Michael C. Allen, Ph.D.

www.mikeallen-eco.com

An ecological researcher specializing in macroecology, biodiversity conservation, and data science.

Education

Institution	*Location*	*Major*	*Degree*	*Year*
Rutgers University	New Brunswick, NJ	Ecology & Evolution	B.Sc.*	2002
East Stroudsburg U.	East Stroudsburg, PA	Biology	M.Sc.	2008
Rutgers University	New Brunswick, NJ	Natural Resources Mgmt.	Ph.D.	2019

** with Certificate in Environmental Geomatics (GIS).*

Working

2026-pres. Head of Science, *Map of Life Solutions*, New Haven*
(*a Yale-backed biodiversity intelligence startup)
2025-2026. Lead Scientist, Biodiversity Informatics, *Map of Life Solutions, New Haven*
2024-pres. Founder, *Tsuga Biodiversity Insights LLC, New Jersey*
2022-2024. Research Assoc. (non-tenure track faculty), *Rutgers University*
2021. Researcher (4 mo. contract), *Cornell Lab of Ornithology, Cornell University*
2019-2022. Postdoctoral Researcher, *Rutgers University*
2018-2024. Researcher (contract), *Dorris Duke Charitable Foundation, New Jersey*
2015-2024. Adjunct Professor, *Rutgers University*
2013. Adjunct Professor, *Raritan Valley Community College*
2008-2018. Research Project Coordinator, *New Jersey Audubon, New Jersey*
2005-2008. Graduate Research Assistant, *East Stroudsburg University*
2003-2005. GIS analyst / Field Technician, *Rutgers University*

Independent consulting*:* ecological field studies, analytics, and technical review for various companies, governments, universities, and non-profits (state-level to international)

Awards

2024 – XPRIZE Rainforest Competition, 2nd Place team: Map of Life Rapid Assessments. Role: team lead, eDNA bioinformatics ($2M to team)
2024 – Eppley Foundation for Research, “Using eDNA to monitor an elusive, threatened marsh bird, the Black Rail (*Laterallus jamaicensis*)” ($24,635; PI)
2023 – Mid-Atlantic Panel on Aquatic Invasive Species, “Molecular analysis in support of Chinese pond mussel eradication in New Jersey” ($12,560; co-PI)
2023 – ExxonMobil Biomedical Sciences, Inc., “Development of eDNA-based biodiversity monitoring protocols for use within forest carbon offset markets” ($153,237; lead PI)
2023 – National Fish and Wildlife Foundation, “Risk evaluation and management plan for the invasive Chinese Pond Mussel in the Delaware Watershed” ($191,507; lead PI)
2022 – ExxonMobil Biomedical Sciences, Inc., “The role of environmental DNA in monitoring biodiversity co-benefits within carbon offset markets” ($101,278; PI)
2019 – New Jersey Sea Grant Consortium, “Mapping eastern black rail habitat to aid coastal conservation and climate resiliency planning” ($132,000; wrote grant as postdoc w/ PI)
2018 – USDA Northeast Climate Hub, Graduate Student Climate Adaptation Program Scholar
2017-2018 – Rutgers University, Professional Development Awards ($2,000; competitive)
2013 – New Jersey Department of Environmental Protection, Conserve Wildlife Grants (2 small awards totaling ~$12,000; w/ Dr. Nellie Tsipoura)
2007 – East Stroudsburg University, research grant ($5,500; w/ Dr. Terry Master)
2006 – Carnegie Museum of Natural History, Rea Internship for Applied Ecology ($6,000; competitive)
2005 – Rutgers University, Teuvo Airola Award for Excellence in Environmental Geomatics

Publications

(Google Scholar)

McHale E, Kwait R, **Allen MC**, Maslo B. (*accepted*). Dietary overlap reveals functional redundancy and complementarity between aerial insectivores in agricultural landscapes. *Ecology and Evolution*, TBD.

Green-Tkacenko L, **Allen MC**, Lockwood JL. (2026). Mapping the evidence for cumulative adverse effects of offshore wind installations on birds. *Environmental Management*, 76(9), 283.

Lockwood JL, **Allen MC**, Vastano A, Hernandez M, Eddy C, Vandegrift M, Kyle K, Truscott C. (2026). Terrestrial environmental DNA survey substantially improves detection of satellite populations for an invasive insect. *Biological Invasions*, 28(9), 193.

Partridge D, Curley SR, Winston T, Ramírez-Garofalo JR, **Allen MC**, Tobón E, Kerlinger P, Craig E, Elbin SB. (2026). Steep declines of colonial wading birds in northeastern North America's largest breeding population. *Conservation Science and Practice*, 8(7), e70316.

Pearson CF, DiBlasio M, Keller DH, Vile J, **Allen MC**, Styler Barry B. (2026). Long-term monitoring to quantify the success of river restoration through dam removal in the Paulins Kill NJ, USA. *Front. Ecol. Evol.* 14, 1771839.

Kyle KE, **Allen MC**, Hernandez M, Vastano AR, Nielsen AL, Weiser K, Dickey S, Lockwood JL (2026). Integrating Environmental DNA Into Early Detection Efforts for an Invasive Terrestrial Beetle. *Environmental DNA*, 8, e70262.

Green-Tkacenko L, **Allen MC**, Lockwood JL. (2025). An ecological vulnerability index to assess impacts of offshore wind facilities on migratory songbirds. *Journal of Applied Ecology* 62(7), 1611-1623.

Napoli MM, Sheehan J, **Allen MC**, Master TL, Clarke JR. (2025). Long-term response of Acadian flycatcher (*Empidonax virescens*) to hemlock (*Tsuga canadensis*) deterioration. *Northeastern Naturalist*, 32(2): 179-196.

Allen MC. (2025). Winter roosting and agonistic interactions of Dark-eyed Juncos (*Junco hyemalis*) at old Barn Swallow (*Hirundo rustica*) nests. *Wilson Journal of Ornithology*, 137(2), 240–248.

Allen MC, Lockwood JL, Ibanez R, Butler JD, Angle JC, Jaffe BD. (2024). eDNA offers opportunities for improved biodiversity monitoring within forest carbon markets. *Communications Earth & Environment*, 5, article 801.

Kyle KE, **Allen MC**, Siegert NW, Grabosky J, Lockwood JL. (2024). Design of an eDNA sampling method for detection of an endophagous arthropod pest species. *Neobiota*, 95, 149-164.

Vastano AR, **Allen MC**, Penca CJ, Stringham OC, Domingue MJ, Lockwood JL. 2024. Can environmental DNA be used within pest insect agricultural biosecurity? Detecting khapra beetle within stored rice. *Environmental DNA*, 6(4), Article e585.

Curley S, Ramírez-Garofalo J, **Allen MC**. 2024. Southern breeding populations drive declining migration distances in Arctic and subarctic geese. *Ecography*, 2024(8), article e07081.

Donlan CJ, Eusse-González D, Luque GM, Reiter ME, Ruiz-Gutierrez V, **Allen MC**, Johnston-González R, Robinson OJ, Fernández G, Palacios E, Valenzuela J. 2024. An impact evaluation of conservation investments targeting long-distance migratory species. *Conservation Biology*, 38(3), Article e14194.

Jensen OP, Vastano AR, **Allen MC**, Hernandez MF, Lockwood JL, Vasslides J, Weldon O. 2024. Migratory passage and run size of American shad and river herring in the Raritan River, New Jersey, USA. *Transactions of the American Fisheries Society*, 153(3), 289-300.

Allen MC, Lockwood JL, Kwait R, Vastano AR, Peterson DL, Tkacenko LA, Kisurin A, Stringham O, Angle JC, Jaffe BD. 2023. Using surface environmental DNA to assess arthropod biodiversity within a forested ecosystem. *Environmental DNA*, 5(6), 1652-1666.

Allen MC, Kwait R, Vastano A, Kisurin A, Zoccolo I, Jaffe BD, Angle JC, Maslo B, Lockwood JL. 2023. Sampling environmental DNA from trees and soil to detect cryptic arboreal mammals. *Scientific Reports*, 13, Article 180.

Allen MC, Lockwood J, Robinson, O. 2023. Integrating habitat models for threatened species with landownership information to inform coastal resiliency and conservation planning. *Environmental Conservation*, 50(1), 31-39.

Peterson D, **Allen MC**, Vastano A, Lockwood J. 2022. Evaluation of sample collection and storage protocols for surface eDNA surveys of an invasive terrestrial insect. *Environmental DNA*, 4(6), 1201-1211.

Kyle K, **Allen MC**, Dragon J, Bunnell JF, Reinert HK, Zappalorti R, Jaffe BD, Angle JC, Lockwood JL 2022. Combining surface and soil environmental DNA with artificial cover objects improves terrestrial reptile survey detection. *Conservation Biology*, 36, Article e13939.

Brzorad JN, **Allen MC**, Condeso E, Elbin S, Jennings S, Kays R, Lumpkin D, Schweitzer S, Tsipoura N, Maccarone AD 2022. Seasonal patterns in daily flight distance and space use

by Great Egrets (*Ardea alba*). *Waterbirds*, 44, 343-355.

Allen MC, Almendinger T, Barreca C, Lockwood J. 2022. A lidar-based openness index to aid conservation planning for grassland wildlife. *Avian Conservation and Ecology*, 17(1), 16.

Allen MC. 2021. Landfills as islands of grassland biodiversity: placing a next-generation habitat restoration plan in context. *Ecological Restoration*, 39, 284-287.

Allen MC, Nielsen AL, Peterson DL, Lockwood JL. 2021. Terrestrial eDNA survey outperforms conventional approach for detecting an invasive pest insect within an agricultural ecosystem. *Environmental DNA,* 3(6), 1102–1112.

Valentin R, Kyle K, **Allen MC**, Welbourne D, Lockwood J. 2021. The state, transport, and fate of aboveground terrestrial arthropod eDNA. *Environmental DNA*, 3(6), 1081–1092.

Allen MC, Lockwood, J. 2021. Mapping shifts in spatial synchrony in North American grassland birds to inform conservation planning. *Conservation Biology*, 35(3), 1029–1038.

Allen MC, Lockwood J, Burger J. 2021. Finding clarity in ecological outcomes using empirical integrated social-ecological systems: a case study of agriculture-dependent grassland birds. *Journal of Applied Ecology*, 58(3), 528-538.

Almendinger T, Van Clef M, Kelly JF, **Allen MC**, Barreca C. 2020. Restoring forests in central New Jersey through effective deer management. *Ecological Restoration,* 38(4), 246–256.

Birthisel SK, Soucy AR, Paul M, Clements R, White A, Eastman BA, Erickson W, Zhu L, **Allen MC**, Acquafredda MP, Mills SA, Dimmig G, Dittmer KM. 2020. Enabling emerging leaders to build climate solutions in agriculture, forestry, and aquaculture. *Climatic Change*, 162, 2181-2195.

Allen MC, Napoli MM, Sheehan J, Master TL, Pyle P, Whitehead DR, Taylor T. 2020. Acadian Flycatcher (*Empidonax virescens*), version 1.0. *In* Birds of the World (P. G. Rodewald, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.acafly.01.

Allen MC, Burger J, Lockwood J. 2019. Evaluation of unharvested refugia for grassland bird conservation within active hayfields. *Avian Conservation and Ecology*, 14(2), Article 15.

Barnes KB, Ernst N, Master T, **Allen MC**, Lausch R. 2018. Louisiana Waterthrush density and productivity in hemlock-dominated headwater streams: the influence of stream morphology. *Northeastern Naturalist*, 25, 587-598.

Allen MC 2018. Observations at an unusual urban Tree Swallow nest: an iron snag in an asphalt meadow. *Bird Observer*, 46, 244-248.

Allen MC, Napoli M, Sheehan J, Master TM, Pyle P, Whitehead DR, Taylor T. 2017. Acadian Flycatcher (*Empidonax virescens*). *In* The Birds of North America (P. G. Rodewald, editor). Cornell Lab of Ornithology, Ithaca, New York, USA.

Allen MC, Tsipoura N, La Puma D. 2017. Assessing the status of Eastern Black Rail (*Laterallus jamaicensis jamaicensis*) in New Jersey. *The Peregrine Observer*, 2017, 180-185.

Peters KA, Mizrahi DS, **Allen MC.** 2014. Empirical evidence for factors affecting searcher efficiency and scavenging rates at a coastal, terrestrial wind-power facility. *Journal of Fish and Wildlife Management*, 5, 330–339.

Allen MC, Peters KA. 2012. Nest survival, phenology, and nest-site characteristics of Common Nighthawks in a New Jersey Pine Barrens grassland. *Wilson Journal of Ornithology*, 124, 116-121.

Master TL, **Allen MA.** 2012. Acadian flycatcher (*Empidonax virescens*) nest tail structure and function in temperate forests. *The American Midland Naturalist*, 167, 136-149.

Allen MC, Sheehan J. 2010. Eastern hemlock decline and its effect on Pennsylvania's birds.

Pages 232-245 *in* S. K. Majumdar et al., eds. Avian Ecology and Conservation: Pennsylvania Perspective with National Implications. Easton: Pennsylvania Academy of Science.

Allen MC, Sheehan J, Master TL, Mulvihill R 2009. Responses of Acadian Flycatchers to hemlock woolly adelgid infestation in Appalachian riparian forests. *The Auk*, 126, 543-553.

Selected Technical Reports

Hernandez M, **Allen MC**, Eddy C, Vastano A, Lockwood JL. 2025. Early Detection and Rapid Response Management Plan for Silty Pond Mussel (*Sinanodonta woodiana*) in the Delaware River Watershed, USA. National Fish and Wildlife Foundation, Final Report. 51 Pages.

Allen MC, Campo M. 2020. Ecological monitoring and mitigation policies and practices at offshore wind installations in the United States and Europe. New Jersey Climate Change Alliance, New Brunswick, NJ. https://doi.org/doi:10.7282/t3-wn1p-cz80.

Allen MC, Almendinger T, Barreca C, Van Clef M, Lockwood J. 2019. Grassland bird ecology at a future conservation grazing site, Duke Farms. Submitted to Duke Farms Foundation, New York, NY.

Tsipoura N, **Allen MC**, Peters KA, Mizrahi DS 2014. Grassland Bird Productivity on Military Airfields in the Mid-Atlantic and Northeast Regions - Final Report (#11-408). Department of Defense Legacy Resource Management Program, Arlington, VA

Peters KA, **Allen MC**, Tsipoura N 2012. Avian Response to Grassland Management Around Military Airfields in the Mid-Atlantic and Northeast - Final Report (#10-381). Department of Defense Legacy Resource Management Program, Arlington, VA

Lathrop RG, **Allen MC**, Love A 2006. Mapping and assessing critical horseshoe crab spawning habitat of Delaware Bay. Center for Remote Sensing & Spatial Analysis, Rutgers University, New Brunswick, NJ

Presentations

(= presenting author)*

2026 – Facilitating conservation of biodiversity and ecosystem services in agriculture via biodiversity informatics. **Allen MC***. *Hot Topics webinar for student GradCAMP program, USDA Northeast Climate Hub (invited, remote)*

2026 – Data integration for robust eDNA-based species inventories. **Allen MC***, Ratnasingham S, Millar N, Coad L, Craine J, Jetz W. *Association for Tropical Biodiversity and Conservation, 62nd Annual Meeting, Xishuangbanna, China (remote)*

2025 – *Lycorma delicatula* Host Choice Using eDNA. Madalinska K*, **Allen MC**, Nielsen AL. *Entomological Society of America - Eastern Branch Meeting, Harrisburg, Pennsylvania*

2025 – Response of Acadian Flycatcher (*Empidonax virescens*) to Eastern Hemlock (*Tsuga canadensis*) Deterioration. Master TL*, Napoli M, **Allen MC**, Clarke J. *Northeastern Natural History Conference, Springfield, Massachusetts*

2024 – eDNA offers opportunities for improved biodiversity monitoring within forest carbon markets. **Allen MC**, Lockwood JL*, Ibanez R, et al. *American Geophysical Union, Washington, D.C.*

2024 – Using eDNA to monitor Black Rail (*Laterallus jamaicensis*) in New Jersey. **Allen MC***, Davis C, Smith J, Kisurin A, Lockwood JL, Dickey S. *Black Rail and Saltmarsh Sparrow New Jersey Meeting (remote)*

2024 - Evaluating Migratory Passage and Estimating Run Size of American Shad and River Herring in the Raritan River: Results of a Ten Year Study. Jensen OP, Vastano AR, **Allen MC**, Hernandez MF*, Lockwood JL, Vasslides JM, Weldon O. *Annual meeting, Mid-Atlantic Chapter of the American Fisheries Society, New Brunswick, New Jersey*

2024 – Can European habitat models inform invasion risk in North American ecosystems? A freshwater mussel case study. **Allen MC***, Hernandez MF, Mehler K, Labecka AM, Sîrbu I, Vastano A, Lockwood JL. *13th International Conference on Biological Invasions, Lisbon, Portugal (poster)*

2024 – Private land, public birds: social-ecological dynamics in grassland and saltmarsh ecosystems. **Allen MC***. *The Wildlife Society (New Jersey Chapter), Forsythe National Wildlife Refuge, New Jersey (invited)*

2024 – Leveraging eDNA and modeling to unveil rare and elusive species (and conservation outcomes). **Allen MC***. *Colloquium, Fordham University (invited)*

2024 – An ecological vulnerability index to assess impacts of offshore wind facilities on migratory songbirds of the Northwest Atlantic. Tkacenko L*, **Allen MC**, Lockwood J. *North American Congress on Conservation Biology, Vancouver*

2023 – Using surface environmental DNA to monitor arthropod biodiversity within a forested ecosystem. **Allen MC***, Lockwood J, Kwait R, et al. *GEO BON Global Conference: Monitoring Biodiversity for Action, Session: Biomolecular approaches for global biodiversity observation, Montreal (poster)*

2022 – Facilitating joint spatial planning for imperiled species and coastal resiliency with habitat models and social data. **Allen MC***, Lockwood J, Robinson, O. *Rutgers Climate Institute Symposium 2022, New Brunswick, New Jersey (poster)*

2022 – Examining population trends of Pacific shorebirds using eBird data. **Allen MC***, Ruiz-Gutierrez V., Robinson O. *Advanced Conservation Strategies, Packard Foundation, Webinar to hybrid meeting in Tijuana, Mexico (invited, remote)*

2022 – Examining population trends of Pacific shorebirds using eBird data. **Allen MC***, Ruiz-Gutierrez V., Robinson O. *Cornell Lab of Ornithology, Quantitative Ecology Group, Webinar to NGO conservation partners across the Pacific Americas flyway (invited, remote)*

2022 – On the trail of spotted lanternfly: an eDNA research update. **Allen MC***, Lockwood JL, Nielsen A. *SLF Research Virtual Discussion. US Dept. Agriculture (remote)*

2021 – Grassland birds in a dynamic human-dominated landscape. **Allen MC*.** *Monmouth County Audubon Society (invited, remote)*

2021 – Shorebird problems and coastal solutions: Full annual cycle conservation along dynamic shorelines. **Allen MC***, Robinson O, Ruiz-Gutierrez V, Lockwood, J, Hinojosa O, Donlan J. *Coastal Solutions Fellows Program, Cornell University (invited, remote)*

2021 – Facilitating joint spatial planning for imperiled species and coastal resiliency with habitat models and social data. **Allen MC***, Lockwood J. *Climate Bridge: Challenges of Climate Change for Spatial and Environmental Planning – An International Dialogue. German Consulate & Rutgers University, New Brunswick, New Jersey (poster)*

2021 – Data taming in invasion science: bridging the gap between models and implementation. Lockwood JL*, **Allen MC**. *Ecological Society of America Annual Meeting (remote)*

2021 – Grassland birds in a dynamic landscape: seeking conservation solutions from fields to biomes. **Allen MC*.** *Washington Crossing Audubon Society (invited, remote)*

2021 – Reconciling grassland birds and agriculture: seeking drivers and solutions from fields to biomes. **Allen MC***. *Brookdale Community College Biology Seminar (invited, remote)*

2021 – Ecological monitoring and mitigation policies and practices at offshore wind installations in the United States and Europe. **Allen MC***, Campo M. *2021 Partners in Science Workshop: Identifying Ecological Metrics and Sampling Strategies for Baseline Monitoring During Offshore Wind Development, Rutgers University Center for Ocean Observing Leadership (invited, remote)*

2020 – Modeling Black Rail habitat suitability in New Jersey saltmarshes. **Allen MC***, Lockwood J. Invited talk for *Cornell Lab of Ornithology's Conservation Science Group, Cornell University (invited, remote).*

2020 – Ecological monitoring and mitigation policies and practices at offshore wind installations in the United States and Europe. **Allen MC***, Campo M. *Electric Power Research Institute (invited, remote)*

2020 – Ecological monitoring and mitigation policies and practices at offshore wind installations in the United States and Europe. **Allen MC***, Campo M. *Multiple briefing presentations for NJ Dept. Environmental Protection, NJ Board of Public Utilities, and several offshore wind regional working groups (remote)*

2020 – Facilitating synergy between imperiled species conservation and coastal resiliency planning. **Allen MC***, Lockwood J. *National Coastal Estuarine Summit (remote poster)*

2020 – Optimizing eDNA surveys for terrestrial insects: Field calibration and simulation inform planning and uncertainty. **Allen MC***, Lockwood J. *Ecological Society of America, 105th Annual Meeting (remote)*

2020 – Spot mapping of grassland birds helps reveal habitat relationships: two years of monitoring at Duke Farms. **Allen MC***, Almendinger T, Barreca C, Van Clef M, Lockwood J. *NYC Grasslands Conference, New York City*

2020 – Mapping eastern black rail habitat to aid climate resiliency and conservation planning. **Allen MC***, Lockwood J. *Delaware Wetlands Conference, Wilmington, Delaware (poster)*

2019 – When is eDNA a practical survey tool for wildlife? **Allen MC***, Lockwood J. *Harbor Herons & Other Waterbirds of the Greater NY/NJ Harbor Working Group, 15th Annual Meeting, New York City*

2019 – Structural equation modelling for social-ecological systems. **Allen MC***. *Central Arizona Phoenix Long Term Ecological Research Program, University of Arizona (invited)*

2019 – Leveraging variation in spatial synchrony to illuminate grassland bird population dynamics. **Allen MC***, Lockwood J. *Ecological Society of America, 104th Annual Meeting, Louisville*

2019 – Leveraging variation in spatial synchrony to illuminate causes of grassland bird declines. **Allen MC***, Burger J, Lockwood J. *Columbia-Rutgers-Princeton-Penn-Yale Annual EEB Grad Student Symposium, Princeton University*

2019 – Social-ecological system frameworks for grassland bird conservation. **Allen MC***, Lockwood J. *Drongos Conservation Plenary, hosted by David Wilcove's Lab, Princeton University*

2019 – Effects of forest size and distance to edge on bird richness and abundance in the New Jersey Piedmont. Tsipoura N, **Allen MC***. *Ecological Changes in Northern New Jersey Forests: Implications for Effective Stewardship, symposium sponsored by New Jersey Academy of Science and Raritan Valley Community College, Somerville, New Jersey*

2018 – Checking in on Edward the Great Egret from Staten Island. **Allen MC***, Tsipoura N, Brzorad J, Kays R, Maccarone A, Schweitzer, S. *13th Annual Meeting of the Greater New York/New Jersey Harbor Herons and Waterbirds Working Group of the Hudson River Foundation, New York City*

2018 – Grassland bird habitat associations and competitive interactions at a future conservation grazing site (Duke Farms). **Allen MC***, Almendinger T, Barreca C, Van Clef M, Lockwood J. *New Jersey Chapter of The Wildlife Society, Assunpink, New Jersey*

2018 – Making hay while the sun shines: how climate can affect farmland bird populations by influencing farmer decisions. **Allen MC***, Lockwood JL, Burger J. *USDA Northeast Climate Hub's 2018 GradCAP Webinar Series (remote)*

2018 – Drivers of grassland bird population declines in the eastern United States. **Allen MC***, Burger J, Lockwood JL. *Student Conference on Conservation Science, American Museum of Natural History, New York City*

2018 – Understanding agricultural policy levers for grassland bird conservation in North America. **Allen MC***, Burger J, Lockwood JL. *North American Congress on Conservation Biology, Toronto*

2018 – Understanding agricultural and climatic correlates of grassland bird population fluctuations. **Allen MC***, Lockwood JL, Burger J. *Northeastern Natural History Conference, Burlington, VT*

2018 – Conservation of grassland birds on agricultural lands of the eastern U.S. **Allen MC**, Burger J, Lockwood JL. *3rd Annual Grasslands of New York City and Surrounding Region Workshop, New York City*

2017 – Where's Edward? Three-year movements of a NYC Great Egret tracked with GPS/GSM. **Allen MC***, Tsipoura N, Brzorad J, Kays R, Maccarone A, Schweitzer, S. *12th Annual Meeting of the Greater New York/New Jersey Harbor Herons and Waterbirds Working Group of the Hudson River Foundation, New York City*

2017 – Evaluation of a low-cost management option for grassland bird conservation in active hayfields. **Allen MC***, Burger J, Lockwood J. *New Jersey Chapter of The Wildlife Society, Assunpink, New Jersey*

2016 – Coastal impoundments of the Northeast and Mid-Atlantic: A regional approach to mapping and assessing value to birds and vulnerability to climate change. **Allen MC***, Tsipoura N, Schrass K, Schotland T, Kane A, Miller J, Emerson C, Frost C, Galbraith H, Mizrahi D. *40th Annual Meeting of the Waterbird Society, New Bern, North Carolina (poster)*

2016 – Assessing the status of Eastern Black Rail (*Laterallus jamaicensis jamaicensis*) in New Jersey. Mylecraine K, **Allen MC***, Freiday D, Crewe M, Tsipoura N, La Puma D, Mizrahi D, Davis C. *New Jersey Chapter of The Wildlife Society, Assunpink, New Jersey*

2016 – Bird use of coastal impoundments in the Mid-Atlantic and Northeast: A preliminary analyses using eBird data. **Allen MC***, Tsipoura N. *Invited lecture to vertebrate zoology course, Raritan Valley Community College*

2016 – Coastal impoundments in a changing climate: a regional GIS catalog and Lidar vulnerability analyses. **Allen MC***, Tsipoura N. *Invited lecture to Urban Sustainability course, Brooklyn College, New York City*

2016 – Monitoring grassland bird populations in New Jersey and the Northeast: Citizen science and airfield research 2004-2013. Tsipoura N, **Allen MC***, Peters K, Mylecraine K, Mizrahi D. *Grasslands of New York City: A workshop hosted by NYDEC, New York City*

2015 – Climate change and managed wetlands in the Northeast and Mid-Atlantic. **Allen MC***, Tsipoura N. *Greater New York/New Jersey Harbor Herons and Waterbirds Working Group of the Hudson River Foundation, 11th Annual Meeting, New York City*

2015 – Assessing forest health in central New Jersey: community college students and citizen science. Kelly JF, Tsipoura, N, **Allen MC***, Hafstad J, Severino A. *New Jersey Native Plant Society Annual Conference, Somerville, New Jersey*

2015 – Refugia as a conservation tool for hayfield insects and their vertebrate predators. **Allen MC***, Burger J. *Student Conference on Conservation Science, American Museum of Natural History, New York City (poster)*

2014 – Great egret roosting dynamics in suburban New York City. **Allen MC***, Tsipoura N, Elbin S, Weseloh DVC. *Greater New York/New Jersey Harbor Herons and Waterbirds Working Group 10th Annual Meeting, New York City*

2014 – Grassland bird persistence in active hayfields: using refugia to mitigate nest losses. **Allen MC***, Burger J. *Student Conference on Conservation Science, American Museum of Natural History, New York City (poster)*

2014 – Monitoring birds and forest health in New Jersey's Piedmont using citizen science. Tsipoura N, Kelly J, **Allen MC***, Wenzel K. *Ecology, Raritan Valley Community College (invited)*

2013 – Birds, planes, and conservation: grassland bird research on airfields. **Allen MC***, Peters K, Tsipoura N, Mizrahi D. *Ornithology 323, Rutgers University (invited)*

2013 – Egret Roost Mapping and Monitoring in the NY/NJ Metro Area. **Allen MC***, Tsipoura N, Elbin S, Weseloh DVC. *Greater New York/New Jersey Harbor Herons and Waterbirds Working Group 9th Annual Meeting, New York City*

2013 – Understanding urban waterbird roosts. **Allen MC***, *University Outing Club, East Brunswick, New Jersey*

2012 – The Great Egret Roost Blitz 2012: Mapping and Monitoring Autumnal Waterbird Roosts in the NY/NJ Metro Area. **Allen MC***, Tsipoura N, Elbin S, Rowden J, Weseloh DVC. *Greater New York/New Jersey Harbor Herons and Waterbirds Working Group 8th Annual Meeting, New York City*

2008 – Potential Effects of Hemlock Decline on Acadian Flycatcher (*Empidonax virescens*) Populations in the Northeastern U.S. **Allen MC***, Sheehan J, Master T. *4th International Partners in Flight Conference, McAllen, Texas*

2008 – Is there adaptive significance to nest tails in Acadian Flycatchers? **Allen MC***, Master T. *84th Annual Meeting of the Pennsylvania Academy of Science, Grantville, Pennsylvania*

2007 – Comparing Acadian flycatcher (*Empidonax virescens*) breeding biology in healthy versus adelgid infested hemlock stands. **Allen MC***, Sheehan, J, Master T. *88th Meeting of the Wilson Ornithological Society, Boston*

2007 – Comparing Acadian flycatcher (*Empidonax virescens*) breeding biology in healthy versus adelgid infested hemlock stands. **Allen MC***, Sheehan, J, Master T. *83rd Annual Meeting of the Pennsylvania Academy of Science, Monroeville, Pennsylvania*

2006 – Interpreting vegetation changes and fire regimes in the NJ Pine Barrens using historical aerial photography. **Allen MC***, Lathrop R. *2nd Annual Lehigh Valley Ecology and Evolution Symposium, Lehigh University*

2006 – Interpreting vegetation changes and fire regimes in the NJ Pine Barrens using historical aerial photography. **Allen MC***, Lathrop R. *82nd Annual Meeting of the Pennsylvania Academy of Science, Grantville, Pennsylvania*

Teaching Experience

Adjunct Professor:

Ornithology (Rutgers University, 300-level):
10 years as professor of record (2015-2024), ~ 500 total students

Principles of Natural Resources Management (Rutgers University, 200-level)
1 semester fill-in appointment, fall 2021
~ 50 students, including applied field research

Ornithology (Raritan Valley Community College, 200-level)
spring 2013, ~ 20 students

Teaching assistant:

2014-2019. Led lab sections for four courses at Rutgers University
Plant Ecology, Vertebrate Zoology, Behavioral Biology, Ornithology

Workshops etc.:

2022. Master Ornithologist' minicourse: Understanding Spring Migration (Duke Farms)

2008-2018. led many workshops, events, and walks as Research Project Coordinator for New Jersey Audubon.

Mentoring & Service

<u>Peer review (30 journals):</u>

Environmental DNA (12 reviews), Avian Conservation and Ecology (5), Biological Invasions, (5), Natural Areas Journal (3), PLoS ONE (3), Proceedings of the Royal Society B (3), Ecology and Evolution (2), Ardea (2), Ecological Economics (2), Ecosphere (2), F1000 Research (2), Rangeland Ecology & Management (2), Sustainability (2); Global Change Biology (1), Animals, Conservation Science and Practice, Ecological Indicators, Environmental Science and Pollution Research, European Journal of Soil Biology, Fishes, Mammalian Biology, Molecular Ecology, Molecular Ecology Resources, Neobiota, Ornithological Applications, Rutgers Cooperative Extension Factsheets (2), Urban

Naturalist, Transportation Research Part D, Water.

Peer review (regulatory):
US Fish and Wildlife Service Species Status Assessment (Black Rail)

Peer review (grants):
California State University Council on Ocean Affairs, Science & Technology (CSU COAST), NOAA New Jersey SeaGrant (2), US Dept. of the Army Research Laboratory (1), Pennsylvania Academy of Science (3), non-US governments (1)

Affiliations
Member, XPRIZE Rainforest 2nd place finisher team: Map of Life Rapid Assessments (2023-2024)
Member, Silty Pond Mussel Working Group (2024)
Member, Rutgers Offshore Wind Energy Collaborative (2024)
Administrator, coordinated departmental access to Rutgers high-performance computing cluster (2021-2024) - 2 nodes (52 cores, 128 GB RAM each), 19 TB shared storage
Member, Blue Economy Convergence Accelerator, Ecology Team, NSF-funded interdisciplinary team, PI: Malin Pinsky (2021-2022)
Visiting researcher, Cornell Lab of Ornithology, Conservation Science Group (2021)
Member, Ecological Monitoring of Offshore Wind Energy Workgroup, NJ Climate Change Alliance (2020)
Climate Adaptation Scholar, USDA Northeast Climate Hub, Graduate Climate Adaptation Program (2018-2019; competitive program)
Member, New York Regional Grassland Bird Working Group (participant)
Member, NWF/NJ Audubon Coastal Impoundment Resiliency Working Group (member)
Member, New York/New Jersey Harbor Herons and Waterbirds Working Group (participant)
Member, Kittatinny Coalition, science advisory team (2015-2016)

Mentoring & Outreach
2026. **Quoted in Science magazine** regarding the evolution of nest adornments in birds. www.doi.org/10.1126/science.zke6u9z
2025. **Leader**, bird walk for New Jersey Society of Women Environmental Professionals (NJSWEP), *Great Swamp NWR, New Jersey*
2024. **Graduate committee member** for MS student: Black Rail conservation & habitat mapping (committee chair: Dr. Richard Lathrop), *Rutgers University*
2023. **Advisor** for Landscape Architecture PhD student independent study: monitoring bird window collisions, *Rutgers University*
2022. **Instructor** for 'Master Ornithologist' minicourse: "Understanding Spring Migration", *Duke Farms, Doris Duke Foundation, New Jersey*
2021. **Committee member** on undergraduate honors thesis: terrapin road mortality (chair: Dr. Brooke Maslo), *Rutgers University*.
2018. **Leader**, public bird walk, *Oros Preserve, New Jersey*
2018. **Mentor** for undergraduate research project: effects of hay harvest on insects, *Rutgers University*.
2017. **Leader**, public bird walks & coordinated the bird unit for a 'bioblitz'; *Oros Preserve, NJ*

2016. **Mentor** for high school honors project: Black Rail population declines in New Jersey, *Ocean County Vocational Technical School, New Jersey*
2015. **Co-author**, popular article for NJ eBird website: “The Birds of Linden’s Hawk Rise Sanctuary”
. **Leader**, public bird walk for *Township of Readington, New Jersey*
. **Guest speaker**, led service on migratory birds, *Skylands Unitarian Universalist Fellowship, Hackettstown, NJ*
. **Curator** and active participant in the *Rutgers University* ‘Personal Bioblitz’
2014. **Leader**, public bird walk for Rutgers University’s Hutcheson Memorial Forest