

Brooke Maslo, Ph.D.
Assistant Research Professor
Department of Ecology, Evolution, and Natural Resources
Rutgers, The State University of New Jersey
14 College Farm Road, New Brunswick, NJ 08901
848.932.5572, brooke.maslo@rutgers.edu

EDUCATION

2010 Doctor of Philosophy, Graduate Program in Ecology & Evolution
Rutgers, The State University of New Jersey

Dissertation: *Evidence-Based Recommendations for Atlantic Coast Piping Plover (*Charadrius melodus*) Conservation and Habitat Restoration*. Advisor: Steven N. Handel

2001 B.S. in Engineering, Biological Resources Engineering, University of Maryland

PROFESSIONAL HISTORY

2012 – present Assistant Research Professor, Department of Ecology, Evolution and Natural Resources, Rutgers, The State University of New Jersey

2012 – present Extension Specialist in Wildlife Ecology, Rutgers Cooperative Extension, New Jersey Agricultural Experiment Station

2011 – 2012 Managing Editor, *Ecological Restoration*
University of Wisconsin Press

2010 – 2012 Research Specialist, Center for Urban Restoration Ecology,
Rutgers, The State University of New Jersey

2010 – 2012 Senior Ecologist, Green Shield Ecology, Inc.
Bridgewater, NJ

2010 – 2012 Adjutant Faculty, Department of Ecology, Evolution and Natural Resources, Rutgers, The State University of New Jersey

2007 – 2009 Seasonal Field Technician
Endangered and Nongame Species Program
NJ Division of Fish and Wildlife

2004 – 2009 Graduate Assistant/Teaching Assistant
Graduate Program in Ecology & Evolution
Rutgers, The State University of New Jersey

2001 – 2004 Engineer, GZA GeoEnvironmental, Inc., Wayne, NJ

2000 Environmental Scientist, F.X. Browne, Inc., Lansdale, PA

PEER REVIEWED JOURNAL ARTICLES

- submitted* Cohen, J., A. Hecht, K.F. Robinson, E.E. Osnas, A.J. Tyre, and **B. Maslo**. Structured decision making for the use of predator exclosures to recover a threatened species, the Atlantic Coast piping plover.
- submitted* Burkhalter, J.C., J.L. Lockwood, **B. Maslo**, and K. Leu. Using realistic measures of cost greatly increases conservation efficiencies within heavily urbanized landscapes.
- submitted* Valentin, R., **B. Maslo**, and D.M. Fonseca. A high-sensitivity TaqMan assay to find DNA traces of the brown marmorated stink bug, an important agricultural pest.
- submitted* Maslo, B., R. Valentin, K. Leu, K. Kerwin, A. Bevan, G. Hamilton, and D.M. Fonseca. Native bat preys heavily on an invasive agricultural pest.
- in review* Gallos, L.K., **B. Maslo**, and N.H. Fefferman. The Impact of Social Network Disintegration on Population Viability.
- in review* Zheng, M., L. Zhou, **B. Maslo**, N. Zhao, and W. Xu. Prey dynamics affecting foraging behavior of hooded cranes (*Grus monacha*) over spatio-temporal scales.
- 2015 Maslo, B., M. Valent, J.F. Gumbs, and W.F. Frick. Conservation Implications of Ameliorating Survival of Little Brown Bats with White-Nose Syndrome. *Ecological Applications*. (in press)
- 2015 Maslo, B. and N.H. Fefferman. Evolutionary Rescue Affects Viability of Declining Populations: A General Model and Case Study Using Bats and White-nose Syndrome. *Conservation Biology*. (in press)
- 2015 Maslo, B., J.L. Lockwood, and K. Leu. Land ownership patterns associated with declining northeastern forest birds. *Environmental Conservation*. (in press)
- 2014 Schlacher, T.A., D.S. Schoeman, A.R. Jones, J.E. Dugan, D.M. Hubbard, O. Defeo, C.H. Peterson, M.A. Weston, **B. Maslo**, A.D. Olds, F. Scapini, R. Nel, L.R. Harris, S. Lucrezi, M. Lastra, C. Huijbers, and R.M. Connolly. Metrics to assess ecological condition, change, and impacts in sandy beach ecosystems. *Journal of Environmental Management* 144: 322-335.
- 2012 Maslo, B., J. Burger, and S.N. Handel. Modeling foraging behavior of piping plovers to evaluate habitat restoration success. *Journal of Wildlife Management* 76:181-188.

- 2011 Maslo, B., S.N. Handel, and T. Pover. Restoring beaches for Atlantic Coast piping plovers (*Charadrius melodus*): a classification and regression tree analysis of nest-site selection. *Restoration Ecology* 19(201): 194-203.
- 2009 Maslo, B. and J.L. Lockwood. Evidence-based decisions on the use of predator exclosures in shorebird conservation. *Biological Conservation* 142: 3213-3218.

BOOKS

- 2014 Maslo, B. and J.L. Lockwood (eds). *Coastal Conservation*. Cambridge UK: Cambridge University Press.

BOOK CHAPTERS

- 2014 Maslo, B. Cascading effects of global oyster reef loss on the health of estuaries. In **Maslo, B.** and J.L. Lockwood (eds), *Coastal Conservation*. Cambridge UK: Cambridge University Press.
- 2014 Lockwood, J.L. and **B. Maslo**. The challenge of biodiversity conservation in coastal ecosystems. In **Maslo, B.** and J.L. Lockwood (eds), *Coastal Conservation*. Cambridge UK: Cambridge University Press.
- 2014 Niles, L.J., A.D. Dey, and **B. Maslo**. Overexploitation of marine species and its consequences for terrestrial biodiversity along coasts. In **Maslo, B.** and J.L. Lockwood (eds), *Coastal Conservation*. Cambridge UK: Cambridge University Press.
- 2014 Lockwood, J.L. and **B. Maslo**. A research agenda for coastal biodiversity conservation. In **Maslo, B.** and J.L. Lockwood (eds), *Coastal Conservation*. Cambridge UK: Cambridge University Press.

EXTENSION PUBLICATIONS

- 2014 B. Maslo. Wildlife management. In Rector, P., C.C. Obropta, and J.R. Brown. *Rutgers River Friendly Business Program Morris County Program Guidance*, E346b. New Brunswick, NJ: Rutgers NJAES Cooperative Extension.
- 2013 Maslo, B. and K. Leu. The facts about bats in New Jersey. Cooperative Extension Fact Sheet FS1207. Rutgers, The State University of New Jersey, New Brunswick, NJ.
- 2013 Maslo, B. and C. Lewis. Canada goose ecology and impacts in New Jersey. Cooperative Extension Fact Sheet FS1214. Rutgers, The State University of New Jersey, New Brunswick, NJ.

- 2013 Maslo, B. and C. Lewis. Strategies for resident Canada goose control and management in New Jersey. Cooperative Extension Fact Sheet FS1217. Rutgers, The State University of New Jersey, New Brunswick, NJ.
- 2013 Maslo, B. and S. Wehman. Living with black bears in New Jersey. Cooperative Extension Fact Sheet E345. Rutgers, The State University of New Jersey, New Brunswick, NJ.
- 2013 Maslo, B. and S. Wehman. An overview of white-tailed deer status and management in New Jersey. Cooperative Extension Fact Sheet FS1202. Rutgers, The State University of New Jersey, New Brunswick, NJ.

PUBLICATIONS (NON-PEER REVIEWED)

- 2014 Hecht, A., K.F. Robinson, E.E. Osnas, J. Cohen, A.J. Tyre, D., Brinker, C. Davis, M. Hake, L. Johnson, E. King, A. Kocek, **B. Maslo**, S. Melvin, T. Pover, L.M. Zitske, D.C. Brewer, and F. Johnson. Balancing demographic benefits and risks using predator exclosures on U.S. Atlantic Coast piping plover nests. United States Fish and Wildlife Service.
- 2012 Expert Panel Member for *Assessment of the Vulnerability of New Jersey's Habitat and Wildlife to Climate Change*. A project led by the Rutgers Edward J. Bloustein School of Planning and Public Policy for the New Jersey Department of Environmental Protection.
- 2012 Maslo, B. The perennial meadow as an alternative to turf lawns. Landscape Stewardship Series, Center for Urban Restoration Ecology, Rutgers University. www.dukefarms.org/en/Resources/Landscapes/Perennial-Meadow1/.
- 2012 Maslo, B. Critical plant invasives and their removal. Landscape Stewardship Series, Center for Urban Restoration Ecology, Rutgers University. www.dukefarms.org/en/Resources/Landscapes/Plant-Invasives/.
- 2011 Handel, S.N., **B. Maslo**, and A. Diehl. Carthay Elementary School: site analysis. Proposition 84: Urban Greening Planning Grant. Los Angeles Unified School District, Los Angeles, CA.
- 2011 Handel, S.N., **B. Maslo**, and A. Diehl. Berendo Middle School: site analysis. Proposition 84: Urban Greening Planning Grant. Los Angeles Unified School District, Los Angeles, CA.
- 2011 Handel, S.N., **B. Maslo**, and A. Diehl. Manual Arts High School: site analysis. Proposition 84: Urban Greening Planning Grant. Los Angeles Unified School District, Los Angeles, CA.

- 2010 Maslo, B. Eagle Rock Reservation forest regeneration program: 2011 ecological health report. Essex County Parks, County of Essex, NJ.
- 2010 Maslo, B. Eagle Rock Reservation forest regeneration program: wetland delineation report. Essex County Parks, County of Essex, NJ.
- 2010 Maslo, B. Eagle Rock Reservation forest regeneration program: deer exclosure management plan. Essex County Parks, County of Essex, NJ.

ACADEMIC PRESENTATIONS

- 2014 *The Evolutionary Rescue Potential for Bats Infected with White-Nose Syndrome.* 44th Annual North American Society for Bat Research Symposium, Albany, NY.
- 2014 *Short-term Management of Bat Populations Infected with White-nose Syndrome.* 2014 White-nose Syndrome Workshop, St. Louis, MO.
- 2014 *Management Implications for the Potential Evolutionary Impacts of White-nose Syndrome in Infected Bat Populations.* The Wildlife Society Annual Meeting, Pittsburgh, PA.
- 2014 *Rapid Response Protocol for Protecting Newly Created Beach Habitat after Severe Coastal Storms.* The Wildlife Society – NJ Chapter Fall Meeting, Jackson, NJ.
- 2014 *Implications of Post White-nose Syndrome Survival on Population Viability of Little Brown Bats.* Ecological Society of America 99th Annual Meeting, Sacramento, CA.
- 2014 *Land Ownership Patterns Associated with Declining Forest Species in New Jersey.* Joint meeting of The Wildlife Society – NJ Chapter and the Society of American Foresters, Oak Ridge, NJ.
- 2014 *Survival of Little Brown Bats (*Myotis lucifugus*) in the Wake of White-Nose Syndrome.* Northeast Bat Working Group – Annual Meeting. Clinton, NJ.
- 2012 *Enhancing the Design of Public Parks through Ecological Restoration.* Presented to the Calgary Land Municipal Trust. Calgary, AB, Canada.
- 2011 *Practical Methods for Evidence-Based Wildlife Habitat Restoration Design,* Society for Ecological Restoration International World Conference on Ecological Restoration. Merida, Mexico.
- 2010 *Modeling Foraging Behavior to Evaluate Restoration Success for the Federally Threatened Atlantic Coast Piping Plover.* Restore America's Estuaries National Conference. Galveston, Texas.

- 2010 *Ecological Benefits of Restoration of Inland Urban Wetlands*. Presented to the City of Villahermosa Engineering Board. Villahermosa, Tabasco, Mexico.
- 2010 *Restoring Beaches for Atlantic Coast Piping Plovers (Charadrius melodus): a CART Analysis of Nest-Site Selection*. Society of Ecological Restoration Mid-Atlantic Chapter Annual Meeting. New Brunswick, New Jersey.
- 2010 *Practical Guidelines for restoring Atlantic Coast piping plover nesting habitat*. Invited presentation, United States Fish and Wildlife Service Piping Plover – Least Tern Workshop. Shepherdstown, WV.
- 2009 *Evidence-based decisions on the use of predator exclosures in shorebird conservation*. The Waterbird Society Annual Meeting. Cape May, NJ.

INVITED TALKS

- 2015 PUBLIC LECTURE - *Resolving Conflicts Between Beach-nesting Birds and Coastal Residents*. Jacques Cousteau National Estuarine Research Reserve, Tuckerton, NJ.
- 2015 *The Role of Bats in the Control of Brown Marmorated Stink Bugs*. Conservation Innovation Grant Information Meeting, United States Department of Agriculture – Natural Resource Conservation Service, Pennington, NJ.
- 2014 PUBLIC LECTURE – *The Importance of Bats and the Threats They Face from White-Nose Syndrome*. Brookdale Biology Departmental Seminar, Lincroft, NJ.
- 2014 *Evidence-based Framework for Protecting Beach-nesting Bird Habitat in the Wake of Severe Coastal Storms*. SEAFWA Shorebird Symposium, 68th Annual Conference of the Southeastern Association of Fish & Wildlife Agencies, Destin, FL.
- 2013 *Habitat Restoration Alternatives for Shorebirds: Refining the Design Parameters*. Society of Ecological Restoration – Mid-Atlantic Chapter Field Meeting, Cape May, NJ.
- 2012 *Modeling Foraging Behavior of Piping Plovers to Evaluate Habitat Restoration Success*. The Wildlife Society – NJ Chapter Spring Meeting, Jackson, NJ.
- 2009 *Evaluating 10 Years of Predator Exclusion Methods for NJ Piping Plovers (Charadrius melodus)*. New Jersey Beach Nesting Bird Partners meeting, Tuckerton, NJ.

EXTENSION PRESENTATIONS

- 2015 PUBLIC LECTURE - *The Piping Plover: Recent Research on the Impact of Hurricane Sandy in New Jersey and on Migration and Wintering in the Bahamas*. Long Beach Island Foundation of Arts and Sciences, Science Saturdays, Long Beach Township, NJ.
- 2014 *Management of Wildlife Damage for Gardens and Landscape Plantings*. Rutgers Master Gardener Course, Totowa, NJ.
- 2014 *Why We Should Promote Wildlife Habitat on our Properties*. Rutgers Master Gardener Course, Totowa, NJ.
- 2013 *Ecological and Economic Benefits of Increasing Wildlife Habitat on Residential and Corporate Landscapes*. Master Gardener Course, Cumberland County, NJ.
- 2013 *Echolocation in Bats*. Rutgers 4-H Science Saturdays, New Brunswick, NJ.
- 2012 *Ecosystem Services and Their Link to Biodiversity*. Master Gardener Course, Gloucester County, NJ.
- 2012 *Creating Sustainable Landscapes for the Benefit of Wildlife*. Master Gardener Course, Sussex County, NJ.
- 2012 *Nature Wars: The clash Between the Conservation and Management of Wildlife Populations in New Jersey*. Presented to the NJ Agricultural Experiment Station Board of Directors, Bordentown, NJ.

EXTENSION SERVICES

- 2015 Ecological education series (5 guided walks), Ernie Oros Nature Preserve, Woodbridge Township, NJ.
- 2014 Ecosystem assessment of publically-owned property for potential designation as Pine Barrens habitat, Woodbridge Township, NJ.
- 2014 *Bats are Cool!* Educational Lesson and Field Trip, Liberty Lake Day Camp, Columbus, NJ.
- 2014-present Wildlife habitat monitoring for Geosyntec, Inc., Burlington, NJ.
- 2014 Recommendations for native plantings for the Sourland Mountain Preserve restoration project. Sourland Conservancy.
- 2013 Consultant for bat exclusion project, Tranquility Methodist Church, Green Township, NJ

2012-present *Got Bats? Initiative* An online reporting system for NJ homeowners to report bat roosts on their property and obtain information and guidance to resolve human-bat conflict.

2012-present *Bat House Distribution Program* Provisioning of bat houses to homeowners who evict bats from their homes.

GRANTS

2014 United States Fish and Wildlife Service. *Protection of Critical Beach-Nesting Bird Habitats in the Wake of Severe Coastal Storms*. \$105,000.

2014 GeoSyntec, Inc. *Evaluation of Habitat Restoration Activities*. Burlington, NJ. \$6,811.

2012 USDA – NRCS Conservation Innovation Grant, *Analyzing Bat Guano for Agricultural Pests to Reduce Brown Marmorated Stink Bug Populations and Improve Bat Habitat on New Jersey Farms*. \$69,050.

2012 Faculty Resource Development Grant, Rutgers University to fund the conversion of an academic course for hybrid delivery. \$3500

2008 Small Grants for Graduate Student Research in Ecology and Evolution, Rutgers University for *Are Constructed Tidal Ponds Suitable Foraging Habitat for Piping Plovers?* \$900.

SERVICE

2014 Editorial Board Member, *Ecosphere*. Ithaca, NY: ESA Publications.

2014 Invited Participant, White-nose Syndrome Workshop, United States Fish and Wildlife Service, St. Louis, MO, Sept. 8-12.

2014 Invited Participant, Regional Piping Plover Recovery Field Assessment and Meeting, United States Fish and Wildlife Service, southern NJ, July 28-30.

2014-present Invited Member, White-nose Syndrome Conservation and Recovery Working Group

2014-present Invited Member, White-Nose Syndrome State/Federal/Tribal/Stakeholder Working Group

2014-present Editorial Board Member, *Urban Naturalist*. Steuben, ME: Eagle Hill Publications

2010-present Reviewer for several journals, including *Biological Conservation*, *Conservation Letters*, *Biodiversity and Conservation*, *Diversity and Distributions*, *Marine Ecology*, and *Waterbirds*

AWARDS

2014 *Women in Wildlife Education Award*. Conserve Wildlife Foundation of New Jersey.

2014 *Merit Award in Landscape Architectural Communication*. American Society of Landscape Architects, NJ Chapter Award.

2014 *2014 AIA NY Merit Award*. American Institute of Architects New Yorks for “St. Patrick’s Island Project.” Team ecologist.

2012 *Green Urban Planning Award*. The Chicago Athenaeum Museum of Architecture and Design, for “Full Circle: St. Louis City+Arch+River” landscape design. Team ecologist.

2012 *Outstanding Faculty/Staff Member of the Month*. The Scarlet Knights Chapter of The National Residence Hall Honorary.

TEACHING EXPERIENCE

2012 – present *Practicum in Wildlife Management*, Rutgers University, faculty advisor

2012 - present *Research Problems in Ecology, Evolution and Natural Resources* – Rutgers University, faculty advisor

2011 - present *Wildlife Ecology and Conservation* – Rutgers University, course instructor

2010 - present *Animal Behavior* – Rutgers University, course instructor

2007 *Behavioral Biology* – Rutgers University, teaching assistant

2006-2009 *General Biology* – Rutgers University, lab instructor

UNDERGRADUATE RESEARCH

2013-present Rachael Sacatelli, *Trends in Bat Occurrence after White-nose Syndrome*

- 2013-present Elizabeth Newton, *Vulnerability of New Jersey's Agricultural Lands to Damage by Black Bears*
- 2013 Chloe Lewis, *Status and Management of Canada Geese in NJ*
- 2013 Lori Huff, Faculty Sponsor for work study with USDA- Animal and Plant Health Inspection Service, Canada goose management
- 2013 Eden Buenaventura, *Predicting Black Bear Damage in Agricultural Fields*
- 2012 Samantha Wehman, *Deer and Black Bear Management in NJ*
- 2012 Patrick LePore, Faculty Sponsor for work study with NJ Division of Fish and Wildlife, migratory waterfowl surveys

ADVISING

- 2012 *Faculty Advisor.* Parks for the People: A Student Competition to Reimagine America's National Parks. Van Alen Institute. Received "Award of Excellence"

MEDIA COVERAGE

- 2014 National Geographic. *Bear Cub Mystery in NYC: Explaining Recent Black Bear News.* featured on Weird and Wild.
- 2014 WHYY.org. *After Sandy, Balancing the Needs of Shorebirds and People.* radio cast.
- 2014 Days Edge Productions. *Fight for Flight: The Battle Against White-Nose Syndrome.* video documentary.
- 2014 northjersey.com. *Big Brown Bats in NJ Thrive as Smaller Cousins Decline.* online article.
- 2014 New Jersey Advance Media. *Bear Attack in West Milford Happened After Warning from Hikers, Was "One in a Million," Experts Say.* online article.

PROFESSIONAL CERTIFICATIONS

Certified Ecologist – *Ecological Society of America*

Engineer-in-Training – *NJ State Board of Professional Engineers & Land Surveyors*

Methodology for Delineating Wetlands

Vegetation Identification for Delineating Wetlands

OSHA Hazardous Waste Operations and Emergency Response & Site Supervisor