

Brad Oberle Ph.D.

Associate Curator
New York Botanical Garden
2900 Southern Blvd, Bronx, NY 10458 USA

Education

2009 Ph.D. Evolution, Ecology and Population Biology, Washington University in St. Louis.
Advisors: Barbara A. Schaal and Peter H. Raven.

2003 B.A. Biology, Concentration in Environmental Studies. Kenyon College.
Summa cum Laude with distinction, *Phi Beta Kappa* (2002), *Sigma Xi*.

Professional Positions

- 2023-** Associate Curator: New York Botanical Garden
- 2023-** Doctoral Faculty, Graduate Program in Biology: City University of New York
- 2024-** Associate Editor: *The Botanical Review*
- 2019-** Associate Editor: *Selbyana*
- 2016-** Research Associate: Marie Selby Botanical Garden
- 2010-** Research Associate: Missouri Botanical Garden
- 2021-2023** Associate Professor of Biology and Environmental Studies: New College of Florida
- 2015-2021** Assistant Professor of Biology and Environmental Studies: New College of Florida
- 2012-2015** Postdoctoral Scientist & Adjunct Instructor: The George Washington University
- 2011-2012** Postdoctoral Research Associate: University of Missouri-St. Louis
- 2009-2010** Postdoctoral Research Associate: University of Zürich Switzerland
- 2009, 2011** Adjunct Instructor: Washington University in St. Louis

Publications (*Indicates undergraduate co-author)

- 37. Wijas, B., Cornwell, W.K., **Oberle, B.**, Powell, J. R., & Zanne, A.E. 2024 Faster than expected: release of nitrogen and phosphorus from decomposing wood. *New Phytologist* <https://doi.org/10.1111/nph.20362>
- 36. Njoroge D.M., Dossa G.G.O., Schaefer D., Zuo J., Ulyshen M.D., Seibold S., Zanne A.E., **Oberle B.**, Harrison R.D. , Liu S., Li X., Birkemoe T., Taylor M.K., Cornelissen J.H.C. 2024 Quantifying the effects of invertebrates on wood decomposition across the world. *Biological Reviews* <https://doi.org/10.1111/brv.13134>
- 35. Stryker, J.*, E. White*, E. M. Díaz-Almeyda, B. Sidoti, **B. Oberle**. 2024. Tank formation transforms nitrogen metabolism of an epiphytic bromeliad and its phyllosphere bacteria. *American Journal of Botany* <https://doi.org/10.1002/ajb2.16396>
- 34. Lyttek E., Lal P., **Oberle B.**, Dubey, R. S. Forgoston, E. 2024. Impact of Fraxinus snag fall on electric distribution and infrastructure stability: An empirical analysis. *Ecological Economics*, 225, 108323. <https://doi.org/10.1016/j.ecolecon.2024.108323>

33. **Oberle, B.** 2024. The Role of Carbon Relations in Plant Diversification. In: Kliman, R.M. (ed.), *Encyclopedia of Evolutionary Biology* 2nd Ed. Oxford: Academic Press.
<https://doi.org/10.1016/B978-0-443-15750-9.00018-5>
32. **Oberle, B.**, P. Cole*, G. Frank*, A. Gates*, B. Hall*, D. Harvey*, M. Scott*, C. Setterberg*, S. Bustetter*. 2023. Multilevel allometric growth equations improve accuracy of carbon monitoring during forest restoration. *Trees, Forests, and People*
<https://doi.org/10.1016/j.tfp.2023.100442>
31. **Oberle B.**, Bressan, S. J.*, J. M. McWilliams*, E. M. Díaz-Almeyda. 2023. Urban food forestry transforms soil function to rapidly and uniformly sequester carbon. *Urban Ecosystems* <https://doi.org/10.1007/s11252-023-01384-2>
30. **Oberle, B.** and E. Fairchild. 2023. On the benefits of clarifying the meaning of “plant gender”. *American Journal of Botany* <https://doi.org/10.1002/ajb2.16196>
29. Lee, M.R., J. Powell, **B. Oberle**, F. Unda, S. D. Mansfield, K. Brice, J. Rigg, W. K. Cornwell, A. E. Zanne. 2022. Initial wood trait variation overwhelms endophyte community effects for explaining decay trajectories. *Functional Ecology* 36(5), 1243-1257
<https://doi.org/10.1111/1365-2435.14025>
28. **Oberle, B.**, Breithaupt, J., McTigue, A. M.*, Stryker, R.*, Cladas, M., Raulerson, G., & Young, D. F. 2022. Restoration objectives create surface carbon cycle trade-offs in coastal habitats. *Restoration Ecology*, 30(4), e13563. <https://doi.org/10.1111/rec.13563>
27. Meyer, E. M.*, J. F. Swift, B. Bassuner, S. A. Smith, E. S. Menges, **B. Oberle**, and C. E. Edwards. 2021. The effects of fire on an amphicarpic plant: a population genetic approach. *Annals of Botany. Plants* <https://doi.org/10.1101/2020.10.18.344036>
26. Falster, D., R. Gallagher, E. Wenk ... **B. Oberle**... (231 Authors). 2021. AusTraits – a curated plant trait database for the Australian flora. *Scientific Data*, 8(1), 1-20.
<https://doi.org/10.1038/s41597-021-01006-6>
25. Jabaily, R. S., E. Fetterly*, M. S. Heschel, B. Sidoti, **B. Oberle** & E. Bodine. 2021. Defining iteroparity with comparative morphometric data (Bromeliaceae). *International Journal of Plant Sciences*. <https://doi.org/10.1086/715484>
24. Joseph, R.*, **Oberle, B.**, Thurmond J. & Clore, A. 2020. Diverse fungal endophytes in the leaves of a widespread epiphytic bromeliad, *Tillandsia recurvata* (L.)L *Selbyana*, 33(2), 16-31.
<https://journals.flvc.org/selbyana/article/view/117389>
23. Powell, J. R., Blyton, M., **Oberle, B.**, Powell, G. L., Rigg, J., Young, D., & Zanne, A. E. 2020. Extraction and Purification of DNA from Wood at Various Stages of Decay for Metabarcoding of Wood-Associated Fungi. In *The Plant Microbiome* (pp. 113-122). Humana, New York, NY. https://doi.org/10.1007/978-1-0716-1040-4_10
22. Lee, M.R., **Oberle, B.**, Olivas, W., Young, D.F. and Zanne, A.E. 2020. Wood construction more strongly shapes deadwood microbial communities than spatial location over five years of decay. *Environmental Microbiology*. <https://doi:10.1111/1462-2920.15212>
21. Lustenhouwer, N., D. S. Maynard, M. A. Bradford, D. L. Lidner, **B. Oberle**, A. E. Zanne, T. W. Crowther. 2020. A trait-based understanding of wood decomposition by fungi. *Proceedings*

of the National Academy of Sciences 117(21), 11551-11558.

<https://doi.org/10.1073/pnas.1909166117>

20. **Oberle, B.**, Lee, M. R., Myers, J. A., Osazuwa-Peters, O. L., Spasojevic, M. J., Walton, M. L., ... & Zanne, A. E. 2019. Accurate forest projections require long-term wood decay experiments because plant trait effects change through time. *Global Change Biology* 26(2): 864-875 <https://doi.org/10.1111/gcb.14873>.
19. Lee, M. R., Powell, J. R., **Oberle, B.**, Cornwell, W. K., Lyons, M., Rigg, J. L., & Zanne, A. E. 2019. Good neighbors aplenty: Fungal endophytes rarely exhibit competitive exclusion patterns across a span of woody habitats. *Ecology*. 100(9) e02790 <https://doi.org/10.1002/ecy.2790>
18. **Oberle, B.**, K. Ogle, A. Zanne, C. Woodall. 2018. When a tree falls: controls on wood decay predict standing dead tree fall and new risks in changing forests. *PloS one*, 13(5), e0196712. <https://doi.org/10.1371/journal.pone.0196712>
17. **Oberle, B.**, K. Covey, K. Dunham*, E. J. Hernandez, M. F. Walton, D. F. Young, A.E. Zanne. 2018. Dissecting the effects of diameter on wood decay emphasizes the importance of cross-stem conductivity in *Fraxinus americana*. *Ecosystems* 21(1): 85-97 <https://doi.org/10.1007/s10021-017-0136-x>
16. 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., Xuhui, L., & Bradford, M.A. 2016. Greenhouse Trace Gases in Deadwood. *Biogeochemistry*. 130(3): 215-226 <https://doi.org/10.1007/s10533-016-0253-1>
15. Maherali, H., **B. Oberle**, P.F. Stevens, W. Cornwell, D.J. McGlenn. 2016. Mutualism persistence and abandonment during the evolutionary history of the mycorrhizal symbiosis. *The American Naturalist* 188:5 E000-E000 <https://doi.org/10.1086/688675>
14. **Oberle, B.**, A. M. Milo, J. A. Myers, M. F. Walton, D. F. Young, A.E. Zanne. 2016. Direct estimates of downslope deadwood movement over 30 years in a temperate forest illustrate impacts of treefall on forest ecosystem dynamics. *Canadian Journal of Forest Research* 46: 351-361 <https://doi.org/10.1139/cjfr-2015-0348>
13. **Oberle, B.**, K. Ogle, J. C. Penagos, J. Sweeney and A. Zanne. 2016. A Bayesian model for xylem vessel length accommodates subsampling and reveals skewed distributions in species that dominate more seasonal habitats. *Journal of Plant Hydraulics* e003 1-17 <https://doi.org/10.20870/jph.2016.e003>
12. **Oberle, B.** 2016. Carbon Relations, the Role in Plant Diversification of. In: Kliman, R.M. (ed.), *Encyclopedia of Evolutionary Biology*. vol. 1, pp. 260–266. Oxford: Academic Press. 10.1016/B978-0-12-800049-6.00261-4
11. Zanne, A. E., **B. Oberle**, K. Dunham*, A. Milo, M. Evans, D. Young. 2015. A deteriorating state of affairs: How endogenous and exogenous factors determine plant decay rates. *Journal of Ecology* 103:1421-1431 <https://doi.org/10.1111/1365-2745.12474>
10. Osazuwa-Peters, O. L., I. Jimenez, **B. Oberle**, C. A. Chapman, A. E. Zanne. 2015. Selective logging: Do rates of forest turnover in stems, species composition and functional traits decrease with time since disturbance? – A 45 year perspective. *Forest Ecology and Management* 357:10-21. <https://doi.org/10.1016/j.foreco.2015.08.002>

9. Spasojevic M. J., E. E. Yablon*, **B. Oberle**, J. A. Myers. 2014. Ontogenetic trait variation influences tree community assembly across environmental gradients. *Ecosphere* 5:129. <https://doi.org/10.1890/ES14-000159.1>
8. **Oberle, B.**, K. Dunham*, A. Milo, M. Evans D. Young and A. Zanne. 2014. Progressive, idiosyncratic changes in wood hardness during decay: implications for dead wood inventory and cycling. *Forest Ecology and Management* 323 :1-9. <https://doi.org/10.1016/j.foreco.2014.03.026>
7. Brandt, L., H. He, L. Iverson, F. Thompson, P. Butler, S. Handler, M. Janowiak, C. Swanston, M. Albrecht, R. Blume-Weaver, W. Dijak, P. Deizman, J. DePuy, G. Dinkel, S. Fei, T. Jones-Farrand, M. Leahy, S. Matthews, P. Nelson, **B. Oberle**, J. Perez, M. Peters, A. Prasad, J. Schneiderman, J. Shuey, A. Smith, C. Studyvin, J. Tirpak, J. Walk, W. Wang, L. Watts, D. Weigel, S. Westin. 2014. Central Hardwoods Ecosystem Vulnerability Assessment and Synthesis: A report from the Central Hardwoods Climate Change Response Framework. Gen. Tech. Rep. NRS-124. Newtown Square, PSA, U.S. Department of Agriculture, Forest Service, Northern Research Station. 254 p.
6. **Oberle, B.**, J.B. Beck, R.A. Montgomery* and E.E. Esselman. 2012. A morphologically intergrading population facilitates chloroplast introgression from diploid to tetraploid *Dodecatheon* (Primulaceae). *Botanical Journal of the Linnean Society* 168: 91-100. <https://doi.org/10.1111/j.1095-8339.2011.01191.x>
5. **Oberle, B.**, and E.E. Esselman. 2011. Fruit and seed characters help distinguish southern Illinois *Dodecatheon* (Primulaceae) species and highlight unusual intergrading populations. *Rhodora* 113: 280-299. <https://doi.org/10.3119/0035-4902-113.955.280>
4. **Oberle, B.** and B.A. Schaal. 2011. Historical responses to climate change highlight contemporary threats to diversity in *Dodecatheon*. *Proceedings of the National Academy of Sciences USA* 108: 5655-5660. <https://doi.org/10.1073/pnas.1012302108>
3. **Oberle, B.**, J.B. Grace and J.M. Chase. 2009. Beneath the veil: plant growth form influences the strength of species richness—productivity relationships in forests. *Global Ecology and Biogeography* 18: 416-425. <https://doi.org/10.1111/j.1466-8238.2009.00457.x>
2. Allan, B.F., R.B. Langerhans, W.A. Ryberg, W.J. Landesman, N.W. Griffin, R.S. Katz, **B.J. Oberle**, M.R. Schutzenhofer, K.N. Smyth, A. de St. Maurice*, L. Clark, K.R. Crooks, D.E. Hernandez, R.G. McLean, R.S. Ostfeld, and J.M. Chase. 2009. Ecological correlates of risk and incidence of West Nile virus in the United States. *Oecologia* 158: 699-708. <https://doi.org/10.1007/s00442-008-1169-9>
1. Croat, T.B., and **B. Oberle**. 2004. New species of Araceae from Columbia. *Aroideana* 27: 64-89.

In preparation, submitted, review or revision

- a. Maherali, H., McGlinn, D., **Oberle, B.**, Schwilk, D. Influence of climate and soil nutrients on the abandonment of the arbuscular mycorrhizal (AM) symbiosis in angiosperms. *Submitted: Evolution*
- b. **Oberle, B.**, S. Bustetter*, L. Continentino*, T. Smith*, G. Frank*, M. Robison*, S. Clingo*, P. Cole*, C. Jefferis*, M. Scott, C. Setterberg, S. Sherrod*, J. Gardiner. Community by

ecosystem interactions control plant biodiversity change before and after mangrove restoration. *Submitted: Ecological Applications*. <https://doi.org/10.32942/X2Fo3S>

- c. Campbell, A.M.*, A. Kula*, R.S. Jabaily, **B. Oberle**, B. Sidoti, A. Cipaldi, E.N. Bodine. Predicting potential recovery of the endangered bromeliad *Tillandsia utriculata*: an agent-based modeling approach. *In Revision: PLOS Computational Biology*
- d. **Oberle, B.**, S. Chambers, W. Law. Simulating phylogeny in digital organisms reinforces inquiry and analysis skills among undergraduate biology students. *In prep: American Biology Teacher*
- e. **Oberle, B.**, E. Bodine, J. Felton*, B. Sidoti, R. Jabaily. Growth tradeoffs distinguish sexual from asexual reproduction among bromeliads. *In prep: Annals of Botany: Plants*

Funding (External sources only total \$3,097,335)

- 2024** "Collaborative Research: RUI: Quantizing the functional trait spectrum: CAM photosynthesis, life history and nitrogen cycling in the diverse Neotropical bromeliads" U.S. National Science Foundation-IOS. K. Heyduk (U. Conn., PI), R. Jabaily (Colorado College, PI), B. Oberle (NYBG, PI). \$1,410,331 (NYBG allocation \$340,546)
- "Enhanced Ecosystem Monitoring in New York City's Only Old Growth Forest" Forest Ecosystem Monitoring Cooperative. B. Oberle (NYBG, PI), J. Zeiger (NYBG, Co-PI). \$19,952
- "Revealing the mechanisms controlling wood decomposition in species-rich tropical forests" Cary Institute Science Innovation Fund. Evan Gora (Cary, PI), Jane Lucas (Cary, PI), Amy Zanne (Cary, PI), Brad Oberle (NYBG Consultant) \$73,233 (NYBG allocation \$3,000)
- 2022** "Carbon sequestration in microforestry" Equity Lifestyles Properties Inc. Donation to B. Oberle (NCF, PI). \$16,000
- 2021** "Restoration and Recovery of Estuarine Systems" Environmental Discovery Awards Program, Cross College Alliance. J. Gardiner (NCF, PI), B. Oberle (NCF, co-PI). \$4,320
- 2020** "Restoration and Recovery of Estuarine Systems" Environmental Discovery Awards Program, Cross College Alliance. B. Oberle (NCF, PI), J. Gardiner (NCF, co-PI). \$10,512
- 2018** "Enhancing coastal habitat in the Gulf of Mexico by identifying best practices in mangrove restoration for multiple ecosystem services". U.S. Environmental Protection Agency. B. Oberle (NCF, PI), J. Gardiner (NCF, co-PI), S. Gilchrist (NCF, co-PI). \$294,200.
- 2013** "Evolutionary and ecological consequences of mycorrhizal states in plants", National Evolutionary Synthesis Center (NESCent). B. Oberle (GWU, Short-Term Visitor Fellowship): \$1,000.
- 2013** "The Tyson Research Center Forest Drought Laboratory: Establishing a Long-term Resource for Linking Climate Change, Extreme Droughts, and Ecosystem Dynamics", International Center for Advanced Renewable Energy and Sustainability. J. Myers (Wash-U, PI), B. Oberle (GWU, co-PI): \$43,000
- 2012** International Research Initiatives Scheme Fellowship. Hawkesbury Institute for the Environment, University of Western Sydney Australia. A. Zanne (GWU, PI), B. Choat (HIE co-PI), J. Powell (co-PI), B. Oberle (GWU, named post-doctoral scholar): \$32,800
- 2011** "CAREER: Influences of plant traits on wood decomposition rates across scales: From

- fungal microbe communities to carbon turnover". U.S. National Science Foundation-DEB. A. Zanne (UMSL, PI), B. Oberle (UMSL, named post-doctoral scholar): \$780,000
- 2006** "Dissertation Research: Tempo and Mode in Adaptation to Climate: Insights from the Phylogeny and Phylogeography of the Plant Genus *Dodecatheon* (Primulaceae)" U.S. National Science Foundation-DEB, Doctoral Dissertation Improvement Grant. B. Schaal (Wash-U, PI), B. Oberle (Wash-U, co-PI): \$11,987
- "Inferring the rate of adaptation to climate from the diversity and distribution of *Dodecatheon* (Primulaceae)." Sigma Xi Grant in Aid of Research to B. Oberle (Wash-U, PI): \$400

Teaching

Courses as instructor, co-instructor or group leader

- *Plants and People* (100-level, NCF): 2018
- *Foundations of Biology: Ecology and evolution* (200-level, NCF) 2016, 2019, 2021
- *Foundations of Biology: Cell and molecular* (200-level, NCF, GWU) 2014, 2015, 2021
- *Introduction to Botany Lecture and Lab* (300-level, NCF): 2016, 2017, 2018, 2020, 2022
- *Evolution* (300-level, NCF): 2016, 2017, 2020
- *Research Methods in Biology*: (300-level, NCF): 2018, 2021
- *Field Biology* (300-level, UMSL): 2012
- *Forest Ecology Laboratory* (400-level, NCF): 2016, 2018, 2020
- *Biology of Urbanization* (400-level, NCF): 2017, 2019, 2021
- *Environmental Science* (500-level, GWU): 2013
- *A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology* (Professional workshop, ESA Annual Meetings): 2012, 2013, 2014

Mentoring

- 1 Plant Biology Ph.D. committee (CUNY)
- 30 honors undergraduate theses (NCF)
- 65 baccalaureate exam committees (NCF)
- 76 January Independent Study Projects (NCF)
- 1 Masters Environmental Studies thesis (Prescott College)
- 300+ recommendation letters for 60+ students

Honors and Professional Development

- 2022** Active-LENS National Dissemination Workshop. Invited to share design of and learning gains from a new activity using Avida-ED.
- 2020** ESA Sustaining Biological Infrastructure. Completed a six-week workshop to hone the planning, communications and budget skills necessary for sustaining long-term ecological research.
- 2019** NSF-Avida-ED Active LENS. Stipend-funded participant in a 3-day workshop to increase capacity for training educators to use the experimental evolution platform Avida-ED in undergraduate biology education.
- 2017** NSF-Training Professionals to Prepare STEM Undergraduates for Research. Stipend-funded participant in a 3-day workshop to improve STEM Undergraduate Research outcomes.

- 2007** NSF-Debating Science Program. Scholarship participant in an interdisciplinary course on the ethics of climate change hosted by the Center for Ethics at the University of Montana.
- 2006** Midwest Ecology and Evolution Conference Organizing Committee.
- 2004** NSF Graduate Research Fellowship Program, Honorable Mention.
- 2003** Maxwell Eliot Power Prize for a Kenyon student showing "unusual promise in biology."
- 2001** NSF REU Internship, Phylogeography of the South African Chameleon *Bradypodion transvaalense* (Washington University)

Invited Presentations

- 2024** Oberle B. Rooted in resilience: belowground variation in the world's premier urban research forest. Torrey Botanical Society

Oberle B. What makes urban forests work: Solutions-focused research in the Thain Family Forest. Montclair State University, Smithsonian Environmental Research Center
- 2023** Oberle B. What makes urban forests work: Solutions-focused research in the Thain Family Forest. The Morton Arboretum, Cary Institute of Ecosystem Studies

Oberle B. Detritus dynamics control tradeoffs between biodiversity enhancement and carbon sequestration in a restored Florida mangrove. Gulf of Mexico Alliance Federal Working Group, US EPA Gulf of Mexico Program.
- 2022** Oberle B. Seeing the forest for the trees using ecological hierarchy theory. Lynn University STEM Seminar.
- 2021** Oberle B. Applications of multilevel models to address scale and uncertainty in forest ecology. New College of Florida Natural Sciences Seminar
- 2019** Oberle B. Blue from Brown: Using hierarchical decay models to inform coastal restoration for multiple ecosystem services. Florida Fish & Wildlife Research Institute.

Oberle B. Do fish grow on trees?: Enhancing coastal habitat in the Gulf of Mexico by identifying best practices in mangrove restoration for multiple ecosystem services. Sarasota Bay Fisheries Forum, Tidy Island Condominium Association.
- 2018** Oberle B. & D. F. Young "Tea"-ming up for citizen science and blue carbon. Robinson Preserve. Manatee Co., FL.

Oberle B. Urban Ecology Panel Organizer and Moderator, Sarasota Manatee Environmental Summit.

Oberle B. Mangroves: how, what, why? Tidy Island Condominium Association
- 2017** Oberle B. Mangroves: how, what, why? Florida Native Plant Society Meetings

Oberle B. The Botany of Climate Change: Global and Local Perspectives. University of South Florida.

Oberle B. Good Fences Make Good Neighbors: Wood Durability and Decay. Trees Florida Conference, Palm Coast, FL.
- 2016** Oberle B. Mangroves: how, what, why? Sarasota Science and Environment Council

- 2015** Oberle B. Rumsfeld's principle and biodiversity effects in the forest carbon cycle. University of Virginia.
- 2014** Oberle B. A new perspective on old fashioned botany highlights pivotal roles for biological diversity in our changing climate. New College of Florida, Pacific University.
Oberle B., H. Maherali, A. Zanne. New analyses of plant-fungal interactions portend a disciplinary renaissance of botany *sensu lato*. National Museum of Natural History.
Oberle B. Tales from the crypt: dead wood dynamics and biodiversity effects in Ozark forest carbon cycling. Tyson Summer Seminar Series, Eureka MO.
- 2013** Oberle B. Bend or break: how wood traits may tip Ozark forest carbon balance as climate changes. Washington University.
- 2012** Oberle B., K. Ogle, J. Sweeney, J. Penagos, A. Zanne. Climate, change death and decomposition: xylem vessel length influences mortality and decay among Ozark forest trees. SIFT/TERF National Dissemination Workshop.
Oberle B. Applications of Bayesian and multilevel models in ecology and evolutionary biology. Washington University.
Oberle B. Mission impossible: conserving biodiversity in a warming world. Wichita State University.
- 2010-2011**
Oberle B. and B. Schaal. Responses to Historical Climate Change Identify Contemporary Threats to Diversity in Eastern North American *Dodecatheon*. Natural Areas Association Meeting, Missouri Native Plant Society Meeting, Virginia Native Plant Society Meeting, Texas Native Plant Society Meeting, University of Missouri-Columbia, University of Missouri-St. Louis, St. Louis University.
- 2009** Oberle B. The Curious Case of *Dodecatheon frenchii*. Southern Illinois University Carbondale.

Accepted Abstracts

(presenting author only)

- 2024** Oberle B. "Rooted in resilience: belowground variation in the world's premier urban research forest." Forest Ecosystem Cooperative Annual Meeting, Burlington, VT.
- 2020** Oberle B., J. L. Breithaupt, A. McTigue, C. Bass, M. Leahy, D. F. Young. "Alternative management objectives change litter and soil carbon dynamics in restored coastal ecosystems" Ecological Society of America Meetings, Salt Lake City, UT. *Withdrawn*.
- 2019** Oberle, B., Lee, M. R., Myers, J. A., Osazuwa-Peters, O. L., Spasojevic, M. J., Walton, M. L., Young D. F. & Zanne, A. E. Accurate forest ecosystem projections from empirical decay models require long-term experiments. Botanical Society of America Meetings, Tucson AZ.
- 2018** Oberle B., R. Stryker, A. McTigue, H. Sullivan. Persistent, Fine Scale Carbon Redistribution in Mangroves Disturbed by Mosquito Ditch Dredging. Foundations and Frontiers in Mangrove Ecology Symposium. Rookery Bay National Estuarine Research Reserve, Naples FL.
Oberle B., B. Sidoti. Teaching Undergraduate Students Scanning Electron Microscopy

- Techniques Utilizing Botanical Garden Collections. Botanical Society of America Meetings, Rochester MN.
- 2017** Oberle, B., D.J. McGlenn, K.G. Peay, D. Schwilk, G. Werner, H. Maherali. The effects of climate and soil on the prevalence of alternative mycorrhizal symbioses depend on plant phylogeny. Ecological Society of America Meetings, Portland OR.
- 2016** Oberle, B., K. Covey, K. Dunham, E. J. Hernandez, M. F. Walton, D. F. Young, A.E. Zanne. Dissecting the effects of stem diameter on wood decay emphasizes within-stem conductivity as a control on decomposition and greenhouse gas production in *Fraxinus americana*. Ecological Society of America Meetings, Ft. Lauderdale FL.
- 2014** Oberle B., M. Shcheglovitova, A. Zanne. A hierarchical approach to estimating microbial diversity effects in mechanistic models of decay. Ecological Society of America Meetings, Sacramento CA.
- 2013** Oberle B., A. Zanne, K. Ogle, C. Woodall. When a tree falls: forest inventories illustrate how wood mechanical properties influence standing to down transitions in US forests. Ecological Society of America Meetings, Minneapolis MN.
- 2012** Oberle B., K. Ogle, J. Sweeney, J. Penagos, A. Zanne. Climate, change death and decomposition: xylem vessel length influences mortality and decay among Ozark forest trees. Ecological Society of America Meetings, Portland OR.
- 2011** Oberle B. and Zanne A. Seeing the forest for the fungi: plant traits and decomposition rates under changing climate. Botanical Society of America Meetings, St. Louis, MO; Ecological Society of America Meetings, Austin TX. Saint Louis Ecology and Evolution Retreat, Saint Louis MO.
- 2009** Oberle B and B. Schaal. Tempo and mode of recent climate niche evolution from the integrated ecophysiology and phylogeography of Eastern North American *Dodecatheon*. Society for the Study of Evolution Meeting, Moscow ID.
- 2008** Oberle B. and E. Esselman. Relative fitness of apparent hybrids suggests dynamic ploidy evolution in Eastern *Dodecatheon* (Primulaceae). Botanical Society of America Meeting, Vancouver BC.
- Oberle B., I Jimenez, T. Consiglio. The effect of population structure on climatic niche breadth in plants. Society for the Study of Evolution Meeting, Minneapolis MN.
- 2005** Oberle B. and J.M. Chase. Do trees get dibs?: North American forest architecture and species-energy relationships. Midwest Ecology and Evolution Conference, Carbondale IL.

Reviewer Service

Agroforestry Systems, American Journal of Botany, The American Naturalist, Biogeochemistry, Botanical Journal of the Linnaean Society, Castanea, Dendrobiology, GCB Bioenergy, Global Ecology and Biogeography, Ecology, Ecology Letters, Ecology and Evolution, Ecosphere, Ecosystems, Environmental Microbiology, Evolution, Fire Ecology, Forest Ecology and Management, Forest Science, Forests, Functional Ecology, IEEE Wireless Communications, International Forestry Review, International Journal of Plant Sciences, Journal of Ecology, Journal of Forestry, Journal of Theoretical Biology, Journal of the Torrey Botanical Society, Nature Communications, Microbial Ecology, New Phytologist, Oikos, Plant and Soil, Plant Biology, Rhodora, Scientific Reports, United States National Science Foundation, Urban Ecosystems.

Outreach and Community Service

2024- Forests for All New York City, Research and Monitoring Action Team Co-Lead

2023 Invited Panelist for NYC Climate week “Working with Urban Nature: Natural Solutions to Climate Change”

2021- TREE Foundation Board Member

2023

2016- New College of Florida Title IX investigator

2023

2019- Sarasota County Tree Advisory Council Chair

2021

2015 Participant in “Sea Level Rise: What’s our Next Move” conference organized by the Institute for Science on Global Policy and hosted by the Institute for Strategic Policy Solutions at St. Petersburg College. Contributed to community forums on local impacts of sea level rise.

Participant in AAAS/ESA Communicating Climate Science Workshop. Contributed to discussions about communicating climate change impacts and scientific research with general audiences.

Expert contributor to “Future Conservation of the Illinois Flora: A Climate Change Vulnerability Assessment of 70 Plant Species” prepared by the Illinois Natural History Survey.

2014- Volunteer peer reviewer for PlantEd, an online repository for educational materials relevant to plant biology (<http://planted.botany.org/>)

2012 Participant in SIFT/TERF National Dissemination Workshop. Contributed to presentations and focal groups aimed at improving high school students’ preparation for and interest in careers in environmental science.

2012 Participant in USFS NIACS Central Hardwoods Expert Elicitation Panel. Presented research and provided expert options on possible responses of different forest types to expected climate change (<http://www.nrs.fs.fed.us/niacs/>).

2007-2009 NSF Life Science for a Global Community Institute for High School Biology Teachers Teaching Assistant for Plants and People and Evolution courses, responsible for designing and conducting inquiry-based laboratory activities related to course materials. (http://www.so.wustl.edu/life_sciences/index.htm)

2006-2009 Washington University Biomedical Research Apprenticeship Program. Chalk Talk Presenter, lead discussion on research during a weekly meeting among aspiring biology students from diverse backgrounds. (<http://biomedrap.wustl.edu/>)

2004-2006 Young Scientist Program. Evolution Teaching Team coordinator, responsible for organizing classroom presentations illustrating evolutionary principles for St. Louis City High School and Middle School students. (<http://medicine.wustl.edu/~yvsp/>)