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Associate Professor
Department of Landscape Architecture
Blake Hall, Cook College
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EDUCATION

- 1984 University of Connecticut. Ph.D. Ecology
Specialization: Population and community ecology.
Thesis: The role of wrack disturbance in the vegetation of a New England salt marsh plant community.
- 1981 University of Wisconsin - Madison. M.S. Landscape Architecture
Specialization: Restoration and management of native plant communities.
Thesis: A comparison of sampling methods for tall grass prairies in terms of management problems.
- 1976 University of Wisconsin - Madison. B.S. Botany

PROFESSIONAL EXPERIENCE AND RESEARCH

- 2007-present Department Chair. Department of Landscape Architecture, Cook College, Rutgers University. New Brunswick, NJ.
- 2005-07 Interim Department Chair. Department of Landscape Architecture, Cook College, Rutgers University. New Brunswick, NJ.
- 2005 Acting Department Chair. Department of Landscape Architecture, Cook College, Rutgers University. New Brunswick, NJ.
- 1994-present Associate Professor. Department of Landscape Architecture, Cook College, Rutgers University. New Brunswick, NJ.
- 1988-94 Assistant Professor. Department of Landscape Architecture, Cook College, Rutgers University. New Brunswick, NJ.
- 1988 Visiting Lecturer. Department of Landscape Architecture, Rhode Island School of Design. Providence, RI.
- 1986-88 Postdoctoral Research Associate and Lecturer. Department of Landscape Architecture, Graduate School of Design, Harvard University. Cambridge, MA.
- 1984-86 National Research Council Associate. Global Biology Program, NASA Langley Research Center. Hampton, VA.
- 1983-84 Visiting Investigator. Demographic Methods for Prediction of Toxic Substance Effects. Biology, Woods Hole Oceanographic Institution. Woods Hole, MA.
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PEER REVIEWED PAPERS

- Nordstrom, K.F., N.L. Jackson, J.M.Hartman, Mark Wong . 2006. Aeolian sediment transport on a human-altered foredune. *Earth Surface Processes and Landforms* 32(1): 102 - 115
- Bart,D., D. Burdick, R. Chambers, and J. M. Hartman. 2006. Human Facilitation of *Phragmites australis* Invasions in Tidal Marshes: A Review and Synthesis . *Journal Wetlands Ecology and Management* 14(1) 53-65.
- Seigel, A., C.A. Hatfeild, and J.M. Hartman. 2005. Avian Response to Restoration of Urban Tidal Marshes in the Hackensack Meadowlands, New Jersey. *Urban Habitats* 3(1): 87-116.
- Yuhas, C.E., J.M. Hartman, and J.S. Weis. 2005. Benthic Communities in *Spartina alterniflora*– and *Phragmites australis*–Dominated Salt Marshes in the Hackensack Meadowlands, New Jersey. *Urban Habitats* 3(1): 158-191.
- Aronson, M. F. J., C. A. Hatfield, and J. M. Hartman. 2004. Plant community patterns of low-gradient forested floodplain wetlands in a New Jersey urban landscape. *Journal of the Torrey Botanical Club* 131(3): 232-242.
- Bart, D.J. and J.M. Hartman. 2003. The Role of Large Rhizome Dispersal and Low Salinity Windows in the Establishment of Common Reed, *Phragmites australis* in Salt Marshes: New Links to Human Activities. *Estuaries* 26: 437-444.
- Raichel, D.L., K. Able, J.M. Hartman. 2003. The influence of *Phragmites* (common reed) on the distribution, abundance and potential prey of a resident marsh fish in the Hackensack Meadowlands, New Jersey. *Estuaries* 26: 511-521.
- Bart, D.J and J.M. Hartman. 2002. Constraints on the establishment of *Phragmites australis* in a New Jersey salt marsh and possible links to human disturbance. *Wetlands* 22: 201-213.
- Bart, D.J. and J.M. Hartman. 2000. Environmental determinants of *Phragmites australis* expansion in a New Jersey salt marsh: an experimental approach. *Oikos* 89: 59-69.
- Cantelmo, A.J., S.R. Kaufman, and J.M. Hartman. 2000. Mycorrhizal and nitrogen-fixer associations with *Casuarina* sp. and mycorrhizal associations with *Melaleuca quinquenervia* in Everglades National Park. *Florida Scientist* 63(3): 160-166.
- Hartman, J.M. 1999. Factors Influencing Establishment Success of *Melaleuca quinquenervia* (Cav.) S.T. Blake in Everglades National Park. Chapter 25 IN: *Florida's Garden of Good and Evil*. David T. Jones and Brandon W. Gamble, Editors.
- Hartman, J.M. 1999. Restoration: Becoming a Science. *Conservation Biology* 13: 946-947. (Book Review of *Habitat Creation and Repair* by Gilbert and Anderson.)
- Jordan, R. and J.M. Hartman. 1996. Effects of canopy opening on recruitment in *Clethra alnifolia* L. (Clethraceae) populations in central New Jersey wetland forests. *Bulletin of the Torrey Botanical Club* 123(4): 286-294.
- Jordan, R. and J.M. Hartman. 1995. Characterization of the regeneration niche of *Clethra alnifolia* L. (Clethraceae) in *Acer rubrum* wetland forests. *American Midland Naturalist* 133: 112-123.
- Leccese, M., P. Trowbridge, D. Morrison, J.M. Hartman, P. Meyer. May 1994. Expanding the palette: Roundtable on Landscape Architects in creasing their plant expertise. *Landscape Architecture* 84 (5): 58.
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- Hartman, J.M., J.F. Thorne, and C.E. Bristow. 1993. Variations in old field succession. Council of Educators in Landscape Architecture Selected Papers Vol. 4: 55-62.
- Royle, D. and J.M. Hartman. 1991. Martha Brookes Hutcheson and her influence on the American landscape. Council of Educators in Landscape Architecture Selected Papers Vol 3: 152-162.
- Bartlett, D.S., G.J. Whiting, and J.M. Hartman. 1990. Use of vegetation indices to estimate intercepted solar radiation and net carbon dioxide exchange of a grass canopy. *Remote Sensing of the Environment* 30: 115-128.
- Bartlett, D.S., K.B. Bartlett, J.M. Hartman, R.C. Harriss, D.I. Sebacher, R. Pelletier-Trivis, D.D. Dow and D.P. Brannon. 1989. Methane emission from natural wetlands: Associations with surface features and inventory using remote sensing. *Global Biogeochemical Cycles* 3(4):363-374.
- Hartman, J.M. 1988. Factors affecting recolonization patterns in salt marsh vegetation. *American Journal of Botany* 75(11):1625-1631.
- Hartman, J.M. H. Caswell, and I. Valiela. 1983. Effects of wrack accumulation on salt marsh vegetation. *Oceanol. Act (Proc. European Marine Biol.):* 99-102.
- Hartman, J.M. 1983. Recovery of salt marsh vegetation after coverage by wrack in Great Sippewissett salt marsh. *Estuaries* 8(2B):47A.
- Hartman, J.M. 1983. Effects of wrack accumulation on vegetation zones in a New England salt marsh. *Bulletin of the Ecological Society of America* 64:174.
- Hartman, J.M. 1983. Disturbance and patch distribution in Great Sippewissett salt marsh, Cape Cod, MA. *Estuaries* 6:311.
- Hartman, J.M. 1982. Prairie sampling methods tested for value in management planning. *Restoration and Management Notes* 1(2):14-15.
- Hartman, J.M., M. Engler. 1982. Density effects on growth and survival of *Salicornia bigelovii* and *S. europaea*. *Biological Bulletin* 163:365-6.
- Hartman, J.M. 1981. Invertebrate succession on leaf packs in a tropical moist forest stream. *Bulletin of the Ecological Society of America* 62:68.

PUBLISHED CHAPTERS, REVIEWS, REPORTS

- Hatfield, C., J.T. Mokos, J.M. Hartman and M. Kaplan. 2004. Development of Wetland Quality and Function Assessment Tools and Demonstration. For New Jersey Department of Environmental Protection.
- Hartman, J.M., N. Shao, J. Hasse, and D. Tulloch. 2003. The Value of Green in the City: Analyzing Relationships of Housing Values to Components of Urban Forestry using GIS and Remote Sensing Imagery. For USDA Forest Service.
- Hartman, J.M. and D.J. Bart. 2003. Phragmites Control: Progress on Monitoring Tidal Restoration Projects in the New Jersey Meadowlands, District Summary Report for Task 4. Report Number 8. For New Jersey Meadowlands Commission.
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Hartman, J.M., M. Norris, M. Bakacs. 2002. Status Report for the Hydrogeomorphic Model Development for the Intertidal Wetlands of the Hackensack Meadowlands District. For New Jersey Meadowlands Commission.

Hartman, J.M. 1999. Factors Influencing Establishment Success of *Melaleuca quinquenervia* (Cav.) S.T. Blake in Everglades National Park. Chapter 25 IN: Florida's Garden of Good and Evil. David T. Jones and Brandon W. Gamble, Editors.

Hartman, J.M. 1999. Restoration: Becoming a Science. Conservation Biology 13: 946-947. (Book Review of Habitat Creation and Repair by Gilbert and Anderson.)

Hartman, J.M. and A. Krivenko. 1999. Progress on Monitoring Tidal Restoration Projects in the Hackensack Meadowlands District for the Period July 1, 1999 to December 31, 1999 Report Number 2

Hartman, J.M. 1997. Recommendations for Beech Woods Restoration Plan. 40 pp. (with appendices and maps).

Hartman, J.M., and S. Strom. 1996. The Newark Urban Forestry Project: Findings and Recommendations. Center for Land Planning and Design (New Jersey). 37pp. (plus Appendices and Maps).

Strom, S., and J.M. Hartman. 1995. The East Orange Urban Forestry Project: Findings and Recommendations. Center for Land Planning and Design (New Jersey). 24 pp. (plus Appendices and Maps).

Hartman, J.M. and S. Strom. 1994. Land Planning in the 90's: Annotated Bibliography. Center for Land Planning and Design (New Jersey).

Hartman, J.M., and C.E. Bristow. 1993. Restoration experiment reveals factors in old-field succession. Restoration and Management Notes 11(1): 73.

Hartman, J.M., A. Delafosse, and the Advanced Landscape Architecture Class, Spring 1992. 1993. Factors influencing sedimentation in Ravine Lake.

Madry, S.L.H., J.M. Hartman, T. Airola, and R. Lathrop. 1992. A wetland mitigation siting study of the Raritan River Basin using geographic information systems technology. Cook College Remote Sensing Center Report. 84 pp. plus appendices.

Strom, S. and J.M. Hartman. 1992. Potential study sites: Newark urban forestry demonstration project.

Hartman, J.M., and the Advanced Landscape Architecture Class, Spring 1991. 1991. Natural Resource Planning for Tewksbury Township.

Hartman, J.M., and K. Poole. 1988. Sustainable Arid Landscapes: A Technical Report. The Aga Khan Unit for Housing and Urbanization, Graduate School of Design, Harvard University.

Hartman, J.M. 1985. Factors affecting recolonization of small disturbance patches in a New England salt marsh. Bulletin of the Ecological Society of America 66:189.

Valiela, I., J.M. Teal, C. Cogswell, J.M. Hartman, S. Allen, R. Van Etten, D. Goehinger. 1985. Some long term consequences of sewage contamination in salt marsh ecosystems. pp.. 301-316. **IN** P.J. Godfrey et al. (eds.) Ecological Considerations in Wetlands Treatment of Municipal Wastewater. Van Nostrand-Reinhold, N.Y.

Merkel, S., J.M. Hartman, and R. Howarth. 1983. Sulfate reduction following marsh grass die-back. Biological Bulletin 165:509.

Woodwell, G.M., J.J. Cole, and J.M. Hartman. 1983. Biotic Impoverishment: A review of experience in terrestrial and aquatic communities. Report to Ecosystems Center, Cornell University.

HISTORY OF GRANT SUPPORT

Weequahic Park Association. "Forestry and Botanic Inventory and Analysis, and Management Recommendations for Weequahic Park, Essex County, NJ." 2003-2004. (Co-PI, Collaboration with S. Handel) Part I

New Jersey Sea Grant. "Assessing Sediment Transport on Coastal Dunes." 2002-2004. (Co-PI, Collaboration with Karl Nordstrom, and Nancy Jackson)

U.S. Fish and Wildlife Service. "Historical Ecology of the Great Swamp." 2002-2004 (PI, Collaboration with E. Southgate and J. Momsen)

New Jersey Department of Environmental Protection "Testing a Wetlands Mitigation Rapid Assessment Tool at Mitigation and Reference Wetlands Within A New Jew Jersey Watershed." 2000-2002. (Co-PI, Collaboration with C. Hatfield)

Meadowlands Environmental Research Institute. "Vegetation History and Land Use Maps for the Hackensack Meadowlands District." 2000-2001 (PI, Collaboration with E. Russell)

New Jersey Department of Environmental Protection. "Development of Wetland Quality and Function Assessment Tools and Demonstration." 1998-2001 (PI, Collaboration with C. Hatfield)

Hackensack Meadowlands Development Commission. "Monitoring of Three Wetland Restoration Projects." 1998-2006. (PI)

USDA Forest Service. "Reforestation potential of hemlock-hardwood stands following large scale hemlock mortality." 1998-1999. (PI)

NJ Department of Environmental Protection. "Analysis of endangered plant species population health and threats." 1998-2001. (Co-PI, Collaboration with T. Breden, NJDEP) .

New Jersey Department of Environmental Protection. "Assessing The Hydrogeomorphic Model for Wetlands Assessment in New Jersey." 1997-2002. (PI, Collaboration with C. Hatfield)

US National Arboretum. "Recommendations for restoration of Beech Woods." 1997. (PI)

USDA Forest Service. "The Influence of Trees on the appraisal value of urban land." 1996-1999. (PI, Collaboration with S. Strom and D. Tulloch)

Ducks Unlimited/Hackensack Meadowlands Development Commission. "Pre-restoration site analysis for Harrier Meadow." 1996-1998. (PI)

New Jersey Agricultural Experiment Station Special Initiatives. "Establishment of soil processes in restored sites." 1995. (PI)

Clayton Mining Corporation. "Population ecology of the rare plant, *Chrysopsis falcata*." 1994-1997. (PI, Collaboration with S. Handel)

US DOI-NPS. "Affects of Hurricane Andrew on the spread of invasive species." 1994-1997.

Chemical Waste Management Inc. "Ecological Factors Influencing the Restoration of a Population of *Helonias bullata* in a Southern New Jersey Wetland." 1993-1997.

New Jersey Agricultural Experiment Station. "Restoration of community processes in constructed wetlands." 1993-1995

New Jersey Office of State Planning. "The use of geographic information systems in the designation of scenic highways." 1993-94. (PI, Collaboration with Cook College Remote Sensing Center)

New Jersey Department of Transportation. "Wetland mitigation site selection in Passaic County" (Co-PI, Collaboration with Cook College Remote Sensing Center). 1993-1994.

Rutgers Research Council. "The influence of Martha Brookes Hutcheson on Landscape Architecture." 1993.

New Jersey Agricultural Experiment Station. "Potential beneficial uses of municipal solid waste compost for land reclamation." 1992-1995.

New Jersey Department of Environmental Protection and Energy. "Urban Forestry: Applications for Two New Jersey Cities." 1992-1994. (Co-PI, Collaboration with S. Strom)

New Jersey Department of Transportation. "Wetland mitigation for the Route 18 realignment project." 1992-1993. (Co-PI, Collaboration with Cook College Remote Sensing Center)

McIntire-Stennis Project 84301, New Jersey Agricultural Experiment Station. "Controls of native plant establishment and persistence." 1988-1997.

HONORS AND AWARDS

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| 2002-5 | Visiting Professor of Restoration Ecology. Three Gorges University, Yichang, Hubei Province, Peoples Republic of China. |
| 1997 | NJ APA Creative Planning Award with March Associates for Lubbers Run Greenway Design. |
| 1995 | NJASLA Honor Award for Communication, with R. Wood and S. Strom. |
| 1995 | NJASLA Merit Award for Landscape Planning, with S. Strom. |
| 1995 | Certificate of Appreciation. New York City Audubon Society. |
| 1994 | Award of Distinction. Council of Educators in Landscape Architecture. |
| 1992 | Award of Distinction. Council of Educators in Landscape Architecture. |
| 1992 | Merit Award for Research, American Society of Landscape Architects, New Jersey Chapter. |
| 1992 | Creative Land Planning Award for Tewksbury Open Space Study. New Jersey Federation of Planning Officials. |
| 1991 | Citation of Merit for Creative Design. New Jersey Federation of Planners. |
| 1990 | Faculty Advisor - 3rd Place. Environmental Management Competition, Environmental Expo Advisory Board and New Jersey Department of Environmental Protection. |
| 1990 | Faculty Advisor - Honorable Mention. Environmental Management Competition, Environmental Expo Advisory Board and New Jersey Department of Environmental Protection. |
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THESES DIRECTED

- David Bart. Ph.D. Ecology and Evolution Graduate Program. 2003. Environmental determinants of *Phragmites australis* invasion in a New Jersey salt marsh: Interactions among human activities, disturbance, and edaphic conditions.
- Jocelyn Tutak. 2003. G.H. Cook Honors Thesis. Patterns of seedling establishment in Kearny Marsh, New Jersey.
- Myla Johnson. 2002. Floodplain forest vegetation, soils, and land use of the Upper Passaic River Basin, NJ.
- Cathy Yuhas, M.S. Environmental Science, NJIT. 2001. Benthic communities in *Spartina alterniflora* and *Phragmites australis* dominated salt marshes.
- Julie Conklin. G.H. Cook Honors Thesis. 2001. Effects of herbivores on selected salt marsh flora.
- Diana Raichel. M.S. Ecology and Evolution Graduate Program. 2000. The influence of *Phragmites* dominance on marsh nekton.
- JoAnna Heberger. Ph.D. Ecology and Evolution Graduate Program. 2000. The effects of soil amendments on Mycorrhizae and growth of *Quercus rubra* (Northern Red Oak) seedlings.
- Jamie Morf. B.S. Departmental Thesis. 2000. College Avenue Campus Gateways: Analysis and Proposals.
- Sylvan Kaufman. Ph.D. Ecology and Evolution Graduate Program. 1999. The effect of habitat and species characteristics on the invasiveness of *Melaleuca quinquenervia* (Cav.) Blake.
- Eliza Goodwin. M.S. Ecology and Evolution Graduate Program. 1999. The influence of some environmental factors on germination and early seedling growth of *Nartheicum americanum* Ker Gawler (Liliaceae).
- Melanie McCool. G.H. Cook Honors Thesis. 1998. Avian community ecology in the hemlock forest of northern New Jersey: Possible response to hemlock decline.
- Claire Homitzky. G.H. Cook Honors Thesis. 1997. Prospects for a sustainable agriculture in Greene County, NY.
- Andrew Bersch. Rutgers Honors Thesis. 1996. Genetic variation in five populations of swamp pink, *Helonias bullata* (Liliaceae).
- Lisa Boyles. M.S. Ecology and Evolution Graduate Program. 1996. Use of municipal solid waste compost in landscape restoration.
- Owen Boyle. G.H. Cook Honors Thesis. 1996. Reestablishment of Atlantic White Cedar after fire.
- Denise Royle. M.S. Ecology and Evolution Graduate Program. 1996. Monitoring Hemlock Decline in Northern New Jersey.
- Jill Dodds. M.S. Plant Biology Graduate Program. 1995. Restoration of *Helonias bullata* to its natural habitat.
- Robert Jordan. Ph.D. Ecology and Evolution Graduate Program. 1993. Demography and Recruitment in Shrub Communities of *Acer rubrum* Swamp Forests of Central New Jersey.
-

Mike Van Clef. G.H Cook Honors. 1993. Effects of Habitat Isolation on the Reproductive Biology of *Cornus amomum*.

Dawn Holt. G.H. Cook Honors, 1993. Habitat Assessment Techniques for the Wood Turtle.

Michael Renda. M.S. Ecology and Evolution Graduate Program. 1991. Dispersal, Germination, and Establishment patterns of Eastern Red Cedar, *Juniperus virginiana* L.

Denise Royle. G.H. Cook Honors, 1990. Martha Brookes Hutcheson and her Influence on the American Landscape.

PROFESSIONAL AFFILIATIONS

Ecological Society of America
Society for Ecological Restoration
Society of Wetland Scientists
Graduate Faculty of Ecology and Evolution - Rutgers
Graduate Faculty of Plant Biology - Rutgers
Center for Land Planning and Design – Rutgers
Center for Remote Sensing and Spatial Analysis - Rutgers
Center for Urban Restoration Ecology - Rutgers
Institute for Marine and Coastal Sciences - Rutgers
