
BETH RAVIT, Ph.D.

Co-Director, Center for Urban Environmental Sustainability (CUES)
Assistant Research Professor
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EDUCATION

Rutgers, The State University of New Jersey , New Brunswick, NJ	8/99 – 5/05
Doctoral Program Environmental Science (Ph.D. degree 5/05)	5/01 – 5/05
Master's Program Environmental Science (M.S. degree 5/01)	1/00 – 5/01
Cook College , Dean's List Fall 1999	8/99 – 1/00
Adelphi University , Garden City, NY (B.A.)	9/66 – 6/70

ACADEMIC POSITIONS

Rutgers, The State University of New Jersey	2/05 – Present
Associate Member, Rutgers Landscape Architecture Graduate Program	2017
Co-Founder, Co-Director Rutgers Center for Urban Environmental Sustainability (CUES)	2007 - Present
Assistant Research Professor, Dept. of Environmental Sciences	2016 - Present
Instructor, Dept. of Environmental Sciences	7/09 – 12/15
Research Associate, Dept. of Environmental Sciences	8/06 – 6/09
Research Associate, Dept. Biochemistry & Microbiology	4/05 – 7/06
Managing Editor, <i>Soil Science</i>	8/10 - Present
Part time lecturer – Cook College Dept. Biochem. & Microb.	9/05 – 12/05
Part time lecturer – Newark Biol. Sciences Graduate Program	2/05 – 5/05
Founder, Director Rutgers Environmental Research Clinic	2002 – 2007

PROFESSIONAL ORGANIZATIONS

Estuarine Research Federation
National Shellfisheries Association
Society of Wetland Scientists

RESEARCH GRANTS

- Raritan River Consortium, PI (2017) (\$7,500)
Co-PI: Keith Cooper
Microplastic Pollution in the Raritan River
- Bergen County Grant, Co-PI (2016-2017) (\$364,800)
PI: Wolfram Hoefler
Bergen County Park System Master Planning
- NIEHS CEED grant through Rutgers Center for Environmental Exposures and Disease,
Co-PI. (2016) (\$15,000)
PI: Keith Cooper; Co-PI: Brian Buckley
Exposure Assessment and Toxicity of Microbead Associated Contaminants Present In New Jersey Surface Waters
- New Jersey Water Resources Research Institute, PI. (2016) (\$20,000).
Co-PIs: Keith Cooper, Brian Buckley
Microplastic Pollution in New Jersey Surface Waters.
- Perth Amboy, NJ CUES Project (2016) (\$29,906)
PI: Richard Alomar
Perth Amboy Trails and Park Design
- NY/NJ Baykeeper Grant (2008 - 2016). PI. (\$125,000).
Raritan Bay oyster restoration feasibility studies
- Mushett Family Foundation Grant (2014-2015). PI. Completed (\$25,000).
Support for CUES involvement in Raritan Bay oyster reintroduction research.
- ISLES, Inc. Grant (2013 – 2015). Co-PI. Completed (\$25,000)
PI: Laura Lawson
Trenton Regional Food Network Assessment & Feasibility Study
- USEPA Grant (2012-2015), Co-PI. (\$100,000)
PI: Christopher Obropta
Rutgers Sustainable Raritan River Initiative
- Community-University Research Partnership Grant (2012 – 2013) (\$23,000)Co-PI.
PI: Michele Bakacs, RCE Middlesex County Agent
Community and Backyard Gardening in New Brunswick's Urban Soils: Providing Locally Grown Food While Protecting Human Health
- Dodge Foundation Grants (2009 - 2012). PI. Completed (\$80,000)
Center for Urban Environmental Sustainability (CUES) operating support
- Township of Voorhees Grant (2010 - 2014). Co-PI. Completed
PI: Wolfram Hoefler, Department of Landscape Architecture
Buzby Landfill Brownfield to Greenfield reuse project
- Bergen County Grant (2009-2012) Co-PI. Completed. (\$54,000)
PI: Dr. Wolfram Hoefler, Department of Landscape Architecture
Oradell Waterworks Cultural Landscape Study and Public Outreach
- Sustainable Raritan Initiative (2009) Completed. \$10,000
funded by the Mushett Family Foundation through Bloustein

New Jersey Meadowlands Commission Grant PI. (2007-2008) Completed. (\$25,000)
 Co-PI: Judith Weis, Rutgers Newark
Hackensack River Oyster Habitat Development Study

New Jersey Meadowlands Commission Grant, PI (2006-2008) Completed. (\$370,000)
 Co-PIs: Weilin Huang, Bingru Huang
Leachate water recovery and turfgrass development for a Meadowlands golf course

Rutgers EcoComplex – Burlington County Grant (2006-2008) Completed. (\$130,000)
 Co-PIs: Donna Fennell, Uta Krogmann
A study to improve the operation of the Burlington County bioreactor landfill and to investigate landfill biogeochemical processes in this bioreactor.

New Jersey Meadowlands Commission Grant, PI (2006-2007) Completed. (\$100,000)
 Co-PIs: Christopher Obropta, Carter Strickland (RU Environmental Law Clinic)
A Stormwater Utility Feasibility analysis to address stormwater-related flooding issues in the Hackensack Meadowlands District

New Jersey Meadowlands Commission Grant, PI (2005-2007) Completed. (\$240,000)
 Co-PI: Christopher Obropta
Modeling of Kearny Marsh ground and surface water contaminant inputs

New Jersey Wetlands Mitigation Council, Co-PI (2004-2007) - \$200,000
 Teaneck Creek Conservancy subcontract to Cook College
 PI: Christopher Obropta
Development of an urban hydrological model linking denitrification potential to urban wetland restoration

New Jersey Meadowlands Commission Grant, PI (2005) - \$110,000 (Completed)
 Co-PIs: Lisa Totten, Weilin Huang, Max Häggblom
 Kearny Marsh sediment contaminant characterization study

NJ Water Resource Research Institute Grant, Co-PI(2005-2006) (Completed) \$30,000
 Co-PIs: Barbara Turpin, Sybil Seitzinger
A study to link atmospheric N deposition with surface and ground water N and denitrification capabilities in an urban New Jersey wetland.

CUES CONSULTING AGREEMENTS

NY/NJ Baykeeper CUES Consulting (2016-2017). \$6,820
 Microplastic reduction project and Newark, NJ community outreach

Middlesex County Improvement Authority CUES Consulting (2016). \$6,450
 Conduct a Brownfield (known and potential) survey in the City of Perth Amboy

Jersey City, NJ CUES Consulting (2016). \$9,750
 Produce an Environmental Resource Inventory

NY/NJ Baykeeper CUES Consulting (2015 – 2018). \$23,000
 Oyster monitoring at Naval Weapons Station Earle

Township of Voorhees CUES Consulting (2014-2016). \$25,000.
 Voorhees Environmental Park implementation.

County of Bergen CUES Consulting (2014 – 2016). \$25,000
 Teaneck Creek Wetland Restoration with RCE Water Resources

Borough of Somerville CUES Consulting (2014-2015). Completed (\$15,000)
Station Area and Landfill Redevelopment Plan: Wetland 'Green Seam' Design

AWARDS

NJASLA Student Design Award. 2013. *Voorhees Environmental Park: Urban Landfill Reuse*.
Running With Scissors Award, NY/NJ Baykeeper 2012
USEPA STAR Fellowship (2002-2005)

PUBLICATIONS

- Ravit, B.**, Gallagher, F., Doolittle, J., Shaw, R., Muñiz, E., Alomar, R., Hoefler, W., Berg, J., Doss, T. Urban wetlands: Restoration or designed rehabilitation? *AIMS Environmental Science* 4(3): 458-483.
- Drake, L., Lawson, L., **Ravit, B.** Developing a vacant land inventory through productive partnerships: A university, NGO, and municipal planning collaboration in Trenton, New Jersey. *Cities and the Environment (CATE)* 8(2): Article 6.
<http://digitalcommons.lmu.edu/cate/vol8/iss2/6>
- Kannepalli, S. **Ravit, B.**, Strom, P.F. 2016. Composting of aged reed bed biosolids for beneficial reuse: a case study in New Jersey, USA. *Compost Science & Utilization* 24(4): 281-290.
- Hoefler, W. Gallagher, F., Hyslop, T., Wibbelt, T., **Ravit, B.** 2016. Unique landfill restoration designs increase opportunities to create urban open space. *Environmental Practice* 18:106-115.
- Drake, L., **Ravit, B.**, Dikidjieva, I., Lawson, L. 2015. Urban greening supported by GIS: From data collection to policy implementation. *AIMS Environmental Science*. 2(4):910-934.
- Ravit, B.**, Weis, J., Rounds, D. 2015. Is urban marsh sustainability compatible with the Clean Water Act? *Environmental Practice* 17(1):1-11.
- Ravit, B.**, Weis, J. 2014. Clean Water Act Section 404 and Coastal Marsh Sustainability. *Coastal Management* 42(5):464-477.
- Ravit, B.**, Cooper, K., Buckley, B., Comi, M., McClandish, E. 2014. Improving management support tools for reintroducing bivalve species [Eastern oyster (*Crassostrea virginica* Gmelin)] in urban estuaries. *Integrated Environmental Assessment & Management* 10(4):555-565.
- Ravit, B.**, Comi, M., Mans, D., Lynn, C., Steimle, F., Walsh, S. Miskewitz, R., Quierolo, S. D. 2012. The Eastern Oyster (*Crassostrea virginica*) in the Hudson-Raritan Estuary: Restoration versus shellfishery regulation. *Environmental Practice* 16(2):110-129.
- Ravit, B.** Obropta, C., Kallin, P. 2008. Restoration of a forested riparian ecosystem: A baseline characterization approach to wetland enhancement in an urban watershed. *Urban Habitats* 5(1):126-152.

- Ravit, B.**, 2008. Rohleder, L., Johnson, L., Ehrenfeld, J., Kallin, P. Restoration of a forested riparian ecosystem: A vegetation survey of Teaneck Creek wetlands. *Urban Habitats* 5(1):199-214.
- Obropta, C., Kallin, P., Mak, M., **Ravit, B.** 2008. Restoration of a forested riparian ecosystem: Modeling urban wetland hydrology 5(1):183-198.
- Ravit, B.**, Ehrenfeld, J.G., Häggblom, M.M., Bartels, M. 2007. The Effects of Hydrology and Nutrient Inputs on Two Estuarine Macrophytes and their Root-Associated Microbial Communities. *Wetlands* 27(4):915-927.
- Babson, D., Krogmann, U., Fennell, D., **Ravit, B.** 2007. Development of a dynamic energy balance to assess operating efficiency of the Burlington County bioreactor landfill in New Jersey (USA). Proceedings Sardinia 2007, Eleventh International Waste Management and Landfill Symposium, Cagliari, Italy.
- Häggblom, M. M., Fennell, D., Ahn, Y-B., **Ravit, B.** Kerkhof, L. 2006. Anaerobic dehalogenation of halogenated organic compounds: Novel strategies for bioremediation of contaminated sediments. *In* Viable Methods of Soil and Water Pollution Monitoring, Protection, and Remediation. NATO Science /series IV. Vol. 69. Springer. The Netherlands.
- Ravit, B.**, Häggblom, M.M., Ehrenfeld, J.G. 2006. Salt Marsh vegetation affects rhizosphere microbial community structure and function. *Soil Biology & Biochemistry* 38(8):2359-2371.
- Ehrenfeld, J. G., **B. Ravit**, Elgersma, K. 2005. Feedback in the Plant-Soil System. *Annual Review of Environment and Resources*. 30:7.1–7.41
- Ravit, B.**, Häggblom, M.M., Ehrenfeld, J.G. 2005. Salt Marsh Rhizosphere Affects Biotransformation of a Widespread Halogenated Contaminant. *Soil Biology & Biochemistry* 37:1049-1057.
- Ravit, B.**, Ehrenfeld, J.G., Häggblom, M.M. 2003. A Comparison of Sediment Microbial Communities Associated with *Phragmites Australis* and *Spartina alterniflora* in Two Brackish Wetlands of New Jersey. *Estuaries* 26(2B):465-474.

SELECTED PRESENTATIONS

- Ravit, B.** Cooper, K., Buckley, B., Meola, S., Greenberg, M. 2016. Addressing Microplastic Pollution in Urban Watershed. Urban Extension Conference. Rutgers – Newark. November 29, 2016. Newark, NJ.
- Ravit, B.** 2016. Lion Gate Park: An Urban Wetland Restoration. Invited Presentation Society for Ecological Restoration. March 14, 2016. Stockton, NJ.
- Ravit, B.** 2015. The Geology/Ecology and Art of the Meadowlands. New Jersey City University. October 17. Jersey City, NY.
- Ravit, B.** 2015. Pearls in the Harbor: Reintroducing Eastern Oysters to the Hudson-Raritan Estuary. Fairleigh Dickinson University. September 24. Teaneck, NJ.
- Ravit, B.** 2015. Restoration, Site Evaluation and Selection in an Urban Estuary: Challenges and Opportunities. Invited Presentation HDC SETAC Annual Meeting. April 20. New Brunswick NJ.
- Ravit, B.**, M. Comi. 2014. Reintroducing the Eastern Oyster into one of the Largest

- Urban Estuaries in the World. Invited Presentation National Summit on Coastal & Estuarine Restoration. Washington, D.C. November 3, 2014.
- Ravit, B.** 2014. Brownfield Action Items for Sustainable Jersey. Invited Presentation Sustainable Raritan Remediation & Reuse Workshop. October 22, 2014. New Brunswick, NJ.
- Ravit, B., Weis, J., Rounds, D.** 2014. Sea Level Rise, Coastal Marsh Sustainability, and the Clean Water Act Section 404. Invited Presentation. NY/NJ Harbor Estuary Program Annual Conference. June 4. New York, NY.
- Ravit, B.** 2013. Sustainable Jersey Brownfield Action Items. League of Municipalities Annual Meeting. November 20. Atlantic City, NJ.
- Ravit, B., Hoefer, W.** 2013. Northern New Jersey Post-Sandy Resiliency. Stevens University Waterfront Conference. October 8. Hoboken, NJ.
- Ravit, B.** 2011. Workshop Organizer and Presenter. Restoring the Hudson-Raritan Estuary: the Planet's Most Urban Ecosystem. Coastal and Estuarine Research Federation International Meeting. November 6. Daytona Beach, FL.
- Ravit, B.** 2011. Shallow Water Habitat Restoration in an Urbanized Estuary. Sustainable Raritan Conference. Rutgers University, New Brunswick, NJ. June 16, 2011.
- Ravit, B.** 2010. Oyster Restoration in an Urban Estuary: Lessons Learned. Ecology in the Balance – Sustainable Raritan Initiative. Rutgers University, New Brunswick, NJ.
- Ravit, B.** 2010. Oyster Restoration in an Urban Estuary: Lessons Learned. Atlantic Estuarine Research Society Conference. Atlantic City, NJ. March 5, 2010.
- Ravit, B.** 2009. Urban Oyster Restoration: How to Proceed? NY/NJ Baykeeper Oyster Conference. Governors Island, NYC. April 24, 2009.
- Ravit, B.** 2009. Urban Wetland Rehabilitation. Puffin Cultural Forum. Teaneck, NJ.
- Ravit, B., Vos-Wein, N., Comi, M., Ponticorvo, J.** 2008. Hackensack River Oyster Project: Integrating Volunteer Monitoring to Develop a Benthic Habitat Restoration Plan. The National Monitoring Conference. Atlantic City, NJ.
- Ravit, B., Obropta, C., Hoefer, W., Miskewitz, R.** 2008. Conceptual Plan for Adaptive Re-Use and Floodwater Control at the Historic Oradell Waterworks. American Ecological Engineering Society Annual Meeting. Blacksburg, VA.
- Yergeau, S., Obropta, C., **Ravit, B., Kallin, P.** 2007. Development of a Water Budget for Kearny Marsh. NJ Meadowlands Symposium.
- Ravit, B., Häggblom, M., Ehrenfeld, J.** 2007. Does the Plant Matter? NJ Meadowlands Symposium.
- Ravit, B., Xiao, B., Wall, S., Totten, L., Huang, W.** 2007. Kearny Marsh sediment contaminant Investigation. NJ Meadowlands Symposium.
- Ravit, B., Webster, R. Esq.** 2006. Science and the Law Seminar. Cook College. New Brunswick, NJ.
- Ravit, B., Arnold, M.** 2006. Member of Brownfields to Greenfields panel. NJDEP Coast the Remediation Highway Workshop. Trenton, NJ.
- Ravit, B., Arnold, M.** 2005. Collaborative Partnerships: A Successful Restoration Paradigm. Annual Volunteer Monitoring Summit. NJDEP. Edison, NJ.

- Ravit, B.**, Ehrenfeld, J.G., Häggblom, M.M. 2004. *Macrophytes and Microbes: Salt Marsh Grasses Affect Sediment Microbial Communities*. Intecol International Wetlands Conference. Utrecht, The Netherlands.
- Ravit, B.**, Obropta, C., Kallin, P. 2004. *A Plan to Assess the Hydrologic Flow and the Denitrification Function in a New Jersey Urban Wetland Restoration Project*. SWS Stormwater Conference. Philadelphia, PA.
- Ravit, B.** 2003. *Vegetation, Microbes, and Debromination*. Society of Wetland Scientists. Annual Meeting. New Orleans, LA.

COURSES TAUGHT

Environmental Design Analysis (Co-taught)	Fall 2016
Environmental Science 101, Rutgers, New Brunswick	1/09 – 12/14
Portals to Academic Student Success (PASS)	Spring 2010, 2011
Microbial Ecology (Instructor & Course Coordinator)	Spring 2010
Special Topics: Ecology & Microbiology, Cook College (Graduate)	Fall 2006
Microbial Ecology, Cook College	Fall 2005
Microbial Ecology, Rutgers Newark (Graduate)	Spring 2005

STUDENT ADVISING

Aresty Student Advisor, Julia Burmistrova, Eden Cohen	2016-17
Aresty Student Advisor, Henry Wright, Julia Gerdes	2015-16
Thesis Advisor, Ty Triplett, SEBS-LA Masters Candidate	2014-15
Research Advisor, Carol Baille, SEBS undergraduate	2012-16
Thesis Advisor, Stephen Yergeau, SEBS-DES PhD Candidate	2005-2010
Department of Environmental Sciences, undergraduate advisor	2012
Research Advisor, Stephanie Queirolo, SEBS undergraduate	2010
PhD Committee Member, Allison Mass, PhD Candidate CUNY, College of Staten Island	2009 - 2013
PhD Committee Member, Tiffany Medley, PhD Candidate CUNY, Queens College	2010
Student Mentor, Sneya Shah, MS Candidate Fairleigh Dickinson University, Hackensack, NJ	2010 – 2011

OUTREACH

CUES/LA Design Studio Bergen County Parks Master Plan	2016
CUES/LA Design Studio Jersey City	2015
CUES/LA Design Studio Little Ferry	2015
CUES/LA Design Studio Borough of Somerville	2014
Co-Chair CUES Brownfields Task for Sustainable Jersey	2012-Present
CUES Financial Feasibility Studies for the Hackensack Water Works (collaboration with Rutgers Business School & NYU graduate school)	2011-2012
Voorhees Environmental Park Community Outreach	2011-2012
Co-Chaired 'Green Solutions for Urban New Jersey' CUES Conference	2011
Co-Chaired 'Shaping the City of New Jersey' CUES Conference	2010

Sustainable Raritan Initiative (<i>collaboration with Bloustein</i>)	1/09- Present
Co-Chaired Stewardship Subcommittee	2010-2011
Invited outside grant reviewer, USEPA STAR Fellowship	2011
Invited outside grant reviewer, USEPA Region II Environmental Education	2008-2014
Invited outside grant reviewer, PSEG Environmental Education	2009

SELECTED BOARDS and ORGANIZATIONS

Board of Trustees, NY/NJ Trail Conference	2014 - Present
Board of Trustees, Hackensack Riverkeeper, Hackensack, NJ	2008 - Present
Treasurer, Executive Committee	2010 - Present
<i>Tidelines</i> newsletter columnist	2001 - Present
Advisory Board	1999 – 2008
Closter Nature Center, Trustee	2012 – Present
Treasurer, Executive Committee	2015 - Present
Sierra Club, Northern NJ, Executive Committee	2012 - 2015
Environmental Commission, Closter, NJ, (Chairman 2010-2012)	2004 – 2012
Board of Trustees, Teaneck Creek Conservancy, Teaneck, NJ	2008 - 2011
Vice-President, Treasurer, Executive Committee	
Watershed Management Planning, WMA5	2001 – 2006
Member Steering Technical Advisory, and Public Advisory Committees	

ABREVIATED WORK HISTORY

Retail Executive	1/70 – 6/99
Numerous executive level positions in national and international corporations	
Beth Ravit Associates, retail consultants	5/98 – 6/99
Next USA, Board of Directors, President, CEO	6/96 – 8/98
National Retail Federation Speaker, <i>The Globalization of Brands</i>	1/98
Panel Member, Forbes Magazine Executive Women’s Summit	11/98
Speedo Authentic Fitness, President, Retail Division	4/92 – 5/96
Lane Bryant Division, Limited Stores Corp., V.P Merchandising	2/86 – 5/89