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## SOFTWARE

2015 R  
2015 Raven Pro  
2017 Python  
2017 R Shiny  
2017 QGIS  
2017 MATLAB  
2017 Maxima  
2017 Pplane  
2017 Populus  
2018 Program MARK  
2018 Vortex  
2018 EasyPop  
2018 GenePop  
2018 GeneClass2  
2018 Ne Estimator  
2018 JAGS (in R)



## EDUCATION

### MASTER OF SCIENCE | Organismic and Evolutionary Biology University of Massachusetts Amherst

Fall 2019 – Present

Dr. Christopher Sutherland, Dr. Ali Nawaz

*Developing optimal sampling designs for Spatial Capture-Recapture to estimate the range-wide density of Snow Leopards and other big cats to inform conservation.*

### BACHELOR OF SCIENCE | Environmental and Sustainability Sciences

Spring 2019

#### Cornell University

Dr. Evan Cooch, Dr. David N. Bonter, Dr. Amanda Rodewald

**Thesis:** Recent avian population dynamics in the Northeastern United States suggest persistent but diminished impacts of West Nile virus

- Modeled spatiotemporal trends of avian populations from citizen-science count data
- Implemented statistical and machine learning models
- Identified novel conclusions to the fields of population and disease ecology

### SUMMER FELLOW | Population Sustainability Group

June – Sept 2019

#### San Diego Zoo Global — Institute for Conservation Research

Dr. Mathias Tobler

- Collaborating to consolidate camera trap data of Jaguars for range-wide SCR modeling
- Compiling remote sensing data (environmental covariates) throughout Jaguar range
- Comparing species distribution modeling methods using virtual species and xenarthrans

### AVIAN CONSERVATION INTERN

May – Aug 2018

#### Massachusetts Division of Fisheries and Wildlife

Dr. Andrew Vitz

- Conducted research with the State Ornithologist related to avian ecology and conservation
- Banded songbirds using a MAPS protocol, designed to inform natural resource management
- Fitted MESA-listed Eastern Whip-poor-wills with geolocator tracking devices

### NSF REU — BIOACOUSTICS ANALYST | BirdVox

July 2017 – May 2019

#### Cornell Lab of Ornithology

Dr. Andrew Farnsworth

- Annotated nocturnal flight calls of migrating birds from overnight recordings
- Identified high-frequency short calls to species-level
- Learned about the automatic detection of bioacoustic data

### ECOTOURISM CONSULTANCY INTERNSHIP DESIGNER

Oct 2017 – May 2018

#### Cornell University

- Designed and coordinated an internship opportunity for undergraduates
- Collaborated with ecolodges to attract clients by incorporating sustainable practices
- Co-authored a consultancy guide to 'Aviturismo' (a.k.a. bird-watching tourism)

### GUEST EDUCATOR & CURRICULUM DESIGNER

Jan 2018 – Present

#### The Fenn School, Boy Scouts of America, Concord Public Schools

- Asked to present to K-12 students on birds, ecology and conservation
- Designed a curriculum to utilize newly-purchased land to teach students about ecology

**Panthera's Sabin Snow Leopard Grant (\$8,600)** — *Designing scalable study design protocols to estimate snow leopard (Panthera uncia) density and population size using non-invasive sampling*

**Undergraduate Research Funds, Cornell Lab of Ornithology (\$1,593)**

**American Ornithological Society Travel Award (\$550)**

**Funding for Undergraduate Research, History Department, Cornell University (\$400)**

**American Ornithological Society 137th Stated Meeting (2019)** — *Modeling Persistent Effects of West Nile Virus on Avian Population Dynamics in the Northeastern United States*

**New York State Ornithological Association (Invited, 2018)** — *Spatiotemporal Trends in Avian Populations Following the Introduction of West Nile Virus in North America*

**Time, Space & Narrative in Medieval Icelandic Literature, University of Iceland, Reykjavik (2017)** — *Seabirds to Starboard: Notes on Norse Navigational Technique*

## WORK EXPERIENCE

## OUTREACH

## FUNDING

## TALKS