

STEVEN N. HANDEL

Degrees

B.A. Columbia College, Major in Biological Sciences, 1969.

M.S. Cornell University, Field of Ecology & Evolutionary Biology, 1974.

Ph.D. Cornell University, Field of Ecology & Evolutionary Biology, 1976.

Institutional Affiliations

2021-present. Distinguished Professor Emeritus, Rutgers Univ., New Brunswick, NJ.

2015 - 2021. Distinguished Professor of Ecology and Evolution, Rutgers University.

2016 - 2019. Visiting Professor of Ecology, Harvard University Graduate School of Design, Department of Landscape Architecture.

1996 - 2015. Professor of Ecology; Director, Center for Urban Restoration Ecology; Director, Hutchison Memorial Forest Center. Rutgers University, New Brunswick, NJ.

1985 - 1996. Associate Professor of Biology, Rutgers University.

1979 - 1985. Assistant, then Associate Professor of Biology, Yale University. Director, Yale University Botanical Garden.

1976 -1979. Assistant Professor of Biology, University of South Carolina.

Additional Academic Positions

2006 - 2012. Adjunct Professor of Ecology, University of California, Irvine

2009 Visiting Professor of Ecology, Stockholm University, Sweden.

1989; 1993. Visiting Research Scholar, School of Biological Sciences, Macquarie University, Sydney, Australia

1987 Summer Faculty, Mountain Lake Biological Station, University of Virginia, Blacksburg, VA. Course: Plant-Animal Interactions.

1985 Summer Faculty, Rocky Mountain Biological Laboratory, Crested Butte, CO. Course: Plant-Animal Interactions

Additional Appointments:

2010 – present Editor, *ECOLOGICAL RESTORATION*

1983 – present Certified Senior Ecologist, Ecological Society of America

2000 – 2012 “Distinguished Advisor,” Board of Trustees, Brooklyn Botanic Garden

2004 – 2010. Member, State of New Jersey Invasive Species Council.

2001 – 2008. Instructor, U. S. Environmental Protection Agency (EPA), Ecological Restoration Principles, annual meetings of Natl. Assoc. of Remedial Project Managers (RPM’s), and of the On-Site Coordinators (OSC’s)

2002 - 2006. Editor, *URBAN HABITATS*

1992 - 2004. Associate editor, *RESTORATION ECOLOGY*

1997 - 2001. Elected member, Board of Directors, Society for Ecological Restoration.

1987 - 1990. Associate Editor, *EVOLUTION*

Professional Organizations

Society for Ecological Restoration (Board of Directors, 1997-2000)

Ecological Society of America (Fellow; Aldo Leopold Leadership Fellow; Chair, Plant Population Section, 1986)

Botanical Society of America (Chair, Genetics Section, 1984)

Torrey Botanical Society (President, 1995)
 American Association for the Advancement of Science (Fellow)
 Australian Institute of Biology (Fellow)
 American Society of Landscape Architects (Honorary Member)

Research Grants (Representative)

National Science Foundation, Convergence Accelerator Research Program.
 “Reconfiguring urban shorelines for resilience: Convergence research meshing ecology, engineering, and architecture.” 2021-2022.

U.S. National Park Service. “Assessment of long-term performance of deer exclosures at Morristown National Historical Park.” 2018-2020.

U.S. National Park Service. “Restoration of Jamaica Bay fringing habitats: post-Sandy status and new approaches for a resilient future.” 2014-2016.

Duke Farms Foundation. Restoration ecology planning and environmental stewardship public outreach programming for the Duke Farms property. 2006-2013.

National Science Foundation, Restoration and Conservation Biology Competition. For studies on the ecology of woodland restoration on landfills. 1993-2003.

U.S. Environmental Protection Agency (EPA). “Terrestrial studies: vegetation dynamics on coal strip mines in West Virginia.” 1999-2001.

Awards (Representative)

Society for Ecological Restoration, Board of Directors Service Award, 2000.

Ecological Society of America, Aldo Leopold Leadership Fellow, 2001.

American Society of Landscape Architects, National Award of Honor for Planning and Analysis, (Orange County Great Park Master Plan). 2008.

American Society of Landscape Architects, National Award of Honor for Research, (Ecological restoration processes to advance landscape design), 2009.

American Planning Association (APA). National Planning Excellence Award, for Innovation in Regional Planning, (Comprehensive Master Plan of the Orange County Great Park), 2009.

American Institute of Architects (AIA), International Institute Honor Award for Regional and Urban Design, (Orange County Great Park), 2009.

American Society of Landscape Architects, National Award of Honor for Analysis and Planning, (Brooklyn Bridge Park master plan team), 2009.

Rutgers University School of Environmental and Biological Sciences, Research Excellence Award for Sustained Research and Impact, 2010.

American Society of Landscape Architects, National Award of Honor for Communication, (member of Safari7 website team. SCAPE, lead), 2010.

Society for Ecological Restoration, Theodore M. Sperry Award (“for significant advancements to the science or techniques used in restoration practices”). Cited “...for pioneering work in the restoration of urban areas.” 2011.

Honorary Member, American Society of Landscape Architects. (For “achievements of nationally or international significance to landscape architecture”) 2012.

American Society of Landscape Architects, NJ chapter. Merit Award for Landscape Architectural Communication, 2014. (For development of the ecological landscape interpretive program for Duke Farms Foundation.)

American Society of Landscape Architects, National Award of Honor for Communication, (For editorial content of the journal, *Ecological Restoration*), 2015.

American Society of Landscape Architects, National Award of Honor for Research, (For management protocols in urban parks), 2015.

American Society of Landscape Architects, NJ chapter. Merit Award for Landscape Architectural Research. (For preparing for climate change at the urban coast: new methods to frame landscape design solutions), 2019.

American Society of Landscape Architects, The LaGasse Medal, 2023. (For “notable contributions to the management and conservation of natural resources and public landscapes”).

Fellow of Ecological Society of America, AAAS, and Australian Institute of Biology.

Scientific Papers (Representative)

Handel, S. N. 1997. The role of plant-animal mutualisms in the design and restoration of natural communities. Pages 111-132 in: *Restoration Ecology and Sustainable Development*. K. M. Urbanska, N. R. Webb, and P. J. Edwards, editors. Cambridge University Press, Cambridge.

Robinson, G.R., and S. N. Handel. 2000. Directing spatial patterns of recruitment during an experimental urban woodland reclamation. *Ecological Applications* 10: 174-188.

Galbraith-Kent, S. L., and S. N. Handel. 2007. Lessons from an urban lakeshore restoration in New York City. *Ecological Restoration* 25: 123-128.

Galbraith-Kent, S. L., and S. N. Handel. 2008. Invasive *Acer platanoides* inhibits native sapling growth in forest understorey communities. *Journal of Ecology* 96:293-302.

Karpati, A. S., S. N. Handel, J. Dighton, and T. R. Horton. 2011. *Quercus rubra*-associated ectomycorrhizal fungal communities of disturbed urban sites and mature forests.

Mycorrhiza 21:537-547.

Aronson, M. F. J., and S. N. Handel. 2011. Deer and invasive plant species suppress forest herbaceous communities and canopy tree regeneration. *Natural Areas Journal* 31:400-407.

Handel, S. N. 2013. Ecological restoration foundations to designing habitats in urban areas. Pages 169-186 in: *Designing Wildlife Habitats*. J. Beardsley, editor. Garden and Landscape Studies, Dumbarton Oaks Research Library, Washington, D.C.

Handel, S.N. 2014. Marriage therapy for ecologists and landscape architects. *Ecological Restoration* 32:343-344.

Handel, S. N., O. Saito, and K. Takeuchi. 2014. Restoration ecology in an urbanizing world. Pages 665-698 in: *Urbanization, Biodiversity and Ecosystem Services – Challenges and Opportunities, A Global Assessment*. T. Elmqvist, M. Fragkias, et al., editors. Springer Science, Dordrecht.

Corbin, J.D., G.R. Robinson, L.F. Hafkemeyer, and S.N. Handel. 2016. A long-term evaluation of applied nucleation as a strategy to facilitate forest restoration. *Ecological Applications* 26:104-114.

Johnson L. R. and S. N. Handel. 2016. Restoration treatments in urban park forests drive long-term changes in vegetation trajectories. *Ecological Applications* 26: 940-956.

Burger, J., K.M. O'Neill, S.N. Handel, B. Hensold, and G. Ford. 2017. The shore is wider than the beach: ecological planning solutions to sea level rise for the Jersey Shore, USA. *Landscape and Urban Planning* 157:512-522.

Handel, S.N. 2018. The Cedars of Lebanon, the limits of restoration, and cultural loss. *Ecological Restoration* 36(4):261-262.

Handel, S.N., G. Ford, and B. Hensold. 2019. Resilience and coastal ecosystems: three typologies, three design approaches. Pages 195-208 in: *Sustainable Coastal Design and Planning*. E. Mossop, editor. CRC Press, Taylor and Francis, Boca Raton, FL.

Piana, M.R., Aronson, M.F.J., Pickett, S.A., and Handel, S.N. 2019. Plants in the city: understanding plant recruitment dynamics in the urban landscape. *Frontiers in Ecology and the Environment* 17(8):455-463.

Epiphan, J. N., and S. N. Handel. 2021. Disturbance in the Forest of Morristown National Historical Park: Influence of Gap Size on Tree Regeneration. Natural Resource Report NPS/MORR/NRR. National Park Service, Fort Collins, Colorado. 141 pages.

Zambrano, L., S.N. Handel, T. Fernandez, and I. Brostella. 2021. Landscape spatial patterns in Mexico City and New York City: contrasting territories for biodiversity planning. *Landscape Ecology* <https://doi.org/10.1007/s10980-021-01372-x>

Media Publications (Representative)

Planning Magazine, April, 2009 issue, page 34. "A Truly Great Park in Orange County," by Marya Morris, AICP.

Christian Science Monitor Online, June 17, 2009 issue, Environment Section. "When nature gets a second chance," by Elizabeth Ginsburg. (csmonitor.com/environment)

Landscape Architecture, August 2009 issue, page 103. "Restoration ecology processes to advance natural landscape design," by S. Stubbs.

The Economist Magazine, January 3, 2008. "American pastoral."

Sierra Club Magazine, Nov./Dec. 2005. "Let a billion flowers bloom" by Heather Millar

The New York Times, November 10, 2002. "A Well-Traveled Ecologist" by Elisabeth Ginsburg

The Economist magazine, August 10, 2002. "Science and Technology: Restoration Drama" p.65-66.

The Wall Street Journal, January 23, 2002. "Where Trash Reigned, Trees Sprout" by Jim Carlton

Conferences/Symposia

Over 250 presentations at universities, science, and design conferences throughout the world, addressing modern aspects of plant restoration ecology, urban ecology, and landscape design.

Contact

Cell 908-881-0383
Email snhandel@gmail.com

Dept. of Ecology, Evolution, & Natl. Resources
Blake Hall, 93 Lipman Drive
Rutgers University
New Brunswick, NJ 08901-8524