

Lucas Pavan

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EDUCATION

Stanford University Ph.D. student in Biology Specializing in Ecology and Evolutionary Biology	Stanford, CA 2017 - present
University of British Columbia B.Sc. in Biology with Honours in Ecology and Environmental Science Graduated with distinction	Vancouver, BC 2010 - 2015

FELLOWSHIPS AND AWARDS

Post-Graduate Scholarship – Doctoral • <i>Natural Sciences and Engineering Research Council of Canada</i>	2020
Stanford Excellence in Teaching Award • <i>Stanford University</i>	2019
William R. and Sara Kimball Fellowship • <i>Stanford University</i>	2018
The Bing Fellowship in Honour of Harold “Hal” Mooney • <i>Stanford University</i>	2017

GRANTS AND SCHOLARSHIPS

Center for African Studies Field Research Grant • <i>Stanford University</i>	2021
Werner and Hildegard Hesse Award • <i>American Ornithological Society</i>	2018
Community Engagement Grant • <i>Stanford University</i>	2018
NSERC Dean of Science Research Award • <i>Wayqecha Biological Station – Manu National Park</i>	2013
Northern Science Training Program Award • <i>Kluane Lake Research Station – Arctic Institute of North America</i>	2012
Alexander Rutherford Scholarship • <i>University of British Columbia</i>	2010
President’s Entrance Scholarship • <i>University of British Columbia</i>	2010

PUBLICATIONS

- Lily M, Amaya-Mejia W, **Pavan L**, Peng C, Crews A, Tran N, Sehgal R, Swei A. (2022) Local community composition drives avian *Borrelia burgdorferi* infection and tick infestation. *Veterinary Sciences*. 9 (2):55.
- Cosset C, Gilroy J, Tomassi S, Benedick S, Nelson L, Cannon P, Messina S, Kaputa M, Fandrem M, Madrid RS, Lello Smith A, **Pavan L**, King B, Fogliano R, Hackney T, Gerald E, Chai JY, Cros E, Chong YY, Tan CH, Chai RR, Cheoh CO, Edwards D. (2021) Impacts of tropical selective logging on local-scale movements of understory birds. *Biological Conservation*. 264:109374.
- Pavan L**, Jankowski J, Hazlehurst J (2020) Patterns of territorial space use by Shining Sunbeams (*Aglaeactis cupripennis*), a tropical montane hummingbird. *Journal of Field Ornithology*. 91 (1): 1-12.

Cespedes L, **Pavan L**, Hazlehurst J, Jankowski J. (2019) The behavior and diet of the Shining Sunbeam (*Aglaeactis cupripennis*): A tropical high-elevation hummingbird. *The Wilson Journal of Ornithology*. 131 (1): 1-11.

MANUSCRIPTS SUBMITTED OR IN PREPARATION

Losapio G, Genes L, Knight C, McFadden T, **Pavan L**. Monitoring and modelling the effects of ecosystem engineers on ecosystem function. *In preparation*.

Pavan L, Kamta R, Dirzo R. The cascading effects of global mammal defaunation on bird communities. *In preparation*.

Pavan L, Dirzo R. Human biomass replaces wildlife along a hunting gradient in a Central African rainforest. *In preparation*.

PRESENTATIONS, POSTERS, AND CONFERENCES

10 th Annual Species Interaction Workshop	2019
• <i>University of California Santa Cruz</i>	
Wildlife Conservation Symposium	2020
• <i>University of California Berkeley</i>	
ATBC Annual Meeting	2021
• <i>Association of Tropical Biology and Conservation</i>	
International Congress of Conservation Biology	2021
• <i>Society of Conservation Biology</i>	

RESEARCH EXPERIENCE

Ph.D Dissertation – Stanford, California, USA 2017 - present

Lead Researcher – Dr. Rodolfo Dirzo – Stanford University

- Developed a dissertation examining the effect of defaunation in Central African rainforests
- Collaborated with the Congo Basin Institute and the International Institute of Tropical Agriculture
- Conducted three years of fieldwork in a remote part of Southern Cameroon – the Dja Biosphere Reserve
- Handled all in-country logistics, training of 3-5 person team of Cameroonian field assistants

Bird Conservancy of the Rockies – Fort Collins, Colorado, USA 2017

Field Ornithologist - Nick Van Lanen – Bird Conservancy of the Rockies

- Performed avian point counts on communities of birds throughout Wyoming
- Handled all logistics and research planning for the course of the position
- Responsible for data management and early data analysis
- Extremely high degree of independence as most work was conducted in very remote regions

Borneo Rainforest Project – Danum Valley Research Center, Sabah, Malaysia 2016

Senior Field Ornithologist - Dr. Dave Edwards – Sheffield University

- Evaluated and monitored avian community recovery in a variably disturbed rainforest landscape
- Investigated avian movement and mortality differences in primary and secondary rainforest
- Extracted, banded, and gathered morphometric data on approximately 250 tropical birds
- Assumed leadership role and was responsible for training team members on bird handling techniques

Manu Bird Project – Manu National Park, Peru 2015 and 2013

Lead Researcher - Dr. Jill Jankowski – University of British Columbia

- Used radio telemetry to describe territorial microhabitat selection patterns of Andean hummingbirds
- Estimated plant gene movement using combination of fitness estimates and camera trapping
- Independently designed, conducted, analyzed, wrote, and published an Honours thesis
- Handled training and logistics planning as co-leader of a seven-person research team

Agriculture and Agri-Food Canada – LRDC, Lethbridge, AB, Canada 2014 and 2011

Assistant Insect Ecologist - Dr. Rob Bouchier – Agriculture and Agri-Food Canada

- Studied interactions between invasive plants and introduced beneficial arthropods in North America
- Examined controlled population collapse in terms of patch dynamics, insect efficacy, and potential risks
- Analyzed insect herbivory in the field as well as in a level 4 biocontainment facility
- Developed a program to estimate invasive plant density through colour analysis of aerial photographs

Arctic Institute of North America – Kluane National Park, YT, Canada 2012

Research Assistant - Dr. Charles Krebs – University of British Columbia

- Examined ecological determinants of population cycling in the boreal forest
- Live trapped, tagged, and telemetry tracked a variety of small mammal species
- Investigated cameras as non-invasive alternative to live trapping for density estimation
- Independently studied phenology of migrating boreal bird species using point count estimates

TEACHING EXPERIENCE

Biology 121 (Ornithology) – Stanford University, Palo Alto, CA, USA

Head Lecturer

- Designed and taught advanced level ornithology course for undergraduate and graduate students over four years

Biology 81 (Introduction to Ecology) – Stanford University, Palo Alto, CA, USA

Teaching Assistant

- First year undergraduate course introducing fundamental ecological concepts

Biology 33 (Ecology for Everyone) – Stanford University, Palo Alto, CA, USA

Teaching Assistant

- First year ecology course designed for non-biology undergraduates

Stanford SPLASH – Stanford University, Palo Alto, CA, USA

Teacher

- Designed high school course introducing students to basic bird biology

Stanford HyPE – Stanford University, Palo Alto, CA, USA

Teacher

- Taught a course introducing high school students from historically underrepresented backgrounds to basic ecological field methods

OTHER RELEVANT EXPERIENCE

Undergraduate Education Council – Stanford University, Palo Alto, CA, USA

Graduate Student Representative

- Elected position responsible for designing teaching workshops and developing undergraduate courses

Hilltown Land Trust – Northampton, MA, USA

Volunteer Consultant

- Worked with private landowners to develop conservation goals and conducted property surveys to formulate strategies to meet those goals

Dogwood Initiative – Vancouver, BC, Canada

General Organizer

- Participated in an organization identifying ecologically vulnerable areas throughout British Columbia and helped to coordinate efforts aimed at acquiring, preserving, and restoring those areas.