Lynn Schofield

Staff Biologist

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Education

M.S. Biological Sciences

2015 – Eastern Illinois University, Charleston, IL – Thesis: Daily Activity Patterns of Three Migratory Bird Species at a Stopover Site on the Northern Coast of the Gulf of Mexico

Advisor: Dr. Jill Deppe

B.S. Ecology, Evolution and Animal Behavior

2008 – University of Minnesota - Twin Cities, Minneapolis, MN – College of Biological Science Advisor: Dr. Robert Zink

Publications and Professional Reports

Schofield, L. N., R. B. Siegel, H. L. Loffland. (In review). Modeling future habitat suitability for bird species associated with rare geomorphic conditions.

Schofield, L. N., H. L. Loffland, R. B. Siegel, C. Stermer, T. Mark. (In review). Willow Flycatcher species conservation strategy for the state of California. The Institute for Bird Populations and California Department of Fish and Wildlife.

Schofield, L. N., H. L. Loffland, K. Strohm. (In prep). Observations of Willow Flycatchers in low elevation meadows in the Sierra Nevada foothills during spring migration and breeding.

Schofield, L. N., B. K. Jackson, S. S. Stock, M. Desrosiers. (In prep). River regulation increases deleterious effects of drought on abundance and richness of upland and riparian breeding birds in a montane riparian meadow system. River Research and Applications.

Loffland, H.L., L.N. Schofield, R.B. Siegel, and B. Christman. 2022. Sierra Nevada Willow Flycatcher decline continues but losses abate at two restored meadows. Western Birds 53:52–69.

Schofield, L.N. Spotted Owl and Northern Goshawk Surveys on the Plumas National Forest 2021 (2022). The Institute for Bird Populations and Plumas National Forest.

Schofield, L.N. Spotted Owl and Northern Goshawk Surveys on the Plumas National Forest 2019-2020 (2021). The Institute for Bird Populations and Plumas National Forest.

Schofield, L.N., S.A. Eyes, R.B. Siegel, and S.L. Stock. (2020). Habitat selection by spotted owls after a megafire in Yosemite National Park. Forest Ecology and Management.

Jackson, B.K., S.L. Stock, L.S. Harris, J.M. Szewczak, L.N. Schofield, and M.A. Desrosiers. (2020). River food chains lead to riparian bats and birds in two mid-order rivers. Ecosphere 11:e03148.

Jackson, B.K., S.L. Stock, L.S. Harris, J.M. Szewczak, L.N. Schofield, and M.A. Desrosiers. (2020). River food chains lead to riparian bats and birds in two mid-order rivers. Ecosphere.

Schofield, L. N., H. L. Loffland, R. B. Siegel, H. A. Mathewson, C. Stermer. (2018). Using conspecific broadcast for Willow Flycatcher restoration in the Sierra Nevada. Journal of Field Ornithology.

Schofield, L. N., J. L. Deppe, T. J Zenzal, M. P. Ward, R. H. Diehl, R. T. Bolus F. R. Moore. (2018). Using automated radio telemetry to quantify activity patterns of songbirds during stopover. The Auk.

Schofield, L. N., J. L. Deppe, R. H. Diehl, M. P. Ward, R. T. Bolus, T. J. Zenzal, J. Smolinsky, F. R. Moore. (2018). Occurrence of quiescence in free-ranging migratory songbirds. Behavioral Ecology and Sociobiology.

Schofield, L.N. Willow Flycatcher Surveys on the Tahoe National Forest (2018). The Institute for Bird Populations and the Tahoe National Forest

Schofield, L. N., S. S. Stock. Birds of Ackerson Meadows prior to acquisition. (2017). U. S. Department of the Interior, Natation Park Service, Yosemite National Park. 24 p.

Schofield, L. N., S. S. Stock. Looking downstream: bird studies in Poopenaut Valley. (2016). U. S. Department of the Interior, Natation Park Service, Yosemite National Park. 40 p.

Schofield, L. N., S. S. Stock. Yosemite Valley riparian bird indicator species status. (2016). U. S. Department of the Interior, Natation Park Service, Yosemite National Park. 25 p.

Schofield, L. N., R. B. Siegel, J. X. Wu, and R. L. Wilkerson. Avian Monitoring in the King Fire: surveying California Spotted Owls and Northern Goshawks during the 2015 breeding season. Final Report. April 13 2015 - Nov. 9 2015. Georgetown, California. (2015) U.S. Department of Agriculture, Forest Service, El Dorado National Forest. 162 p.

Schofield, L. N., R. B. Siegel, J. X. Wu, and R. L. Wilkerson. Avian Monitoring in the King Fire: surveying Black-backed Woodpeckers during the 2015 breeding season. Final Report. April 13 2015 - Nov. 9 2015. Georgetown, California. (2015). U.S. Department of Agriculture, Forest Service, El Dorado National Forest. 25 p.

Deppe, J. L., M. P. Ward, R. T. Bolus, R. H. Diehl, A. Celis-Murillo, T. J. Zenzal, F. R. Moore, T. J. Benson, J. A. Smolinsky, L. N. Schofield, D. A. Enstrom, et al. (2015). Fat, weather, and date affect migratory songbirds' departure decisions, routes, and time it takes to cross the Gulf of Mexico. Proceedings of the National Academy of Sciences 112(46): E6331-E6338

Key Qualifications

- Possesses strong writing skills with experiencing writing scientific reports, papers, and assessments
- Proficiency with R, Python, SQL, ArcGIS, QGIS, Matlab, all MS Office products (particularly Microsoft Access, Excel, and Word), and the Adobe Creative Suite.
- Experience working within and in cooperation with various government and nongovernment agencies both nationally and internationally (including military bases, US Forest Service, and US Parks Service.)
- Knowledgeable about most commonly used biological field techniques
- Experience managing field crews and coordinating large projects
- Holds a bird banding sub permit with the Bird Banding Lab (permit number 23577)
- Skilled at data manipulation and management
- Comfortable with back country situations, and able to handle difficult conditions

- Fluent in Spanish

Professional Experience

Staff Biologist/GIS Specialist: The Institute for Bird Populations

November 2016 – Present

- Creating study designs and implementing research projects
- Analyzing data and synthesizing information to produce scientific manuscripts and professional presentations
- Writing government reports and providing data products in compliance with research agreements
- Creating and managing databases for a wide variety of projects
- Produced GIS products, including maps, survey transects, and spatially-explicit analyses
- Training, coordinating, and managing field crews

Adjunct Professor in Biological Sciences: San Francisco State University

Spring Semester 2022

- Taught upper level course in ornithology
- Independently created an ornithology curriculum centered on avian biology, ecology and conservation
- Drafted and graded exams, exercises, and writing assignments

Avian Surveyor (GS-07): Yosemite National Park, Division of Resource Management and Science April 2016 – November 2016

- Continued data collection for several ongoing projects, focusing on bird and bat communities and trophic dynamics in the Tuolumne and Merced River watersheds
- Prepared government reports and presented results at scientific meetings
- Analyzed existing data and synthesized this information to produce scientific manuscripts
- Prepared grants to fund new studies focusing on avian ecology

Project Coordinator/Seasonal Staff Biologist: Institute for Bird Populations and El Dorado National Forest March 2015 – January 2016

- Designed a survey plan to assess populations of Black-backed Woodpeckers, California Spotted Owls, and Northern Goshawks for the US Forest Service within the recently burned King Fire area.
- Managed 7 employees during the field season and participated directly in data collection
- Created and curated an Access database for all collected data, modeled habitat use in GIS and reported results to the El Dorado National Forest.
- Compiled findings into a year-end report submitted to the USDA Forest Service to be made available for public review

Field Supervisor: Eastern Illinois University and National Autonomous University of Mexico September 2014

- Trained new students in field techniques including bird banding, telemetry tracking, taking and processing blood samples, and using automated radio-receiving equipment

Field Technician: Ohio State University

January 2012-April 2012 and February 2013

- Assisted with a PhD project focused on the effects of anthropogenic disturbance on wintering bird populations and mixed species flock dynamics in Antioquia, Colombia
- Performed point count surveys and tracked mixed-species feeding flocks of birds at sites throughout the Andes

Avian Monitoring Consultant: ACCIONA Energy – La Ventosa Windfarms, Oaxaca August 2012–January 2013

- Worked as an independent consultant at the Accióna Windfarm to assess the impact of development in the Isthmus of Tehuantepec
- Collected behavioral data of migratory birds moving through the wind farms
- Searching below towers for carcasses to establish mortality rates
- Conducted base-line transect and point count surveys in surrounding parks

Lead Bird Bander/Terrestrial Research Staff: Operation Wallacea - Cusuco National Park, Honduras July and August 2012

- Collected data for long term avian monitoring projects within the national park mostly focusing on establishing a passerine banding program and point count protocols
- Worked with students and tourists as an ecotourism guide
- Entered, organized, and analyzed data
- Drafted a manuscript analyzing correlations between habitat characteristics and bird communities in order to eventual publish the findings from the past seven years of point count data

Contract Biologist: Institute for Bird Populations

May 2012-July 2012

- Collected data for a long term project establishing the distribution and abundance of the Black-backed Woodpecker in California
- Conducted woodpecker call-back surveys throughout recent burn areas in the Sierra Nevada Mountains
- Conducted point count and vegetation surveys to establish habitat use and changes in vegetation over time

Lead Bird Bander/Surveyor: ProNatura, The Veracruz River of Raptors

Fall 2009 and 2011, Spring 2011

- Collected data for yearly long-term raptor migration study in Central Veracurz
- Helped to establish the new spring migration monitoring program in Chavarrillo, Veracruz by raising funds, hiring counters, arranging lodging, and running the count
- Worked alongside a Mexican crew communicating almost exclusively in Spanish

Field Technician: University of Alberta and Environment Canada

May 2011-August 2011

- Collected data for study of species at risk throughout the Canadian prairies focusing the influence of oil and gas development on Ferruginous Hawks
- Monitored nests, set up and maintained nest cameras, and searched for new nests
- Trapped, banded, and fitted both adult and juvenile birds with satellite and/or radio telemetry tags and tracked individuals through the season
- Worked in cooperation with local land owners in order to conduct research on private land, as well as on Suffield Military Base

Field Technician: CONANP, La Encrucijada Bioshphere Reserve in Chiapas January 2011-April 2011

- Assisted in the ongoing wildlife monitoring projects on the Encrucijada reserve
- Participated in projects including mammal monitoring and spoor surveys, passerine banding, and crocodile surveys using spotlighting and mark-recapture
- Helped develop protocols for a future shorebird monitoring project

Lead Raptor Bander: Hawkwatch International, Manzano Mountains August 2010–November 2010

- Worked as part of the yearly raptor migration study on the Manzano Mountains in New Mexico
- Lived and worked in a particularly remote field station alongside a small tight-knit crew

Bird Banding Crew Leader: Utah Department of Wildlife Resources

May-August 2010

- Managed a MAPS (Monitoring Avian Productivity Survey) style bird banding stations at four sites in northern Utah
- Assisted with other projects including habitat restoration, line-transect vegetation surveys, point counts, and monitoring Lewis's and Three-toed Woodpeckers nests

Passerine Bander: University of Michigan and the El Cielo Biosphere Reserve December 2009–April 2010

 Worked in the El Cielo Biosphere in Tamaulipas, Mexico as part of a study establishing wintering bird demographics and collecting samples for later genetics work

Wildlife Field Technician: US Forest Service, Stanislaus Nation Forest February 2009–August 2009

- Worked independently in the backcountry on the Stanislaus National Forest and in Yosemite
 National Park on an ongoing population study of Great Gray Owls,
- Conducted nocturnal call-back surveys, ARU surveys, PIT tags, trapping, nest searches, and meadow searches to describe the Great Gray Owl demography

Intern: Golden Gate Raptor Observatory

July 2008-February 2009

- Collected data as part of a long-term raptor migration study
- Learned a wide range of field techniques including how to handle birds, use telemetry equipment, and take blood samples
- Delivered interpretive talks on raptors and the study of raptors

Ornithology Teaching Assistant: University of Minnesota - College of Biological Science January–May 2008

- Taught the lab for the introductory ornithology
- Created a curriculum with other TAs that included field methods, avian diversity, evolution, anatomy and field identification.
- Led birding walks on campus and around the Twin Cities

Natural History Interpreter: Bell Museum of Natural History

September 2006-July 2008

- Prepared and taught the museum-based ecology unit for U of M's introductory biology courses
- Led tours and programs and delivered outreach programs for the public
- Created lessons for tours, summer camps, and events
- Learned to perform curatorial tasks and prepare study skins

Field Technician: Institute for Bird Populations

May–August 2006

 Worked on a project investigating the extirpation of Great Gray Owls from the eastern portion of the Sierra Nevada Mountains

Undergraduate Research Tech: U of M College of Biological Sciences

January 2005-April 2006

- Worked on an ongoing project investigating the background rate of mutation accumulation in Arabidopsis thaliana
- Learned and used many laboratory techniques including gel electrophoresis and PCR

Grants Awarded

Yosemite Conservancy Scientific Research Grant. (Awarded 2017). Discover and Document Ackerson Meadow Species. Total amount \$44,000

Eastern Illinois University Research and Creative Activity Awards. (Awarded 2015). Daily Activity Patterns of Three Migratory Bird Species at a Stopover Site on the Northern Coast of the Gulf of Mexico. Total amount \$2500

Eastern Illinois University Graduate Student Investigator. (Awarded 2015). Occurrence of quiescence in free-ranging migratory songbirds. Total amount \$1500

Professional Presentations

Onondaga Audubon Society (2022). Bird Migration: Connecting Continents.

The Wildlife Society Western Section (2021). Modeling future habitat suitability for Great Gray Owls in a changing climate. Virtual conference.

Golden Gate Audubon Society and other California Audubon chapters (2020). Wildlife and wildfire: Animal adaptations in a dynamic and changing ecosystem. Virtual presentation

The Wildlife Society Western Section (2020). A habitat suitability model for identifying Willow Flycatcher habitat refugia in a changing climate. Redding, CA.

The Wildlife Society Western Section (2019). Effects of forest fire and drought-induced tree mortality on habitat selection by California spotted owls in Yosemite National Park. Fish Camp, CA

The Wildlife Society Western Section (2019). Using conspecific broadcast for Willow Flycatcher restoration in the Sierra Nevada. Santa Rosa, CA.

Riparian Summit. (October 2017). Using conspecific broadcast for Willow Flycatcher restoration in the Sierra Nevada. Davis, CA.

Tuolumne River Summit. (July 2016). River regulation increases deleterious effects of drought on abundance and richness of upland and riparian breeding birds in a montane riparian meadow system. Yosemite National Park, CA.

North American Ornithological Society. (September 2014). Using automated radio telemetry to quantify activity patterns of songbirds during stopover. Estes Park, CO.

Outreach Efforts

Cal Falcons Social Media Director: University of California Berkeley 2018-present

- -Maintains nest cams at a Peregrine Falcon nest located on the UC Berkeley Campus
- -Engages public by making nest cam highlight videos and educational materials relating to peregrine and raptor biology available to the public via social media channels including Facebook, Twitter, Instagram, and YouTube and at the calfalcons.berkeley.edu website -Hosts live online and in-person events to answer questions and communicate with Cal Falcons followers and the local community
- -Works with reporters and journalists to create science content for print, radio, and television media to share with a wider audience.

Birding Trip Leader: Feminist Birding Club Bay Area Chapter 2020-2021

-Lead live and online birding events within the Bay Area community

Raptor Banding Docent: Golden Gate Raptor Observatory 2016-2021

-Gave presentations featuring live raptors at Hawk Hill in the Marin Headlands, CA about raptor biology and raptor banding for school groups and other visitors to the National Park