

Auriel M.V. Fournier

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Professional Appointments and Education

Postdoctoral Researcher - Mississippi State University
April 2017-Present ~ Dr. Mark Woodrey and Dr. Jim Lyons, Supervisors

Elected Councilor Wilson Ornithological Society - 2017-2020

Associate Editor The Ibis - 2017-Present

Research Committee Member Black Swamp Bird Observatory - 2016-Present

2017 ~ **Ph.D. in Biological Sciences** - Arkansas Cooperative Fish & Wildlife Research Unit
University of Arkansas - Dr. David G. Krentz, Adviser -

Phenology, Habitat Use, and the Impacts of Wetland Management on Autumn Migrating Rails in Missouri

2011 ~ **Bachelor of Science in Wildlife Ecology and Management** - Minor *Remote Sensing*
Michigan Technological University Houghton, MI - Magna Cum Laude

Peer-Reviewed Publications

In Press

Fournier, A.M.V., Krentz, D.G. *Confirmation of diving and swimming behavior in the Sora (Porzana carolina)* **Wilson Journal of Ornithology** (copy available upon request)

Fournier, A.M.V., Mengel, D.C., Gbur, E.E., Krentz, D.G. *The timing of autumn Sora (Porzana carolina) migration in Missouri* **Wilson Journal of Ornithology** (copy available upon request)

2017

Fournier, A.M.V., Mengel, D.C., Krentz, D.G. *Virginia and Yellow Rail autumn migration ecology: synthesis using multiple data sets* **Animal Migration** 4:15-22 doi:10.1515/ami-2017-0003 pdf link

Fournier, A.M.V., Drake K.L., Tozer D.C. *Using citizen science monitoring data in species distribution models to inform isotopic assignment of migratory connectivity in wetland birds* **Journal of Avian Biology** doi:10.1111/jav.01273 pdf link

Fournier, A.M.V., Krentz, D.G. *Nocturnal distance sampling all-terrain vehicle surveys for non-breeding rails* **The Wildlife Society Bulletin** 41:151-156 doi:10.1002/wsb.745 pdf link

Fournier, A.M.V., Sullivan, A., Bump, J., Perkins, M., Shieldcastle, M.C., King, S. *Combining citizen science species distribution models and stable isotopes reveals migratory connectivity in the secretive Virginia rail* **Journal of Applied Ecology** 54:618-627 doi:10.1111/1365-2664.12723 pdf link

2016

Fournier, A.M.V., Welsh, K.J., Polito, M., Emslie, S. Brasso, R. *Levels of mercury in feathers of Clapper Rails over 45 Years in coastal salt marshes of New Hanover county, North Carolina* **Bulletin of Environmental Contamination & Toxicology** 97: 469-473 doi:10.1007/s00128-016-1870-z pdf

Peer-Reviewed Publications Continued

2015

Fournier, A.M.V., Shieldcastle, M.C., Kashmer, T., Mylecraine, K.A. *Comparison of arrival dates of spring rail migration in the southwest Lake Erie Marshes, Ohio, USA.* **Waterbirds** 38: 312-314 [doi:10.1675/063.038.0313](#) [pdf link](#)

Fournier, A.M.V., Bond, A.L. *Volunteer field staff are bad for wildlife ecology* **The Wildlife Society Bulletin** 39: 819-821 [doi:10.1002/wsb.603](#) [pdf link](#)

2013

Fournier, A.M.V., Shieldcastle, M.C., Fries, A.C. and Bump, J.K. *A morphometric model to predict the sex of virginia rails* **The Wildlife Society Bulletin** 27: 881-886 [doi:10.1002/wsb.323](#) [pdf link](#)

Technical Publications

4 **Fournier, A.M.V.**, 2016. Effects of Wetland Management Strategies on Habitat Use of Fall Migrating Rails on Intensively-Managed Wetland Complexes in Missouri : Final Report USFWS Division of Migratory Birds Webless Program [pdf](#)

3 **Fournier, A.M.V.**, K. Willard. 2015. King Rail Nesting and Brood Rearing Ecology in Managed Wetlands: Final Report USFWS Division of Migratory Birds Webless Program [pdf](#)

2 Butler, C.J., **Fournier, A.M.V.** 2015. Using Multiple Stable Isotopes to Investigate Migratory Connectivity in Yellow Rails, Le Conte's Sparrows, Nelson's Sparrows and Sedge Wrens. U.S. Fish and Wildlife Service (Region 3) and Prairie Pothole Joint Venture.

1 Butler, C.J., **Fournier, A.M.V.** 2015. Using Multiple Stable Isotopes to Investigate Migratory Connectivity in Yellow Rails, Le Conte's Sparrows, and Sedge Wrens. U.S. Forest Service

Grants

Travel Grant 2017 \$210 American Ornithological Society/Society of Canadian Ornithologists Conference

Travel Grant 2017 \$350 Wilson Ornithological Society Annual Conference

Travel Grant 2016 \$200 North American Ornithological Conference

(declined) **PI National Science Foundation East Asia Pacific Summer Institute Program** 2016
Timing is everything: Identifying peak Rallidae call rate in southeast Australia

Co-Investigator and Writer Missouri Department of Conservation Research Grant 2015 \$62,000
Effects of Wetland Management Strategies on Habitat Use of Autumn Migrating Rails on Intensively Managed Wetland Complexes in Missouri

Travel Grant 2015 \$320 American Ornithologists Union/Cooper Ornithological Society Conference

Travel Grant 2015 \$500 Association of Field Ornithologists/Wilson Ornithological Society/Society of Canadian Ornithologists Conference

The Frances M. Peacock Scholarship for Native Bird Habitat 2015 \$4000

Arkansas Audubon Society Trust 2014 \$1200

Summer Undergraduate Research Fellowship 2011 \$3000

Ecosystem Science Center Undergraduate Research Grant 2011 \$750

Ecosystem Science Center Undergraduate Research Grant 2010 \$750

Honors

2012-16 **Distinguished Doctoral Fellowship** - University of Arkansas
2016 **Distinguished Student Service Award** - The Wildlife Society U of Arkansas Student Chapter
2011 **Outstanding Senior in Wildlife Ecology and Management** - Michigan Technological University
2010 **Member of the Year** - The Wildlife Society Michigan Technological University Student Chapter
2009 **Woman of Promise** - School of Forest Resources and Envi. Science - Michigan Technological University

Work Experience

Quantitative Ecology Contractor

Birds Studies Canada - 2016-2017

Environmental Education Internship

Kellogg Bird Sanctuary, Michigan State University - Kara Hass - May - July 2012

Bird Bander

The Big Island, Hawaii - Dr. Jessie Knowlton - February - May 2012

Field Technician

Isle Royale National Park - Dr. Joseph Bump - May 2011

Remote Sensing/GIS Technician

Michigan Technological University - Dr. Mike Falkowski - February 2010 - December 2011

Small Mammal/Lakeshore Restoration Technician

Michigan Technological University - Dan Haskell - July 2010

Field Crew Leader

Michigan Technological University - Dr. Amber Roth March - June 2010

Bird Bander

Black Swamp Bird Observatory - Mark & Julie Shieldcastle - Spring and Fall 2004-2008

Research Experience

Undergraduate Research Grant Dr. Joseph Bump - Michigan Technological Uni. - 2011
Summer Undergrad Research Fellowship Dr. Joseph Bump - Michigan Technological Uni. - 2011
Undergraduate Research Grant Dr. David Flaspohler - Michigan Technological Uni. - 2010

Invited Presentations

Seminar 2017 Grand Bay National Estuarine Research Reserve
Symposium Talk 2017 American Ornithological Society/Society of Canadian Ornithologists
Seminar 2017 Royal Society for the Protection of Birds, Centre for Conservation Science, UK Headquarters
Talk 2017 Mississippi Coast Audubon Society
Symposium Talk 2017 International Association of Great Lake Researchers
Seminar 2017 Bird Studies Canada
Keynote 2017 The Biggest Week in American Birding Festival
Seminar 2017 Missouri State University, Department of Biological Sciences
Keynote 2016 Ohio Ornithological Society Annual Conference
Talk 2016 Arkansas Audubon Society Annual Conference
Seminar 2016 University of Toledo, Department of Environmental Sciences
Seminar 2014 Arkansas Tech University, Department of Biological Sciences

Presentations

- 11 **Fournier, A.M.V.**, Woodrey, M.S., Lyons, J.E., Cooper, B.J., Evans, K.E. 2017 Application OF Structured Decision Making to Marshbird Monitoring in the Gulf of Mexico *American Ornithological Society/Society of Canadian Ornithologists Meeting, East Lansing, MI*
- 10 Heard, S., **Fournier, A.M.V.**, Branch, T., Skelly, D. 2017 Why most studied populations should decline. *Canadian Society for Ecology and Evolution*
- 9 **Fournier, A.M.V.**, Mengel, D.C., Krementz, D.G. 2017. Habitat Use and Migratory Timing of Virginia and Yellow Rails. *Wilson Ornithological Society Meeting, Fort Meyers, FL* [pdf link](#)
- 8 **Fournier, A.M.V.**, Drake, K., Tozer, D., Krementz, D.G. 2016. Migratory Connectivity of Sora, Virginia Rail and Yellow Rail. *North American Ornithological Conference, Washington D.C.* [pdf link](#) [recording](#)
- 7 **Fournier, A.M.V.** 2016 Building Collaboration and Community in Science Through Twitter. North American Ornithological Conference, Twitter for Scientists Workshop, Washington D.C.
- 6 **Fournier, A.M.V.**, Mengel, D.C., Krementz D.G. 2016 Habitat Use by Autumn Migrating Sora in the Mississippi Flyway *Society of Wetland Scientists - TX* [pdf link](#)
- 5 **Fournier, A.M.V.**, Drake, K. 2015 Active Capture of Rails During the Breeding Season and Fall Migration. *Inland Bird Banders Association Meeting - MS* [pdf link](#)
- 4 **Fournier, A.M.V.**, Sullivan, A.R., Bump, J.K., Perkins M., Shieldcastle, M.C., King, S.L. 2015 Combining Citizen Science Derived Species Distribution Models and Stable Isotope Analysis Reveals Migratory Connectivity in a Secretive Species, the Virginia Rail (*Rallus limicola*). *American Ornithologists Union/Cooper Ornithological Society Meeting - OK* [pdf link](#)
- 3 **Fournier, A.M.V.**, Mengel, D.C., Krementz D.G. 2015 Timing of Autumn Migration in the Mississippi Flyway by Rails. *Association of Field Ornithologists Meeting - NS* [pdf link](#)
- 2 **Fournier, A.M.V.**, Krementz, D.G. 2014 The Response of Fall Migrating Sora to Wetland Management. *Arkansas State Chapter of the Wildlife Society Spring Meeting- AR*
- 1 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H. 2013 Phenology, Habitat Use and Co-Occurrence of Fall Migrating Yellow Rails in Missouri. *Yellow Rail Virtual Symposium* USFWS

Posters

- 6 **Fournier, A.M.V.**, Shieldcastle, M.C., Kashmer, T., Mylecraine, K.A. 2017 Comparison of Arrival Dates of Rail Migration in the Southwest Lake Erie Marshes, Ohio, USA *International Association of Great Lakes Researchers Conference - MI* [pdf](#)
- 5 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H., 2014 Sora Migration and Wetland Management *The Wildlife Society National Conference - PA* [pdf](#)
- 4 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H., 2013 Ecology of Fall Migrating Sora in Missouri. *The Wildlife Society National Conference - WI* [pdf](#)
- 3 **Fournier, A.M.V.**, Sheildcastle, M.C., Fries, A.C., Bump, J.K., 2011 Developing a morphometric model to predict the sex of Virginia Rails. *The Wildlife Society National Conference - HI* [pdf](#)
- 2 **Fournier, A.M.V.**, Roth, A.M., Flaspohler, D.J., 2011 Assessing mechanisms for variation in the eyes of Golden-winged Warblers *Ecosystem Science Center Poster Session - MI* [pdf](#)
- 1 **Fournier, A.M.V.**, Flaspohler, D.J., 2010 Habitat Classification and Biological Inventory of Pioneer Scout Reservation *Undergraduate Research Expo - MI*

Service

2016-Present **Lesson Maintainer** Data Carpentry [R Ecology Lessons](#)
2013-Present **Peer Reviewer** 13 journals 2017 **Presentation Judge** Wilson Ornithological Society Meeting
2016-17 Vice Chair **Open Science Section** Ecological Society of America
2015-17 Treasurer/Secretary **Wetlands Working Group** The Wildlife Society
2014-16 Treasurer **Biology Graduate Student Association** University of Arkansas
2015 **Presentation Judge** Association of Field Ornithology, Wilson Ornithological Society, Society of Canadian Ornithologists Meeting
2015 **Organized/Attended** *Software Carpentry Workshop* University of Arkansas
2014-15 Treasurer **Student Working Group** The Wildlife Society
2014-15 Secretary **Student Chapter - University of Arkansas** The Wildlife Society
2013-14 Treasurer **Student Chapter - University of Arkansas** The Wildlife Society
2013-14 Vice President **Biology Graduate Student Association** University of Arkansas
2010 **Career Panel Member** Ohio Young Birder's Club Conference

Professional Development

2017 **Adaptive Management: Structured Decision Making for Recurrent Decisions** NCTC
2017 **Bayesian Modeling for Ecological & Social Scientists** SESYNC, University of Maryland
2016 **Spatial Capture Recapture Workshop** University of Georgia
2016 **Game Theoretical Modeling of Evolution Tutorial** NIMBios, University of Tennessee
2015 **Editing in Ornithology Workshop** American Ornithologist Union Meeting
2014 **Data Management Workshop** The Wildlife Society National Conference Pittsburgh, PA
2014 **Applied Hierarchical Modeling Workshop** Patuxent Wildlife Research Center/Royle & Kery
2013 **'Adehabitat' R Package Workshop** The Wildlife Society National Con/James Sheppard
2013 **Occupancy Modeling Short Course** Darryl MacKenzie

Outreach

2016-17 **#SkypeWithAScientist** 8 Classrooms across the US
2013-17 **Outdoor Education Volunteer** Hobbs State Park, Arkansas
Lead monthly spring bird banding demonstrations to groups 40-150 of children and adults
2013-17 **Science Fair Judge** (7) Regional/Local Science Fairs NW Arkansas
2015-16 **Editor** Science and Math Section Editor of [Science Borealis](#)
2015-16 **Bird Banding Demonstration** (3) Camp War Eagle Summer Camp, Arkansas
2015-6 **Biotweeps Curator** Curating a week of tweets to 2k+ people about my research for [Biotweeps](#)
2016 **Presentation** Arkansas Audubon Society Annual Meeting [presentation](#)
2015 **RealScientist Curator** Curating a week of tweets to 30k+ people about my research for [RealScientists](#)
2014-5 **Presentation** (4) Local Library Science Program, AR
2013-5 **Presentation** (3) Springdale Alternative High School, Springdale, AR
2015 **Field Trip Leader** (2) The Biggest Week In American Birding Festival
2015 **Presentation** (3) Boys and Girls Club of Bentonville, Arkansas STEAM Program
2011 **North American Breeding Bird Surveyor** U.S. Geological Survey
2003-9 **Bird Bander** Black Swamp Bird Observatory