CURRICULUM VITAE **MaryCarol Rossiter Hunter** **03/30/2019**

Associate Professor, School of Natural Resources & Environment mchunter@umich.edu
University of Michigan, Ann Arbor, MI 48109

Educational Background
University of Georgia, Master of Landscape Architecture, 1999
State University of New York at Stony Brook, Ph.D. Ecology, 1981
University of California at Berkeley, B.A. Zoology, 1976.
University of Detroit, B.A. Communications, 1970.

Master's Thesis: Evolution of an Ecological Aesthetic in Landscape Design: The Beauty of Revealed Function.
Doctoral Dissertation: Evolution of Host Plant Use in a Generalist Herbivore, *Lymantria dispar*.

Employment History
Associate Professor, School of Natural Resources and Environment, University of Michigan, Ann Arbor, MI 5/2012 – present
Assistant Professor, School of Natural Resources and Environment, University of Michigan, Ann Arbor, MI 1/2006 – 4/2012
Assistant Professor and professional designer, School of Environmental Design, University of Georgia, Athens GA, 8/2003 – 12/2005
Landscape Architect, Beall, Gonnsen & Co. Athens, GA; Site design, master planning, engineering, construction, 6/1999 - 7/2003
Research Scientist, 15 years:
Adjunct Associate Research Ecologist, Institute of Ecology, University of Georgia, 6/1995 – 12/1997
Assistant Professor (tenure-track), Université Laval, Département de Biologie, 8/92- 1/95.
Research Associate (non-standing faculty), Pennsylvania State University, Dept. Entomology, 6/87 - 7/92.
Postdoctoral Associate, Pennsylvania State University, Department of Entomology, 8/84 - 5/87.
Lecturer, University of Texas at Austin, Dept. Zoology, 1/82 - 1/84.
Postdoctoral Associate, University of Texas at Austin, Depts. Botany and Zoology, 4/81 - 12/81.

Teaching Experience
University of Michigan: Ecological Site Design Studio, Ecological Planting Design Studio; Urban Agriculture – current; Site Engineering-Civil Engineering for Landscape Architects, Sustainable Site Design Studio - previously
University of Georgia: undergrad - Applied Landscape Ecology; Urban Design; Site Planning; Advanced Construction; grad level - Design & Meaning - advanced design studio; interdisciplinary course with engineering and ecology faculty and students doing outreach projects. 2003 – 2006.
University of Texas: undergrad - Genetics, Ecology & Evolution, Cell Biology, Organismal Biology. 1982 – 1984.

Certification & Licensure:
Registered Landscape Architect, No. LA001313, State of Georgia License, 2003 to present

PUBLICATIONS
***Refereed scholarly articles* (*Landscape Architecture*):**
Hunter, M.R., B.W. Gillespie, S.Y. Chen. 2019. Urban nature experiences reduce stress in the context of daily life based on salivary biomarkers. Frontiers in Psychology doi: 10.3389/fpsyg.2019.00722

Ibarra FF, Kardan O, Hunter MCR, Kotabe HP, Meyer FA and Berman MG. 2017. Image Feature Types and Their Predictions of Aesthetic Preference and Naturalness. Frontiers in Psychology 8:632. doi: 10.3389/fpsyg.2017.00632

Hadavi, S, R Kaplan, MCR Hunter. 2017. How does perception of nearby nature affect multiple aspects of neighbourhood satisfaction and use patterns? Landscape Research. 42(6): 1-20 doi: 10.1080/01426397.2017.1314453

Hunter, M. R. and A. Askarinejad. 2015. Designer's approach for scene selection in tests of preference and restoration along a continuum of natural to manmade environments. Frontiers in Psychology 6:1228 doi: 10.3389/fpsyg.2015.01228).

Kardan O, Demiralp E, Hout MC, Hunter MR, Karimi H, Hanayik T, Yourganov G, Jonides J, Berman MG, 2015. Is the preference of natural versus man-made scenes driven by bottom–up processing of the visual features of nature? Frontiers in Psychology 6:471. doi: 10.3389/fpsyg.2015.00471

Hadavi, S., R. Kaplan, and M.R. Hunter. 2015. Environmental affordances: A practical approach for design of nearby outdoor settings in urban residential areas. Landscape and Urban Planning 134: 19-32.

Berman MG, Hout MC, Kardan O, Hunter MCR, Yourganov G, et al. 2014. The Perception of Naturalness Correlates with Low-Level Visual Features of Environmental Scenes. PLoS ONE 9(12): e114572. doi: 10.1371/journal.pone.0114572

Hunter, M.C. and D.G. Brown. 2012. Spatial contagion: Gardening along the street in residential neighborhoods. Landscape and Urban Planning. 105:407-416.

Haan, N.L., M.C. R. Hunter, and M.D. Hunter. 2012. Investigating Predictors of Plant Establishment During Roadside Restoration. Restoration Ecology 20(3) 315-321.

Hunter, M.C. 2011. Using ecological theory to guide urban planting design: An adaption strategy for climate change. Landscape Journal 30(2): 173-193.

Hunter, M.C. 2011. Impact of ecological disturbance on awareness of urban nature and sense of environmental stewardship in residential neighborhoods. Landscape and Urban Planning 101:131-138.

Hunter, M.C .and Hunter, M.D. 2008. Designing for conservation of insects in the built environment. Insect Conservation and Diversity. 1(4): 189-196.

Hunter, M.C . 2008. Managing Sense of Place in Transition: Coping with Climate Change. PLACES- a Forum of Environmental Design 20(2): 20-25.

Book Chapters (Landscape Architecture):

Aguirre, S. et al. 2015. Sustainable tourism: Strategies for landscape regeneration. In Rome's Landscape: LE:NOTRE Landscape Forum 2013, Stiles, S. B.-P. et al. (eds.), pp. 161-210. LE:NOTRE Landscape Monographs.

Heneghan, L. and M.C. Hunter. 2006. "Biodiversity" section of Green Landscaping with Native Plants. http://www.epa.gov/greenacres/conf12_04/conf_knwldge.html. U.S. Environmental Protection Agency.

Hunter, M.C. 2007. Ecological Community Restoration. In L. J. Hopper (ed.), Landscape Architectural Graphics Standards: Student Edition. Pp. 431-437, in section: Restoration and Remediation. John Wiley & Sons, Inc. New York. 566 pages.

Hunter, M.C. 2006. Ecological Community Restoration. In L. J. Hopper (ed.), Landscape Architectural Graphics Standards; Professional Edition. Pp. 792-798 in section: Restoration and Remediation. John Wiley & Sons, Inc. New York. 1074 pages. **R**

Johnson, B.R., J. Silbernagel, M.Hostetler, A. Mills, F. Ndubisi, E. Fife and M.C. Rossiter Hunter. 2002. The Nature of Dialogue and the Dialogue of Nature: Designers and Ecologists in Collaboration. In B.R. Johnson & K. Hill (eds.) Ecology and Design: Frameworks for Learning. Pp. 305-356. Island Press, Washington, D.C.

Reviews (Landscape Architecture):

Hunter, M.C. 2011c. Conference Review for 2010 Joint meeting of International Study Group for Multiple Use Land (ISOMUL) and the Council of Educators in Landscape Architecture (CELA). Landscape Journal 30(1):162-164.

Websites for Public Education:

Hunter, M.C. 2009. http://natureforcities.snre.umich.edu/

Reports (Landscape Architecture):

Hunter, M.C. 2010. Sustainable approaches for protecting sense of place and building community in new cities. In El-Maghraby, A, M George, and M El-Demirdash (eds.), US-Egypt Conference/Workshop on Sustainable Green Building in Desert Environment, pp. 49-50. Housing & Building National Research Center, Giza, Egypt

Published Abstracts (Landscape Architecture):

Hunter, M.C. 2015 Handout for ASLA Education Session FRI-B10: Urban Green Space and Mental Well-being: Evidence-Based Design. Annual Meeting, American Society of Landscape Architects, Chicago IL, Nov 6-9. https://www.asla.org/uploadedFiles/CMS/Meetings_and_Events/2015_Annual_Meeting_Handouts/FRI-B10_Urban%20Green%20Space%20and%20Mental%20Well-being.pdf

Hunter, M.C. 2015. Developing Design Guidelines for Urban Spaces in Support of Mental Wellbeing Using Theoretical Frameworks from Environmental Psychology and Aesthetics, Pg 184 in Brainstorms: Dynamic Interactions of Environment-Behavior and Neurosciences, Proceedings of the 46th Annual Conference of the Environmental Design Research Association (EDRA). Los Angeles CA, May 27-30

Hunter, M.C. 2012. Spatial contagion: Gardening along the street in residential neighborhoods, Pg 296 in Finding Center: Landscape & Values, CELA: Council of Educators in Landscape Architecture, Urbana-Champaign IL

Hunter, M.C. 2010. Impact of extensive street tree loss on urban dwellers' sense of place. Pg 9 in Charles H.; Ginzel, Matthew D., eds. Proceedings of symposium on ash in North America. Gen. Tech. Rep. NRS-P-72. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.

Hunter, M.C. 2010. Impact of extensive street tree loss on sense of place in urban dwellers. Pg. 70 in G.J. Carsjens (ed.), Landscape Legacy: Landscape Architecture and Planning Between Art and Science, CELA: Council of Educators in Landscape Architecture/ ISOMUL: International Study Group on Multiple Uses of Land, Maastricht, Netherlands **(R)**

Hunter, M.C. 2009. Using ecological theory to guide urban planting design in light of climate change. Pg. 98 in Teaching + Learning Landscape, CELA: Council of Educators in Landscape Architecture, Tucson AZ **(R)**

Hunter, M.C. 2008. Adaptation to climate change: Using ecological theory to guide urban planting design. Ecological Society of America, Milwaukee WI http://eco.confex.com/eco/2008/techprogram/P10814.HTM

Hunter, M.C. 2007. Managing Urban Forest Disturbance: Ecological Design for the People and the Environment, Symposium: Advancing Ecological Function in Managed Ecosystems: Restoring, Revealing, and Re-inventing the Landscape. Ecological Society of America / Society for Ecological Restoration, San Jose, CA http://eco.confex.com/eco/2007/techprogram/P1455.HTM

Hunter, M., Sawhill, R., Echols, S., and Liptan. T. 2006. Sustainability and G=D/L: A New Path for Teaching Site Engineering. Pg. 201 in Proceedings of the (CELA) Council of Educators in Landscape Architecture Conference and the Canadian Society of Landscape Architects, University of University Of British Columbia, June14-17, 2006, Vancouver, British Columbia., Vancouver, British Columbia. **(R)**

Refereed scholarly articles (Sciences):

Rossiter, M.C. 1996. The incidence and consequences of inherited environmental effects. Annual Review of Ecology and Systematics 27: 451-476.

Yerger, E.H. and M.C. Rossiter. 1996. Natural causes and rates of early larval mortality in gypsy moths (Lepidoptera: Lymantriidae) sampled from field populations in different density states. Environmental Entomology 25: 1002-1011.

Rossiter, M.C., D.L. Cox-Foster, M. Abou-Zaid, D. Bergeron. 1996. Egg protein insolubility in *Lymantria dispar* versus other forest lepidoptera. ChemoEcology 7: 74-84.

Rossiter, M.C. 1994. Maternal effects hypothesis of herbivore outbreak. BioScience 44:752-763.

Rossiter, M.C., D.L. Cox-Foster, and M.A. Briggs. 1993. Initiation of maternal effects in *Lymantria dispar* L.: Genetic and ecological components of egg provisioning. Journal of Evolutionary Biology 6: 577-589.

Rossiter, M.C. 1991a. Environmentally-based maternal effects: A hidden force in insect population dynamics? Oecologia 87: 288-294.

Rossiter, M.C. 1991b. Maternal effects generate variation in life history: consequences of egg weight plasticity in the gypsy moth. Functional Ecology 5: 386-393.

Rossiter, M.C., W.G. Yendol, and N.R. Dubois. 1990. Resistance to *Bacillus thuringiensis* in the gypsy moth (Lepidoptera: Lymantriidae): Genetic and environmental causes. Journal of Economic Entomology 83(6): 2211-2218.

Rossiter, M.C., J.C. Schultz, and I.T. Baldwin. 1988. Relationships among defoliation, red oak phenolics, and gypsy moth growth and reproduction. Ecology 69: 267-277.

Rossiter, M.C. 1987a. Use of a secondary host, pitch pine, by non-outbreak populations of the gypsy moth. Ecology 68: 857-868.

Rossiter, M.C. 1987b. Genetic and phenotypic variation in diet breadth in a generalist herbivore. Evolutionary Ecology 1: 272-282.

Rossiter, M.C., J. Gershenzon, and T.J. Mabry. 1986. Behavioral and growth responses of a specialist herbivore (*Homoeosoma electellum*) to the major terpenoid of its host (*Helianthus* spp.). Journal of Chemical Ecology 6: 51-63.

Book Chapters (Sciences):

Rossiter, M.C. 1998a. The role of environmental variation in parental effects expression. *In* T.A. Mousseau and C.W. Fox (eds.), Maternal Effects As Adaptations. Pp. 112-134. Oxford University Press

Rossiter, M.C. 1998b. Assessment of genetic variation in the presence of maternal or paternal effects in herbivorous insects. *In* S. Mopper and S. Strauss (eds.), Genetic Structure and Local Adaptation in Natural Insect Populations. Pp. 113-138. Chapman & Hall, New York

Rossiter, M.C. 1995. Impact of life history evolution on population dynamics: predicting the presence of maternal effects. *In* N. Cappuccino and P.W. Price (eds.), Population Dynamics: New Approaches and Synthesis, Pp. 251-275. Academic Press, San Diego.

Rossiter, M.C. 1992. The impact of resource variation on population quality in herbivorous insects: A critical component of population dynamics. *In* M.D. Hunter, T. Ohgushi and P.W. Price (eds.), Resource Distribution and Animal-Plant Interactions, Pp. 13-42. Academic Press, San Diego.

Gershenzon, J., M.C. Rossiter, T.J. Mabry, C.R. Rogers, et.al. 1985. Insect antifeedant terpenoids in wild sunflower: a possible source of resistance to the sunflower moth (*Homoeosoma electellum*). *In* Bioregulators for Pest Control, P.A. Hedin, ed., pp.443-446. American Chemical Society, Washington, D.C.

Rossiter, M.C., D.J. Howard and G.L. Bush. 1982. Symbiotic bacteria of Rhagoletis pomonella, pp. 77-84. In R. Cavallo (ed.) Fruit Flies of Economic Importance. A.A. Balkema, Rotterdan, Netherlands.

Reviews (Sciences):

Rossiter, M.C. 1989. Book Review: Epizootiology of Insect Disease. Fuxa and Tanada (eds.) Quarterly Review of Biology 64(2): 207-208.

GRANTS OR CONTRACTS RECEIVED

Funding Record as Principle Investigator (Landscape Architecture):

TKF Foundation, "The mechanisms and design elements of restorative experiences at Open Space, Sacred Places (OSSP) sites", with PI Marc Berman and Co-PI John Jonides (5/2013 – 4/2018) $678.2K

University of Michigan MCubed Grant, "A "nature pill" for healthy ageing in urban areas", with co-PIs Sara Warber & Brenda Gillespie (1/2013 – 12/2014) $60,000

USDA-FS, McIntire-Stennis Award, "Public urban green spaces: The impact of proximity to home, landscape structure, and ecological diversity on mental wellbeing", USDA-NIFA-MSCFR-TBA (10/12 – 8/15) $72,000

SNRE Research Seed Grant Program, "Spatially Contagious Distribution of Easement Gardens in Ann Arbor: motivations and cultural impact", (7/2011 – 6/2012) $7000

USDA-FS, McIntire-Stennis Award, "Supporting Ecological Services Provided by Urban Forest Habitat in Residential Areas", USDA-NIFA-MSCFR-002655 (1/09 – 9/10) $67,500

USDA-FS, McIntire-Stennis Award, "Urban Forest Disturbance: Environmental and Behavioral Response to Street Tree Loss due to the Emerald Ash Borer", CSREES-OD-1088-D (10/06 – 9/08) $60,000

Lynch Mountain Community Coalition, "Lynch Mountain Study: Designs for an Ecologically and Culturally Sensitive Land" , co-PI, Pratt Cassity, University of Georgia Public Outreach, (1/05-1/06) $25,000

US Fish & Wildlife, Working Together to Restore Habitat Program for installation of raingarden with community educational component; co-Pi, Deborah Borden, environmental engineer, (1/05-9/06) $12,000

UGA Research Foundation Junior Faculty Seed Grant in Humanities and Arts, "Evaluation of the ecological aesthetic in the built environment in Georgia", (1/05-1/06) $2000

Funding Record as Principle Investigator (Sciences):

National Science Foundation. Mid-Career Advancement Award. Impact of Heavy Metals on DNA Damage and Survival in Two Grasshopper Species. 12 months (7/96-6/97), $57,000.

University System of Georgia National Patterns of Academic Excellence Program. Nature and mechanism of population-level response to heavy metal contamination of grasshoppers. 6 months (10/95-4/96), $10,000.

National Sciences and Engineering Research Council of Canada, NSERC #OGPIN 018. Contribution of maternal effects to population dynamics of herbivorous insects. 3 years (4/92-3/95), $65,000

National Sciences and Engineering Research Council of Canada, Equipment Grant for ELISA/immunoassay equipment. 1 year (4/92-3/93), $28,000

National Research Initiative (USDA) Competitive Grants Program, NRI/USDA #91-37302-6292. Pathogen tolerance in *Lymantria dispar*: Genetic and maternal effects components. 3 years (8/91-7/94), $210,000

USDA Competitive Grants Program, USDA #89-37250-4590. Genetic and environmental control of egg provisioning by the gypsy moth. 2 years (8/89-7/91), $120,000 ((D. Cox-Foster, co-PI)

National Science Foundation (Population Biology), BSR-8706001. Ecological genetics of diet breadth in a generalist herbivore, *Lymantria dispar*. 2 years (9/87-9/89), $117,000

NEPIAP- Northeast Pesticide Impact Assessment Program. Variation in resistance to *Bacillus thuringiensis* within and among three gypsy moth populations. 1 year (7/88-7/89), $18,000 (W.G. Yendol, co-PI)

University Research Institute (Univ. of Texas) Grant R-324. Toxins produced by wild sunflowers: a possible source of resistance against insects. 1 year (5/82-5/83), $5,000

PRESENTATIONS

Invited Presentations (Landscape Architecture):

Speaker and panel member: Non-Economic Values of Ecosystem Services. Water Center at University of Michigan. "Designing for psychological ecosystem services – aesthetics and restoration. Ann Arbor MI, 3/28/2017

Speaker: TKF Foundation webinar "Deconstructing nature based on theory and empirical evidence in order to assess sources of wellbeing benefits. 1/20/2017

Speaker and panel member: Urban nature experiences result in lowered levels of stress hormone, cortisol". Texan by Nature and Houston Methodist Symposium A Natural Connection: Exploring Positive Outcomes in Health and Healing Through Nature. Houston TX, 9/12/2016 https://www.youtube.com/watch?v=kzHBSUUR6WI

Speaker and organizer: "Designing Urban Green Space for Mental Wellbeing: Translating Research for Evidence-Based Design" Education Session, ASLA National meeting, Chicago, 2015, with Marc Berman and Jay Graham. Session selected to be recorded and used for online continuing education credits.

Speaker: Developing Design Guidelines for Urban Spaces in Support of Mental Wellbeing Using Theoretical Frameworks from Environmental Psychology and Aesthetics, 46th Annual Conference of Environmental Design Research Association (EDRA). Los Angeles CA, May 27-30

Speaker: "Taking a nature Pill", UM TED-talk in MCubed Symposium, University of Michigan, Ann Arbor, Oct 2014.

Poster: LE:NOTRE Landscape Forum- MEETING IN THE MIDDLE | A point of contact for different landscape cultures. Sustainable Tourism | strategies for landscape regeneration: "Planting design for ecological resilience and sense of place under climate change ", April, 2013

Speaker: Natural Environment Research Council's Centre for Ecology & Hydrology, Edinburgh. "Translating ecological processes for the design of resilient urban green space." February 2013.

Speaker: LE:NOTRE, European Thematic Network in Landscape Architecture: Online seminar 'Landscape Architecture and Climate Change'. "Working with climate change through ecologically resilient planting design." January 2013.

Speaker: University of Edinburgh, College of Art and Design. "Design of urban nature in relation to human wellbeing and sense of place." June 2012.

Speaker and panelist: AIA Detroit by Design - Part 3, Urban Agriculture. "Designing for Interface between public life and urban agriculture". American Institute of Architect's sponsored public workshop for citizens, professionals and government. Detroit Main Library. June 2011.

Speaker: University of Oregon, Department of Landscape Architecture's Research to Design series. "Using ecological theory to guide urban planting design: An adaption strategy for climate change". April 2011.

Speaker and participant: Workshop on Building Sustainable Cities in Desert Environments, Cairo, Egypt, co-sponsored by the National Science Foundation and the Egyptian government. March 2010.

Speaker: USFS Symposium on Ash in North America. "Impact of extensive street tree loss on sense of place in urban dwellers". Purdue University, March 2010.

Speaker: University of Michigan Faculty Scholars Program in Integrative Medicine." The use of health-giving mind-body techniques as a path to intuitive thinking in design studio education", September 2007.

Symposium speaker: "Managing Urban Forest Disturbance: Ecological Design for the People and the Environment" in symposium *Advancing Ecological Function in Managed Ecosystems: Restoring, Revealing, and Re-inventing the Landscape* Ecological Society of America / Society for Ecological Restoration, San Jose, CA, August 2007

Organizer, speaker, panel member on Pedagogy: "Sustainability and G=D/L: A New Path for Teaching Site Engineering", CELA Conference (Council of Educators in Landscape Architecture), Vancouver, BC, June 2006.

Speaker in Ecology series: "Achieving Sustainable Design: Collaboration among Designers, Engineers and Ecologists", Dept. Biology, Georgia State University in Atlanta, March 2005

Speaker: "Ethical Perspectives on Practices in Sustainable Design", Environmental Ethics Program, University of Georgia, Athens, GA, March 2005

Keynote Speaker on Ecological Sustainability for BioScience Day, "Design Innovations for a Sustainable Built Environment", Washington DC, November 2004

Seminar series speaker: “The Relevance of Ecological Design to the Science of Sustainability”, Dept. Entomology, University of Maryland, College Park, November 2004

Speaker/Panel Member at conference “Landscaping with Native Plants: Exploring the environmental, social and economic benefits”. DePaul University, Chicago, IL , December 2004

Public Lecture: “Ecological Basis of Fine Design”, School of Environmental Design seminar series, University of Georgia, April 1999,

Invited participant: Shire Conference: “Interfacing Ecology and Landscape Architecture”, Portland, Oregon, July, 1998.

Contributed Papers-peer reviewed (Landscape Architecture):

CELA: Council of Educators in Landscape Architecture; “Spatial contagion: Gardening along the street in residential neighborhoods”; Urbana IL March 2012

CELA: Council of Educators in Landscape Architecture/ ISOMUL: International Study Group for the Multiple Use of Land; “Impact of extensive street tree loss on sense of place in urban dwellers”; Maastricht, Netherlands, May 2010

CELA: Council of Educators in Landscape Architecture, “Using ecological theory to guide urban planting design in light of climate change”; Tucson AZ, January 2009

ESA: Ecological Society of America, “Adaptation to climate change: Using ecological theory to guide urban planting design”; Milwaukee WI, August 2008

Invited Presentations (Sciences, since 1990):

Symposium Speaker; Symposium: Maternal Effects as Adaptations, Society for the Study of Evolution, St. Louis, MO. (1996)

Symposium Speaker; Symposium: Understanding population stability and outbreaks: new approaches from the study of phytophagous insects, Ecological Society of America, Knoxville, Tenn. (1994)

Seminar Speaker; Institute of Terrestrial Ecology, Millbrook, NY (1994)

Seminar Speaker; University of British Columbia, Dept. Zoology (1993)

Symposium Speaker; International Conference: Individuals, Populations & Patterns, Norwich, England (1992)

Symposium Speaker; International Symposium: Characteristics of Forest Insect Pests and Outbreaks, XIX International Conference of Entomology, Beijing, China (1992)

Seminar Speaker; McGill University, Dept. Biology, Montréal (1992)

Seminar Speaker; University of South Carolina, Dept. Biology (1992)

Seminar Speaker; University of Arizona, Dept. Biochemistry (1990)