

Roger Earl Latham

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PROFESSIONAL EXPERIENCE

Ecologist/Conservation Biologist

Continental Conservation, Rose Valley, Pennsylvania (2000-ongoing):

Doing applied research and conservation planning as a consultant for the National Park Service, The Nature Conservancy, Natural Lands Trust, Western Pennsylvania Conservancy, Audubon, Pennsylvania Department of Conservation and Natural Resources, New York State Department of Environmental Conservation, and other agencies and organizations involved in wildland restoration and management.

Assistant Professor

Department of Biology, Swarthmore College (1996-2000):

Conducted research in restoration ecology and alternative persistent states in plant communities; taught courses and seminars in ecology and related subjects; supervised student research.

Post-doctoral Researcher

Department of Geology, University of Pennsylvania (1992-1996):

Directed an experimental research program on the ecology, biogeochemistry and conservation biology of fire-maintained shrubland ecosystems marked by exceptional clusters of rare species.

Director, Science and Stewardship; Stewardship Ecologist

Pennsylvania Field Office, The Nature Conservancy (1988-1992):

Planned and implemented management of a regional nature preserve system. Supervised assistants, interns, preserve stewards and volunteers. Developed preserve design, biological monitoring, restoration, and protection strategies for globally rare species and exemplary occurrences of natural communities.

Botanist/Field Investigator

Pennsylvania Flora Project, Morris Arboretum, University of Pennsylvania (1982-1983):

Located and documented populations of approximately 200 species of rare plants across eastern Pennsylvania as part of the multi-agency Pennsylvania Natural Diversity Inventory.

Naturalist/Environmental Planner

Fahringer McCarty Grey, Inc., Pittsburgh (1973-1980):

Collaborated in developing conservation management plans for large landholdings of state and federal government agencies and conservation organizations in five states.

EDUCATION

Ph.D. in Biology	University of Pennsylvania (1990) Thesis: Co-Occurring Tree Species Change Rank in Seedling Performance with Small-Scale Resource Variation (Advisor: Dr. Brenda B. Casper)
B.A. in Biology	Swarthmore College (1983)

PROFESSIONAL CERTIFICATION

Certified as Senior Ecologist, Ecological Society of America (1995)

PROFESSIONAL AND CIVIC SERVICE ACTIVITIES

President (2015-16), acting webmaster, and member of Ecological Community Technical Committee, Pennsylvania Biological Survey (2005-ongoing)

Ecosystem Management Advisory Committee, Pennsylvania Bureau of Forestry (2013-ongoing)

Steering Committee, Private Lands Plant Sanctuary Program, Pennsylvania Department of Conservation and Natural Resources (2008-ongoing)

Chair, Environmental Advisory Council, Borough of Rose Valley, Pennsylvania (2008-ongoing)

Board of Trustees, Natural Lands Trust, Media, Pennsylvania (2008-14)

Advisory Committee, Wild Resource Conservation Program, Pennsylvania Department of Conservation and Natural Resources (2007-13)

Deer Management Forum, Audubon Pennsylvania and Pennsylvania Habitat Alliance (2001-05)

Natural Areas Committee, Tyler Arboretum, Media, Pennsylvania (2000-ongoing)

Editor of *Bartonia: Journal of the Philadelphia Botanical Club* (1999–2007)

INVITED SYMPOSIUM PRESENTATIONS

“Pink Hill: Restoring and Sustaining the Tyler Arboretum’s Ancient Grassland,” Bowman’s Hill Wildflower Preserve’s Land Ethics Symposium, Delaware Valley University, Doylestown, Pennsylvania (2016)

“Desired Conditions Analysis for Mount Loretto Grasslands,” Grasslands of New York City: a Workshop to Evaluate Habitat Quality and Availability for Birds, Staten Island, New York (2016)

“World-class Ecosystem with a Heart of Stone: What the Piedmont Serpentine Barrens Reveal About Continental Collision, Extinct Megafauna, Ancient Customs, and More,” Irvine Native Plant Seminar, Irvine Nature Center, Owings Mills, Maryland (2015); Maryland Native Plant Society Annual Fall Conference, Cecil College, North East, Maryland (2014)

“Forests Too Deer: How Today’s Record High Deer Population Affects Ecosystems, Biodiversity and Quality of Life,” Gordon Natural Area Seminar, West Chester University, West Chester, Pennsylvania (2009)

“Paleo- and Present-Day Ecology of Fire-Maintained Ecosystems in Pennsylvania,” Fire in Pennsylvania Conference, State College (2008).

“All Meadows Aren’t Created Equal: a Diversity of Meadow Communities,” New Directions in the American Landscape Symposium, Connecticut College, New London, and Villanova University, Villanova, Pennsylvania (2008).

“Native grasslands and meadows in Pennsylvania: their history and current condition,” Bowman’s Hill Wildflower Preserve’s Land Ethics Symposium, Langhorne, Pennsylvania (2007); plenary address, Eastern Native Grass Symposium, New Cumberland, Pennsylvania (2006); Pennsylvania Grasslands Workshop, Kings Gap (2005).

“Shrubland Longevity and Rare Plant Species in the Northeast,” Early-Successional Forests and Shrubland Habitats in the Northeastern United States: Critical Habitats Dependent on Disturbance, University of New Hampshire, Durham (2002)

EDITORIAL WORK

Editor of *Bartonia: Journal of the Philadelphia Botanical Club* (1999–2007)

Peer reviewer for professional journals, organizations and agencies:

<i>American Journal of Botany</i>	<i>Journal of Applied Ecology</i>	<i>Northeastern Naturalist</i>
<i>American Midland Naturalist</i>	<i>Journal of Ecology</i>	<i>Oecologia</i>
<i>American Naturalist</i>	<i>Journal of the Torrey Botanical Society</i>	Pennsylvania Wild Resource Conservation Program
<i>Annals of Botany</i>	<i>Journal of Vegetation Science</i>	<i>Plant Ecology</i>
<i>Australian Journal of Ecology</i>	<i>Mitteilungen der Eidgenössischen Forschungsanstalt für Wald, Schnee und Landschaft</i>	<i>Restoration Ecology</i>
<i>Bartonia</i>	National Science Foundation	U.S. E.P.A., National Health and Environmental Effects Laboratory
<i>Diversity and Distributions</i>	Natural Sciences and Engineering Research Council of Canada	U.S. Department of Defense, Strategic Environmental Research and Development Program (SERDP)
<i>Ecography</i>	<i>Natural Areas Journal</i>	<i>Sustainability</i>
<i>Ecology</i>	New Hampshire Agricultural Experiment Station	
<i>Ecology Letters</i>		
<i>Environmental Practice</i>		
<i>Forest Ecology and Management</i>		
<i>Forestry</i>		

SELECTED PUBLICATIONS**Peer-reviewed volume**

Latham, R. E. (ed.), J. Beyea, M. Benner, C. A. Dunn, M. A. Fajvan, R. R. Freed, M. Grund, S. B. Horsley A. F. Rhoads and B. P. Shissler. 2005. *Managing White-tailed Deer in Forest Habitat from an Ecosystem Perspective: Pennsylvania Case Study*. Audubon Pennsylvania and the Pennsylvania Habitat Alliance, Harrisburg. 340 pp. (pa.audubon.org/deer_report.html)

Peer-reviewed journal articles and book chapters

- deCalesta, D., R. Latham and K. Adams. 2016. Managing deer impacts on oak forests. Pages 261-277 in P. D. Keyser, T. Fearer and C. A. Harper (eds.), *Managing Oak Forests in the Eastern United States*, CRC Press, Boca Raton, Florida.
- Latham, R. E., D. Zercher, P. McElhenny, P. Mooreside and B. Ferster. 2007. Habitat restoration and management for the eastern regal fritillary, *Speyeria idalia idalia* (Drury), at a military installation in Pennsylvania. *Ecological Restoration* **25**: 103-111.
- Gustafson, D. J. and R. E. Latham. 2005. Is the serpentine aster, *Symphotrichum depauperatum* (Fern.) Neesom, a valid species and actually endemic to eastern serpentine barrens? *Biodiversity and Conservation* **14**: 1445-1452.
- Wibiralske, A. W., R. E. Latham and A. Johnson. 2004. A biogeochemical analysis of the Pocono till barrens and adjacent hardwood forest underlain by Wisconsinan and Illinoian till in northeastern Pennsylvania. *Canadian Journal of Forest Research* **34**: 1819-1832.
- Maurice, K. R., J. M. Welch, C. P. Brown and R. E. Latham. 2004. Mesic till barrens in retreat: topography, fire and forest contagion effects. *Landscape Ecology* **19**: 603-620.
- Latham, R. E. 2003. Shrubland longevity and rare plant species in the northeastern USA. *Forest Ecology and Management* **185**: 21-39.
- Gustafson, D. J., G. Romano, R. E. Latham and J. Morton. 2003. Amplified fragment length polymorphism analysis of genetic relationships among the serpentine barrens endemic *Cerastium velutinum* Rafinesque var. *villosissimum* Pennell (Caryophyllaceae) and closely related *Cerastium* species. *Journal of the Torrey Botanical Society* **130**: 218-223.
- Eberhardt, R. W. and R. E. Latham. 2000. Relationships among vegetation, surficial geology and soil water content at the Pocono mesic till barrens. *Journal of the Torrey Botanical Society* **127**: 115-124.
- Castelli, J. P., J. Sullivan, B. B. Casper and R. E. Latham. 1999. Early understory succession following catastrophic wind damage in a deciduous forest. *Canadian Journal of Forest Research* **29**: 1-6.
- Petraitis, P. S. and R. E. Latham. 1999. The importance of scale in testing the origins of alternative community states in ecosystems. *Ecology* **80**: 429-442.
- Ricklefs, R. E., R. E. Latham and H. Qian. 1999. Global patterns of tree species richness in moist forests: distinguishing ecological influences and historical contingency. *Oikos* **86**: 369-373.
- Latham, R. E., J. E. Thompson, S. A. Riley and A. W. Wibiralske. 1996. The Pocono till barrens: shrub savanna persisting on soils favoring forest. *Bulletin of the Torrey Botanical Club* **123**: 330-349.
- Ricklefs, R. E., M. T. Kalin-Arroyo, R. E. Latham, T. M. Lewinsohn, D. J. Lodge, N. I. Platnick and D. Wright. 1995. The distribution of biodiversity. Pages 139-173 in V. H. Heywood (ed.), *Global Biodiversity Assessment*, Cambridge University Press for United Nations Environmental Programme.
- Latham, R. E. and R. E. Ricklefs. 1993. Continental comparisons of temperate-zone tree species diversity. Pages 294-314 in R. E. Ricklefs and D. Schluter (eds.), *Species Diversity in Ecological Communities: Historical and Geographical Perspectives*, University of Chicago Press.
- Latham, R. E. and R. E. Ricklefs. 1993. Global patterns of tree species richness in moist forests: energy-diversity theory does not account for variation in species richness. *Oikos* **67**: 325-333.
- Ricklefs, R. E. and R. E. Latham. 1993. Global patterns of diversity in mangrove floras. Pages 215-229 in R. E. Ricklefs and D. Schluter (eds.), *Species Diversity in Ecological Communities: Historical and Geographical Perspectives*, University of Chicago Press.
- Latham, R. E. 1992. Co-occurring tree species change rank in seedling performance with resources varied experimentally. *Ecology* **73**: 2129-2144.

- Ricklefs, R. E. and R. E. Latham. 1992. Intercontinental correlation of geographical ranges suggests stasis in ecological traits of relict genera of temperate perennial herbs. *American Naturalist* **139**: 1305-1321.
- Petratis, P. S., R. E. Latham and R. A. Niesenbaum. 1989. The maintenance of species diversity by disturbance. *Quarterly Review of Biology* **64**: 393-418.

Other publications

- Latham, R. E. et al. In progress. *Grassland Desired Conditions in the Mount Loretto Unique Area, Staten Island*. For the New York Department of Environmental Conservation, Albany.
- Latham, R. E. In progress. *2016–2020 Five-Year Update, Unionville Serpentine Barrens Restoration and Management Plan*. Natural Lands Trust, Media, Pennsylvania.
- Latham, R. E. 2015. *Survey of Wetland Plant Species of Conservation Concern at the Hopewell Furnace National Historic Site*. National Park Service, Elverson, Pennsylvania. 27 pp.
- Latham, R. E. and M. McGeehin. 2012. *Unionville Serpentine Barrens Restoration and Management Plan*. Natural Lands Trust, Media, Pennsylvania. 157 pp. + 10 maps.
- Latham, R. E. 2011. *Desired Condition of Grasslands and Meadows in Valley Forge National Historical Park*. Natural Resource Report NPS/NER/VAFO/NRTR—2011. National Park Service, Philadelphia, Pennsylvania. 270 pp.
- Latham, R. E. (ed.), M. D. Grund, S. B. Horsley, B. C. Jones, W. H. McWilliams, C. K. Nielsen, C. S. Rosenberry, R. S. Seymour, B. P. Shissler and D. M. Waller. 2009. *Monitoring Deer Effects on Forest Ecosystems in Pennsylvania State Forests*. Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, Harrisburg. 49 pp.
- Latham, R. E. 2008. *Pink Hill Serpentine Barrens Restoration and Management Plan*. John J. Tyler Arboretum, Media, Pennsylvania, and Mt. Cuba Center, Greenville, Delaware. 87 pp.
- Steckel, D. B., H. M. Harper, R. Latham, S. Charkes and A. F. Rhoads. 2008. *Stewardship Handbook for Natural Lands in Southeastern Pennsylvania*. Natural Lands Trust, Media, Pennsylvania. 222 pp.
- Furedi, M. A., R. Latham, T. Davis and G. Podniesinski. 2008. *Management Plan for Goat Hill Wild Plant Sanctuary*. Pennsylvania Department of Conservation and Natural Resources, Harrisburg. 49 pp.
- Latham, R. and J. F. Thorne. 2007. *Keystone Grasslands: Restoration and Reclamation of Native Grasslands, Meadows, and Savannas in Pennsylvania State Parks and State Game Lands*. For the Wild Resource Conservation Program, Pennsylvania Department of Conservation and Natural Resources, Harrisburg. 100 pp.
- Latham, R. E., D. B. Steckel, H. M. Harper, C. Steckel and M. Boatright. 2007. *Lehigh Gap Wildlife Refuge Ecological Assessment*. For the Lehigh Gap Nature Center, Slatington, Pennsylvania, by Natural Lands Trust, Media, Pennsylvania, Continental Conservation, Rose Valley, Pennsylvania, and Botanical Inventory, Allentown, Pennsylvania. 62 pp. + 8 maps, 5 appendices.
- Latham, R. and A. F. Rhoads. 2006. The historical flora of Wykers Island in the Delaware River, Bucks County, Pennsylvania, from the 1884 to 1887 botanical notes of John and Harvey Ruth. *Bartonia* **63**: 29-47.
- Latham, R. 2006. Smart Conservation's™ plant community module: a tool for rapid quality-assessment of natural communities by non-experts. Pages 139-146 in R. B. McKinstry, Jr., C. M. Ripp and E. Lisy (eds.), *Biodiversity Conservation Handbook: State, Local and Private Protection of Biological Diversity*, Environmental Law Institute, Washington, D.C.
- Moyer, B., B. Shissler and R. Latham. 2006. Deer, communities and quality of life. Ecosystem Management Project, Fort Hill, Pennsylvania. 8 pp.
- Latham, R. E. 2004. [Book review of] *Measuring Biological Diversity*, by Anne E. Magurran. *Journal of Vegetation Science* **15**: 854-856.
- Latham, R. E., D. B. Steckel, H. M. Harper and D. C. Rosencrance. 2003. *Conservation and Stewardship Plan for the Crum Woods of Swarthmore College*. For Swarthmore College, Swarthmore, Pennsylvania by Natural Lands Trust, Media, Pennsylvania and Continental Conservation, Rose Valley, Pennsylvania. 138 pp. + 19 maps, 12 appendices.