



University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE
APPALACHIAN LABORATORY

Emily B. Cohen

Associate Professor

University of Maryland Center for Environmental Science

Appalachian Laboratory
301 Braddock Road
Frostburg, Maryland 21532

Tel: 301-689-7201
Email: emily.cohen@umces.edu
<https://research.al.umces.edu/emily-cohen/>

I. EDUCATION

Ph.D. in Biological Sciences, University of Southern Mississippi, December 2011

Dissertation: Movement ecology of an intercontinental migratory bird during spring stopover

M.S. in Zoology, Michigan State University, May 2003

Thesis: Survival, habitat use, and movements of fledgling White-throated Robins in tropical agricultural habitats

B.S. in Ecology and Environmental Biology, Appalachian State University, May 1996

II. PROFESSIONAL EXPERIENCE

University of Maryland Center for Environmental Science, Appalachian Laboratory

Associate Professor, 2024 -present, Assistant Professor, 2019-2024

Smithsonian Conservation Biology Institute, Migratory Bird Center

Research Ecologist, 2017-2019

Postdoctoral Fellow, 2012-2016

University of Southern Mississippi, Department of Biological Sciences

Graduate Teaching and Research Assistant, 2005-2011

Southern Sierra Research Station

Assistant Research Director, 2003-2005

Research Associate, 1999-2000

Michigan State University, Zoology and Center for Global Change and Earth Observations

Graduate Teaching and Research Assistant, 2000-2003

Pacific Island Ecosystems Research Center, University of Hawai'i

Project Coordinator, Hakalau Wet Forest Birds, 1998-1999

III. RESEARCH

Areas of Professional Expertise: Animal Ecology, Animal Migration, Migratory Connectivity, Stopover Biology, Aeroecology, Ornithology, Population and Community Ecology, Behavioral Ecology

Total peer-reviewed publications plus book chapters: 41; 2284 citations; h-index = 23 (Google Scholar; accessed March 2025)

ORCID: 0000-0002-4978-4278

Google Scholar: <https://scholar.google.com/citations?user=9chX8ZgAAAAJ&hl=en&oi=ao>

A. Publications

*Student mentored by Cohen, ‡Fellow mentored by Cohen, †Authors contributed equally to the work
Final author position denotes senior authorship.

1. Peer-reviewed publications in review or revision

Marra PP, Scarpignato AL, Cohen EB, Harrison A-L, Huysman AE, Gomez C, Goodrich L, Green C, Guida T, Lanctot R, Mackenzie S, Roberts A, Rosenberg K, Ruegg K, Smith M, Therrien JF, and Will T. The Atlas of Migratory Connectivity for the Birds of North America. *Princeton University Press*.

Nilsson C, Shamoun-Baranes J, Satterfield D, Sjöberg S, Cohen EB. Animal niches in the airspace. *In Review*. Trends in Ecology & Evolution.

2. Peer-reviewed publications published

40. Guo F, Buler JJ, Horton KG, Dokter AM, Cohen EB, Sheldon, Smolinsky JA, and Wilcove DS (2025) The agricultural Midwest is an anthropogenic barrier to landbird migration in the eastern United States. *Conservation Biology*, *in press*.
40. Nemes CE*, Lindsay AM, DeGroot LW*, and Cohen EB (2025) Close encounters: Behavioral responses of migrating songbirds to the perceived risk of predation. *Behavioral Ecology*, *in press*.
39. Bobowski TJ, Bossu C, Rueda-Hernández R, Schweizer T, Tello-Lopez I, Smith TB, Feldman R, Cohen EB and Ruegg, K (2025) Factors underlying migratory timing of a seasonally migrating bird. *Scientific Reports*, 15(1), p.8527.
38. Van Doren B, DeSimone J, Firth JA, Hillemann F, Gayk Z, Cohen E, Farnsworth A (2025) Social associations across species during nocturnal bird migration. *Current Biology*.
37. Tonelli BA, Youngflesh C, Cox T, Neate-Clegg MH, Cohen EB and Tingley, MW (2025) Spatial Nonstationarity in Phenological Responses of Nearctic Birds to Climate Variability. *Ecology Letters*.
36. Hostetler JA†, Cohen EB†, Bossu CM, Scarpignato AL, Ruegg K, Contina A, Rushing CS, Hallworth MT (2025) Challenges and opportunities for data integration to improve estimation of migratory connectivity. *Methods in Ecology and Evolution*.
35. DeSimone JG‡, DeGroot LW*, MacKenzie S, Owen J, Patterson A, Cohen EB (2024). Persistent species relationships characterize migrating bird communities across stopover sites and seasons. *Proceedings of the National Academy of Sciences*.
34. Larkin J., McNeil DJ, Chronister L, Akresh ME, Cohen EB, D'Amato AW, Fiss CJ, Kitzes J, Larkin JL, Parker, HA and King, DI (2024) A large-scale assessment of eastern whip-poor-will occupancy across a gradient of forest management intensity using autonomous recording units. *Journal of Environmental Management*.
33. Massa ML*, Matthews ER, Shriver WG, and Cohen EB (2024) Response of grassland birds to management in national battlefield parks. *Journal of Wildlife Management*.
32. Nemes CE*, Marra PP, Zenzal Jr. TJ, Collins S, Dossman BC, Gerson AR, Gómez C, González AM, Gutierrez Ramirez M, Hamer SA, Marty J, Vasseur PL, and Cohen EB (2023) Springing forward: Migrating songbirds catch up with the start of spring in North America. *Journal of Animal Ecology*.
31. DeSimone JG‡ and Cohen EB (2023) Social, not spatial, fidelity underlies between-year winter site fidelity in a migratory bird. *Proceedings of the National Academy of Sciences*.
30. Nemes CE*, Cabrera-Cruz SA, Anderson MJ, DeGroot LW*, DeSimone JG‡, Massa ML*, and Cohen EB (2023) More than mortality: Indirect anthropogenic threats to migrating birds. *Ornithological Applications*.
29. Roberts A, Scarpignato AL, Huysman A, Hostetler JA, Cohen EB (2023) Migratory connectivity of North American waterfowl across administrative flyways. *Ecological Applications*.
28. Cohen EB†, Buler JJ†, Horton KG, Loss SR, Cabrera-Cruz S, Smolinsky JA, and Marra PP (2022) Using weather radar to help minimize wind energy impacts on nocturnally migrating birds. *Conservation Letters*.
27. Cohen EB, Lafleur J, and Moore FR (2022) Density dependent refueling of migratory songbirds during stopover within an urbanizing coastal landscape. *Frontiers in Ecology and Evolution*.

26. Clipp HL*, Buler JJ, Smolinsky JA, Horton KG, Farnsworth A, and Cohen EB (2021) Winds aloft over three water bodies influence spring stopover distributions of migrating birds along the Gulf of Mexico coast. *Ornithology*.
25. DeBrock S, Cohen EB, Balasubramanian S, Marra PP, and Hamer SA (2021) Characterization of the Plasmodium and Haemoproteus parasite community in temperate-tropical birds during spring migration. *International Journal for Parasitology: Parasites and Wildlife*.
24. Scarpignato AL, Stein KA, Cohen EB, Marra PP, Kearns LJ, Hallager S, and Tonra CM (2021) Full annual cycle tracking of Black-crowned Night-Herons suggests wintering areas do not explain differences in colony population trends. *Journal of Field Ornithology*.
23. Cohen EB and Satterfield DA (2020) 'Chancing on a spectacle:' co-occurring animal migrations and interspecific interactions. *Ecography*.
22. Cohen EB, Horton KG, Marra PP, Clipp HL*, Farnsworth A, Smolinsky JA, and Buler JJ (2020) A place to land: spatiotemporal drivers of stopover habitat use by migrating birds. *Ecology Letters*.
21. Clipp HL*, Cohen EB, Smolinsky JA, Horton KG, Farnsworth A, and Buler JJ (2020) Broad-scale weather patterns encountered during flight influence landbird stopover distributions. *Remote Sensing*.
20. Cabrera-Cruz SA, Cohen EB, Smolinsky JA, and Buler JJ (2020) Artificial light at night is related to broad-scale stopover distributions of nocturnally migrating landbirds along the Yucatan Peninsula, Mexico. *Remote Sensing*.
19. Horton KG, Van Doren BM, La Sorte FA, Cohen EB, Clipp HL*, Buler JJ, Fink D, Kelly JF, and Farnsworth A (2019) Holding steady: little change in intensity or timing of bird migration over the Gulf of Mexico. *Global Change Biology*.
18. Cohen EB, Rushing CR, Moore FR, Hallworth MT, Hostetler JA, Gutierrez Ramirez M, Marra PP (2019) The strength of migratory connectivity for birds en route to breeding through the Gulf of Mexico. *Ecography*.
17. Cohen EB†, Hostetler JA†, Hallworth MT, Rushing CS, Sillett TS, and Marra PP (2018) Quantifying the strength of migratory connectivity. *Methods in Ecology and Evolution*.
16. Cohen EB, Barrow Jr. WC, Buler JJ, Deppe JL, Farnsworth A, Marra PP, McWilliams SR, Mehlman DW, Wilson RR, Woodrey MS, and Moore FR (2017) Understanding how en route events around the Gulf of Mexico impact intercontinental migratory landbird populations. *Ornithological Applications*.
15. Culp LA, Cohen EB, Scarpignato A, and Marra PP (2017) Full annual cycle climate change vulnerability assessments. *Ecosphere*.
14. Cohen EB, Aukland L, Marra PP and Hamer SA (2015) Avian migrants facilitate invasions of Neotropical ticks and tick-borne pathogens into the United States. *Applied Environmental Microbiology*.
13. Marra PP, Cohen EB, Loss SR, Rutter JE, and Tonra CM (2015) A call for full annual cycle research in animal ecology. *Biology Letters*.
12. Cohen EB, Németh Z, Zenzal Jr. TJ, Paxton K, Diehl R, Paxton, EH, and Moore FR (2015) Spring resource phenology and timing of songbird migration across the Gulf of Mexico. Chapter in Wood, EM and Kellermann, JL (eds) Phenological synchrony and bird migration: changing climate and seasonal resources in North America. *Studies in Avian Biology*.
11. Thorup K, Korner-Nievergelt F, Cohen EB, and Baillie SR (2014) Large-scale spatial analysis of ringing and re-encounter data to infer movement patterns: A review including methodological perspectives. *Methods in Ecology and Evolution*.
10. Cohen EB, Hostetler JA, Royle JA, and Marra PP (2014) Estimating migratory connectivity of birds when encounter probabilities are heterogeneous. *Ecology and Evolution*.
9. Cohen EB, Moore FR, and Fischer RA (2014) Fuel stores, time of spring, and movement behavior influence red-eyed vireo stopover duration. *Journal of Ornithology*.
8. Paxton, KL, Cohen EB, Paxton EH, Németh Z, and Moore FR (2014) Climatic variability at over-winter sites in Caribbean-Central and South America differentially affects intercontinental migrants during spring migration. *PLoS One*.
7. Cohen EB, Pearson S, and Moore FR (2014) Effects of landscape composition and configuration on migrating songbirds: inference from an individual-based model. *Ecological Applications*.

6. Cohen EB, Moore FR, and Fischer RA (2012) Experimental Evidence for the Interplay of Exogenous and Endogenous Factors on the Movement Ecology of a Migrating Songbird. *PloS One*.
5. Lindell CA, O'Connor RS, and Cohen EB (2011) Nesting success of Neotropical thrushes in agricultural land covers. *Wilson Journal of Ornithology*.
4. Cohen EB and Lindell CA (2005) Habitat use of White-throated Robins (*Turdus assimilis*) during the breeding season in a mosaic landscape in Costa Rica. *Journal of Field Ornithology*.
3. Cohen EB and Lindell CA (2004) Survival, habitat use, and movements of fledgling White-throated Robin (*Turdus assimilis*) in a Costa Rican agricultural landscape. *The Auk*.
2. Lindell CA, Cohen EB, and Fritz JS (2004) Are Daily Mortality Rates for Real and Artificial Clutches Comparable? *Ornithologia Neotropical*.
1. Woodworth, BL, Nelson JT, Tweed EJ, Fancy SG, Moore MP, Cohen EB, and Collins MS (2001) Demography of the endangered Hawai'i Creeper in a wet forest refuge on Mauna Kea, Hawai'i. *Studies in Avian Biology*.

3. Book Chapters

Marra PP, Cohen EB, Harrison A-L, Studds CE, and Webster M (2019) Migratory Connectivity. Chapter in Choe, J (ed) *Encyclopedia of Animal Behavior*. Oxford: Oxford Academic Press. Pages 643-654

4. In preparation and close to submission

DeSimone JG, Morris S, Furst M, Dalton E, Patterson A, DeGroot L, Cohen EB Migrating communities in a changing world. *Global Change Biology*.

Davis C, DeSimone JG, Owen JC, Lindsay A, Cohen EB Strategic public engagement to support avian conservation outcomes and goals. *Ornithological Applications*.

5. Technical Reports

Cohen EB, Buler JJ, Horton KG, Farnsworth A, Marra PP (2019) Critical habitat for migrating birds along the Gulf of Mexico. *The National Fish and Wildlife Foundation*

Marra, PP, Culp LA, Scarpignato AL, Cohen EB (2014) Full Annual Cycle Climate Change Vulnerability Assessment for Migratory Birds of the Upper Midwest and Great Lakes Region. *U.S. Fish and Wildlife Service*

Cohen EB, Moore FR, Wilson B (2012) Application of a spatially explicit individual-based model to the conservation of migrating songbirds. *Gulf Coast Joint Venture, National Wetlands Research Center*

Fischer RA, Guilfoyle MP, Valente J, Gauthreaux, Jr SA, Belser CG, Cohen EB and Moore FR (2012) The Identification of Military Installations as Important Migratory Bird Stopover Sites and the Development of Bird Migration Forecast Models: A Radar Ornithology Approach. *Environmental Research and Development Center /Environmental Laboratory -TR-12-22*.

6. Other products

Contributor to Hostetler JA and Hallworth MT (2024). MigConnectivity: Estimate Migratory Connectivity for Migratory Animals (R package version 0.4.5) [Computer software] <https://cran.r-project.org/web/packages/MigConnectivity/index.html>

B. Contracts and Grants (2019-2023)

Amount awarded as a PI since arriving at UMCES: \$2,175,253 from 8 different funding sources

1. Awarded (\$1,794,104)

TALIN, Private Funders Group, 2025 (\$100,000) "A compact mobile radar system for quantifying the movement of birds, bats, and insects" PI: Emily Cohen

National Science Foundation, 2024-2029 (\$645,000) "Using big data and a translational ecology approach to inform full annual cycle conservation of migratory birds in the Appalachian Mountains" PI: Emily Cohen

National Science Foundation, 2022-2027 (\$750,000) "CAREER: Community ecology of bird migration - co-occurring migrations and interspecific interactions" PI: Emily Cohen

Supplemental Funding for an REU student 2024 (\$8,000)

Maryland Department of Natural Resources, Wildlife and Heritage Service, 2023-2025 (\$251,244)

“Identification of landbird migration stopover habitat hotspot locations and threats in Maryland” PI: Emily Cohen

United States Fish and Wildlife Service, 2023-2024 (\$39,860) “Identifying SGCN Habitat Use across Multiple Scales throughout the Eastern US using Motus WTS” PI: Emily Cohen

2. Awarded, Completed (\$381,149)

National Park Service, 2021-2023 (\$113,963) “Interpreting and communicating the results of land bird monitoring in the National Park Service units of the National Capital Region” PI: Emily Cohen

National Fish and Wildlife Foundation, 2021-2023 (\$57,544) “Enhancing structural diversity in public and private forests through collaborative partnerships and increased planning capacity in the Blue Ridge focal geography (VA)” PI: Emily Cohen

National Science Foundation through Colorado State University, 2020-2023 (\$50,713) “Evolution on the move – the role of seasonal migration in avian diversification” Senior Personnel: Emily Cohen

Maryland Department of Natural Resources, Power Plant Research Program, 2021-2023 (\$138,929) “Evaluating the floral resource provisioning and ecological function of solar facility pollinator habitat plantings” PI: Rodney Richardson; Col: Dave Nelson, Emily Cohen

Smithsonian Conservation Biology Institute to UMCES, 2020 (\$20,000) “Tracking bird migration through the coast of the Gulf of Mexico” PI: Emily Cohen

3. Submitted, Not Funded

National Science Foundation, 2023-2026 (\$752,494) “Leveraging interpretable machine learning to inform conservation planning: Application to migratory birds and their habitats in the Appalachian Mountains” PI: Emily Cohen, Col: Andrew Elmore, Matt Fitzpatrick

National Science Foundation through University of Delaware, 2022-2026 (\$769,868) “HDR Institute: Convergent biological and environmental data science for understanding multi-scale ecosystem processes and their societal impact” PI: Emily Cohen, Col: Matt Fitzpatrick

National Aeronautics and Space Administration, 2021-2024 (\$723,618) “Integrating high-dimensional, multi-scalar earth observations with different biodiversity data types to model avian biodiversity throughout the annual cycle” PI: Matt Fitzpatrick, Col: Emily Cohen, Andrew Elmore

National Science Foundation, 2020-2023 (\$277,422) “Collaborative Research: A race against time: A test of spring bird migration strategies across hemispheres (2020-2023) National Science Foundation” PI: Emily Cohen, Col: Alex Jahn, Indiana University

Department of Energy, 2020-2021 (\$295,822) “Establishing an Avian Impact Assessment Protocol for Offshore Wind Development in the great Lakes” PI: Emily Cohen Awarded but not funded due to permitting

National Science Foundation through Cornell University, 2020-2023 (\$20,425) “Collaborative Research: AccelNet: a global network for radar surveillance of animal movement to NSF’s Accelerating Research through International Network-to-Network Collaborations” PI: Emily Cohen

Morris Animal Foundation with Texas A&M, 2020-2022 (\$24,720) “University Comprehensive assessment of the effects of co-infection in migrating birds: timing, health, and energetic condition” PI: Emily Cohen

NOAA RESTORE Science Program with University of Delaware, 2019-2024 (\$505,340) “A comprehensive assessment of past and future impacts of weather and climate change, land use, and habitat management on the status of wintering waterfowl across the western Gulf of Mexico” PI: Emily Cohen

American Wind Wildlife Institute, 2019-2021 (\$133,174) "Exposure of nocturnally migrating birds to current and future wind-energy development" PI: Emily Cohen

C. Presentations (2019-2024)

1. Invited Seminars

University of Illinois at Urbana-Champaign, Department of Natural Resources and Environmental Sciences, Urbana. Champaign, IL, October 2024

R.W. Moriarty Science Seminar Series, Carnegie Museum of Natural History, Pittsburg, PA, February 2024

Watershed Moments Event. Garrett College, September 2024

Gordon Research Conference, Movement Ecology of Animals. Tuscany, Italy, June 2023

University of Maryland College Park, Department of Biology. College Park, MD, April 2023

University of Georgia, Odum School of Ecology Athens, GA, March 2023

IMET, UMCES, Cambridge, MD, November 2023

Horn Point Laboratory, UMCES, Cambridge, MD, December 2023

Chesapeake Biological Laboratory, UMCES, Solomons, MD, December 2023

Appalachian Laboratory, UMCES, Frostburg, MD, December 2023

Midwest Migration Network Virtual Symposium. Virtual, July 2020

Second Annual Maryland Bird Symposium. Patuxent Wildlife Visitor Center, MD, January 2020

Horn Point Laboratory, UMCES, Cambridge, MD, 2019

Chesapeake Biological Laboratory, UMCES, Solomons, MD, 2019

Appalachian Mountain Joint Venture Technical meeting, Frostburg, MD, August 2019

Public Lecture, Joint MMM-Intermag Meeting, Annual Conference on Magnetism and Magnetic Materials, Washington, D.C., June 2019

Public Lecture, Conservation Discovery Day, Smithsonian Conservation Biology Institute, Front Royal, VA, May 2019

2. Conference Presentations (2019-2024)

*Student or *Fellow mentored by Cohen

2024

Davis, C, Cohen, EB, DeSimone, JG[‡]. Integrating behavior change theories into conservation education at science-research sites. North American Association for Environmental Education, Pittsburgh, PA. November 2024

DeSimone, JG[‡], Dalton EN, DeGroote LW*, Fuirst M, Morris SR, Patterson AJ, Cohen EB. Population declines and phenological shifts are changing migrating bird communities. American Ornithological Society, Estes Park, CO. October 2024

Hostetler J, Cohen EB, Bossu C, Scarpignato A, Ruegg K, Contina A, Rushing C, Hallworth M. Challenges and opportunities for data integration to improve estimation of migratory connectivity. American Ornithological Society, Estes Park, CO. October 2024

Davis C, DeSimone JG[‡], Cohen EB. Being more strategic in your public engagement efforts. American Ornithological Society, Estes Park, CO. October 2024

Tonelli B*, C Youngflesh, T Cox, M Neate-Clegg, EB Cohen, M Tingley. The relative importance of temperature, precipitation, snowpack, NAO and ENSO on the spring migratory timing of North American landbirds. American Ornithological Society, Estes Park, CO. October 2024

- Anderson M*, B Blackwell, E Sanchez Rivera, C Farrell, A Janik, [EB Cohen](#), E McBride, J Fair, S Hamer. Differential neonicotinoid exposure between migrant and resident birds: testing hypotheses at a high-volume spring stopover site in coastal Texas. American Ornithological Society, Estes Park, CO. October 2024
- Nemes C[‡], G Brewer, F Guo, J Buler, [EB Cohen](#). Closing the research-implementation gap for landbird stopover habitat conservation in U.S. State Wildlife Action Plans. American Ornithological Society, Estes Park, CO. October 2024
- Endyke S*, D Nelson, [EB Cohen](#), K Martin, H Vander Zanden, T Katzner. Stable isotopes identify migratory connectivity for heavily harvested sea duck populations. American Ornithological Society, Estes Park, CO. October 2024
- Tsuru B*, Buler JJ, DeSimone JG[‡], Nemes CE[‡], [Cohen EB](#). Seeking Scale-dependent drivers of species-specific filtering from passage in migratory birds. [Poster] International Radar Aeroecology Conference, Newark, Delaware, USA. August 2024.
- Nemes CE[‡], GL Brewer, JJ Buler, F Guo, BR Tsuru*, [EB Cohen](#). Incorporating radar aeroecology into U.S. State Wildlife Action Plans for migratory bird conservation. [Poster] International Radar Aeroecology Conference, Newark, Delaware, USA. August 2024.
- 2023
- DeSimone JG[‡] and Cohen EB. *Communities on the move: testing the strength and persistence of songbird species associations at stopover*. American Ornithological Society/Society of Canadian Ornithologists conference, London, Ontario
- Massa M*, Johnson AEM, Matthews ER, Shriver WG, and [Cohen EB](#). *Can public lands safeguard grassland bird populations in the eastern US?* American Ornithological Society/Society of Canadian Ornithologists conference, London, Ontario (Poster)
- Massa M*, Johnson AEM, Matthews ER, Shriver WG, and [Cohen EB](#). *Management and landscape context are key to conserving eastern grassland birds on public and private lands*. Poster presentation at Virginia Working Landscapes annual meeting, Front Royal, Virginia (Poster)
- Massa M*, Matthews ER, Shriver WG, and [Cohen EB](#). *Battlefields for Birds: Impacts of park management on grassland bird populations*. Talk delivered to National Park Service Avifauna Webinar Series, Virtual
- 2022
- Nemes CE*, Lindsay AM, De Groote LW*, [Cohen EB](#). *Behavioral responses of migrating songbirds to the perceived risk of predation*. American Ornithological Society - Birds Caribbean Conference, San Juan, Puerto Rico. [winner of a student presentation award]
- Nemes CE*, Nicole EF, Fitzpatrick MC, Flockhart DTT, Mullinax JM, [Cohen EB](#). *Density of free-roaming domestic cats in Puerto Rico and potential impacts on wildlife*. American Ornithological Society - Birds Caribbean Conference, San Juan, Puerto Rico.
- Massa M*, Matthews E, Redmond H, Shriver WG, Cohen EB. *Response of grassland birds to management in National Battlefield Parks*. American Ornithological Society-Birds Caribbean, San Juan, PR.
- Buler, JJ, [Cohen EB](#), Horton KG, Loss SR, Cabrera-Cruz SA[‡], Smolinsky JA, and Marra PP. *Safeguarding migrating birds to inform wind energy development*. World Biodiversity Forum, Davos, Switzerland.
- Cabrera-Cruz SA[‡], Buler JJ, Loss SR, [Cohen EB](#). *A threatscape for the aeroconservation of migratory birds*. World Biodiversity Forum, Davos, Switzerland
- Buler, JJ [Cohen EB](#), Horton KG, Loss SR, Cabrera-Cruz SA[‡], Smolinsky JA, and Marra PP. *Using weather radar to help minimize wind energy impacts on nocturnally migrating birds*. Midwest Migration Network Virtual Meeting Series, Virtual

Massa M*, Matthews E, Redmond H, Shriver WG, Cohen EB. *Response of grassland birds to management in National Battlefield Parks*. National Park Service Spotlight on Resources, Virtual

2021

Hostetler JA, Cohen EB, Hallworth MT, Rushing CS, Contina A, Bossu C, Ruegg K. (2021) *Estimating migratory connectivity strength and pattern across data types*. EURING Analytical Meeting & Workshop, Virtual

Bobowski T*, Bossu CH, Schweizer T, Cohen EB, and Ruegg K. *Using genomic data to model migratory timing: A Common Yellowthroat case study*. American Ornithological Society & Society of Canadian Ornithologists, Virtual [winner of a student presentation award]

Nemes C*, Guinn S, Collins S, Dossman B, Gerson A, Gómez, C González-Prieto AM, Marty J, Gutierrez Ramirez M, Hamer SA, Marra PP, Vasseur P, Zenzal, TJ and Cohen EB. *Do migrating songbirds track the 'green wave' of emerging vegetation in spring?* American Ornithological Society & Society of Canadian Ornithologists, Virtual

Scarpignato AL, Roberts AJ, Huysman A, Marra, PP and Cohen EB. *North American waterfowl migratory connectivity across flyways*. American Ornithological Society & Society of Canadian Ornithologists, Virtual

2020

Cohen EB and Satterfield DA. *Chancing on a Spectacle: Co-occurring animal migrations and interspecific interactions*. North American Ornithological Conference VII, Virtual

DeBrock SC*, Cohen EB, Marra PP, Hamer SA. *Tracking Malaria Parasite Infection in Birds Migrating Through Coastal Texas over a 6-Year Period*. North American Ornithological Conference VII, Virtual

Scarpignato AL, Cohen EB, Marra PP. *The Migratory Connectivity Project: Mining a USGS Hidden Resource, the Bird Banding Lab Encounter Database*. North American Ornithological Conference VII, Virtual

Bobowski T*, Bossu CH, Cohen EB, Ruegg K. *Drivers of differences in migratory timing in Neotropical migrants - a Common Yellowthroat case study*. North American Ornithological Conference VII, Virtual

Hamer SA, Cohen EB, DeBrock S*, Marra PP. *Disease Ecology of Neotropical Migrants in Texas*. Texas Ornithological Society, College Station, TX.

Buler JJ, Cabrera-Cruz SA*, Cohen EB, Smith RJ, Farnsworth A, Smolinsky JA, Clipp H*. *Broad-scale attraction of nocturnally migrating birds to artificial light at night is stronger during autumn than spring across North America*. International Artificial Light at Night Conference, Virtual

2019

Clipp HL*, Cohen EB, Smolinsky JA, Farnsworth A, Horton KG, Buler JJ. *Mesoscale winds shape spring stopover distributions of migrating birds along the Gulf of Mexico*. 137th Annual Meeting American Ornithological Society, Anchorage, AK

4. Symposia Organized

Davis, C, Cohen, EB, DeSimone, JG (symposium organizers). *Being more strategic in your public engagement efforts*. American Ornithological Society conference, Estes Park, CO. October 2024

14th European Ornithologists' Union Congress, *Vertical Space Use of Flying Animals*, Lund, Sweden, August, 2023

28th International Ornithological Congress, *Chancing on a spectacle: co-occurring animal migrations and interspecific interactions*, Virtual, August 2022

Appalachian Mountain Joint Venture Technical meeting, Appalachian Lab, UMCES, Frostburg, MD, August, 2019

D. Research Fellowships, Prizes, and Awards

Runner up for the Ecography Award for Excellence in Ecology and Evolution (E4 Award) for an exceptional review manuscript by early career research scientists

E. Membership in Professional Organizations

Lifetime Member, American Ornithological Society (2024- present)

Elected Fellow, American Ornithological Society (2019- present)

Elected Member, American Ornithological Society (2016- present)

Cooper Ornithological Society (2000 – 2016)

American Ornithologist Union (2005 – 2016)

IV. Teaching and Training**A. University System of Maryland Courses Taught**

| Semester | Course Number | Title | Credits | Enrollment | Taught With |
|-----------|---------------|--|---------|------------|--------------------|
| Fall 2021 | MEES718I | Issue Study Group: Invasive Species Management in Maryland | 2 | 12 (1FSU) | Engelhardt |
| Fall 2022 | MEES698C | Spatial Ecology in R | 3 | 12 (1FSU) | Fitzpatrick |
| Fall 2023 | MEES660 | Ecological Systems | 3 | 13 | Harris, Hildebrand |
| Fall 2024 | MEES698C | Spatial Ecology in R | 4 | 8 | Fitzpatrick |

B. Graduate Students Supervised**1. Students Currently Supervised as Major Advisor**

DeGroote, Lucas Ph.D. MEES Ecological Systems

Tsuru, Brian Ph.D. MEES Ecological Systems

2. Completed Graduate Students as Major Advisor

Nemes, Claire Ph.D. MEES Ecological Systems (May 2023)

Moving the goalposts: Migratory birds in a changing world

Massa, Megan M.S. FSU Wildlife and Conservation (May 2023)

Conserving eastern grassland birds on public and private land

3. Graduate Student Committee Memberships

Ferguson, Sarah M.S. Frostburg State University (current)

Endyke, Sarah Ph.D. UMCES, AL (current)

Ibrahim, Nicole Ph.D. UMCES, AL (current)

Anderson, Meredith Ph.D. Texas A&M University (current)

Tonelli, Benjamin Ph.D. UCLA (current)

Smith, Nicholas Ph.D. U. Tennessee, Knoxville (current)

Gutierrez, Mariamar Ph.D. U. Mass, Amherst, completed 2022

Bobowski, Taylor M.S. Colorado State U, completed 2022

DeBrock, Spencer M.S. Texas A&M University, completed 2021

C. Postdoctoral Researchers Supervised

DeSimone, Joely UMCES AL, 2022-2027

Nemes, Claire UMCES AL, 2023-2025

D. Research Internships and Independent Studies Supervised

Cullen, Anna B.S. student Alleghany College, AL Summer Intern Program, 2024

Donley, Alex B.S. student FSU, AL Summer Intern Program, 2023

McBride, A'laurenye' B.S. student FSU, AL Summer Intern Program, 2022

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| Wise, Atlee | B.S. student | FSU, AL Summer Intern Program, 2022 |
| Sergio Cabrera-Cruz | Ph.D. student | U Delaware, Smithsonian Predoctoral Fellow, 2019 |
| Hannah Redmond | M.S. student | Smithsonian Institution, 2019 |
| Stacy Hill | M.S. student | Smithsonian Institution, 2019 |
| Esther Tsai | B.S. student | Smithsonian Institution 2018 |

E. Mentee awards

Nemes, Claire: Best Student Presentation, American Ornithological Society, 2022
Student Service Award, UMCES 2022

Massa, Megan: Student Award, Chesapeake Watershed Cooperative Ecosystems Studies Unit 2023

DeSimone, Joely: NSF Postdoctoral Research Fellowship in Biology (\$240,000), *Migrant-Resident Community Dynamics During the Transition To Breeding in a Changing Climate*

DeGroot, Lucas: USFWS, State Wildlife Grant (\$39,860), *Identifying SGCN Habitat Use across Multiple Scales throughout the Eastern US using Motus WTS*

F. Training and Workshops

Faculty Mentoring Workshop, Virtual, University of Maryland Graduate School, Feb 2023

Inclusive Hiring Workshop, University of Maryland Office of Diversity and Inclusion, Aug 2023

Sense of Belonging in Field Courses: What, Why, When, and How?, University of Oregon, Nov 2022

G. Additional Academic Affiliations for Teaching and Training

Carnegie Museums of Natural History, Research Associate

University of Maryland, College Park, Biological Sciences, Affiliate Faculty (www.bisi.umd.edu/bees-faculty)

Texas A&M University, Graduate and Professional School, Affiliate Faculty

Colorado State University, College of Natural Sciences, Affiliate Faculty

V. Academic and Community Service

A. Review

1. Editorships: Associate Editor, Ornithology (2019 – 2024), Editor for the Americas, Journal of Ornithology (2024- present)
2. Peer-review: Behavioral Ecology, Behavioral Ecology and Sociobiology, Biology Letters, Canadian Journal of Zoology, Ecography, Ecological Modeling, Ecology, Ecosphere, Frontiers in Ecology and Evolution, Frontiers in Zoology, Ibis, Journal of Avian Biology, Journal of Animal Ecology, Journal of Field Ornithology, Journal of Ornithology, Methods in Ecology and Evolution, Movement Ecology, Nature Ecology & Evolution, Oikos, Ornis Hungarica, Ornithology, Ornithological Applications, PloS One, PNAS, Proceedings of the Royal Society B, Royal Society Open Science, Scientific Reports, Trends in Ecology and Evolution, Wilson Journal of Ornithology
3. Proposal review 2024: External Reviewer for United States- Israel Binational Science Foundation, External Reviewer for National Science Foundation DEB, Population and Community Ecology Cluster (2023, 2022, 2021, 2019, 2016), Smithsonian Secretary's Research Prizes (2023), External PhD Project Proposal Reviewer for Wageningen University – Netherlands (2022), Independent Research Fellowships NERC United Kingdom (2019)
4. Panel review: Two National Science Foundation Panels in 2024, Smithsonian Institution Fellowship Program Panel member in 2019

B. Service to UMCES

UMCES Strategic Planning Committee, 2024-present

AL DEIC Faculty Representative 2023-present

Faculty Senate, May 2023-present

Animal Care and Use Committee (IACUC), 2020-present

Presidential Search Committee, Fall 2023-2024

Academic Promotion and Tenure (APT) Policy Committee, Jan-Oct 2023

Ecological Systems Student Admissions Review, 2021-2024

AL Computational Resources Evaluation Committee, Fall 2019

AL Faculty search committee, Fall 2019

C. Service to other Academic institutions

Elective Councilor (leadership voting member of the decision-making body), American Ornithological Society, 2021-2024 term

Science Program Chair, 124th stated Meeting of the American Ornithological Society in Estes Park, Colorado, 2024 (~1200 attendees)

Science Program Chair, Joint Meeting of the American Ornithological Society and Society of Canadian Ornithologists–Société des ornithologistes du Canada (SCO–SOC) in London, Ontario, 2023 (~700 attendees)

Science Program Co-Chair, Joint Meeting of the American Ornithological Society and Birds Caribbean in San Juan, Puerto Rico, 2022 (~800 attendees)

Developed and piloted online lesson, (Grades 9–12) with The Towson University Center for STEM Excellence, Bird Migration and Climate Change, 2021

Co-developed and co-led Professional Learning Community for Middle and High School STEM teachers with The Towson University Center for STEM Excellence, Summer 2024

D. Public Service

Partners in Flight, Migration Subcommittee member, 2023- 2024

Appalachian Mountain Joint Venture technical committee member, 2019-current

Maryland Bird Conservation Partnership Advisory Council, 2021- 2024

Garrett County Middle School Robotics Club project advisor, 2020, 2019

E. UMCES News (2019-2024)

2024

UMCES. “Summer Professional Learning Experience Planned for Maryland Teachers”

<https://www.umces.edu/news/summer-professional-learning-experience-planned-for-maryland-teachers>

UMCES. “UMCES receives \$1.12M NSF grant for migratory bird conservation efforts.”

<https://www.umces.edu/news/umces-receives-112m-nsf-grant-for-migratory-bird-conservation-efforts>

UMCES. “Migratory bird species found to be socially oriented.” <https://www.umces.edu/news/migratory-bird-species-found-to-be-socially-oriented>

2023

DeSimone selected for NSF Postdoctoral Research Fellowship, August 3, 2023

<https://www.umces.edu/news/desimone-selected-for-nsf-postdoctoral-research-fellowship>

2022

Graduate student Claire Nemes receives UMCES Student Service Award, May 13, 2022

<https://www.umces.edu/news/graduate-student-claire-nemes-receives-umces-student-service-award>

New research will help minimize impact of wind energy development on migratory birds, May 4, 2022

<https://www.umces.edu/news/new-research-will-help-minimize-impact-of-wind-energy-development-on-migratory-birds>

Emily Cohen awarded NSF CAREER Award to study migrating birds as communities, February 14, 2022

<https://www.umces.edu/news/emily-cohen-awarded-nsf-career-award-to-study-migrating-birds-as-communities>

2020

New study highlights importance of U.S. coastal habitats for migrating birds, October 7, 2020

<https://www.umces.edu/news/new-study-highlights-importance-of-us-coastal-habitats-for-migrating-birds>

Paper proposes framework for future study of "co-migration" April 3, 2020

<https://www.umces.edu/news/comigration-framework>

F. Popular Press (2019-2024)

2024

UMCES Receives Grant for Migratory Bird Conservation. [The Star Democrat](#) and [My Eastern Shore MD](#)

American Bird Conservancy. University of Maryland Center for Environmental Science and Appalachian Mountains Joint Venture/American Bird Conservancy Awarded \$1.2 Million Grant to Use Big Data in Migratory Bird Conservation. <https://abcbirds.org/news/amjv-nsf-grant-award-2024/>

National Science Foundation News. "U.S. National Science Foundation, Paul G. Allen Family Foundation double investment in science-driven conservation projects" <https://new.nsf.gov/news/us-national-science-foundation-paul-g-allen-family>

National Science Foundation News. "Studying the journey, not the destination, provides new insight into songbird migrations." <https://new.nsf.gov/news/studying-journey-into-songbird-migrations>

Smithsonian Magazine. "Birds Form Surprising Relationships With Other Avian Species During Migration, Study Suggests." Alexa Robles-Gil. <https://www.smithsonianmag.com/smart-news/birds-form-surprising-relationships-with-other-avian-species-during-migration-study-suggests-180985059/>

Science Friday. "Different Bird Species May Team Up For Migration." <https://www.sciencefriday.com/segments/songbird-species-work-together-during-migration/>

WYPR On the Record. "Social or solitary? The secret lives of migratory songbirds." <https://omny.fm/shows/on-the-record-1/social-or-solitary-the-secret-lives-of-migratory-s>

National Geographic. "Do birds have migration buddies? A new study shows surprising connections between species." Jason Bittel. <https://www.nationalgeographic.com/animals/article/bird-migration-social-relationship>

Santa Barbara Independent. "Birds of Two Feathers Flock Together." Hugh Ranson. <https://www.independent.com/2024/09/06/birds-of-two-feathers-flock-together/>

Audubon. "A new study reveals migration isn't a solo affair—it's the social event of the season." Benjamin Hack. <https://www.audubon.org/magazine/new-study-reveals-migration-isnt-solo-affair-its-social-event-season>

earth.com. "Bird migration is influenced by social relationships." by Sanjana Gajbhiye. <https://www.earth.com/news/bird-migration-is-influenced-by-social-relationships/>

Atmos. "A First-of-Its-Kind U.N. Report Sounds Alarm for Migratory Species" <https://atmos.earth/a-first-of-its-kind-u-n-report-sounds-alarm-for-migratory-species/>

PBS News. "Landmark report details how human activities can disrupt animal migrations" <https://www.pbs.org/newshour/science/landmark-report-details-how-human-activities-can-disrupt-animal-migrations>

2022

Weather radar is key to bird-friendly wind energy by Sarah DeWeerd in Anthropocene Magazine's Daily Science Blog, 2022: <https://www.anthropocenemagazine.org/2022/05/weather-radar-key-to-bird-friendly-wind-energy/>

Weather Radar Networks Can Help Minimize Wind Energy Impacts on Nocturnally Migrating Birds in Environmental News Network and AZoCleantech, online publication for the Clean Technology community, 2022: <https://www.azocleantech.com/news.aspx?newsID=31647>

Bright lights, big pity City lights lure migratory birds, with lethal results, but weather radar and modeling can help reduce toll by Joshua Sokol in Science, 2022: <https://www.science.org/content/article/radar-powered-forecasts-save-birds-deadly-city-lights>

Night Moves by Paul Bogard in Audubon Magazine, 2022: <https://www.audubon.org/magazine/spring-2021/a-new-golden-age-observation-revealing-wonders>

2020

Mapping out rest stops for migrating birds, 7 news outlets Scien Mag, Bioengineer.org, Science Daily, Newswise, ScienceNewsnet.in, Phys.org, 2020: <https://www.sciencedaily.com/releases/2020/10/201014171332.htm>

The stopover-to-passage ratio (SPR) links airspace and stopover habitat use to identify high-priority conservation areas for migrating birds. Partners in Flight Conservation Blog, 2020: <https://partnersinflight.org/stopover-to-passage-ratio-links-airspace-and-stopover-habitat-use-to-identify-high-priority-conservation-areas-for-migrating-birds/>

Observations shared by bird watchers reveal migratory pathways of more than 600 bird species, ebird.org, 2020: <https://ebird.org/news/observations-shared-by-bird-watchers-reveal-migratory-pathways-of-more-than-600-bird-species/>