

Marlyse C. Duguid

Yale School of the Environment
360 Prospect Street, New Haven, CT 06511
203-650-9118 • marlyse.duguid@yale.edu

Education

2016 Ph.D. Yale University, *Joint degree with The New York Botanical Garden—Cullman Fellow*
2010 M.F. Yale School of Forestry and Environmental Studies
1999 B.S. Horticulture, University of Connecticut

Professional Experience

2017 – Present Yale School of the Environment; *Thomas G. Siccama Lecturer and Associate Research Scientist*
2017 – Present Yale Forests; *Director of Research*
2011 – 2016 Yale Forests; *Research Coordinator*
2008 – 2016 Wakerobin Consulting: Horticulture, Forestry, Conservation and Ecological Design; *President*
2000 – 2008 Oliver Nurseries, Fairfield, CT; *Manager*
1999 – 2003 Northeast Organic Farmers Association, CT chapter, *Organic Farm Inspector*

Honors & Awards

2020 Creating an Inclusive Environment Teaching Award, Yale School of the Environment
2019 Supporting Whole Persons, Teaching and Mentoring Award, Yale School of Forestry and Env Studies
2018 Excellence in Pedagogy Teaching Award, Yale School of Forestry and Environmental Studies
2014 Student Presentation Award (3rd place); Society of American Foresters National Convention, Salt Lake City, Utah
2012 Student Presentation Award (1st place); Society of American Foresters National Convention, Spokane Washington

Teaching

Courses Taught as Lead Instructor —Yale University

Ecological Restoration (ENV 677), Spring 2021
Forest Dynamics (ENV 660), Fall 2020
Invasive Species: Ecology, Policy, and Management (F&ES 694), Spring 2018, 2020
The New England Forest (EVST 007), Fall 2017, 2018, 2019
Temperate Woody Plant Taxonomy and Dendrology (F&ES 221/EVST 231), Fall 2017, 2018, 2019
Indigenous Land Use Reading Seminar (F&ES 1168), Spring 2018
Ecosystem Measurements for Conservation & Restoration (F&ES 741), Spring 2019

Field Modules & Internships

Ingalls Field Ecology Internship at Yale-Myers Forest, Director, Summer 2017, 2018, 2019
Ecosystem Science & Measurements Module, Yale-Myers Forest, Summer 2012 – 2015, 2017, 2018, 2019
YSE Community Orientation: From Self to System: Closing the Empathy Gap and Prompting Action through Environmental Justice, August 2020

Teaching Fellowships

Research Analysis, Writing, and Communication, Spring 2014, Fall 2015
Natural History and Taxonomy of Trees, Fall 2014, 2015
Tropical Field Botany, Spring 2015
Principles in Applied Ecology: The Practice of Silviculture, Spring 2012 – 2014
Forest Dynamics: Growth and Development of Forest Stands, Fall 2012, 2013
Management Plans for Protected Areas, Fall 2009 – 2011
Invasive Species: Ecology, Policy, and Management, Spring 2010

updated 1/29/2021

Guest Lectures

Field Science: Environment and Sustainability (EVST 234), Fall 2013 – 2018
Forest Dynamics: Growth and Development of Forest Stands (F&ES 660), Fall 2014, 2015, 2017
Ecology and Russian Culture (RUSS 355 / RSEE 355/HUMS 294/EVST 294), Fall 2017
Survival Skills for Doctoral Students (F&ES 910), Guest panelist, January 28th, 2019

Field Trips & Workshops

Winter Tree Identification Workshop, Hamden Land Trust. February 2020.
Tour of Tornado damage in Sleeping Giant and Wharton Brook State Parks, co-led with DEEP foresters. November 2018
West River Restoration: Pond Lily Dam Removal and Restoration of Tidal Flow Field Trip, Society of Ecological Restoration New England Regional Conference, New Haven, Connecticut. October 2018.
Field-based learning at Yale-Myers Forest, Yale F&ES Alumni, October 2017, 2018
Connecticut Botanical Society: Plant identification Workshop at Yale-Myers Forest, May 2017
Urban Resources Initiative: Plant identification Workshop in College Woods, New Haven, CT. June 2017
Natural History and Plant Communities at Pond Lily Preserve, A dam removal and active vegetative restoration project, New Haven Land Trust and CFE/Save the Sound, October 2016, June 2017
Forest Ecology Field Trip: Eastford Middle School, Fall 2104, 2015
Yale Intertribal Timber Summit Student Field Trip, Yale-Myers Forest. October 2015.
University of New Hampshire Silviculture Field Trip at Yale-Myers Forest, Fall 2012, 2013, 2014
Forest Ecology and Land-Use History Workshop, Yale-Myers Forest, September 24, 2011

Scientific Publications

*Publications with advisees: *doctoral student, ^masters student, *undergraduate*

In Review or Revision

Ward, E., **Duguid, M.C.**, Kuebbing, S., Lendermer, J., Warren, R., Bradford, M. *In review*. Biogeochemical effects of ericoid mycorrhizae and the need to reconceive the mycorrhizal dominance framework. *New Phytologist*
Zamuda, K.M. ^, **Duguid, M.C.** and Schmitz, O.J., *In review*. Human land-use effects on mammalian mesopredator occupancy of a northeastern Connecticut landscape. *Animal Conservation*.
Borden, C.G., Ashton, M.S., Duguid, M.C. *In review*. The legacy of fire: Long term changes to the forest understory from periodic burns in a New England oak-hickory forest. *Fire Ecology*.
Carpenter, R.* , Ward, E.B.* , Wike, J. ^, **Duguid, M.C.**, Bradford, M.A., and Ashton, M.S., *In revision*. Soil nutrient recharge after shelterwood timber harvesting in a temperate oak hardwood forest, Insights using a twenty-five-year chronosequence. *Forest Ecology and Management*.

Peer-reviewed articles

Spake, R., Mori, A.S., Beckmann, M., Martin, P.A., Christie, A.P., **Duguid, M.C.** and Doncaster, C.P., 2021. Implications of scale dependence for cross-study syntheses of biodiversity differences. *Ecology Letters*.
Green, L. ^, **Duguid, M.C.**, 2020 Vascular plant diversity of forested wetlands in southern New England. *Rhodora*.
Doroski, D.A.* , **Duguid, M.C.**, Ashton, M.S., 2020. Forest patch size predicts seed bank composition in urban areas. *Applied Vegetation Science*, p.e12534.
Doroski, D.A.* , Ashton, M.S. and **Duguid, M.C.**, 2020. The future urban forest—A survey of tree planting programs in the Northeastern United States. *Urban Forestry & Urban Greening*, 55, p.126816.
Hanle, J. ^, **Duguid, M.C.**, Ashton, M.S., 2020. Legacy forest structure increases bird diversity and abundance in aging young forests. *Ecology and evolution*, 10(3), pp.1193-1208.
Wike, J. ^, **Duguid, M.**, & Ashton, M. S., 2019. Legacy forest structures in irregular shelterwoods differentially affect regeneration in a temperate hardwood forest. *Forest Ecology and Management*, 454, 117650.

- Mossman*, A., Lambert, M. R., Ashton, M. S., Wikle, J. ^, & **Duguid, M. C.**, 2019. Two salamander species respond differently to timber harvests in a managed New England forest. *PeerJ*, 7, e7604.
- Lefland, A.B. ^, **Duguid, M. C.**, Morin, R. S., & Ashton, M. S., 2018. The demographics and regeneration dynamic of hickory in second-growth temperate forest. *Forest Ecology and Management*, 419(420), 187-196.
- Covey, K.R., Bueno de Mesquita C.P. *, Oberle, B., Maynard, D.S., Bettigole, C., Crowther T.W., **Duguid, M.C.**, Steven, B., Zanne, A.E., Lapin M., Ashton, M.S., Oliver, C.D., Lee, X., & Bradford, M.A. 2016. Greenhouse Trace Gases in Deadwood. *Biogeochemistry* 130 (3): 215-226.
- Duguid, M.C.**, Morrell, E.H. ^, Goodale, E., and Ashton, M.S. 2016. Changes in breeding bird abundance and species composition over a 20 year chronosequence following shelterwood harvests in oak-hardwood forests. *Forest Ecology and Management* 376: 221–230.
- Crowther, T.W., Glick, H.B., Covey, K.R., Bettigole, C., Maynard, D.S., Thomas, S.M., Smith, J.R., Hintler, G., **Duguid, M.C.**, *et al.* 2015. Mapping tree density at a global scale. *Nature* 525: 201–205.
- Covey, K.R., Carroll, C.J., **Duguid, M.C.**, Dorji, K., Dorji, T., Tashi, S., Wangdi, T., Ashton, M.S. 2015. Developmental dynamics following selective logging of an evergreen oak forest in the Eastern Himalaya, Bhutan: Structure, composition, and spatial pattern. *Forest Ecology and Management* 336: 163-173.
- Duguid, M.C.**, Ashton, M.S., 2013. A meta-analysis of the effect of forest management for timber on understory plant species diversity in temperate forests. *Forest Ecology and Management* 303: 81-90.
- Duguid, M.C.** Frey, B.R., Ellum, D.S., Kelty, M., Ashton, M.S., 2013. The influence of ground disturbance and gap position on understory plant diversity in upland forests of southern New England. *Forest Ecology and Management* 303: 148-159.

Books, Book chapters & Technical Reports

- National Audubon Society Master Guide to Trees. *In press to be released 06 April 2021*. Editor: James Cirigliano. Contributing writers: **Marlyse Duguid**, Kyle Carlsen, Patrick Sweeney, Tyler Deal, Lawrence M. Kelly. ISBN: 978-0525655718. Publisher: Knopf.
- Chamberlain, J.; Davis, J.; **Duguid, M.C.**; et al. 2018. Chapter 2—Non-Timber Forest Products & Production. In: Assessment of nontimber forest products in the United States under changing conditions. Eds: Chamberlain, J. L., Emery, M. R., & Patel-Weynand, T. General Technical Report SRS-232, US Forest Service, Southern Research Station, 1-268.
- Ashton, M.S., **Duguid, M.C.**, Barrett, A.L., Kristofer Covey, K. 2015. Yale School Forests, New England, United States of America, In: *Forest Plans of North America*, Eds: Siry, J., Bettinger, P., Merry, K., Grebner, D.L., Boston, K., and Cieszewski. Academic Press, New York. 482 pps.
- Frey, B.R., Campbell, R., **Duguid, M.C.**, Ashton, M.S., 2013. A century of silvicultural research and demonstration in working forests. In: Camp, A.E., Irland, L.C., Carroll, C.J.W. (Eds.), *Long-term Silvicultural & Ecological Studies: Results for Science and Management*: Global Institute of Sustainable Forestry, Yale School of Forestry and Environmental Studies, New Haven, CT, pp. 15-30.

Non-technical articles

- A New England Orchid (*Cypripedium acaule*), Hidden Beauties in Newtown’s Woods. Whispers in the Forest, newsletter of the Newtown Forest Association. 2014.
- A Natural Resource Assessment, Botanical Inventory, and Management Plan for Greenleaf Preserve. Prepared for Newtown Forest Association. 2010.
- Common Plants of the Quiet Corner, a Functional Field Guide. Yale University, New Haven, CT. co-authors Covey, K., Hodgman, T., and Spalding, D. 2010
- Symposium on the Future of Connecticut’s Forests. YFF Review Vol 12, No. 1. Yale Forest Forum, Global Institute of Sustainable Forestry, Yale University, New Haven, Connecticut. Co-authors Paul, G., Cousins, S., Covey, K., Nerenberg, J., and Campbell. R.W. 2010.

Presentations & Invited Talks

- The Not-So-Secret Life of Trees. One World Lecture Series. Hartford, Connecticut. November 18th 2019.
- In Land We Trust. REI Women's Speaker Series. West Hartford, Connecticut. June 10th. 2019.
- Careers in Ecological Restoration Panel, Society of Ecological Restoration New England Regional Conference, New Haven, Connecticut. October 2018.
- Natural History and Ecology of Ericaceae. The Rhododendron Society — Connecticut Chapter. Windsor, Connecticut. January 2017.
- Ecology in the Woodland. New England Hardy Plant Society — Connecticut Chapter. Wethersfield, Connecticut. November 2015.
- Patterns and process in understory plant communities in a temperate second-growth forest of eastern North America. International Union of Forest Research Organizations (IUFRO) World Congress 2014. Salt Lake City, Utah.
- Understory plant community response to forest management in a temperate second-growth forest. Society of American Foresters National Convention. Salt Lake City, Utah, October 2014.
- The influence of ground disturbance and gap position on understory plant diversity in upland forests of southern New England. Society of American Foresters National Convention. Spokane, Washington, 2012.
- The influence of ground disturbance and gap position on understory plant diversity. Connecticut Conference on Natural Resources, University of Connecticut. 2012.
- Conservation in the Suburban Landscape. Fairfield County Regional Partnership Meeting. Highstead, Redding, Connecticut. June 2010.
- Understory Plants and Plant Communities of Northeast Connecticut. Summer Research Seminar. Yale-Myers Forest, Eastford, Connecticut. July 2010
- A Natural Resource Inventory, Botanical Inventory, and Management Plan for Greenleaf Preserve. Annual Meeting of the Newtown Forest Association. C.H. Booth Library, Newtown, CT. May 2010.

Invited Working Group Participant

- RCN-UBE: Biodiversity Literacy in Undergraduate Education — Data Initiative (BLUE Data Network). NSF Award Number: 1730526, Project Title: May 2017

Grants and Fellowships

- Northeast Sustainable Agriculture Research & Education, 2019–2021, *Award Number: GNE19-221-33243, Proposal Number: G19-052* (PI with Graduate Student Karam Sheban; \$15,000)
- Yale-Smithsonian Partnerships, graduate student internship funding, Summer 2019, Monitoring New England forests in a changing world—establishment of a Smithsonian ForestGEO plot at the Yale-Myers Forest (PI, with Drs. Comita, Queenborough, Bradford, Ashton, Davies, McMahon; \$6,800)
- Rosenkranz Awards for Pedagogical Advancement, Poorvu Center, 2019 (PI, with Dr. Ashton; \$10,000)
- Yale Institute for Biospheric Studies, Doctoral Dissertation Improvement Grants, 2015 (PI; \$3500)
- Society for Ecological Restoration, Laderman Early Professional Fellowship, 2015 (PI; \$500)
- Conference Travel Fellowship, Yale Graduate School Assembly, 2014 (\$750)
- Doctoral Conference Travel Grant, Yale School of Forestry and Environmental Studies, 2014 (\$500)
- Lewis B. and Dorothy Cullman Doctoral Research Award, 2014 (\$5000)
- Andrew M. Greller Graduate Student Award, Torrey Botanical Society, 2014 (\$1000)
- Doctoral Conference Travel Grant, Yale School of Forestry and Environmental Studies, 2012 (\$500)
- Yale Institute for Biospheric Studies, Doctoral Pilot Grants, 2011 (\$5000)
- Lewis B. Cullman Fellowship, 2011-2016

University Service

The Forest School

Director, Ingalls Field Ecology Program, 2017 – Present

Taylor Fund Research Fellowship Committee (chair), 2021 – Present

Child's Family Research Fellowship Committee (co-chair), 2019 – Present

Kohlberg-Donohoe Fellowship Committee (chair), 2017– Present

Yale-Myers Forest Research Committee (Chair), 2017 – present

Yale Forest Forum Management Committee (to be renamed: The Forest School Management Committee), 2019 – present

Faculty Coordinator, Yale-Myers Forest Summer Seminar Series, 2012 – present

Search committee, Yale-Myers forest caretaker hiring committee, 2017

Yale School of the Environment

Faculty Associate, Student Chapter Society of Ecological Restoration, 2019 – Present

MODS Steering Committee, 2019 – Present

Governance committee, 2019 – present

MESc/MFS admission committee, 2017 – present

MODS Evaluation Committee, 2019

Faculty Mentor, Women in Science at Yale (WISAY) mentoring program (career mentor to 8–10 female doctoral students from YSE per year, 2017 – present

YSE Mental health working group, 2019 – present

Judge, Research Day, Yale School of Forestry and Environmental Studies, April 2018 – 2019

Search committee, Director of Forest and Agricultural Operations hiring committee, 2017 – 2018

Session Chair, Research Day, Yale School of Forestry and Environmental Studies, April 2017

Yale University

Designed the new Field Biosafety and Tick awareness training for Yale Environmental Health and Safety, 2017

Environmental Studies Faculty Advisory Committee Meetings, 2017 – 2018

Outside Professional Service & Volunteer Work

- 2020 – Present Board Member at Large, Society for Ecological Restoration New England, co-chair of Justice, Equity, and Inclusion committee, member of emerging professionals committee
- 2020 Proposal Review Committee, Fellowship in Plant Conservation Biology, Oak Spring Garden Foundation,
- 2018 Host and on the organizing committee member for The Connecticut Outdoor & Environmental Education Association's (COEAA) annual meeting: Environmental Education (EE) is Everywhere: Conversations on the Crucial Role of Environmental Education in our Changing World.
- 2008 – Present Newtown Forest Association, Consultant to the Board
- 2013 – 2016 Secretary and Board member: Newtown Earth Day
- 2008 – 2010 Treasurer: Society of American Foresters, Yale chapter
- 2009 Symposia Chair: Society of American Foresters, Yale chapter
- 2003 Organic Land Care Committee Member: Northeast Organic Farming Association CT chapter
- 2000 – 2002 Certification Committee Member: Northeast Organic Farming Association CT chapter
- Journal Reviewer for: *Forest Ecology and Management*, *Environmental Monitoring and Assessment*, *Journal of Arid Environments*, *PloS One*, *Scientific Reports*, *Annals of Forest Science*, *Canadian Journal of Forest Research*, *Ecology and Evolution*, *Southwestern Naturalist*, *BMC Ecology*, *International Journal of Environmental Research and Public Health*, *MDPI Forests*

Public Outreach & Science Communication

A Connecticut Quilt. By Mike Freeman. Northern Woodlands Magazine. *In press expected spring 2021*. Article inspired by my paper Mossman et al. 2019 and features my research with students.

The Social Life of Forests. By Ferris Jabr. New York Times Magazine. December 2, 2020. Interviewed as background on silviculture and forest management.

Some trees may 'social distance' to avoid disease. By Katherine J. Wu. National Geographic Magazine. July 6, 2020. Interviewed and quoted in article.

Poisonous Plants, Backpacker magazine, May 2017. Interviewed as plant identification expert.

Led guided nature hikes for Cub Scout Pack 170, October 2018, April 2019

Led a Natural History Hike with Girl Scout Troop 50440, July 2019

Career as a Forest Ecologist, Sandy Hook Elementary School Career Day, 30-40 4th graders per year 2016 – 2019

Professional Affiliations

Sigma Xi, The Scientific Research Honor Society, Full member; Northeast Organic Farmers Association; Society of American Foresters; Botanical Society of America; Connecticut Botanical Society; Arnold Arboretum; Torrey Botanical Society; New England Botanical Club; Society for Ecological Restoration.

Certifications

State of Connecticut, Forest Practitioner Certification (F000983); Game of Logging, Levels 1 & 2 (2009); Connecticut Accredited Nursery Professional, Connecticut Nursery and Landscape Association (2001); NOFA Accreditation Course in Organic Land Care (2003, *lapsed*)