**TIMOTHY SALZMAN** Department of Biology salzman.tim@uky.edu

**PhD Student** University of Kentucky **419-266-6701**

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**Career Objective**

I am currently seeking to explore the physiological underpinnings of multilevel behavioral variation using house sparrows. My long-term objective is to contribute to projects that benefit both humans and the environment; and to enhance my present knowledge and skills base while pursuing interdisciplinary research. I value teaching and outreach as integral to my work.

**Education**

PhD student, University of Kentucky, expected completion – 2020

Graduated *Cum Laude* (3.53 GPA) from The Ohio State University, Columbus, OH - June 2004 B.S. in Food, Agricultural, and Biological Engineering with emphasis on Ecological Engineering

**Teaching Assistant Positions**

BIO 155 – Lab for Intro Biology 1 (Fall 2014 – Fall 2015)

BIO 559 – Ornithology (Spring 2015)

BIO 209 – Intro Microbiology Lab (Fall 2016, Spring 2017, Fall 2018)

BIO 303 – Introduction to Evolution (Fall 2017)

**Publications**

**Salzman, T. C.**, McLaughlin, A. L., Westneat, D.F., Crowley, P. H. (in press) Energetic trade-offs and feedbacks between behavior and metabolism influence correlations between pace-of-life attributes. Behavioral Ecology and Sociobiology: topical collection on Pace-of-life syndromes

Vitousek, M.N., Taff, C.C., Ardia, D.R., Stedman, J., Zimmer, C., **Salzman, T.C.**, Winkler, D.W. (in review) The lingering effects of stress: brief acute glucocorticoid exposure has long-term, dose-dependent effects on reproduction. Proceedings of the Royal Society B-Biological Sciences

Shipley, J. R., D. Y. Gu, **T. C. Salzman**, and D. W. Winkler. 2015. Heterothermic flexibility allows energetic savings in a small tropical swift: The Silver-rumped Spinetail (Rhaphidura leucopygialis). Auk 132:697-703.

**Presentation**

“Energetic trade-offs and feedbacks between behavior and metabolism influence correlations between pace-of-life attributes” Joint meeting of the American Ornithological Society and the Society of Canadian Ornithologists, Michigan State University, East Lansing, MI. July 31-August 5, 2017

**Community Outreach**

BioBonanza Activities Manager (2017) – BioBonanza is an annual event showcasing the research conducted in the Department of Biology at the University of Kentucky. The event is open to the public and targets K-12 students in the greater Lexington community. I facilitated participation and communication between all participating labs and the event organizer over the several months preceding the event to ensure the success of all activities/presentations.

The Ecology of Birds presentation (October 19, 2017). Maxwell Elementary School Science Night. I developed and presented an interactive activity demonstrating bird beak form and function related to foraging using tools analogous to several different bird feeding strategies.

BioBonanza Activities Manager (2016)

**Grants and Awards**

GRADUATE SCHOLARSHIPS

Univ. of KY Dept. of Biology Ribble Mini Grant – $700 (2016)

Univ. of KY Dept. of Biology Ribble Mini Grant – $300 (2015)

NSF GRFP Honorable Mention (2015)

Univ. of KY Graduate School Academic Year Fellowship (GSAY) – $7,500 (2015)

Gertrude Flora Ribble Research Fellowship – $2000 (2014)

GOLONDRINAS STUDENT GRANT

I was awarded this grant to conduct research investigating the effects of variable wind conditions on the foraging behaviors of *Tachycineta* swallows. The data from wind loggers was collected from several sites along a latitudinal gradient in the Americas and is currently being analyzed along with other data collected pertaining to feeding behaviors in preparation for publication. - $1430 (2010)

SENIOR DESIGN PROJECT COMMUNICATION AWARD

I received this award for my oral presentation skills regarding my senior design project. I served as project leader with three other classmates as we designed a waterfowl rehabilitation enclosure with attached treatment wetland, which was constructed and is in use by the Ohio Wildlife Center, a non-profit wildlife rehabilitation clinic.

UNDERGRADUATE SCHOLARSHIPS

Glenn McCuen Scholarship - $577 (September 2002, March 2003)

Bickle Development Fund - $1334 (2001-2002)

Trustees Scholarship - $600 (2000-2001)

**Skills**

Over the past eighteen years I have become proficient with research-based fieldwork, such as habitat and wildlife surveys and experiments in both terrestrial and aquatic systems. I have used respirometry equipment to measure metabolic rates of birds and bats. I possess experience using programming languages, such as R and Matlab, to aid in data analysis and am working with Drs. Winkler and Ardia to publish scientific papers pertaining to the research we have conducted over the past several years related to the Golondrinas de las Americas project. I work well both within a team and independently with minimal supervision. I am a strong communicator, problem solver, and a quick learner. I am experienced with both Mac and PC programs. I possess knowledge of lab safety and proper procedures. I also possess competency speaking and understanding Spanish. I am naturally a curious person and have a large appetite for learning.

**Relevant Experience**

RESEARCH ASSISTANT/DATA ACQUISITION NETWORK MANAGER, CORNELL UNIVERSITY, DR. DAVID WINKLER; ITHACA, NY — APRIL 2012-JULY 2014

For the summers of 2012 – 2014, I managed a local area data acquisition network used to monitor the breeding biology of Tree Swallows as part of an ongoing long-term research project. I ensured the success of the network’s ability to capture and store nest box images and temperature data. I am currently working with Dr. David Winkler and my coworkers to publish several papers dealing with this project. I am also analyzing data from several projects associated with the Golondrinas de las Americas project in preparation for publication.

GOLONDRINAS DE LAS AMERICAS VETERAN, CORNELL UNIVERSITY, DR. DAN ARDIA; ARGENTINA, BELIZE, PERU, VENEZUELA — SUMMER 2010-SPRING 2011, FALL 2011-SPRING 2012

As a technician in Argentina, and later as a veteran at 3 other sites, I monitored the breeding biology of 5 species of swallows of the genus *Tachycineta*. I constructed nest boxes, monitored the birds’ nest building and egg laying, performed egg metabolism and chick cooling experiments, installed and managed ibuttons designed to record temperature inside and near nest boxes, captured, banded and bled birds, measured standard morphological data such as head-bill size, and oversaw management of data collection. I also applied for and was awarded a grant to study the effects of variable wind conditions on feeding and foraging behaviors.

SMALL MAMMAL TECH, UNIVERSITY OF WYOMING; PRINCE OF WALES ISLAND, ALASKAS — SUMMER 2011

For 3.5 months I live trapped small mammals including mice, shrews, voles, flying squirrels, ermine, and marten. I navigated the trapping grids and PIT tagged trapped individuals. I measured and recorded morphological data of the mammals and collected tissue and blood samples. I administered sedatives by injection to the carnivores prior to handling. I also performed vegetation sampling, including identification of shrubs, fungi, and berries.

CREW LEADER AND FIELD TECH FOR CREATED SNAG PROJECT, WEYERHAEUSER, MATT HANE; COTTAGE

GROVE, OR — SUMMER 2010 and 2009

From April through July, I led a crew of 6 as we observed cavity-nesting birds in the timberlands surrounding Cottage Grove, Oregon. I was responsible for scheduling site visits, ensuring accuracy of the data collected, and communicating with our superiors at Weyerhaeuser while upholding the highest of safety standards. For all avian species associated with the created snags, I monitored their use and evaluate nesting success by reporting on observed behaviors. I monitored productivity with cavity cameras. I also conducted stand cruises to estimate natural snag densities.

STREAM SURVEYOR, DEMETER DESIGN INC.; NEHALEM, OR — FALL 2008 and 2009

During September, October and November, I navigated logging roads and hiked off trail in the Coast Range of Oregon to conduct stream surveys. I measured stream morphology characteristics including: bankful height and width, thalwag depths, sediment sizes, slope, and assessed bank conditions. I also conducted riparian health surveys that included estimating vegetation cover and reporting on surrounding land use.

MARBLED MURRELET & RED TREE VOLE SURVEYOR, ABR INC.; FOREST GROVE, OR — SUMMER 2008

From May through July, I delineated MAMU habitat and set survey stations. I conducted MAMU surveys throughout the northern Oregon coastal mountain range according to Oregon Department of Forestry (ODF) standards. I also spent a week delineating red tree vole habitat in the Cascades near Mt. Hood.

MARBLED MURRELET SURVEYOR, TURNSTONE ENVIRONMENTAL CONSULTANTS; PORTLAND, OR — SUMMER 2007

From May through July, I conducted MAMU surveys throughout the northern Oregon coastal mountain range according to ODF standards. I also mapped and set new survey stations.

FOREST ECOLOGY TECHNICIAN, OREGON STATE UNIVERSITY; BLUE RIVER, OR — SUMMER 2006

From June through September, I worked with two colleagues to re-measure trees in old growth forest near the HJ Andrews Experimental Forest. Our work was part of a long-term study of forest ecology dynamics. We measured DBH, assessed causes of mortality, collected information on new trees to be included into the data set, identified vascular plant species, estimated plant cover, and sampled plant biomass.

ELK RESEARCH TECHNICIAN, NCASI; SLED SPRINGS, OR — SUMMER 2005

From April to September, I worked with six others as part of an elk nutrition study. We moved tame elk to different habitats in NE Oregon and observed their foraging habits. I sampled vegetation to determine the species composition available to the elk, and measured forage abundance and forest overstory characteristics. I collected behavioral data by way of close observation of the elks’ activity patterns; and assisted with pen construction, loading and moving cow elk and their calves, and feeding and caring for the elk not being used in the research plots.

RESEARCH ASSISTANT, THE OHIO STATE UNIVERSITY, DR. JAY MARTIN; COLUMBUS, OH — 2001-2005

As student, and then after I graduated, I assisted with various graduate research projects. I dealt with stream fish habitat restoration, the construction of a wetland treatment system, the construction and maintenance of a living machine style ecological treatment system, and water quality analysis of water from ecologically engineered systems in a USDA lab.