

University of Maryland Center for Environmental Science
Appalachian Laboratory
301 Braddock Road
Frostburg, MD 21532

Phone: 301-689-7161
Email: Emily.Cohen@UMCES.edu
Web: www.umces.edu/emily-cohen

PROFESSIONAL POSITIONS

2019-Present: Assistant Professor, Appalachian Laboratory, University of Maryland Center for Environmental Science

2017- 2019: Research Ecologist, Migratory Bird Center, Smithsonian Conservation Biology Institute, National Zoological Park, Washington, D.C.

2012-2016: Postdoctoral Fellow, Migratory Bird Center, Smithsonian Conservation Biology Institute, National Zoological Park, Washington, D.C.

2003-2005, 1999-2000: Research Associate, Southern Sierra Research Station, Weldon, California

1997-1998: Research Associate, Pacific Island Ecosystem Research Center, US Geological Survey, Volcano, Hawai'i

EDUCATION

2011: Ph.D., Biology, University of Southern Mississippi, Hattiesburg, Mississippi
Dissertation: Movement ecology of an intercontinental migratory bird during spring stopover,
Committee Chair: Dr. Frank R. Moore.

2003: M.S, Zoology, Michigan State University, East Lansing, Michigan

Thesis: Survival, habitat use, and movement of fledgling white-throated robins in tropical agricultural habitats, Committee Chair: Dr. Catherine Lindell

1996: B.Sc., Biology and Environmental Science, Appalachian State University, Boone, North Carolina

PEER-REVIEWED PUBLICATIONS

- 20) Horton, K.G., B.M. Van Doren, F.A. La Sorte, **E.B. Cohen**, H.L. Clipp, J.J. Buler, D. Fink, J.F. Kelly, and A. Farnsworth. 2019. Holding steady: little change in intensity or timing of bird migration over the Gulf of Mexico. *Global Change Biology*.
- 19) **Cohen, E.B.**, C.R. Rushing, F.R. Moore, M.T. Hallworth, J.A. Hostetler, M. Gutierrez Ramirez, P.P. Marra. 2019. The strength of migratory connectivity for birds en route to breeding through the Gulf of Mexico. *Ecography*.
- 18) Marra P.P., **E.B. Cohen**, A-L. Harrison, C.E. Studds, and M. Webster 2019. *Migratory Connectivity*. Encyclopedia of Animal Behavior Oxford: Oxford Academic Press.
- 17) **Cohen, E.B.**, J.A. Hostetler, M.T. Hallworth, C.S. Rushing, T.S. Sillett, and P.P. Marra. 2018. Quantifying the strength of migratory connectivity. *Methods in Ecology and Evolution* 9: 513-524.
- 16) **Cohen, E.B.**, W.C. Barrow, Jr., J.J. Buler, J.L. Deppe, A. Farnsworth, P.P. Marra, S.R. McWilliams, D.W. Mehlman, R.R. Wilson, M.S. Woodrey, and F.R. Moore. 2018. Understanding how en route events around the Gulf of Mexico impact intercontinental migratory landbird populations. *The Condor: Ornithological Applications* 119: 327-343.
- 15) Culp, L.A., **E.B. Cohen**, A. Scarpignato, and P.P. Marra. 2017. Full annual cycle climate change vulnerability assessments. *Ecosphere* 8: e01565.

PEER-REVIEWED PUBLICATIONS continued

- 14) **Cohen, E.B.**, L. Aukland, P.P. Marra and S.A. Hamer. 2015. Avian migrants facilitate invasions of Neotropical ticks and tick-borne pathogens into the United States. *Applied Environmental Microbiology* 81: 8366-8378.
- 13) Marra, P.P., **E.B. Cohen**, S.R. Loss, J.E. Rutter, and C.M. Tonra. 2015. A call for full annual cycle research in animal ecology. *Biology Letters* 11: 20150552.
- 12) **Cohen, E.B.**, Z. Németh, T.J. Zenzal Jr., K. Paxton, R. Diehl, E.H. Paxton, and F.R. Moore. 2015. Spring resource phenology and timing of songbird migration across the Gulf of Mexico. Pp. 54-74 in E.M. Wood and J.L. Kellermann (editors). *Phenological synchrony and bird migration: changing climate and seasonal resources in North America. Studies in Avian Biology* (no. 47).
- 11) Thorup, K., F. Korner-Nievergelt, **E.B. Cohen**, and S.R. Baillie. 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* 5: 1337-1350.
- 10) **Cohen, E.B.**, J.A. Hostetler, J.A. Royle, P.P. Marra. 2014. Estimating migratory connectivity of birds when encounter probabilities are heterogeneous. *Ecology and Evolution* 4: 1659-1670.
- 9) **Cohen, E.B.**, F.R. Moore, and R.A. Fischer. 2014. Fuel stores, time of spring, and movement behavior influence red-eyed vireo stopover duration. *Journal of Ornithology* 155: 785-792.
- 8) Paxton, K.L., **E.B. Cohen**, E.H. Paxton, Z. Németh, and F.R. Moore. 2014. Climatic variability at over-winter sites in Caribbean-Central and South America differentially affects intercontinental migrants during spring migration. *PLoS One* 9: e95383.
- 7) **Cohen, E.B.**, S. Pearson, and F.R. Moore. 2014. Effects of landscape composition and configuration on migrating songbirds: inference from an individual-based model. *Ecological Applications* 24:169-180.
- 6) **Cohen, E.B.**, F.R. Moore, R.A. Fischer. 2012. Experimental Evidence for the Interplay of Exogenous and Endogenous Factors on the Movement Ecology of a Migrating Songbird. *PLoS One* 7: e41818.
- 5) Lindell, C.A., R.S. O'Connor and **E.B. Cohen**. 2011. Nesting success of Neotropical thrushes in agricultural land covers. *Wilson Journal of Ornithology* 123:502-507.
- 4) **Cohen, E.B.**, and C.A. Lindell. 2005. Habitat use of White-throated Robins (*Turdus assimilis*) during the breeding season in a mosaic landscape in Costa Rica. *Journal of Field Ornithology* 76:279-286.
- 3) **Cohen, E.B.**, and C.A. Lindell. 2004. Survival, habitat use, and movements of fledgling White-throated Robin (*Turdus assimilis*) in a Costa Rican agricultural landscape. *The Auk* 121:404-414.
- 2) Lindell, C.A., **E.B. Cohen**, and J.S. Fritz. 2004. Are Daily Mortality Rates for Real and Artificial Clutches Comparable? *Ornithologia Neotropical* 15: 201-208.
- 1) Woodworth, B.L., J.T. Nelson, E.J. Tweed, S.G. Fancy, M.P. Moore, **E.B. Cohen**, and M. S. Collins. 2001. Demography of the endangered Hawai'i Creeper in a wet forest refuge on Mauna Kea, Hawai'i. In *The Status, Ecology, and Conservation of the Hawaiian Avifauna. Studies in Avian Biology*. 22: 164-172.

MANUSCRIPTS IN REVIEW OR FINAL PREPARATION

Clipp, H.L., **E.B. Cohen**, J.A. Smolinsky, K.G. Horton, A. Farnsworth, and J.J. Buler. Broad scale synoptic weather patterns influence landbird migration patterns. In review at Journal of Animal Ecology.

Satterfield, D.A. and **E.B. Cohen**. Chancing on a spectacle: animal migrations that co-occur and interact. Prepared for Ecology E4 Award October 1, 2019.

Marra, P.P., A. Scarpignato, A-L. Harrison, and **E.B. Cohen**. Atlas of Migratory Connectivity for the Birds of North America. In Preparation for Princeton University Press in 2020.

OTHER PUBLICATIONS

Cohen, E.B., and T.A. Guida. 2019. Book Review: Birdlife of the Gulf of Mexico. The Condor: Ornithological Applications

Cohen, E.B., T.A. Guida and P.P. Marra. 2016. Abundance, diversity, and timing of migratory songbirds at Powderhorn Ranch, Texas. The Nature Conservancy of Texas.

Marra, P.P., L.A. Culp, A.L. Scarpignato, and **E.B. Cohen**. 2014. Full Annual Cycle Climate Change Vulnerability Assessment for Migratory Birds of the Upper Midwest and Great Lakes Region.

Cohen, E.B., L.A. Culp, S.R. Loss, and P. P. Marra. 2014. Lead in the United States: exposure and toxicity to birds. Smithsonian Conservation Biology Institute, Migratory Bird Center, Washington, D.C.

Fischer, R.A., M.P. Guilfoyle, J. Valente, S.A. Gauthreaux, Jr., C.G. Belsler, **E.B. Cohen** and F.R. Moore. 2012. The Identification of Military Installations as Important Migratory Bird Stopover Sites and the Development of Bird Migration Forecast Models: a Radar Ornithology Approach. ERDC/EL-TR-12-22 Vicksburg, Mississippi

Whitfield, M.J. and **E.B. Cohen**. 2004. Southwestern Willow Flycatcher Monitoring and Removal of Brown-headed Cowbirds on the South Fork Kern River in 2004. Report to the U.S. Army Corps of Engineers, Sacramento, California

GRANTS, AWARDS AND FELLOWSHIPS

2019: U.S. Fish and Wildlife Service: Great Lakes (\$32,000)

2016- 2018: The National Fish and Wildlife Foundation: Comprehensive Spring and Fall Migratory Bird Assessment on the Gulf of Mexico, Gulf Coast Conservation Grant (co-PI; \$321,000)

2017: U.S. Fish and Wildlife Service: Cooperative Research Agreement (\$40,000)

2012-2016: Smithsonian Institution Conservation Biology Institute: competitive Postdoctoral Fellowship (\$255,000)

2012: University of Southern Mississippi, College of Science and Technology: Research Council Graduate Student Innovation Award (\$500)

2011: U.S. Fish and Wildlife Service Gulf Coast Joint Venture: Research Grant (\$12,000)

2005: U.S. Department of Defense Strategic Environmental Research and Development Program, Environmental Research and Development Center: Research Grant (\$100,000)

GRANTS, AWARDS AND FELLOWSHIPS Continued

2004: Environmental Systems Research Institute (ESRI): Conservation Grant for Southern Sierra Research Station (\$3,500)

2001-2002: Michigan State University Graduate Research Awards: Sigma Xi, Association of Field Ornithologists, Wilson Ornithological Society

2000- 2012: Student Travel and Enhancement Awards: U.S. International Association of Landscape Ecologists Annual Symposium, Conservation Biology, Cooper Ornithological Society, American Ornithological Society, Southeast Partners in Flight

MENTORING AND TEACHING EXPERIENCE

Students:

2018- 2023: Spencer DeBrook (Ph.D. Committee member) – Veterinary Integrative Biosciences, Texas A&M University

2018- 2019: Sergio Cabera-Cruz (Ph.D. Fellowship mentor) –Smithsonian Predoctoral Fellowship, University of Delaware, Project: Nocturnal light pollution and land bird migration.

2019- 2021: Mariamar Gutierrez Ramirez (Ph.D. Committee member) – Organismic and Evolutionary Biology Program, UMass Amherst

2018- 2019: Esther Ivanna Tsai (Undergraduate) –Smithsonian Internship Program with Whitworth University.

2016- 2018: Hannah L. Clipp (M.S. Co-advisor and committee member) –University of Delaware, Project: Weather patterns and stopover of migratory birds around the US coast of the Gulf of Mexico.

Courses:

2014, 2015: Lecturer, Graduate Training Course, Ecology and Conservation of Migratory Birds, Smithsonian Mason School of Conservation

2009, 2011: Instructor, Animal Behavior Laboratory, University of Southern Mississippi

2010: Instructor, Behavioral Ecology Laboratory, University of Southern Mississippi

2008: Lecture Instructor of Record, Biology and Society, University of Southern Mississippi

2005, 2006, 2007: Instructor, Principals of Biological Sciences Laboratory, University of Southern Mississippi

2001, 2002: Instructor, Principals of Biological Sciences Laboratory, Michigan State University

2004, 2005: Training Course Leader, Southwestern Willow Flycatcher Endangered Species Survey and Monitoring Training, Southern Sierra Research Station

Evaluations:

Students ranked my teaching as high/highest or agree/ strongly agree (> 4.5 out of 5) on all question related to my instructing. In particular, every student strongly agreed that “the instructor attempts to involve students in class discussions/ activities.” (Animal Behavior, BSC 455L/ 555L)

SYNERGISTIC ACTIVITIES AND PROFESSIONAL SERVICE

- 2019 - Present: Fellow, American Ornithological Society (AOS)
- 2019 - Science Program Committee, North American Ornithological Conference, August 2020
- 2018- Present: Associate Editor, *The Auk: Ornithological Advances*
- 2014- 2018: Communications Committee Member and Chair, American Ornithological Society
- 2016 - Present: Elected Member, American Ornithological Society (AOS)
- 2005– 2016 Member: American Ornithologists Union, Cooper Ornithological Society (now AOS)
- 2014- 2015 Organizer: Conservation and Science Seminar Series for Smithsonian Conservation Biology Institute
- 2012- 2015 Communications: Migratory Connectivity Project, www.migratoryconnectivityproject.org
- 2012- 2015: Elementary to high school educational programs about the phenomenon of bird migration in Matagorda, Texas, Smithsonian Conservation Biology Institute
- 2009- 2019: Manuscript reviewer for: *Ecological Modeling, Ecography, Ecosphere, Ecology, Frontiers in Zoology, PloS One, Behavioral Ecology, Behavioral Ecology and Sociobiology, The Auk: Ornithological Advances, The Condor: Ornithological Applications, Journal of Ornithology, Wilson Journal of Ornithology, Journal of Field Ornithology, Ornis Hungarica, Scientific Reports, Journal of Animal Ecology*

SELECTED PRESENTATIONS AND INVITED SEMINARS

Symposia organized:

- 2016: "Synthesizing Science to Inform Conservation of Songbird Migrants around the Gulf of Mexico", North American Ornithological Conference in Washington, D.C.
- 2014: "Future of Migratory Connectivity Research", American Ornithological Union, Cooper Ornithological Society and Society of Canadian Ornithologists, British Columbia, Canada

Invited:

- 2018: Cohen, E.B., Smithsonian Conservation Immersion Seminar, Virginia
- 2018: Cohen, E.B., Aeroecology Training School, Oklahoma
- 2017: Cohen, E.B., J.J. Buler, A. Farnsworth, H.L. Clipp, S. Cabrera-Cruz, K.G. Horton, B. Van Doren, and P.P. Marra, Symposium: Migration Stopover in the Neotropics: Filling a Black Hole in Full Annual Cycle Conservation, International Partners in Flight Meeting, Costa Rica
- 2016: Cohen, E.B., Seminar Series, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University, Texas
- 2014: Cohen, E.B., J.A. Hostetler, T.S. Sillett, P.P. Marra, Symposium: The Future of Migratory Connectivity Research. American Ornithological Union, Cooper Ornithological Society and Society of Canadian Ornithologists, Colorado
- 2013: Cohen, E.B., J.A. Hostetler, J.A. Royle, P.P. Marra, Symposium: Large-scale spatial analysis. Euring Analytical Meeting and Workshop, Georgia

SELECTED PRESENTATIONS AND INVITED SEMINARS continued

2012: Cohen, E. B., Smithsonian Conservation Biology Institute Seminar Series, Washington D.C.

2012: Cohen, E. B. and F. R. Moore, Symposium: Movement ecology of migratory birds in relation to an ecological barrier across different levels of analysis: lessons from two major regional systems, 5th North American Ornithological Conference Symposium, Oregon

2012: Cohen, E. B., Department of Entomology and Wildlife Ecology, University of Delaware, Delaware

2011: Cohen, E. B., National Wetlands Research Center, Louisiana

Contributed:

2018: Cohen, E.B., J.J. Buler, H.L. Clipp, and P.P. Marra, American Ornithological Society, Arizona

2017: Cohen, E.B. J.A. Hostetler, M.T. Hallworth, C.S. Rushing, T.S. Sillett P.P. Marra, Gordon Research Conference on Movement Ecology of Animals, California

2013: Cohen, E.B. J.A. Hostetler, J.A. Royle, P.P. Marra, Joint meeting of the American Ornithological Union and Cooper Ornithological Society, Illinois

2013: Cohen, E.B., Ornithology Exchange. Smithsonian Institution, Washington, D.C.

Contributed:

2012: Cohen, E.B., S. Pearson, and F.R. Moore. U.S. Regional Association of the International Association of Landscape Ecologists Annual Symposium, "Informing Decisions in a Changing World", Rhode Island

2010: Cohen, E.B., F.R. Moore, and R.A. Fischer. 25th Anniversary Symposium of the U.S. Regional Association of the International Association of Landscape Ecologists, Georgia

2010: Cohen, E. B., F. R. Moore, and R. A. Fischer. Joint Meeting of the Cooper Ornithological Society/ American Ornithologist's Union/ Society of Canadian Ornithologists, California

2008: Cohen, E.B., F.R. Moore, and R.A. Fischer. International Congress for Conservation Biology, Tennessee

2008: Cohen, E.B., F.R. Moore, and R.A. Fischer. Joint Meeting of the Cooper Ornithological Society, American Ornithologist's Union, Society of Canadian Ornithologists, Oregon

2007: Cohen, E.B. Ecology of Animal Migration Course, Department of Animal Ecology, Lund University, Sweden

2007: Cohen, E.B. and F.R. Moore. Southeast Partners in Flight Annual Meeting, Tennessee

2004: Cohen, E.B., and C.A Lindell. Joint Meeting of the Cooper Ornithological Society/ American Ornithologist's Union/ Society of Canadian Ornithologists, Quebec, Canada

2002: Cohen, E.B., and C.A Lindell. Joint Meeting of the Cooper Ornithological Society/ American Ornithologist's Union/ Society of Canadian Ornithologists, Louisiana

PRESS FOR RESEARCH

2018: The Times-Picayune "Temperature rising: Louisiana's health and environment threatened by global warming" by Mark Schleifstein, https://www.nola.com/archive/article_37ea93fe-b432-5566-8869-7748fbbc11cf.html

2018: Methods Blog "Sticking Together or Drifting Apart? Quantifying the Strength of Migratory Connectivity" <https://methodsblog.wordpress.com/2017/11/09/migratory-connectivity/>

2018: Methods Video Abstract "How Can We Quantify the Strength of Migratory Connectivity?" <https://www.youtube.com/watch?v=Qf6leduWgRM>

2017: National Zoo News "Solving the Perilous Puzzle of Bird Migration", <https://nationalzoo.si.edu/migratory-birds/news/solving-perilous-puzzle-bird-migration>

2017: Cool Green Science "Migration, The Black Box of Neotropical Bird Conservation" by Justine E. Hausheer, <https://blog.nature.org/science/2017/05/04/migration-the-black-box-of-neotropical-bird-conservation/>

2017: BirdCalls "Passing Through: Migratory Connectivity and the Gulf of Mexico", by Jennifer Howard, <https://abcbirds.org/migratory-connectivity-gulf-of-mexico/>

2017: Living Bird Magazine "The New Migration Science" by Scott Weidensaul, <https://www.allaboutbirds.org/the-new-migration-science/>

2016: The Victoria Advocate "Band on the run: Catching birds in mid-migration" by Sara Sneath, https://www.victoriaadvocate.com/news/local/band-on-the-run-catching-birds-in-mid-migration/article_e87d8fd6-4342-590b-85d3-9e234a4a9291.html

2015: Smithsonian Insider "Disease carrying ticks hitchhike into U.S. on migratory birds" <https://insider.si.edu/2015/10/disease-carrying-ticks-hitchhike-into-u-s-on-migratory-birds/>

2015: The Texas Tribune "Songbirds Bring Exotic Strain of Ticks to Texas" by Traci Badalucco, <https://www.texastribune.org/2015/11/24/texas-m-scientist-studies-tick/>

2015: Cool Green Science "Migratory Songbirds Transport New Ticks and Pathogens Across the Gulf" by Justine E. Hausheer, <https://blog.nature.org/science/2015/10/21/migratory-songbirds-transport-ticks-pathogens-gulf-disease/>

2015: Science World Report "Disease-Ridden Ticks May Hitch Rides into the United States on Migratory Birds" by Catherine Griffin <https://www.scienceworldreport.com/articles/30839/20151005/disease-ridden-ticks-hitch-rides-united-states-migration-birds.htm>

2015: Nature World News "Pathogen-carrying ticks are hitching rides from Central and South America on migratory birds" by Samantha Mathewson <https://www.natureworldnews.com/articles/17280/20151005/migratory-birds-transport-disease-carrying-ticks-new-study-shows.htm>

2015: Web MD and US News and World Report Health "Migrating Birds May Bring Exotic Ticks to U.S." by Robert Preidt <https://www.webmd.com/skin-problems-and-treatments/news/20151002/migrating-birds-may-bring-exotic-ticks-to-us>

2015: Cool Green Science "Blood, Birds, and Ticks" by Justine E. Hausheer <https://blog.nature.org/science/2015/05/13/blood-birds-ticks-migration-texas-birding-banding-songbird-mad-island/>