

Auriel M.V. Fournier

PhD Candidate - University of Arkansas
Arkansas Cooperative Fish and Wildlife Research Unit
Associate Wildlife Biologist ©
amvander@uark.edu - [/@RallidaeRule](#) - 419.307.6261
aurielmvfournier.com - [github](#) - [Google Scholar](#)

Education

PhD in **Biological Sciences - Ecology and Evolutionary Biology**
2017 (expected) **University of Arkansas** Fayetteville, AR
Distinguished Doctoral Fellowship Recipient

Master of Science in **Statistics and Analytics - Bioanalytics**
2017 (expected) **University of Arkansas** Fayetteville, AR

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

Research Experience

Graduate Research Assistant Dr. David Krementz
Arkansas Cooperative Fish and Wildlife Research Unit - University of Arkansas
August 2012 - Present

- Effects of wetland management strategies on habitat use of fall migrating rails on intensively managed wetland complexes in Missouri. Performing distance based nocturnal ATV surveys for rails in wetland impoundments across the state of Missouri. Managing a four person field crew, working closely with state and federal land managers. Capturing rails, taking blood and feather samples.

Undergraduate Research Grant

Dr. Joseph Bump
Michigan Technological University
May 2011 - Present

- Assessing the breeding location of Virginia Rails migrating through NW Ohio using stable isotopes. Manuscript In Review.

Summer Undergraduate Research Fellowship

Dr. Joseph Bump
August 2010 - December 2011

- Developed a morphometric model to predict the sex of Virginia Rails. Published in [The Wildlife Society Bulletin](#).

Undergraduate Research Grant

Dr. David Flaspohler

May 2010 - March 2011

- Examined variation in eye color across the range of Golden-winged Warblers. Presented poster.

Summer Undergraduate Research Fellowship

Dr. David Flaspohler

May - August 2009

- Developed a land management plan for Pioneer Scout Reservation, Ohio. Presented poster.

Publications

In Review **Fournier, A.M.V** %, Sullivan, A. %, Bump, J., Perkins, M., Shieldcastle, M.C., King, S. *Combining citizen science derived species distribution models and stable isotope analysis reveals migratory connectivity in a secretive species, the Virginia rail (Rallus limicola)*

- % **The first two authors contributed equally to this manuscript**

In Review **Fournier, A.M.V.**, Bond, A.L. *Volunteer field staff are bad for wildlife ecology*

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(3) **In Press**

2013 **Fournier, A.M.V.**, Shieldcastle, M.C., Fries, A.C. and Bump, J.K. *Developing a morphometric model to predict the sex of Virginia Rails (Rallus limicola)*. **The Wildlife Society Bulletin** 27: 881-886

Work Experience

Environmental Education Internship

Kellogg Bird Sanctuary, Michigan State University May - July 2012

- Planned and led outdoor education programs for all ages. Developed a social media plan.

Bird Bander

The Big Island, Hawaii February - May 2012

- Banded endemic and endangered birds in isolated forest patches on the Big Island of Hawaii. Operated double high mist-nets to capture birds and take blood and feather samples.

Field Technician

Isle Royale National Park - Dr. Joseph Bump May 2011

- Worked full-time constructing aquatic moose and beaver exclosures in small inland lakes at Isle Royale National Park to study the affect of herbivory on plant communities.

Remote Sensing/GIS Technician

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

- Delineated cover type from color and B/W photos from past seventy years; Identified beaver dams and identified water bodies were created by the dams; Processed raw LiDAR data into maps for later interpretation

Field Technician

Michigan Technological University July 2010

- Trapped small mammals; Performed nocturnal audio boat surveys for frogs; Frequently talked to public about project

Field Crew Leader

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

- Led a crew of three to gather blood, feather and toenail samples of Blue-winged and Golden-winged Warblers across five study sites in Minnesota and Wisconsin; Developed the time line, budget and travel plans as to cover the largest area and gather the most samples; Established contact and coordinated site access on local, state, federal and military properties

Bird Bander

Black Swamp Bird Observatory - Mark & Julie Shieldcastle - Spring and Fall 2004-2008 - Volunteered atleast weekly during both spring and fall migration working at Black Swamp Bird Observatory's banding station. Extracted thousands of birds over the five years, was trusted to help train volunteers and extract birds solo even on very busy days or under harsh conditions. Banded hundreds of passerines.

Bird Bander

Green Creek Wildlife Society - Tom Kashmer - 2002-2008

- Volunteered weekly throughout the year on various field projects. Primarily the rail migration project, checking traps, banding birds and taking vegetation data. Also helped with a wide variety of mist netting projects, including public education programs. Also checked fish and turtle traps, banded hundreds of fledgling Eastern Bluebirds and monitored a bluebird trail for many years.

Posters

- 2014 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H. Sora Migration and Wetland Management The Wildlife Society National Conference - PA [pdf](#)
- 2013 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H., Ecology of Fall Migrating Sora in Missouri. *The Wildlife Society National Conference* - WI [pdf](#)
- 2011 **Fournier, A.M.V.**, Sheildcastle, M.C., Fries, A.C., Bump, J.K., Developing a morphometric model to predict the sex of Virginia Rails. *The Wildlife Society National Conference* - HI [pdf](#)
- 2011 **Fournier, A.M.V.**, Roth, A.M., Flaspohler, D.J., Assessing mechanisms for variation in the eyes of Golden-winged Warblers *Ecosystem Science Center Poster Session* - MI [pdf](#)
- 2010 **Fournier, A.M.V.**, Flaspohler, D.J., Habitat Classification and Biological Inventory of Pioneer Scout Reservation *Undergraduate Research Expo* - MI

Presentations

- 2015 **Fournier, A.M.V.**, Sullivan, A.R., Bump, J.K., Perkins M., Shieldcastle, M.C., King, S.L. 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*
- 2015 **Fournier, A.M.V.**, Mengel, D.C., Krementz D.G. Timing of Autumn Migration in the Mississippi Flyway by Rails *Association of Field Ornithologists Meeting*
- 2014 **Fournier, A.M.V.**, Krementz, D.G. The Response of Fall Migrating Sora to Wetland Management *Arkansas State Chapter of the Wildlife Society Spring Meeting*
- 2014 **Fournier, A.M.V.**, Krementz, D.G. The Use of U.A.V.s to Assess Wetland Vegetation Interspersion *Arkansas State Chapter of The Wildlife Society Spring Meeting*
- 2013 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H., Phenology, Habitat Use of Fall Migrating Rails in Missouri. *Missouri Department of Conservation Annual Meeting*
- 2013 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H., Phenology, Habitat Use of Fall Migrating Rails in Missouri *Arkansas Coop Fish & Wildlife Research Unit Annual Meeting*
- 2013 **Fournier, A.M.V.**, Krementz, D.G., Mengel, D.C., Raedeke, A.H., Phenology, Habitat Use and CoOccurrence of Fall Migrating Yellow Rails in Missouri *Yellow Rail Virtual Symposium*, USFWS

Grants

- 2015 **Co-Pi Missouri Department of Conservation Research Grant** \$55,000 Effects of Wetland Management Strategies on Habitat Use of Autumn Migrating Rails on Intensively Managed Wetland Complexes in Missouri
- 2015 **Travel Grant** \$320 American Ornithologists Union/Cooper Ornithological Society Conference
- 2015 **Travel Grant** \$500 Association of Field Ornithologists/Wilson Ornithological Society/Society of Canadian Ornithologists Conference
- 2015 **The Frances M. Peacock Scholarship for Native Bird Habitat** \$4000 The Use of Stable Isotopes, eBird and Species Distribution Models to Assess Migratory Connectivity of Fall Migrationg Rails
- 2014 **Arkansas Audubon Society Trust** \$1200 Migratory Stopover Timing, Survival and Habitat Use of Fall Migrating Sora in Managed Wetlands

2011 **Summer Undergraduate Research Fellowship** \$3000 Developing A Morphometric Model to Predict the Sex of Virginia Rails

2011 **Ecosystem Science Center Undergraduate Research Grant** \$750 What are the breeding and wintering areas of Virginia Rails which migrate through NW Ohio

2010 **Ecosystem Science Center Undergraduate Research Grant** \$750 Assessing the relationship between eye spotting and breeding location in Golden-winged Warblers

2009 **Summer Undergraduate Research Fellowship** \$3000 Habitat classification and Biological Inventory of Pioneer Scout Reservation

International Experience

2015 Field work capturing rails to take feather samples for stable isotope project with Bird Studies Canada in Saskatchewan.

Professional Licenses and Certifications

Software Carpentry Instructor [Software Carpentry](#) - (5/2015)
Associate Wildlife Biologist The Wildlife Society - (3/2015)
Sub-permit bird banding license holder (12 years experience, handled ~7k birds)
CPR/First Aid American Red Cross (4/2014)
NSC Defensive Driving II National Safety Council (1/2013)
Defensive Driving AAA Driver Improvement Program (7/2012)
ATV Rider Certification ATV Safety Institute (6/2012)

Teaching Experience

Teaching Assistant University of Arkansas
Wetlands Ecology and Management
Spring Semester 2015
Teaching weekly labs on taxonomy and wetland field methods. Giving lectures, grading materials.

Science Writing Tutor
Quality Writing Center - University of Arkansas
January 2014 - Present
- Tutoring undergraduate and graduate students on proper scientific writing 8-15 hours a week. Editing thesis, dissertations, lab reports and other writing.

Teaching Assistant Michigan Technological University
Field Techniques
Fall Semester 2010 and 2011
Taught weekly field labs on forestry and wildlife ecology skills. Graded 100+ lab reports weekly.

Teaching Assistant Michigan Technological University
Creating Your Success
Fall Semester 2010 and 2011
Oriented new students to campus resources, taught study skills.

Teaching Assistant Michigan Technological University
Ornithology
Spring Semester 2011
Lead field trips, gave guest lecture, gave field quizzes.

Honors

2012 **Distinguished Doctoral Fellowship** - University of Arkansas
2011 **Outstanding Senior in Wildlife Ecology and Management** - Michigan Tech 2010 **Member of the Year** - The Wildlife Society Michigan Tech Student Chapter
2009 **Woman of Promise** - School of Forest Resources and Envi. Sci. - Michigan Tech

Service & Outreach

2013-5 **Peer Reviewer** Waterbirds, The Wildlife Society Bulletin, Conservation Biology, PLOS ONE, Journal of Wildlife Management
2013-5 **Outdoor Education Volunteer** Hobbs State Park, Arkansas
Lead monthly spring bird banding demonstrations to groups 40-150 of children and adults
2013-5 **Science Fair Judge** Regional/Local Science Fairs NW Arkansas
2015 **Presentation** Local Library Science Program, AR
2015 **Presentation** Camp War Eagle Summer Camp, Arkansas
2015 **Field Trip Leader** The Biggest Week In American Birding Festival
2015 **Presentation** Boys and Girls Club of Bentonville, Arkansas STEAM Program
2015 **Presentation** Springdale Alternative High School, Springdale, AR
2014 **Invited Seminar** Arkansas Tech University Fish and Wildlife Seminar
2014 **Volunteer** The Wildlife Society National Conference, Pittsburgh, PA
2014 **Presentation** Local Library Science Program, AR
2013 **Volunteer** The Wildlife Society National Conference, Milwaukee, WI
2011 **North American Breeding Bird Survey Volunteer** U.S. Geological Survey
2013 **Presentation** Springdale Alternative High School, Springdale, AR
2011 **Volunteer** The Wildlife Society National Conference, Big Island, HI
2011 **Panel Member** Wind Power Meeting - Upper Peninsula Environmental Coalition
2011 **Outdoor Educator** W. U.P. Center for Science, Math and Envi. Education
2011 **Owl Survey Volunteer** Michigan Bird Conservation Initiative
2010 **Presentation** Copper Country Audubon Society
2010 **Career Panel Member** Ohio Young Birder's Club Conference
2009 **Presentation** Kirtland Bird Club - Cleveland, OH
2009 **Presentation** Copper Country Audubon Society
2009 **Bird Bander** (Six years) Black Swamp Bird Observatory
2008 **Presentation** Ohio Young Birder's Club Conference
2008 **Presentation** Black Swamp Bird Observatory Lunch Lecture
2007 **Presentation** Ohio Young Birder's Club Conference

Professional Development

2015 *Instructor* **'Taking R to the Next Level' Workshop** American Ornithologists Union Meeting 2015
Instructor **Graphing with ggplot2 workshop** University of Arkansas
2015 *Organized/Attended* **Software Carpentry Workshop** University of Arkansas
2015 *Instructor* **Social Media for Outreach and Prof Development Workshop** University of Arkansas
2014 **Data Management Workshop** The Wildlife Society National Conference Pittsburgh, PA
2014 **The Wildlife Society National Conference** Pittsburgh, PA
2014 **Midwest Bird Conservation and Monitoring Conference** Port Washington, WI
2014 **Applied Hierarchical Modeling Workshop** Patuxent Wildlife Research Center/Royle & Kery
2013 **'Adehabitat' R Package Workshop** The Wildlife Society National Con/James Sheppard
2013 **Symposium Planning Committee** The Wildlife Society National Con, Milwaukee, WI
2013 **Occupancy Modeling Short Course** Humboldt State U./Darryl MacKenzie
2013 **The Wildlife Society National Conference** Milwaukee, WI

2011 **The Wildlife Society National Conference** Waikialoa, HI
2011 **Midwest Bird Conservation and Monitoring Conference** Rockford, IL
2011 **Guest Lecture** Ornithology - Michigan Tech. Univ. - 'Migration and Navigation'
2010 **Midwest Fish and Wildlife Conference** Minneapolis, MN
2010 **The Wildlife Society National Conference** Snowbird, UT
2010 **Wildlife Diversity Conference** Ohio Department of Natural Resources - Columbus, OH
2009 **International Association of Great Lakes Researchers Conference** Toledo, OH
2009 **Wildlife Diversity Conference** Ohio Department of Natural Resources - Columbus, OH

Leadership

Student Development Working Group The Wildlife Society
Treasurer 2014 - Present

The Wildlife Society Student Chapter University of Arkansas
Secretary 2014 - 2015 Treasurer 2013 - 2014

Biology Graduate Student Association University of Arkansas
Treasurer 2014 - Present
Vice President 2013 - 2014

The Wildlife Society Student Chapter Michigan Technological University Activities Chair 2008 - 2011

The Honors Institute Michigan Technological University
Treasurer, Secretary, Committee Chair 2008 - 2011

The Birdbums Michigan Technological University
Founding Member & President 2008 - 2011

Xi Sigma Pi Honors Fraternity Michigan Technological University
Symposium Chair 2010 - 2011

Computer Skills

- R/RStudio
- Python
- ArcGIS (9 and 10)
- LaTeX
- Markdown/RMarkdown
- Program Mark/RMark
- Git/Github
- Unix Shell
- Systat

Memberships (since)

2008 **The Wildlife Society**
National, State, Student Chapter, Student Development Working Group, Wetlands Working Group, Spatial Ecology and Telemetry Working Group
2012 **American Ornithologist Union**
2012 **Association of Field Ornithologists**
2012 **The Waterbirds Society**
2003 **Black Swamp Bird Observatory**