# **EMILY V. ABERNATHY**

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## Rapid Evolution and Adaptation in an Endemic Island Raptor

Ongoing dissertation research about mechanisms behind the rapid speciation of the Galapagos Hawk. Research includes population structure among islands as well as comparative genomics between the Galapagos hawk and its most recent ancestor, the Swainson's hawk.

University of California, Davis • 2015-PRESENT

♦ Conservation Genetics and Genomics of the Swainson's Hawk (*Buteo Swainsoni*)

A collaboration with the Swainson's Hawk Technical Advisory Committee to use next-generation sequencing to better understand population structure and health of a threatened raptor.

Results include a high-quality annotated reference genome and will be used to inform the Swainson's hawk listing status in California.

University of California, Davis • 2015-PRESENT

# ♦ Anticoagulant Rodenticide Exposure in Red-tailed Hawks

In collaboration with the Golden Gate Raptor Observatory, I conducted a study on the effects of rodenticide poisoning on red-tailed hawks migrating through the Marin Headlands, CA. We took blood samples from 100 Red-tailed hawks and found trace amounts of anticoagulant rodenticides in 8% of sampled birds. These findings suggest that Red-tailed Hawks are being exposed to anticoagulant rodenticides somewhere along their migration route.

University of California, Davis • 2015-2016

#### ⟨ EDUCATION >

◆ Ph.D., Ecology • University of California, Davis

2015-PRESENT

♦ B.S., Wildlife Biology • University of Vermont, Burlington, VT

2009-2013

# ⟨ PUBLICATIONS >

- ♦ Kwasnoski, L.A., K.A. Dudus, A.M. Fish, **E.V. Abernathy**, and C.W. Briggs (2019). Examining sub-lethal effects of anticoagulant rodenticides on Haemosporidian parasitemia and body condition in migratory Red-tailed hawks. Journal of Raptor Research 53(4): 402-409.
- ♦ Abernathy, E., J.M. Hull, A.M. Fish, and C.W. Briggs (2018). Secondary anticoagulant rodenticide exposure in migrating Red-tailed Hawks (*Buteo jamaicensis*) in relationship to body condition. Journal of Raptor Research 52(2): 225-230.

## ⟨ TEACHING EXPERIENCE ⟩

♦ Teaching Assistant • *University of California, Davis* 

- 2015-PRESENT
- > <u>Introduction to Biology: Biodiversity and the Tree of Life (BIS 2C)</u> Led two, 3-hour laboratory sections on material based on the tree of life ranging from bacteria and archea to metazoans. Graded pre-lab and post-lab assignments as well as presentations and proctored exams.
- Ethics of Animal Use (ANS 170) Led two discussion sections a week, held office hours, graded essays and take-home exams.
- > <u>Introduction to Companion Animal Biology (ANS 42)</u> Led two discussions a week, held office hours, graded worksheets, assignments, and final.
- > <u>Care and Management of Companion Animals (ANS 142)</u> Led two discussion sections a week and graded and provided feedback on group projects.

# ⟨INVITED TALKS⟩

- ♦ Yolo Audubon Society Monthly Meeting, March 2018
- ♦ Golden Gate Raptor Observatory Annual Banquet, January 2018

## < POSTERS AND PRESENTATIONS >

- ♦ Abernathy, E., K. Ruegg, H.B. Ernest, C.R. Vennum, and J.M. Hull. Conservation genetics and genomics of the Swainson's hawk (*Buteo swainsoni*): A next-generation sequencing approach. Raptor Research Foundation Annual Meeting, Fort Collins, CO, November 2019.
- ♦ Abernathy, E., A.M. Fish, C.W. Briggs, and J.M. Hull. Secondary Anticoagulant Rodenticide Exposure of Red-tailed Hawks (*Buteo jamaicensis*) migrating through the Marin Headlands, California. Presented at the Annual Meeting of the Raptor Research Foundation, October 2016.

#### ⟨ AWARDS AND GRANTS >

- ♦ Henry A. Jastro Research Award, 2018, 2019
- ♦ Swainson's Hawk Technical Advisory Committee Research Grant, 2018
- NSF Graduate Research Fellowship Program Honorable Mention, 2017
- ♦ Ecology Graduate Student Endowment, UC Davis, 2016, 2017

#### ⟨ PROFFESIONAL AFFILIATIONS >

Society for the Study of Evolution (SSE), Raptor Research Foundation (RRF), American Ornithological Society (AOS), Wilson Ornithological Society (WOS)