFER CODE **ALUM5808**