Luke M. Browne

CURRICULUM VITAE – JANUARY 2016
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EDUCATION

2011 – present	Ph.D. Ecology and Evolutionary Biology Tulane University, New Orleans, Louisiana Advisor: Dr. Jordan Karubian
2009	B.S. Natural Resource Ecology and Management – Conservation Biology Louisiana State University, Baton Rouge, Louisiana Academic Advisor: Dr. Phil Stouffer *magna cum laude*

FELLOWSHIPS AND SCHOLARSHIPS

2013-14	IBM Fellowship in Computational Science: $3,000
2013-16	National Science Foundation Graduate Research Fellowship: $32,000 / yr
2011-13	Louisiana Board of Regents Fellowship: $27,000 / yr
2008	F.O. Batemen Memorial Scholarship
2008	LSU Chancellor's Aide Scholarship
2007	American Society of Animal Science Scholastic Achievement Award
2005	LSU Chancellor's Future Leaders in Research Scholarship

GRANTS

2014	NSF Doctoral Dissertation Improvement Grant: $11,977
2014	Tulane EEB Graduate Research Award: $1,945
2013	International Palm Society: $900
2013	IDEA WILD Biodiversity Conservation Grant: $1,050
2013	American Ornithologist's Union Research Award: $1,842
2013	Stone Center for Latin American Studies at Tulane and Tinker Foundation Summer Field Research Grant: $1,470
2013	The Explorers Club Exploration Fund: $1,000
2013	Western Ag Innovations Research Award: $960
2012	The Gerald E. Gunning Memorial Fund, $500
2012	Organization for Tropical Studies Post-course Research Grant: $831
2011,13	Provost's Office Graduate Student Travel Grant: $400
2011,13,15	School of Science and Engineering Dean's Travel Grant: $300
2011,13,15	Graduate Studies Student Association Travel Grant: $300

PUBLICATIONS

L. Browne, K. Ottewell, and J. Karubian. 2015. Short-term genetic consequences of habitat loss and fragmentation for the Neotropical palm *Oenocarpus bataua*. **Heredity** 115: 389-395. doi:10.1038/hdy.2015.35

Karubian, J., **L. Browne**, C. Bosque, T. Carlo, M. Galetti, B. Loiselle, J. Blake, D. Cabrera, R. Durães, F. Labecca, K. Holbrook, R. Holland, W. Jetz, F. Kümmeth, J. Olivo, K. Ottewell, G. Papadakis, G. Rivas, S. Steiger, B. Voirin, and M. Wikelski. 2012. Seed dispersal by Neotropical birds: emerging patterns and underlying processes. **Ornitologia Neotropical** 23: 9–24.

PUBLICATIONS – *IN REVIEW*

Browne, L. and J. Karubian. Local and landscape diversity of palm communities in a recently fragmented tropical landscape.

Karubian, J., **L. Browne**, D. Cabrera, M. Chambers, and J. Olivo. Relative influence of relatedness, conspecific density, and microhabitat on seedling survival and growth of an animal-dispersed Neotropical palm.

PUBLICATIONS – *OUTREACH*

Browne, L., M. Gonzalez, and J. Karubian. Biodiversity in forest fragments of the Mache-Chindul Reserve. Quito, Ecuador. DOI: 10.13140/RG.2.1.2619.2485

PRESENTATIONS

Browne, L. and J. Karubian. 2015. Response of palm communities to habitat fragmentation in northwest Ecuador. World Palm Symposium. Armenia, Colombia.

Browne, L. 2015. Consecuencias genéticas a corto plazo de fragmentación forestal en REMACH para *Oenocarpus bataua*. Simposio Internacional Ciencia y Conservación en la Reserva Mache Chindul. Universidad San Francisco de Quito, Quito, Ecuador.

Browne, L. 2013. How does fruit abundance influence seed dispersal and predation by vertebrates in the Chocó forests of Ecuador? Stone Center for Latin American Studies Research Symposium, New Orleans, LA

Browne, L. 2013. Defaunation: the next global change? Tulane Ecolunch Seminar Series, New Orleans, LA.

Browne, L., K. Ottewell, and J. Karubian. 2013. Genetic consequences of forest fragmentation in Ecuador for a widespread canopy palm. Student Conference on Conservation Science, American Museum of Natural History Center for Biodiversity and Conservation, New York City, NY.

Browne, L., K. Ottewell, and J. Karubian. 2013. Genetic and ecological consequences of forest fragmentation in Ecuador for the palm *Oenocarpus bataua*. Tulane Ecolunch Seminar Series, New Orleans, LA.

Browne, L. 2011. Impacts of behavior, movement, and the environment on seed dispersal: perspectives and advances in Neotropical avifauna. Neotropical Ornithology Congress, Cuzco, Peru.

POSTER PRESENTATIONS

Olivo, J., J.B. Cox, **L. Browne**, and J. Karubian. 2015. Use of aerial and terrestrial camera traps for describing palm frugivore communities. World Palm Symposium. Armenia, Colombia.

Castillo, F., M. Chambers, **L. Browne**, and J. Karubian. 2015. How does dispersal into umbrellabird lek breeding sites impact survival of *Oenocarpus bataua* seedlings? World Palm Symposium. Armenia, Colombia.

Cabrera, D., Z. Diaz-Martin, **L. Browne**, and J. Karubian. 2015. Using seed traps to describe fruiting phenology of palm communities. World Palm Symposium. Armenia, Colombia.

Olivo, J., M. Gonzáles, **L. Browne**, S.T. Walter, and J. Karubian. 2014. Study of avian diversity in forest fragments in the Mache-Chindul Reserve. Ecuadorian Ornithology Meeting. Maldonado, Ecuador.

Walter, S.T., F. Castillo, J. Rivero, J. Olivo, **L. Browne**, M. Darkes, A. Moreno, M. Gonzáles, J. Loor, M. Gonzáles, J. Freile, and J. Karubian. 2014. Avian community diversity across forest fragments in Ecuador. Ecuadorian Ornithology Meeting. Maldonado, Ecuador.

Chambers, M., **Browne, L**., and J. Karubian. 2014. Influence of lek breeding sites and surrounding genetic diversity on the survival of dispersed seedlings. Tulane School of Science and Engineering Research Day. New Orleans, LA, USA.

Browne, L. 2014. Comparing pollen and seed dispersal in fragmented landscapes: a simulation-based approach. Tulane School of Science and Engineering Research Day. New Orleans, LA, USA.

Browne, L., K. Ottewell, and J. Karubian. 2013. Genetic and ecological consequences of forest fragmentation in Ecuador for the palm *Oenocarpus bataua*. New Frontiers in Tropical Biology: The Next 50 Years – ATBC/OTS Joint Meeting. San José, Costa Rica.

Browne, L., K. Ottewell, and J. Karubian. 2013. Genetic and ecological consequences of forest fragmentation in Ecuador for the palm *Oenocarpus bataua*. Tulane School of Science and Engineering Research Day. New Orleans, LA, USA.

Cabrera, D., J. Cabrera, J. Karubian, and **L. Browne**. 2011. Diet and activity of the Long-wattled Umbrellabird and its relation with the phenology of the palm *Oenocarpus bataua*. Neotropical Ornithology Congress, Cuzco, Peru.

SPECIALIZED TRAINING

2015 **UCLA La Kretz Conservation Genomics Workshop**
Santa Monica, California

2014 **NIMBioS Tutorial: Computing in the cloud: what every computational life scientist should know**
University of Tennessee, Knoxville

2012 **Hierarchical models for abundance, distribution and species richness in spatially structured populations using unmarked/R and WinBUGS**
USGS Patuxent Wildlife Research Center

2012 **Tropical Biology: An Ecological Approach 2012 – 1**
Organization for Tropical Studies, Costa Rica & Duke University

2011 **Summer Institute for Training in Biostatistics**
Disease and Genetic Epidemiology Statistics
Washington University in St. Louis, Missouri

TEACHING EXPERIENCE

2013, 2015 **EEB 3780: Tropical Field Biology & Conservation – Teaching Assistant**
Tulane University
An immersive study abroad course with a strong focus on engaged scholarship and experiential learning in the field. Based in Ecuador.

2012 – 13 **R Club – Founder**
Tulane University
Group of faculty and students learning and using the R statistical programming language.

2011 **BIOL465: Techniques in Conservation Biology – Teaching Assistant**
Smithsonian Conservation Biology Institute
A field course with an overview of techniques used by conservation biologists and wildlife managers. For University of Pennsylvania students.

PREVIOUS RESEARCH EXPERIENCE

2011 **Smithsonian Conservation Biology Institute - Field Ecologist Intern**
Front Royal, Virginia
- Conducted litterfall, seed rain, and carbon sequestration studies on a CTFS (Center for Tropical Forest Science) 26 ha long-term forest dynamics plot
- Assisted with public launch and quality control of siwild.si.edu, a collection of over 200,000 camera trap photographs from researchers worldwide
- Compiled dataset of oak acorn masting cycles across Northeastern USA

2008 – 10 **Louisiana State University**
NSF Undergraduate Research Assistant in Ecology (Advisor: Jim Cronin)
Baton Rouge, Louisiana
- Researched predator-prey population dynamics using Cowpea weevils (*Callosobruchus maculatus*) and the parasitoid wasp (*Anisopteromalus calandrae*)
- Assisted in developing nexperiment to test how variability in the vulnerable stage of host development affects long-term population dynamics

2008 – 09 **Louisiana Department of Wildlife and Fisheries - Wildlife Technician**
Sherburne Wildlife Management Area, Krotz Springs, Louisiana
- Mist-netted and banded birds for the MAPS (Monitoring Avian Productivity and Survivorship) program
- Performed daily breeding bird surveys by sight and sound

2008 **Louisiana State University – Field Technician**
Sherburne Wildlife Management Area, Krotz Springs, Louisiana

– Radio-tracked movements of wild turkeys (*Meleagris gallopavo*) and raccoons (*Procyon lotor*)

2003 **Naval Research Laboratory**
Science & Engineering Apprenticeship Program
Stennis Space Center, Mississippi
– Used an electron microscope to assess the magnitude of microbial iron reduction of sea-floor sediment

SERVICE AND OUTREACH

2014 **Science Fair Judge – Senior computer science**
Greater New Orleans Science and Engineering Fair — New Orleans, LA

2013 **Classroom helper (6th grade Life science), Reading mentor (Kindergarten)**
Benjamin Banneker Charter Public School — New Orleans, LA

2013 **College Captain for STEM Awareness (8th grade**)
Viva Technology — Luling, LA

2013,14 **Science Fair Judge (6th – 8th grade)**
Benjamin Franklin Elementary Mathematics and Science School — New Orleans, LA

2012 **Math and Science Tutor (8th grade)**
Sophie B. Wright Public Charter School — New Orleans, LA

MANUSCRIPT REVIEWS

Biotropica (3x), Ecological Monographs

PROFESSIONAL MEMBERSHIP

Fundación para la Conservación de los Andes Tropicales

ADDITIONAL SKILLS

– Computer programming - proficient: R, Python. Intermediate: C++, CSS, HTML, BUGS
– Written and conversational Spanish
– DNA extraction and sequencing, PCR, microsatellite analysis
– Maintenance and operation of ABI 3730xl DNA sequencing machine
– Mist-netting, live trapping, marking, and handling of vertebrates
– Animal tracking: VHF radio telemetry