# MARY MACK GRAY

Avian ecologist with over 10 years' experience with endemic & vulnerable species. My expertise includes reintroduction ecology, cooperative breeding, behavior, habitat use, & fire-dependent species. Research interests include animal personality and the causes & consequences of biodiversity loss.



#### **EDUCATION**

Mav 2019 Aug 2017

Dec 2012

Aug 2008 **MSc Wildlife Ecology & Conservation** University of Florida GPA 4.0

Gainesville, FL

· Advisor: Kathryn Sieving

BS Biological Sciences: Ecology, Evol., Conservation

North Carolina State University GPA 3.6

• Raleigh, NC



### R SELECTED POSITIONS

present May 2019

#### **Avian Research Specialist - Pineland Endemics**

Tall Timbers Research Station

• Tallahassee. FL

- · Lead field biologist; project mgmt (3-4/yr); develop, implement new research initiatives; coordinate, train assistants; protected species banding/handling
- · Collaborate with stakeholders to achieve shared conservation goals: deliver actionable results to landowners/managers; communicate findings to diverse audiences (gov't agencies, the public, non-profits, Board of trustees)
- · Projects (as PI 2019-21): Bachman's sparrow occupancy on longleafrestored public lands (>100k acres surveyed); Long-term Brown-headed nuthatch research; Motus station; (Asst.) Black Rail occupancy, habitat survevs
- · Spearheaded establishment of a Motus station and implemented radiotagging program for declining over-wintering species; doubled tagging capability by coordinating with private donor to supplement project funds
- · Consulted on nuthatch reintroduction to Missouri; personally captured 20% of translocated birds; reintroduced nuthatches to S. FL
- · Manuscript, technical, grant writing; spatial, data analysis; database administration; science communication; conference presentations; outreach

May 2017 Aug 2016

## **Endangered Species Biological Technician (GS-04)**

US Fish & Wildlife Service

St Mark's, FL

- · Frosted flatwood salamanders: developed pilot conservation program, methods; captive reared and released >400 salamanders; built remote detection infrastructure; implanted PIT tags; habitat mgmt
- $\cdot \ \mathsf{Red\text{-}Cockaded} \ \mathsf{Woodpecker} \ \mathsf{translocations}; \ \mathsf{banding}; \ \mathsf{cavity}, \ \mathsf{habitat}$ maintenance



# CONTACT

■ graymarymack@gmail.com

**J** (336) 337-6463

ResearchGate

in LinkedIn

#### SOFTWARE SKILLS

R (Proficient) ArcGIS (Proficient) Microsoft Office, Access; G Suite Some SQL, RMarkdown, CSS, HTML

# RESEARCH **STRENGTHS**

Project design, implementation

Data analysis, viz, synthesis; multivariate stats

Extensive experience in many Florida ecosystems

Tech-savvy self-starter; innovative problem-solver; personable

Community, landowner/manager, stakeholder engagement

Adept communicator, public speaker; award-winning presenter

Federal, Non-profit experience

Aug 2016 Feb 2015

#### Research Technician - Brown-headed Nuthatches

Tall Timbers Research Station

**♀** Tallahassee, FL

- · BHNUs, BACS, RCWOs: banding, nestling translocation; genetic sampling (blood); behavioral research
- · Eastern Grasshopper Sparrows: capture, post-release telemetry of population used as surrogates to refine captive breeding techniques for critically-endangered FL Grasshopper Sparrows

Jan 2015 Sept

2014

#### Field Technician - Fairy-wrens

Cornell University

Parisbane, QLD, AUS

- · Red-backed and Variegated Fairy-wrens research: sexual signalling, feather UV, cooperative behavior, social network analysis
- · Nest searching/monitoring; banding; data collection, entry

July 2014 Jan 2014

#### Avian Ecology Intern - Florida Scrub-jays

Archbold Biological Station

♥ Venus, FL

- · Florida Scrub-Jay nest, demographic monitoring; independent research
- · Meticulous data collection for one of the longest-running bird studies

# SELECTED PUBLICATIONS

2022

The nuthatch and the hare: Slow explorers dominate in a reestablished population of the Brown-headed Nuthatch (Sitta pusilla) two decades later

Accepted

Avian Conservation & Ecology

2022

Cooperative breeding behavior emerges early in restored populations of the Brown-headed Nuthatch (Sitta pusilla)

Pre-print. DOI: 10.1676/19-00146

♥ Wilson Journal of Ornithology

· Cox, J.A., MM Gray, H.E. Levy, G.L. Slater

Jun 2016 Tool usage by juvenile (Sitta pusilla) Brown-headed Nuthatch

https://doi.org/10.1656/058.015.0209

Southeastern Naturalist

· Gray, MM, E. Schunke, J.A. Cox



# **CONTRACTIONS & AWARDS**



#### Florida Ornithological Society

Vice President

· Cruickshank Research Award 2018 (\$2,500)

present 2019

#### **American Ornithological Society**

· Mark E. Hauber Award - Best Oral Presentation on Behavior

Places I've Worked (2014-)



Made with the R package pagedown.

Source code by nstrayer available on github.

Last updated on 2022-01-08.