## **DAVID S. MASON**

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#### **EDUCATION**

Current Ph.D. candidate in Wildlife Ecology and Conservation, University of Florida

Advisor: Marcus A. Lashley

Dissertation: "Resource pulses influence plant establishment via animal vectors."

2018 M.Sc. in Biological Sciences, Mississippi State University

Advisor: Gary N. Ervin

Thesis: "Beta diversity provides evidence for niche-based assembly in temperate

forest understory assemblages of Mississippi."

2013 B.A. in Environmental Studies, Richard Stockton University of New Jersey

2010 A.A. in History, Rowan College of South Jersey

## PEER REVIEWED PUBLICATIONS [Media coverage]

- 9. Kays, R. et al. (92 of 152 authors listed in alphabetical order by institution). 2022. SNAPSHOT USA 2020: A second coordinated national camera trap survey of the United States during the COVID-19 pandemic. Ecology 103(10): e3775. https://doi.org/10.1002/ecy.3775
- 8. Mason, D.S., C. Baruzzi, & M. A. Lashley. 2022. Passive directed dispersal in plant-animal dispersal relationships. Biological Reviews 97(5): 1908-1929. https://doi.org/10.1111/brv.12875
- 7. Mason, D. S. 2022. Heterocarpochory: hitching a ride on fruit. Ecology 103(6): e3628. https://doi.org/10.1002/ecy.3628
- 6. Boggess, C. M., D. S. Mason, H. D. Alexander, B. K. Strickland, & M. A. Lashley. 2021. Facultative seed predators drive community-level indirect effects of mast seeding. Forest Ecology and Management 502: 119713. https://doi.org/10.1016/j.foreco.2021.119713
- 5. Lázaro-Lobo, A. et al. (19 of 20 authors). 2021. Phenotypic differentiation among native, expansive, and introduced populations influences invasion success of Baccharis halimifolia L. Journal of Biogeography 48(11): 2907-2918. <a href="https://doi.org/10.1111/jbi.14252">https://doi.org/10.1111/jbi.14252</a>
- 4. Cove, M. V. et al. (95 of 154 authors listed in alphabetical order by institution). 2021. SNAPSHOT USA 2019: a coordinated national camera trap survey of the United States. Ecology 102(6): e03353. https://doi.org/10.1002/ecy.3353 [5 outlets]
- 3. Mason, D.S., & M.A. Lashley. 2021. Spatial scale in prescribed fire regimes: an understudied aspect in conservation with examples from the southeastern United States. Fire Ecology 17(3): 1-14. <a href="https://doi.org/10.1186/s42408-020-00087-9">https://doi.org/10.1186/s42408-020-00087-9</a> [1 outlet, 1 podcast]
- 2. Westlake, S.M., D. Mason, A. Lazaro Lobo, P. Burr, J.R. McCollum, D. Chance, & M.A. Lashley. 2020. The magnet effect of fire on herbivores affects plant community structure in a forested system. Forest Ecology and Management 458(15): 1177794. https://doi.org/10.1016/j.foreco.2019.117794.
- 1. Baruzzi, C., D. Mason, B. Barton, & M. Lashley. 2018. Effects of increasing carrion biomass on food webs. Food Webs 17: e00096. https://doi.org/10.1016/j.fooweb.2018.e00096

## **MANUSCRIPTS IN PREP**

- 5. Baruzzi, C., **D. S. Mason**, B. T. Barton & M. A. Lashley. Ecological consequences of mass mortality events. Target journal: *Ecology Letters*.
- **4. Mason, D. S.**, M. A. Lashley & K. M. Robertson. Fire-mediated passive directed dispersal in a diffuse seed dispersal mutualism. Target journal: *Journal of Ecology*.
- 3. **Mason, D. S.**, M. A. Lashley, B. T. Barton, A. K. Jones, S. L. Webb, & M. D. Proctor. Functional identity modulates effects of vertebrate mass mortality events on plant dormancy classes. Target journal: *Functional Ecology*.
- 2. Holdgrafer, J. P., **D. S. Mason**, T. S. Coleman & M. A. Lashley. Resource diversity has weak effects on animal-mediated seed dispersal in a depauperate system. Target journal: *Ecology and Evolution*.
- 1. **Mason, D. S.**, M. A. Lashley, C. M. Dixon & K. M. Robertson. Fire season modulates seed dispersal. Target journal: *Ecology*.

## **CONFERENCE PRESENTATIONS**

1. **Mason, D. S.**, & M. A. Lashley. 2020. Wildlife Contribute to Plant Community Assembly in Life and Death. 27th Annual Conference of The Wildlife Society, Louisville, Kentucky. With published abstract.

#### INVITED SPEAKER

1. **Mason, D. S.**, K. M. Robertson, & M. A. Lashley. 2021. *Fire-Driven Seed Rain*. 28th Annual Conference of The Wildlife Society, Virtual. With published abstract. Invited for the Fire Effects on Biodiversity Symposium.

## **POSTER PRESENTATIONS**

- 5. Mason, D. S., & M. A. Lashley. 2019. *Are Bird Feeders Evolutionary Traps for Bird-Dispersed Plants?*. Poster presented at The Wildlife Society 26th Annual Conference.
- 4. O'Connell, C., C. Baruzzi, **D. Mason,** G. Jones, M. Cove, B. Barton, & M. Lashley. 2018. Horizontal and Vertical Camera Trapping Designs Produce Different Species Richness in Carrion Food Webs. Poster presented at The Wildlife Society 25th Annual Conference.
- 3. Kiska, R., D. S. Mason, W. Redman, R. Adams, P. Townsend, R. Mack, B. Trainor, P.J. Baker & T.J. Baker. 2012. Characteristics of Vernal Ponds Influence Occupancy, Community Structure, and Reproductive Success of Spring Breeding Amphibians. Poster presented during Spring 2012 School of Natural Sciences and Mathematics poster competition at Richard Stockton University.
- Mason, D. S. 2012. Modeling the Population Growth of Amanita phalloides in California.
   Poster presented during Spring 2012 School of Natural Sciences and Mathematics poster competition at Richard Stockton University.
- 1. **Mason, D.** & E. Parker. 2012. *Effects of Land Use on Aquatic Plant Communities*. Poster presented during Montclair State REU Student Symposium.

# **RESEARCH POSITIONS**

2019-Current	RA for UF D.E.E.R. lab and Tall Timbers Research Station
2017-2019	Field Technician, Mississippi State University
2017	Herbarium Research Assistant, Mississippi State University

2012	Distinguished Student Fellow, Stockton University
2012	NSF Student Fellow, New Jersey School of Conservation

## **TEACHING POSITIONS**

Current	TA for Wildlife Habitat Management (3 sections) at University of Florida
2016-2019	TA for Biology II (10 sections), Survey of Plants and Fungi (2 sections), Plant Anatomy (2 sections), and Ecology (1 section) at Mississippi State University
2014-2017	Sustainability teacher, Academic Director, Assistant Director, and Director at Branded Camp Services (NY, USA)
2015-2015	Instructor and Outdoor Education Leader at Camp Olympia (TX, USA)
2014-2015	Outdoor Education Instructor at Battlecreek Outdoor Ed. Center (MI, USA)
2005-2014	Teaching Assistant, HollyDELL School (NJ, USA)

## **AWARDS, HONORS, AND GRANTS**

2021	WGSA Student Award (\$250   Self-nominated   Competitive), University of Florida
2020	Grinter Fellowship (\$8,500   Faculty nominated   Competitive), University of Florida
2020	Key Collaborator for USFS Project agreement "Interactive effects between repeated seasonal prescribed fire and wildlife utilization on understory species diversity in the longleaf pine ecosystem (20-JV-11330170-046 [\$15,000])," Principal investigators Marcus A. Lashley and John L. Willis.
2018	Biological Sciences Graduate Research Grant (Self-nominated), Mississippi State University
2016	3MT Grand Champion Runner Up (\$750), Mississippi State University
2015	Outdoor Educator of the Month, Camp Olympia Outdoor Education Center (TX, USA)
2012	Distinguished Student Fellowship (\$2500), Stockton University
2012	NAMS Poster Competition (2 <sup>nd</sup> place), Stockton University
2011	Dean's List, Stockton University
2010	President's List, Rowan College of South Jersey

# **EXTENSTION / OUTREACH**

## **Invited Webinar**

- 2. **Mason, D. S.** 2022. Fire generates seed rain via the magnet effect. Ona Highlight, Range Cattle Research & Education Center. July 12<sup>th</sup>, 2022. 15 Participants.
- 1. **Mason, D. S.,** & M. A. Lashley. 2021. *Spatial scale in prescribed fire regimes: an understudied aspect in conservation with examples from the southeastern United States*. Southern Fire Exchange Webinar Series. November 17<sup>th</sup>, 2021. ~80 Participants.

# Podcasts:

- Appeared as guest on Episode 14: "Seed dispersal" of How Ecology Works, hosted by UF D.E.E.R. lab primary investigator Marcus A. Lashley (2022, September 4<sup>th</sup>).
- Appeared as guest on Episode 42: "Songbirds, Fire, and Seed Dispersal" of Backyard Ecology, hosted by Shannon Trimboli (2022, January 20<sup>th</sup>).

 Appeared as guest on Episode 18: "Planting the Idea for More Fire" of Fire University, hosted by UF D.E.E.R. lab primary investigator Marcus A. Lashley. (2021, December 15<sup>th</sup>).

## Social media:

- Run an Instagram account (@ecografitto) with 49 posts covering topics related to conservation, naturalism, wildlife habitat management, and game species.
  - o 432 followers
  - o Reached 11.2k accounts (346 engagements) over 3 months of high activity
- Run a Twitter account (@ecografitto) with covering current research conducted by myself and others.
  - o 171 followers
  - o 2.8k impressions over a month of high activity
- Starred in a UF D.E.E.R. lab Instagram outreach video for *Flora Fact Friday*. I discussed how to identify Virginia creeper (*Parthenocissus quinquefolia*) and relevance to wildlife species.
  - o 442 views

## University publications:

 Preparing a document titled "Managing the weeds in your yard with birds" for UF/IFAS Electronic Data Information System (EDIS)

#### **EDITORIALS**

1. **Mason, D**. & C. Baruzzi. 2019. Love in Strange Places. *Frontiers in Ecology and the Environment* 17(3): 184. https://doi.org/10.1002/fee.2027

#### **INVITED BOOK REVIEWS**

- 4. Mason, D. S. *In prep*. review of Game Theory in Biology: Concepts and Frontiers, by John McNamara & Olof Leimar, *Journal of Wildlife Management*.
- Mason, D. S. 2021. review of Oak Seed Dispersal: A Study in Plant-Animal Interactions, by Michael A. Steele, *Journal of Wildlife Management*. Early View (e22232). https://doi.org/10.1002/jwmg.22232
- 2. **Mason, D. S**. 2021. review of Biology of Grasslands, by Brian J. Wilsey. *Journal of Wildlife Management* 85(4): 815. https://doi.org/10.1002/jwmg.22002
- Mason, D. S. 2019. review of Fire Ecology of Florid and the Southeastern Coastal Plain, by Reed Noss. *Journal of Wildlife Management* 84(1): 193. https://doi.org/10.1002/jwmg.21757

# **INVITED COURSE LECTURES [Asynchronous lecture\*]**

- 10. **Mason, D. S.** 2021. *Plant Dispersal*. Wildlife Habitat Management (WIS 4427). Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. May 22<sup>nd</sup>, 2021. 10 participants.
- Mason, D. S. 2021. Succession and Habitats. Wildlife Ecology and Management (WIS 3401).
   Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. March 2<sup>nd</sup>, 2021.
   44 Participants.
- 8. **Mason, D. S.** 2021. *Dispersal and Distributions*. Wildlife Ecology and Management (WIS 3401). Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. February 9<sup>th</sup>, 2021. 44 Participants.

- 7. **Mason, D. S.** 2020. *Succession and Habitats*. Wildlife Ecology and Management (WIS 3401). Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. October 8<sup>th</sup>, 2020.\*
- Mason, D. S. 2020. Dispersal and Distributions. Wildlife Ecology and Management (WIS 3401).
   Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. September 10<sup>th</sup>, 2020.\*
- 5. **Mason, D. S.** 2020. *Sampling Understory Vegetation*. Wildlife Habitat Management (WIS 4427). Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. February 6<sup>th</sup>, 2020. 15 participants.
- 4. **Mason, D. S.** 2020. *Dispersal in Higher Plants*. Wildlife Habitat Management (WIS 4427). Wildlife Ecology and Conservation, University of Florida, Gainesville, USA. February 5<sup>th</sup>, 2020. 15 participants.
- 3. **Mason, D. S.** 2017. *Herbivory and Aquatic Plants*. Aquatic Botany (BIO 4224). Department of Biological Sciences, Mississippi State University, Starkville, USA. October 25<sup>th</sup>, 2017. 20 Participants.
- 2. **Mason, D. S.** 2017. *Dispersal in Higher Plants*. Wildlife Plant Identification (WFA 4223). Department of Wildlife, Fisheries, and Aquaculture, Mississippi State University, Starkville, USA. October 16<sup>th</sup>, 2017. 24 participants.
- Mason, D. S. 2017. Dispersal in Higher Plants. Wildlife Plant Identification (WFA 4223).
   Department of Wildlife, Fisheries, and Aquaculture, Mississippi State University, Starkville, USA. May 24<sup>th</sup>, 2017. 8 participants.

## **MEDIA COVERAGE**

Bakirci, C. M., Günal, A., Kalacyik, B. (2021, August 20<sup>th</sup>). Kontrollü Yangın ve Karşı Ateş Tekniği: Uzmanlar Neden Bilerek Yangın Çıkarırlar ve Bu, Bazı Ormanlar ve Yangınlar İçin Neden Faydalıdır (Controlled Fire and Counterfire Technique: Why Experts Set Fires On Purpose, and Why It's Useful for Some Forests and Fires)? *Evrim Ağaci*.

Pishney, J. (2021, June 9<sup>th</sup>). Snapshot USA: first-ever nationwide mammal survey published. *North Carolina Museum of Natural Sciences*.

Adapted in *Mirage News* as "U contributes to first-ever nationwide mammal survey" (June 5<sup>th</sup>, 2021).

Adapted in *Bioegineer.org* as "Snapshot USA: first-ever nationwide mammal survey published" (June 9<sup>th</sup>, 2021).

Adapted in *Science Magazine* as "Snapshot USA: first-ever nationwide mammal survey published" (June 9<sup>th</sup>, 2021).

Adapted in *Phys org* as "Snapshot USA: first-ever nationwide mammal survey published" (June 9<sup>th</sup>, 2021).

Adapted in *EurekAlert* as "Snapshot USA: first-ever nationwide mammal survey published" (June 9<sup>th</sup>, 2021).

Adapted in *Mirage News* as "Snapshot USA: first-ever nationwide mammal survey published" (June 10<sup>th</sup>, 2021).

Appeared as guest on Episode 11: "Spatial Scale in Prescribed Fire Regimes" of *Fire Ecology Chats*, hosted by *Fire Ecology* editor Bob Keane. (2021, March 17<sup>th</sup>).

Imbra, S. (2020, January 22<sup>nd</sup>). Scientists Are Simulating Mass Animal Die-Offs in an Oklahoma Prairie: Understanding the ecological impact of hundreds of dead feral hogs. *Atlas Obscura*.

Barton, B. & A. Jones. (2020, January 10<sup>th</sup>). Rotting feral pig carcasses teach scientists what happens when tons of animals die all at once, as in Australia's bushfires. *The Conversation*.

Adapted in *American Scientist* as "What's Left When Animals Die." (March-April 2020, Volume 108, Number 2, p. 80).

# **AD-HOC REVIEWER**

2022	Ecology and Evolution
2022	Journal of Wildland Fire
2020	Ecology and Evolution
2020	Journal of Wildlife Management and Wildlife Monographs
2019	Forest Ecology and Management, Ecology and Evolution
2017	Forest Science

#### PROFESSIONAL DEVELOPMENT

2021 Preparing Future Faculty, Graduate School, University of Florida

#### **COMMUNITY INVOLVEMENT**

2017	President of Biology Graduate Student Association, Mississippi State University
2016	Student-Faculty Liaison, Mississippi State University
2015	Open Spaces Commissioner, Pitman Environmental Commission (NJ, USA)
2009	Organized Clean-up of Natural Area at Memorial School (NJ, USA)
2009	Organized Toy-drive for Eleanor Corbett Safe Haven (NJ, USA)

## **MENTORING EXPERIENCE (12 Students)**

- Julia St. Amant, Alexys B. Morgan, Autumn M. Perry
  - Helped students create social media posts for UF D.E.E.R. lab for undergraduate course (WIS 4905).
- 2020 James P. Holdgrafer, Undergraduate Honors Thesis Project
  - Developed research question and experiment design.
  - Collaborated with student on field experiment at Ordway-Swisher Biological Station
  - Provided guidance and feedback for thesis titled ""Bird feeders as a novel tool to direct seed dispersal in a diffuse mutualism." https://ufdc.ufl.edu/AA00082466
  - Currently collaboratively preparing manuscript for submission to Functional Ecology
- 2020 Autumn M. Perry, Victoria I. Siedlecki, Samantha M. Hinsz, Chloe G. Arbogast, Victoria Siedlecki and Ava Blanc
  - Oversaw undergraduate volunteers in UF D.E.E.R. lab
  - Students processed camera trap data for multiple experiments (~300 observations collectively)
  - Students collected acorns on campus for lab experiment (~6 hours)

- 2020 Amanda L. O'Brien, Max L. Maddox, Anandi R. Mohip
  - Organized continuation of gopher tortoise class project at Ordway-Swisher Biological Station with interested students (WIS 4427)
  - Students processed additional camera trap data (~150 observations collectively)
- 2020 Alexia Yau
  - Attended weekly sessions for students directed independent study
  - Student wrote a document assessing extension opportunities in social media for the UF D.E.E.R. lab

#### SUPERVISORY EXPERIENCE

- 2020-2022 UF D.E.E.R. Lab technicians (Gainesville, FL)
  - Oversaw scheduling and work for 200 hrs of work done by four technicians (Autumn M. Perry, Mackenzie F. Wirick, Ashley J. Walford, and Blake A. Josephson)
- 2015-2017 Camp Instructors and Teachers (Hackettstown, NJ and New York City, NY)
  - Supervised ~15 teachers and ~30 counselors in a variety of roles, including Director, Academic Director, and Assistant Director
  - Scheduled activities, developed curricula, and interfaced with parents and campus administrators
  - 2015 Outdoor Education Instructors (Trinity, TX)
    - Lead a team of four outdoor education instructors
    - Scheduled shifts and activities and assessed performance of instructors

# PREPARED GRANT SUBMISSIONS

- Key collaborator on USFS Southern Research Proposal for project "A protocol to simultaneously and efficiently monitor plant and avian community diversity and the seed dispersal ecosystem service," \$256,181, Principal Investigators: John L. Willis, Dan Saenz, Marcus A. Lashley.
- 2022 American Ornithological Society Research Award, \$2,500
- 2022 Garden Club of America Catherine H. Beattie Fellowship, \$4,500
- The Frances M. Peacock Scholarship for Native Bird Habitat, \$4,500
- The Longleaf Alliance Owens Fellowship, Semi-Finalist, \$15,000
- 2020 Key collaborator on NRCS Conservation Innovation Grant for "Enlisting wildlife to achieve desired forest conditions with prescribed fire.," \$217,588, Principal Investigator: Marcus Lashley.
- Joint Fire Science Program Graduate Research Innovation Award, \$5,272
- Torrey Botanical Society Graduate Student Research Fellowship, \$2,488
- National Science Foundation Graduate Research Fellowships Program, \$114,000
- 2018 National Geographic Early Career Grant, \$10,000

## PREPARED AWARD SUBMISSIONS

2022 College of Arts and Sciences Innovation in Teaching Award, University of Florida, nominated Dr. Marcus A. Lashley

2022	College of Arts and Sciences Scholarship of Teaching & Learning Award, University of Florida, nominated Dr. Marcus A. Lashley
2022	College of Arts and Sciences Jimmy G. Cheek Graduate Student Medal of Excellence, University of Florida (Self-nominated)
2022	College of Arts and Sciences Jack L. Fry Graduate Student Teaching Award, University of Florida (Self-nominated)
2018	Biological Sciences Graduate Teaching Assistant Award, Mississippi State University, nominated Cory Shoemaker

## MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Ecological Society of America The Wildlife Society The Longleaf Alliance

# **REFERENCES**

Marcus A. Lashley, University of Florida <a href="marcus.lashley@ufl.edu">marcus.lashley@ufl.edu</a>
Kevin M. Robertson, Tall Timbers Research Station <a href="krobertson@talltimbers.org">krobertson@talltimbers.org</a>
Gary N. Ervin, Mississippi State University <a href="marcus.lashley@ufl.edu">Gervin@biology.msstate.edu</a>

# Other manuscripts in prep

- 1. Kays, R., M. V. Cove, H. Shannon, ..., **D. S. Mason**, ..., & W. J. McShea. SNAPSHOT USA 2021: A third coordinated national camera trap survey of the United States first trends. *Ecology*.
- 2. **Mason, D. S.**, B. T. Barton, C. J. Speights, A. K. Jones, J. F. Tomberlin & M. A. Lashley. Vertebrate scavengers suppress the effects of a mass mortality event on future decomposition rate. *Proceedings of the National Academy of the Sciences*.
- 3. **Mason, D. S.**, G. N. Ervin, C. M. Shoemaker & R. D. Lucardi. Partitioning variance of forest understory beta diversity in forests of Mississippi. *Southeastern Naturalist*.
- 4. **Mason, D. S.**, M. A. Lashley & K. M. Robertson. Two birds with one stone: sampling bird and plant communities with mutualism monitoring stations. *Ecological Indicators*.
- 5. **Mason, D. S.**, M. A. Lashley & K. M. Robertson. Describing fine-scale variation in seed dispersal using landscape and geospatial data. *Frontiers in Ecology and Evolution*.
- 6. **Mason, D. S.**, M. A. Lashley, M. J. Butler-Valverde. Scavenger disturbance drives plant community changes after carrion decomposition. *Ecology*.
- 7. Beau. B. N., **D. S. Mason**, M. A. Lashley & B. K. Strickland. Indirect effects of supplemental feeding on plant communities. *The Journal of Wildlife Management*.