# Katherine Lauck

## **EDUCATION**

#### UNIVERSITY OF CALIFORNIA, DAVIS

Davis, CA

Advisor: Daniel Karp

Graduate Group in Ecology Fellow

Current GPA: 4.0 / 4.0

#### UNIVERSITY OF CALIFORNIA, DAVIS

Davis, CA

Advisor: Daniel Karp

Graduate Group in Ecology Fellow

■ GPA: 4.0 / 4.0

#### CORNELL UNIVERSITY

Ithaca, NY

Dean's List (Spring 2012 – Fall 2013)

Graduated Cum Laude

Cum. GPA: 3.53 / 4.0

## **AWARDS**

Selma Herr Research Award 2020-2022
Horodas Conservation Fellowship 2022
Jastro-Shields Research Fellowship 2021
Jastro-Shields Research Award 2020-2021
Graduate Group in Ecology Fellowship 2019-2020
Fulbright Student Research Award 2017-2018

## **PUBLICATIONS**

**Lauck K. S.**, Ke, A., Olimpi, E. M., Paredes, D., Hood, K., Phillips, T., Anderegg, W., Karp, D. (in revision at *Science*). Habitat conversion to agriculture and temperature extremes synergistically erode avian reproductive success across the continental United States.

Echeverri A., Smith, J. R., MacArthur-Waltz, D., **Lauck, K. S.**, Anderson, C. B., Vargas, M. R., Quesada, I. A., Wood, S. A., Chaplin-Kramer, R., Daily, G. C. (2022). Biodiversity and infrastructure interact to drive tourism to and within Costa Rica. *PNAS* 119:11. doi:10.1073/pnas.2107662119

**Lauck K. S.**, Miller A. E. (*in prep.*). Trapping for the pet trade drives range contractions in wild bird populations. Target journal Conservation Biology.

Rentschlar K. A., Miller A. E., **Lauck K. S.**, Rodiansyah, Bobby M., Muflihati, Kartikawati (2018). A silent morning: The songbird trade in West Kalimantan, Indonesia. *Tropical Conservation Science* 11:1-10. doi:10.1177/1940082917753909.

## **PRESENTATIONS**

- **Lauck K. S.** (2022). Habitat conversion to agriculture and temperature extremes synergistically erode avian reproductive success across the continental United States. Presentation at the joint annual meeting of the Ecological Society of America and the Canadian Society for Ecology and Evolution in Montréal, Canada.
- **Lauck K. S.** (2021). Habitat conversion to agriculture and temperature extremes synergistically erode avian reproductive success across the continental United States. Presentation at the online annual meeting of the Ecological Society of America.
- **Lauck K. S.** (2020). Trapping for the pet trade drives range contractions in wild bird populations. Presentation at the Wildlife, Fish, and Conservation Biology Seminar at UC Davis.

PhD candidate, Ecology

Expected graduation: Spring 2024

M.S. Ecology February 2022

B.S. Ecology and Evolutionary Biology

January 2015

- **Lauck K. S.**, Trianto A., DiGiorgio A. L., Knott C. (Aug 2016). *Where do wild Bornean Orangutans* (Pongo pygmaeus wurmbii) *get dietary water?* Poster was presented at the joint meeting of the International Primatological Society and the American Society of Primatologists, Chicaco, IL. doi:10.13140/RG.2.2.34201.93284.
- Digiorgio A. L., Scott K. S., **Lauck K. S.**, Trianto A., Knott C., Weber K. (Aug 2016). *Bornean Orangutan Long Call as a Resource Guarding Behavior in Gunung Palung National Park, Indonesia*. Poster was presented at the joint meeting of the International Primatological Society and the American Society of Primatologists, Chicago, IL. doi:10.13140/RG.2.2.20672.53768.
- **Lauck K. S.** (2015). *Tree Climbing 101*. Workshop and training for Indonesian employees of International Animal Rescue, Ketapang, Indonesia.

## **EMPLOYMENT**

## UC DAVIS DEPT. WILDLIFE, FISH AND CONSERVATION BIOLOGY

Teaching Assistant
Jan 2020-present

- Davis, CA
  - Taught discussion sections independently to 15 classes of about 25 students each.
  - Helped develop research project and mentor students through steps of completing a small group research project in Fall 2020-2022.
  - Updated discussion materials and content for current course.
  - Courses: Tropical Ecology, Conservation Biology, Working Lands Conservation
  - Developed rubrics for and graded exams and writing assignments.

# UC DAVIS DEPT. WILDLIFE, FISH AND CONSERVATION BIOLOGY Graduate Student Researcher Davis, CA April 2021-September 2022

- To date, mentored 5 undergraduate students and 2 graduate students in grant acquisition, ornithological field skills and research site design.
- Conducted two field seasons, each 6 months long, to explore the mechanisms underlying reduced reproductive output of birds in agriculture and hot weather.
- Monitored over 200 nesting attempts by Tree Swallow and Western Bluebird; banded, collected blood samples, and measured adults and juveniles.
- Constructed Raspberry Pi-based motion-activated cameras to monitor nest attendance.
- Curated and cleaned data, and conducted analyses in R.

#### VIRGINIA POLYTECHNIC INSTITUTE

Research Technician

Lexingon, VA

May - Aug 2019

- Conducted point counts as part of the Virginia Breeding Bird Survey.
- Worked independently to collect and report data.

#### KAUAI FOREST BIRD RECOVERY PROJECT

Field Technician Jan – May 2019

Kokee State Park, HI

Jan - May 2019

- As part of a team working primarily at a remote research station, I searched for nests of endangered birds, maintained the rat control grid, and collected and curated data.
- Advised the project in rope use during banding and measuring of Akikiki chicks.

#### **PLANET INDONESIA**

Consultant

Pontianak, West Kalimantan, Indonesia

Jan - Nov 2018

- I will publish two scientific articles resulting from work carried out as a Fulbright grantee (see PUBLICATIONS).
- Trained new employees to carry out protocols I wrote as a Fulbright grantee (see RESEARCH).
- Built a Google Team Drives-based database to centralize and organize Planet Indonesia's data

#### KAUAI FOREST BIRD RECOVERY PROJECT

Intern

Kokee State Park, HI

Feb 2016 -June 2016

- As part of a four—person team working primarily at a remote research station, I searched for nests of endangered birds, maintained the rat control grid, and collected and curated data.
- Advised the project in rope use during five harvests of 'Akikiki and 'Akeke'e eggs, with no incidents.

#### WINKLER LAB, CORNELL UNIVERSITY

Research Assistant

Ithaca, NY

May - June 2013 - 2014

Trapped, banded, measured, and bled hundreds of juvenile and adult Tree Swallow.

### RESEARCH

#### **FULBRIGHT U.S. STUDENT PROGRAM**

Principal Investigator

Planet Indonesia, Pontianak, West Kalimantan, Indonesia

Jan 2017 - Jan 2018

- Proposed, planned, wrote protocols for, and collected data for a research project to assess the effects of the bird trade on primary rainforest birds.
- Trained three Indonesian assistants to apply the survey protocol and managed them throughout the project.
- Created the first maps of Cagar Alam Gunung Niut that combined forest cover, bird occupancy, and human habitation data using ArcMap.
- Communicated daily using the Indonesian language in both professional and personal contexts.

#### **GUNUNG PALUNG ORANGUTAN PROJECT**

Research Assistant

West Kalimantan, Indonesia

April 2015 - Jan 2016

- Climbed 50+ emergent rainforest trees to collect orangutan food samples for nutritional analysis.
- Maintained a safe environment for backcountry tree climbing throughout the project, with no injuries.
- Created graphs and scripted analyses using R for Andrea Digiorgio's presentations to local governments and at the Aug 2016 conference of the International Primatological Society and the American Society of Primatologists.

IVY EXPEDITIONS Expedition Member

Sabah, Malaysia and Ithaca, NY

Jan 2012 –Jan 2015

- As part of a three— to five—person team, planned, secured funding for, and implemented all aspects of two
  expeditions (Feb—May 2013 and June—July 2014) to rural Malaysia.
- Gathered natural history data on poorly known rainforest birds by nest searching, auditory spot mapping, collecting video data, and banding birds.
- Taught other participants to apply field ornithology skills.

### **SERVICE**

#### **ECOLOGY GRADUATE GROUP EXECUTIVE COMMITTEE**

Student Representative

September 2022 -present

Davis, CA

- Attend meetings and vote on issues regarding policies and procedures of the Ecology Graduate Group, including decisions about which faculty to admit.
- Liase with students and bring their concerns before the Executive Committee, then advocate for their resolution in favor of students' interests.

# ECOLOGY GRADUATE GROUP DIVERSITY COMMITTEE'S ADMISSIONS AND AWARDS SUBCOMMITTEE Co-chair

September 2021 –September 2022

Davis, CA

- Facilitated implicit bias trainings for admissions reviewers.
- Ensured student representation on committee tasked with improving the holistic review admissions process.

## ECOLOGY GRADUATE GROUP DIVERSITY, EQUITY, AND INCLUSION TASK FORCE

Member

Davis, CA

January 2021 –September 2022

- Helped plan response to student petition to reform inequitable policies and practices in the Ecology Graduate Group.
- helped draft community expectations that would establish a cultire of accountability for discriminatory actions.

#### **ECOLOGY GRADUATE STUDENT ASSOCIATION**

Co-chair

Davis, CA

September 2020 -September 2021

- With two other graduate students, I developed a comprehensive resource for incoming graduate students to fill gaps in information provided to new students.
- Facilitated several committees tasked with organizing a yearly research symposium, social events, a student newsletter, and a fundraiser for local charities.

#### **EXPANDING YOUR HORIZONS**

Workshop leader

Ithaca, NY

March 2014 - May 2014

• With two other undergraduate students, proposed, planned, and presented a daylong, hands-on workshop about bird anatomy and specimen preparation for a group of 10 local high school girls.

INSECTAPALOOZA

Event guide October 2012

•	<ul> <li>Supervised children visiting the microscopy room at Insectapalooza, a one-day event hel educate children about insects and arachnids.</li> </ul>	ld at Cornell University to