Lauren V. Puleo

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EDUCATION

B.S., Biological Sciences Expected: Spring 2021
University of Central Florida, Orlando, Florida

Research advisor: Dr. Anna M. Forsman
Research topic: Songbird migration phenology

Bishop Verot Highschool May 2017
Fort Myers, Florida

RESEARCH INTERESTS

Avian ecology, migratory phenology, migratory connectivity, conservation biology and global change biology

AWARDS & SCHOLARSHIPS

Burke Grant ($1,000 to UCF Knighthawks) Spring 2020
National Audubon Society

American Ornithological Society Student Membership Award January 2020 – Present

Audubon's 2019 Conservation Leadership Initiative October 2019 – Present

Dean's List, University of Central Florida Fall 2017 – Spring 2018, Spring 2019

Francine Litofsky Scholarship ($1,000) Summer 2017
J.N. "Ding" Darling National Wildlife Refuge

CONFERENCES (Presenter indicated in bold)

Puleo, L.V., Boyle, A.J., Fitak, R., Forsman, A.M. 2020. Migratory Phenology of the Gray Catbird: A Circular Approach, British Ornithological Union – Climate Change and Birds: Solutions to the Crisis, November 24th, *Poster abstract accepted*

Puleo, L.V., Boyle, A.J., Fitak, R., Forsman, A.M. 2020. Migratory Phenology of the Gray Catbird: A Circular Approach, North American Ornithological Conference, August 10th-15th, *Poster abstract accepted*

Puleo, L.V., Boyle, Forsman, A.M. 2020. The Catbird Climate Conundrum: Is climate change affecting the Gray catbird?, Showcase of Undergraduate Research Excellence (SURE), March 30th-April 3rd, *Poster abstract accepted, Cancelled due to COVID-19 pandemic*

MANUSCRIPTS

Puleo, L.V., A.J. Boyle, R. Fitak, A.M. Forsman. 2020. Migratory Phenology of the Gray Catbird: A Circular Approach, *Manuscript in preparation*

RELEVANT EXPERIENCE

Wild Symbioses Lab, University of Central Florida, Orlando, FL November 2019 – Present
Undergraduate Research Student

- Conducting an independent data analysis project, utilizing Wekiva Basin Bird Banding Station songbird data to understand how Gray catbirds may be adjusting to environmental change by identifying changes in migratory timing
- Interpreting phenological changes alongside weight, fat score, and local climate data
- Using circular statistics as a novel statistical approach, which has been used previously to interpret phenological changes in plant cycles but not in avian annual cycles
- Demonstrating that circular models are overall more effective when communicating phenological trends visually than standard linear models

Heavy Metal Raptors Project, University of Central Florida, Orlando, FL July 2019 – June 2020
Undergraduate Research Assistant

- Dissected and collected tissue samples from deceased raptors at the Audubon Center for Birds of Prey for a M.S. thesis project on ecotoxicity in birds of prey conducted by University of Central Florida graduate student Jenny Bouchenot
- The following samples were collected from each dissection: blood feathers, pin feathers, pancreas, left and right liver lobes, left and right kidneys, caeca, colon swab, preen oil swab, and fat when present
- Species dissected include: Barred owls, Eastern Screech Owls, Red-shouldered hawks, black Vultures, Turkey vultures, Ospreys, American Kestrels, Cooper Hawks
- Created a standardized dissection protocol to implement proper sample collection techniques and to limit contamination of tissue samples

Wekiva Basin Bird Banding Station, Altamonte Springs, FL October 2019 – February 2020
Volunteer

- Participated in a citizen science bird banding group located in Lake Lotus Park
- Assisted in the setting up and taking down of mist nets to facilitate safe capture, handling, and banding of birds

Audubon Center for Birds of Prey, Maitland, FL March 2019 – August 2020
Guest Relations Volunteer

- Performed administrative duties in the admission center such as selling tickets and being responsible for transactions.
- Answered phone calls about injured birds and wildlife. Calmly provided steps on how to safely handle injured raptors and provided information about the closest rehabilitator near the caller.
- Effectively communicated with the lab staff about injured birds coming to the center to aid in their preparation.
- Educated the public about the rehabilitation and conservation of raptors through interacting with guests who toured the main house on property.

WORKSHOP PARTICIPATION

Florida Audubon Assembly October 2019

- Selected to participate in Audubon's 2019 year-long Conservation Leadership Initiative, a program aimed to pair Florida students with mentors to expand their knowledge on conservation-based career opportunities.
- Attended Florida Audubon's' Annual Assembly in Gainesville Florida where I was paired with my mentor Stephanie Gaspar. I attended talks about community-based science programs, participated in leadership training sessions, and engaged with leaders in advocacy, science, and conservation.

SERVICE

Knighthawk Audubon UCF Campus Chapter

President November 2019 – Present

- Supervising and coordinating all activities of the organization including events, monthly newsletters, monthly officer meetings, and monthly student body meetings
- Responsible for corresponding with organizations like the National Audubon Society, The UCF Arboretum team, and Orange County Audubon Society (Orlando, FL).
- Supervisor of the Knighthawk Audubon Native Plants for Bird's Garden Project. This project is funded by the Burke Grant ($10,000) awarded to the Knighthawk Audubon UCF Campus Chapter by the National Audubon Society. This project is a collaboration with the UCF Arboretum and requires communication with the Director of Landscape and Natural Resources and the UCF Arboretum Program Director. Our native plants for bird's garden is planned to be implemented on the UCF Campus in Spring 2021. This garden will serve as a source of food and shelter to birds and educate the UCF community about the importance of native landscapes.

Publicity officer August 2019 – November 2019

- Promoted the organization and recruited new members
- Managed social media accounts associated with the organization
- Founding board member during the establishment of the Knighthawk Audubon UCF Campus Chapter during Fall 2019

UCF Purple Martin Project March 2020 – Present

Undergraduate Researcher

- Assisted Dr. Anna Forsman in setting up 12 telescoping housing poles with a total of 144 artificial gourds around the UCF campus for the UCF Purple Martin Project.
- Will monitor the Purple Martin colonies (Spring 2020) to test if purple martins prefer gourds with pre-existing nesting material (pine straw) and if purple martins prefer poles with a higher or lower density of gourds. Monitoring will include the collection of morphometric measurements and bird-banding of both adult and nestling birds.

SKILLS

- Entry, management, and analysis of large data sets, including community-based science data
- Proficiency in statistical software (JMP and RStudio) and Microsoft Office (Excel, PowerPoint)
- Mist net use and maintenance
- Extensive dissection experience with avian specimens, tissue collection, and strong knowledge of bird anatomy

- Proficiency in applications that aid in scientific research such as Endnote and Web of Science
- Strong ability to work both collaboratively and independently on projects

REFERENCES

- Dr. Anna M. Forsman, Email: Anna.Forsman@ucf.edu
- Dr. Robert Fitak, Email: Robert.Fitak@ucf.edu
- Stephanie Gaspar, Email: stephanie.a.gaspar@gmail.com

COVID-19 STATEMENT

Due to the COVID-19 pandemic, many of my research goals have been affected. Although purple martins did arrive to the UCF campus, students were unable to participate in the monitoring of the colonies for the summer 2020 season because of campus closure. I have continued to work on my independent research project remotely under the advisement of Dr. Anna M. Forsman and Dr. Robert Fitak and I am looking forward to presenting at the virtual North American Ornithological Conference in August of 2020 and the British Ornithological Union – Climate Change and Birds: Solutions to the Crisis virtual conference in November of 2020.