

# William F. Oakley

Department of Natural Sciences, University of South Carolina Beaufort  
Office: Grayson House Room 103, 801 Carteret St., Beaufort, SC 29902

[william.oakley@uscb.edu](mailto:william.oakley@uscb.edu) | [www.williamoakley.com](http://www.williamoakley.com)

## EDUCATION

---

Ph.D., Biology. University of Oklahoma (OU), Norman, OK	2023
<i>Graduate Certificate in Earth Observation Science for Society &amp; Sustainability</i>	2017
M.A., Biology. The Citadel Graduate College, The Citadel, Charleston, SC	2014
B.A., Biology. College of Charleston, Charleston, SC	2007

## PROFESSIONAL APPOINTMENTS

---

<b>Pritchards Island Postdoctoral Teaching Fellow</b>	2025 – Present
Department of Natural Sciences, University of South Carolina Beaufort (USCB)	

<b>Postdoctoral Researcher</b>	2024 – 2025
Department of Fish, Wildlife and Conservation Ecology, New Mexico State University (NMSU)	

## DISSERTATION RESEARCH

---

Title: *Demographic and Behavioral Characteristics of Wintering Sparrow Populations in a South Carolina Salt Marsh*. (Advisor: Dr. Eli Bridge)

– I combined several methodologies, including sea-level rise modeling, agent-based modeling, capture-recapture modeling, and field-based translocation experiments to assess the current status of the Kiawah Island marsh sparrows (i.e., Nelson’s, Saltmarsh, and Seaside Sparrows), their capacity to cope with environmental changes, and ultimately their prospects for survival over the next 75 years.

## TEACHING

---

<b>Instructor of Record</b> , University of South Carolina Beaufort	
Human Anatomy & Physiology (BIOL B243); Lecture (34 students), Lab (12 students)	Fall 2025

<b>Instructor of Record</b> , New Mexico State University	
Wildlife Ecology (FWCE 301); Lecture (40 students)	Fall 2024
Introduction to Natural Resource Management (FWCE 1110G); Lecture (70 students)	Fall 2024

<b>Graduate Teaching Assistant</b> , University of Oklahoma	
Principles of Physiology (BIOL 3101); Lab (16 – 24 students)	Spring 2020 – Spring 2023
Introductory Biology (BIOL 1124); Lab (24 – 30 students)	Spring 2019
Human Anatomy (BIOL 2234); Lab (16 students)	Fall 2016

<b>Instructor and Co-Creator</b> , University of Oklahoma	
Electronics for Non-Engineers; Lecture/Practical (10 students)	Fall 2019

<b>Undergraduate Tutor</b> , The Citadel, Academic Support Center	
Biology/Chemistry/Writing	2014 – 2015

## PROFESSIONAL DEVELOPMENT IN TEACHING

---

### *Workshops & Seminars Internal to New Mexico State University*

Teaching and Learning STEM: A Practical Guide (Book Group)	2025
Get Your Students Actively Engaged	2025
Entering Mentorship Workshop	2024
Establishing an Undergraduate Research Culture Workshop	2024

## HONORS & AWARDS

---

NSF National Research Traineeship (NRT) Fellowship, Univ. Oklahoma (\$39,000)	2017 – 2018
Biology Dept. Award for Excellence in Graduate Student Teaching, Univ. Oklahoma (\$500)	2023; 2022
Kiawah Conservancy Environmental Research Grant (\$7,920)	2019
Purple Martin Conservation Association Research Grant (\$2,380)	2019
Kiawah Conservancy Environmental Research Grant (\$7,250)	2018
Loren G. Hill Excellence Fund, Univ. Oklahoma (\$500)	2018
Helen Miller Payne County Audubon Society Scholarship (\$500)	2017
George Miksch Sutton Scholarship in Ornithology, Univ. Oklahoma (\$600)	2017
George Miksch Sutton Scholarship in Ornithology, Univ. Oklahoma (\$1,185)	2016

## RELEVANT TECHNICAL SKILLS

---

**Programming:** R (proficient)

**Software:** Program MARK; ArcGIS; QGIS; Sea Level Affecting Marshes Model (SLAMM); Biopac Student Lab; Logger Pro; MaxEnt; NOAA's Weather and Climate Toolkit (WCT); Arduino.

**Data Analyses:** Estimation of demographic parameters using mark-recapture data; Survival analysis techniques (e.g., Kaplan Meier method and Cox Proportional Hazards modeling); Modeling future sea level rise impacts on coastal habitats; Likelihood-ratio tests and logistic regression models; Least cost path (LCP) analyses; Multi-model selection (AIC).

Familiarity with developing and/or coding agent-based models (ABMs), Bayesian analyses, species distribution models (SDM), population viability analyses (PVA), and extraction of data from still images and video using the R programming environment.

## PUBLICATIONS

---

Contina, A., Anderson, C.E., Hille, D.C., **Oakley, W.F.**, Bridge, E.S., Kelly, J.F., Smith, H.O., Koch, J., & Jervis, L.L. (2021). Domesticating the Exotic? An Online Survey of Attitudes towards the International Wildlife Pet Trade. *Conservation & Society*, 19(3), 184-189.

Contina, A., Alcantara, J.L., Bridge, E.S., Ross, J.D., **Oakley, W.F.**, Kelly, J.F., & Ruegg, K.C. (2019). Genetic structure of the Painted Bunting and its implications for conservation of migratory populations. *Ibis*, 161(2), 372-386.

## PUBLICATIONS IN PREPARATION

---

Sutton, C.B., Vargo, D.J., **Oakley, W.F.**, Gebreselassie, F., and Desmond, M.J. Breeding territory characteristics of a vulnerable aridland obligate songbird in the southwestern United States.

**Oakley, W.F.** and Bridge, E.S. Predicting the impacts of future sea-level rise on wintering habitat for three tidal marsh songbird species at a South Carolina barrier island.

**Oakley, W.F.**, Given, A.G., Patten, M.A., and Bridge, E.S. Translocation experiments reveal strong homing abilities and site fidelity for wintering songbirds in a threatened coastal salt marsh.

**Oakley, W.F.**, Given, A.G., and Bridge, E.S. Annual survival rates and abundances of wintering songbirds in a South Carolina salt marsh.

LePage, H.K., Bridge, E.S., **Oakley, W.F.**, and Heaston, A. Comparison of migratory and resident bird species in a contaminated environment.

## CONFERENCE PRESENTATIONS

---

**Oakley, W.** 2025. Annual survival, abundance, and behavioral characteristics of wintering Ammospiza sparrow populations in a South Carolina salt marsh. *102nd Annual Meeting of the Eastern Bird Banding Association*. Charleston, South Carolina. 28 February - 2 March 2025.

## POSTER PRESENTATIONS (Presenter underlined if not first author)

---

**Oakley, W.**, E. Bridge., B. Smith-Patten, and M. Patten. 2017. Can we use drones to locate and track Black Rails (*Laterallus jamaicensis*) during the breeding season? *Southwestern Association of Naturalists Conference*; Lawton, Oklahoma. April 2017.

Bridge, E., J. Ruyle, I.D. Grady, G.P. Robinson, **W.F. Oakley**, and H.K. Lepage. 2017. A low-cost RFID reader and electronics platform for biological research. *Meeting of the American Ornithological Society (AOS) and Society for Canadian Ornithologists (SOC)*; East Lansing, Michigan. August 2017.

**Oakley, W.** and E. Bridge. Modeling Distributions of Disjunct Populations of Nelson's Sparrow (*Ammodramus nelsoni*). 2016. *North American Ornithological Congress*; Washington DC. August 2016.

Bridge, E., S., K. Broadfoot, P. B. Chilson, A. J. Contina, T. Fagin, K. Goodenough, K. Horton, J. F. Kelly, G. Melhado, **W. Oakley**, S. Pletschet, K. Stumpf. 2016. Macro-scale analysis of Purple Martin roosting populations using NEXRAD. *North American Ornithological Congress*; Washington DC, 16-20 August 2016.

## PROFESSIONAL DEVELOPMENT IN RESEARCH

---

### *Workshops & Courses*

3 <sup>rd</sup> Radar Aeroecology Training School, Univ. Oklahoma	2019
Science Through Multimedia Stories Workshop, Albuquerque, NM	2018
<i>Society for Vertebrate Paleontology 2018 Meeting</i>	
Program MARK Workshop, Univ. Oklahoma (Co-organizer)	2018
sUAS Remote Pilot License Test Prep Course, Univ. Oklahoma	2017
Professional Ethics Training/Responsible Conduct of Research Seminar, Univ. Oklahoma	2016
Software Carpentry Workshop, Univ. Oklahoma	2016
Advanced Programming and Graphing in R Workshop, Washington, DC	2016
<i>North American Ornithological Conference</i>	
Introduction to R Workshop & Careers in Ornithology, Univ. Oklahoma	2015
<i>Annual Meeting of the American Ornithologists' Union and the Cooper Ornithological Society</i>	

## SERVICE & PROFESSIONAL MEMBERSHIP

---

### *Sam Noble Museum at the University of Oklahoma*

Outreach Event Volunteer, Full S.T.E.A.M Ahead at Sam Noble	2022
Bird Specimen Preparation Volunteer, Ornithology Collection	2016 – 2017

### *University of Oklahoma*

Teaching Assistant, Coding Outreach for Data Education (CODE) Workshop	2022
President, Biology Graduate Student Association	2016 – 2017

### *Journal Services – Peer Reviewer*

Southwestern Naturalist (2016), The Auk: Ornithological Advances (2017)

### *Professional Memberships*

American Ornithological Society

Association of Field Ornithologists  
 Association of Southeastern Biologists

### TECHNICIAN AND FIELD EXPERIENCE

---

Volunteer Bird Bander, Avian Ecotoxicology Research Project, OU	2018 – 2019
Black Rail Survey Technician, Oklahoma Department of Wildlife Conservation	2017
Volunteer Bird Bander, Kent Island Savannah Sparrow Monitoring Research, Univ. of Guelph	2017
Grassland & Breeding Bird Survey Field Crew Leader, Oklahoma Biological Survey, OK	2015
Volunteer Data Processor, Osprey Migration Research, OspreyTrax.com	Winter 2014
Graduate Assistant, Department of Biology, The Citadel, Charleston, SC	Spring 2014
Wildlife Research Technician, University of Delaware, DE	2012
Volunteer Bird Bander, Winter Marsh Sparrow Monitoring Project, Kiawah Island, SC	2012 – 2018
Fall Migration Bird Banding Assistant, Town of Kiawah Island, SC	2012 – 2014
Migratory Bird Survey Field Technician, University of Southern Mississippi, MS	2011
Bird Banding Assistant in Amazonia Peru, University of Florida	2010
Volunteer, Wildlife Survey & Monitoring Projects, Kiawah Island, SC	2010 – 2014
Volunteer Bird Bander, Fall Migration Banding, Kiawah Island, SC	2010 – 2011
Volunteer Trail Leader, Eastern Bluebird Monitoring Project, Kiawah Island, SC	2010 – 2011
Volunteer, Diamondback Terrapin Mark-Recapture Project, Kiawah Island, SC	Summers 2010, 2011

### ADDITIONAL EXPERIENCE

#### *Experiential & Leadership Education*

---

Naturalist (Ecotour Guide/Educator), Kiawah Island Golf Resort, Kiawah Island, SC	2009 – 2013
Children's Ski Instructor, Canyons Resort, Park City, UT	2008 – 2009
Wilderness Trip Leader, Camp North Star for Boys, Hayward, WI	2008
Teaching Intern, The Leadership School at Kieve-Wavus, Nobleboro, ME	2008
Intern, National Outdoor Leadership School (NOLS), Tucson, AZ	Fall 2007

#### *Leadership Training & Outdoor Travel*

National Outdoor Leadership School (NOLS), Semester in the Southwest	Spring 2006
Boy Scouts of America, Eagle Scout awarded in 1998	1995 – 1998

### ADDITIONAL TECHNICAL SKILLS

---

**Wildlife Research Techniques:** Mist netting and bird banding (over 2,500 passerines and near-passerine banded); Radio telemetry of birds; Point-count and transect surveys for birds; Designing and conducting translocation/displacement experiments with birds; Blood and feather sampling of birds; Carcass surveys for birds and bats; Operating acoustic recording equipment for bird and bat flight calls; Operating thermal imaging camera and screening thermal video for birds and bats; Deploying light-level geolocators; Quadrat vegetation sampling; Small mammal trapping; Terrestrial and aquatic sampling for amphibians and reptiles.

#### *Land & Water Vehicles*

4WD; Manual transmission autos; Small horsepower boats in tidal marshes and near-coast waters; Flat-water and river canoeing; Flat-water kayaking; Towing RVs and motorboat trailers; UAV/Drone operation (e.g., DJI Phantom 4 drone).