
EDUCATION

- **University of Wyoming, Wyoming Cooperative Fish and Wildlife Research Unit** **Laramie, WY**
Master of Science in Zoology & Physiology Expected completion: Dec 2015
"Indirect Effects of Wind Energy Development on Breeding Grassland Birds" Advisor: Dr. Anna Chalfoun
- **University of Georgia** **Athens, GA**
Bachelor of Arts and Science in Biology 2002
- **James Cook University** **Townsville, QLD, Australia**
Semester Abroad - Studies in Zoology and Ecology Spring 2000

EMPLOYMENT

Master of Science Graduate Student Researcher, University of Wyoming Jan 2011-present.

Modeling avian abundance and nesting productivity with wind energy development and habitat using R, Program MARK, Program Distance, ArcGIS, and Fragstats to assess indirect impacts to songbirds and inform management and mitigation efforts for wind energy development in grasslands. Gained experience in study design, site selection, database management, data analysis, scientific writing and presentation research findings. Hired, trained, & supervised 7 technicians and coordinated research with industry cooperators, private landowners, and WGFD partners.

Wildlife Biologist, Hayden-Wing Associates Mar-Nov 2009, Mar-May 2010, Aug-Nov 2010.

Conducted wildlife and plant surveys of species of conservation interest and delineated habitat for regulatory compliance by oil, gas, and uranium industries in Wyoming and Montana. Collected spatially-referenced field data using ArcPad-enabled PDAs and digitized remotely-sensed disturbance data using ArcMap.

Biological Field Technician, Rocky Mountain Bird Observatory May-Aug 2010.

Identified landowners and coordinated access to survey locations. Conducted avian point count and vegetation surveys throughout Colorado for RMBO's Integrated Monitoring in Bird Conservation Regions program.

Seasonal Field Biologist, Great Basin Bird Observatory Mar 2008-Mar 09, Nov 09-Feb 2010.

Established avian survey routes for the Lower Colorado River Multi-Species Conservation Plan. Conducted avian point count surveys, territory mapping, snowy plover surveys, vegetation sampling, data entry, proofing, and summary for the Nevada Breeding Bird Atlas across the state of Nevada. Conducted literature reviews of species of conservation interest.

Biological Technician, Rocky Mountain Research Station, USFS Apr-Sep 2007.

Surveyed, monitored nests, and banded Mexican Spotted Owls, in addition to mark-recapture small mammal trapping and vegetation sampling for a long-term owl demography study in New Mexico's Sacramento Mountains.

Project Assistant, Cary Institute of Ecosystem Studies Aug-Dec 2006.

Trapped small mammals using mark-recapture techniques, camera-trapped large/meso-mammals, collected ticks, and received training in ArcGIS and Program MARK in NIH-funded Lyme disease research examining effects of fragmentation on biodiversity and disease dilution.

Crew Leader, Field Technician, University of Georgia Apr-Aug 2006, May-Jul 2005.

Conducted avian transect surveys, and nesting ecology-associated surveys for Black-throated Blue Warbler (including resighting marked individuals, territory mapping, nest searching and monitoring, and capturing and banding unmarked adults and nestlings), as well as insect and habitat surveys to examine variation in avian communities and Black-throated Blue Warbler nesting ecology with prey and habitat across an elevation gradient.

Research Technician III, Southeastern Cooperative Wildlife Disease Study, UGA Oct 2005-Feb 2006.

Live-trapped herpetofauna, small and meso-mammals, and birds to collect parasite specimens for Florida-wide exotic ectoparasite surveillance.

Field Technician, University of Georgia, Feb-Mar 2005.

Mist-netted and identified understory birds, trained 3 indigenous assistants in mist-netting and bird-handling techniques to assess variation in avian community composition with indigenous logging practices in remote north-central Peru.

Crew Leader, Field Technician, Oregon State University, Sep-Nov 2004, Aug-Nov 2003.

Trapped small mammals using mark-recapture techniques and sampled vegetation to assess the effects of various logging practices on small mammal populations in northern California.

Field Technician, University of Georgia, Mar-Jun 2004.

Surveyed Louisiana Waterthrush by mapping habitat use and nest searching and monitoring in conjunction with water quality surveys to determine the suitability of Louisiana Waterthrush as stream-health indicators.

Field Technician, University of Georgia, Apr-Jul 2003.

Conducted avian transect surveys, and Acadian Flycatcher nest searching, monitoring, and territory mapping in nesting ecology study in the bottomland hardwood forests of Mississippi.

Field Technician, University of Alaska, May-Aug 2002.

Located and monitored waterfowl nests, trapped, banded, and radio-tracked Greater and Lesser Scaup in nesting ecology study in interior Alaska.

Student Worker, Joye Marine Biogeochemistry Laboratory, UGA, May 2001-Apr 2002.

Lab assistant and field sampling in the salt marsh ecosystem of coastal Georgia for nutrient cycling analysis and sediment surveys.

Undergraduate Researcher, Ecology Department, UGA, May-Dec 2001.

Investigated small mammal movement and the use of riverine peninsulas as mesocosms under Dr. G.W. Barrett using mark-recapture trapping and radio telemetry.

SKILLS

- Database management using MS Access
- ArcGIS 10 (including completion of ESRI Virtual Campus courses: Exploring Spatial Patterns; Basics of Raster Data; Basics of the Geodatabase Data Model; ArcGIS Spatial Analyst; Geodatabase Topology)
- Proficient in R, Program DISTANCE, Program MARK, and FRAGSTATS statistical software
- GPS navigation, radio telemetry, data collection using ArcPAD and PDA, map and compass reading, orienteering
- ATV, four-wheel drive, and outboard-motor boat operation
- First Aid, CPR, and Georgia hunter safety certified
- Conversational German

SCHOLARSHIPS

The Wyoming Chapter of The Wildlife Society Graduate Student Award, University of Wyoming	2012
Reed W. Fautin Memorial Scholarship, University of Wyoming	2012
HOPE Scholarship, University of Georgia	1997-1999

SELECTED PRESENTATIONS

Chalfoun, AD and AC Mahoney. Contrasting Indirect Effects of Wind Turbine Complexes vs. Natural Gas Development on Grassland and Shrubsteppe Songbirds. Annual Meeting of the American Ornithologists' Union. Estes Park, CO. 2014.

Mahoney, AC and AD Chalfoun. Impacts of Wind Energy Development on Songbird Reproductive Success. Annual Meeting of the Wyoming Chapter of The Wildlife Society. Rock Springs, WY. 2013.

Mahoney, AC and AD Chalfoun. How Wind Energy May Indirectly Influence Grassland Songbirds. Izaak Walton League. Laramie, WY. Murie Audubon Society, Casper, WY. Laramie Audubon Society, Laramie, WY. 2013.

Mahoney, AC and AD Chalfoun. Wind Energy Development & Grassland Songbird Nesting Metrics. Annual Meeting of the Wyoming Chapter of The Wildlife Society. Laramie, WY. 2012.

Mahoney, AC and AD Chalfoun. Indirect Effects of Wind Energy Development on Grassland Birds. North American Ornithological Conference. Vancouver, BC, Canada. 2012.

Mahoney, AC., and AD Chalfoun. Zephyr or Tempest? Wind Energy Development and Breeding Grassland Birds. The Wildlife Society, Portland, OR. 2012

Mahoney, AC and AD Chalfoun. Wind Energy & Nest Success. Annual Meeting of the Wyoming Chapter of The Wildlife Society. Jackson, WY. 2011.

PUBLICATIONS

Mahoney, AC and AD Chalfoun. Wind energy production variably influences the reproductive success of two species of grassland songbirds. *The Condor: Ornithological Applications*. *In revision*.

Klee, Ryan V., Mahoney, Anika C., Christopher, Cory C., Barrett, Gary W. 2004. Riverine Peninsulas: An Experimental Approach to Homing in White-footed Mice (*Peromyscus leucopus*). *American Midland Naturalist*, 2:408-413.

PROFESSIONAL AFFILIATIONS & PUBLIC SERVICE

American Ornithologists' Union	2011-present
The Wildlife Society	2011-present
Laramie Audubon Society Board of Directors	2012-present