
Robert T. Fahey – *Curriculum vitae*

Assistant Professor
Department of Natural Resources and the Environment &
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EDUCATION

- PhD** **2011**
University of Wisconsin-Madison
Major: Forestry
Dissertation: “Establishment and persistence of early successional pine species in late-successional landscapes of the Great Lakes region” 212 p.
- Master of Science** **2005**
Oregon State University
Major: Forest Science, *Minor:* Botany
Thesis: “Patterns in understory vegetation communities across canopy gaps in young, Douglas-fir forests of western Oregon” 153 p.
- Bachelor of Science** **2001**
Cornell University
Major: Natural Resources
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PROFESSIONAL EXPERIENCE

- **Assistant Professor** – 2016-present. Department of Natural Resources and the Environment & Center for Environmental Sciences and Engineering, University of Connecticut, Storrs, CT.
 - **Associate Director** – 2019-present. UConn Eversource Energy Center, Storrs, CT.
 - **Research Fellow** – 2016-present. Center for Tree Science, The Morton Arboretum, Lisle, IL.
 - **Forest Ecologist** – 2010-2015. The Morton Arboretum, Lisle, IL
 - **Lecturer** – 2012-2015. University of Michigan – Biological Station, Pellston, MI
 - **Graduate Research Assistant** – 2006-2010. Dept. of Forest and Wildlife Ecology, University of Wisconsin-Madison
 - **Graduate Research Assistant** – 2004-2005. Dept. of Forest Science, Oregon State University, Corvallis, OR
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TEACHING

Provost Commendation for Teaching Excellence in 6 of 7 semesters of teaching at UConn
Mean Student Evaluation of Teaching: 4.6/5

- Landscape Ecology. NRE 5461. UConn, Spring 2018 (SET 5.0/5), 2020 (in progress)
- Forest Management. NRE 4475. UConn, Spring 2020 (in progress)
- Exurban Silviculture. NRE 3500. UConn. Spring 2017 (SET 5.0/5), 2019 (SET 4.6/5)
- Forest Ecology. NRE 2455. UConn. Fall 2016 (SET 4.5/5), 2017 (SET 4.0/5), 2018 (SET 4.6/5), 2019 (SET 4.6/5)

- Forest Ecosystems. EEB 348. University of Michigan - Biological Station. Instructor. Summer 2012, 2013, 2015
- Woodland Conservation and Management. The Morton Arboretum – Woodland Stewardship Program. Co-instructor. Spring 2011, 2012, 2013, Fall 2014, Spring 2015
- Forest and Wildlife Ecology 410: Principles of Silviculture. UW-Madison. Volunteer lab teaching assistant and occasional lecturer. Spring 2007, 2008, 2009, 2010.
- Plant Pathology 123: Plants, Pathogens, and People. UW-Madison. Co-instructor. Fall 2008.

MENTORING

Director of Exurban Ecosystem Management Fellowship Program – funded through USDA NIFA National Needs Fellowship

Graduate students

- Primary advisor
 - Jillian Pastick, MS (2018)
 - Elliott Volin, MS (2018)
 - Julia Rogers, MS (2019)
 - Brandon Alveshere, Ph.D. (expected 2021)
 - Amanda Bunce, Ph.D. (expected 2022)
 - Danielle Tanzer, MS (expected 2021)
 - Kerste Milik, MS (expected 2021)
 - Levon Bigelow, MS (expected 2022)
 - Jillian Dyer, MS (expected 2022)
 - Nicholas Cranmer, MS (expected 2023)
- Associate Advisor
 - Samantha Walker, MS (2019) - UConn
 - Daniel Hale, MS (2019) - UConn
 - Marjorie Liberati, Ph.D. (2018) – UConn
 - Nancy Marek, Ph.D. – UConn
 - Lacalasia – UConn EEB
 - Mayra Rodriguez-Gonzalez. Ph.D. – Purdue University
 - Ellen Stuart-Haentjens, Ph.D. - Virginia Commonwealth University
 - Kayla Matthes, Ph.D. - Virginia Commonwealth University
 - Douglas Lynch, Ph.D. (2014) – University of Illinois-Chicago
 - Lindsay Darling, M.S. (2014) – Northwestern University
 - Mary Moses, M.S. (2015) – Northern Illinois University
 - Ben McCallister, MS - Purdue University

Undergraduate students

- UConn University Scholar/SURF Program
 - Mari Cullerton – NRE/Environmental Science – 2019-present
- UConn Eversource Energy Center Undergraduate Research Fellowship Program – co-PI
 - Angie Green – Virginia Tech University - 2017
- UConn Undergraduate Research students
 - Nicholas Cranmer – NRE 2019/2020
 - Keenan Rivers – NRE 2019/2020
 - Colin O’Brien – NRE 2019
 - Thomas Buhl – NRE - 2018
 - David Backhaus – NRE - 2017
- Morton Arboretum Undergraduate Research Fellowship Program – co-PI
 - Bruce Jake Berger – UW-Madison - 2015

- Stuart Hupp – Virginia Tech - 2014
- UMBS NSF REU Program
 - Laura Hickey – VCU - 2018
 - Shea Wales – Fort Lewis College - 2016
 - Nicolás Correa-Pascuas - University of Puerto Rico - 2015
 - Aubrie De La Cruz – Cal Poly Pomona - 2013
 - Elizabeth Stockton – Tufts University - 2012
- Undergraduate research interns
 - Jillian Pastick – Lake Forest College
 - Tatia Bauer – University of Michigan
 - Brian Bash – Northern Illinois University
 - David Carter – UW-Madison
 - David Gudex-Cross – UW-Madison
 - Albert Muelendyke – UW-Madison

PUBLICATIONS

(*Graduate Student, **Undergraduate Student**, ^Post-doctoral advisee)

53 total publications, 21 as first or senior author; 35 at UConn

Total citations: 1456, H-index: 21, i10 index: 31

LaRue E.A., W. Dodds, J. Rohr, K. Rose, F. Tromboni, B. Hardiman, J. Johnson, K. Dahlin, J. Atkins[^], **R.T. Fahey**, J.H. Thorp, M.I. Rodriguez-Gonzalez*, J. Parker, M. Keller, S. Chandra, J. Liu, J. Knott, and S.Fei. (Accepted). The ongoing evolution of Macrosystems Biology. *Frontiers in Ecology and the Environment*.

Pastick, J.*, D. Maurer, and **R.T. Fahey**. 2020. Testing the potential for restoration-focused silviculture to affect ecosystem trajectories in urban-exurban oak woodlands. *Restoration Ecology*. doi: 10.1111/rec.13307

Gough, C.M., J.W. Atkins, B. Bond-Lamberty, **R.T. Fahey**, M.S. Grigri, L.T. Haber, K.C. Mathes, S. Pennington, J.M. Tallant. 2020. Diversity, structure and complexity as predictors of carbon cycling resistance to disturbance. *Ecosystems*. <https://doi.org/10.1007/s10021-020-00544-1>

Gough, C.M., J.W. Atkins[^], **R.T. Fahey**, B.S. Hardiman, and E.A. LaRue. 2020. Community and structural constraints on the complexity of eastern North American forests. *Global Ecology and Biogeography*. <https://doi.org/10.1111/geb.13180>

Volin, E.* A. Ellis, S. Hirabayashi, S. Maco, D. Nowak, J. Parent, and **R.T. Fahey**. 2020. Understanding macro-scale patterns in urban tree canopy and inequity. *Urban Forestry and Urban Greening*. <https://doi.org/10.1016/j.ufug.2020.126818>

Atkins, J.W.[^], **R.T. Fahey**, B.S. Hardiman, L. Haber*, E. Stuart-Haentjens*, LaRue, B. McNeil, D. Orwig, A. Stovall, J. Tallant, C. Gough. 2020. Application of multidimensional structural characterization to detect and describe moderate forest disturbance. *Ecosphere*. e03156. <https://doi.org/10.1002/ecs2.3156>

Johnson, L., M. Johnson, L. Campbell, M. Carr, M. Clarke, V. D'Amico, L. Darling, T. Erker, **R.T. Fahey**, K. Lautar, D.H. Locke, A.T. Morzillo, S. Pincetl, L. Rhodes, J.P. Schmit, L. Scott, N.F. Sonti. 2020. Conceptualizing Social-Ecological Drivers of Change in Urban Forest Patches. *Urban Ecosystems*. <https://doi.org/10.1007/s11252-020-00977-5>

LaRue, E.A., F.W. Wagner*, J.W. Atkins[^], **R.T. Fahey**, C.M. Gough, S. Fei, B.S. Hardiman. 2020. Compatibility of aerial and terrestrial LiDAR for quantifying forest structural diversity. *Remote Sensing*. 12, 1407. <https://doi.org/10.3390/rs12091407>

- Haber, L.*, **R.T. Fahey**, S.B. Wales*, N. Correa-Pascuas**, W.S. Currie, and C.M. Gough. 2020. Forest structure, diversity, and primary production in relation to disturbance severity. *Ecology and Evolution*. <https://doi.org/10.1002/ece3.6209>
- Wales, S.B.*, M.R. Kreider**, J.W. Atkins^, C.M. Hulshof, **R.T. Fahey**, L.E. Nave, K.J. Nadelhoffer, and C.M. Gough. 2020. Stand Age, Disturbance History and the Temporal Stability of Forest Production. *Forest Ecology and Management*. 460, 117865. <https://doi.org/10.1016/j.foreco.2020.117865>
- Fahey, R.T.**, J.W. Atkins^, C.M. Gough, B.S. Hardiman, L.E. Nave, P. Curtis, J. Tallant, L. Turner*, K. Nadehoffer, C. Vogel, C. Scheuermann*, E. Stuart-Haentjens*, A. Fotis*, R. Ricart*. 2019. Defining a spectrum of integrative trait-based vegetation canopy structural types. *Ecology Letters*. 22, 2049-2059. doi:10.1111/ele.13388
- Gough, C.M., J.W. Atkins^, **R.T. Fahey**, B.S. Hardiman. 2019. High rates of primary production in structurally complex forests. *Ecology*. <https://doi.org/10.1002/ecy.2864>
- Fahey, R.T.**, J.W. Atkins^, J. Campbell, M. Duffy**, T. Fahey, L. Rustad, P. Schaberg, C. Driscoll. 2019. Effects of an experimental ice storm on forest canopy structure. *Canadian Journal of Forest Research*. <https://doi.org/10.1139/cjfr-2019-0276>
- Weitzman, J.N., P.M. Groffman, J.L. Campbell, C.T. Driscoll, **R.T. Fahey**, T.J. Fahey, P.G. Schaberg, G.J. Hawley, and L.E. Rustad. 2019. Ecosystem nitrogen response to a simulated ice storm in a northern hardwood forest. *Ecosystems*. 10.1007/s10021-019-00463-w
- Hickey, L.J.***, J. Atkins^, **R.T. Fahey**, M. Kreider*, S. Wales*, C.M. Gough. 2019. Contrasting development of canopy structure and primary production in planted and naturally regenerated red pine forests. *Forests*. 10 (7), 566. <https://doi.org/10.3390/f10070566>
- Parent, J, T. Meyer, J. Volin, **R.T., Fahey**, and C. Witharana. 2019. An analysis of enhanced tree trimming effectiveness on reducing power outages. *Journal of Environmental Management*. 241, 397-406. <https://doi.org/10.1016/j.jenvman.2019.04.027>
- Atkins, J.W.^, G. Bohrer, **R.T. Fahey**, B.S. Hardiman, T. Morin, A. Stovall, N. Zimmerman, and C.M. Gough. 2018. Quantifying forest and canopy structural complexity metrics from terrestrial LiDAR data using the forestR package. *Methods in Ecology and Evolution*. 9(10), 2057-2066. <https://doi.org/10.1111/2041-210X.13061>
- Scheuermann, C.S.*, L.E. Nave, **R.T. Fahey**, K.J. Nadelhoffer, C.M. Gough. 2018. Mixed effects of ecosystem biological and physical structure on primary production in upper Great Lakes forests. *Oecologia*. 188(2), 405-415. doi: 10.1007/s00442-018-4236-x
- Gallinat, A.S.*, R.B. Primack, C.G. Willis, B. Nordt, A.D. Stevens, **R.T. Fahey**, A. Whittemore, Y. Du, Z.A. Panchen. 2018. Patterns and predictors of fleshy fruit phenology at five international botanic gardens. *American Journal of Botany*. 105(11), 1824-1834.
- Hardiman, B.S., L. LaRue, J.W. Atkins^, **R.T. Fahey**, F. Wagner*, and C.M. Gough. 2018. Spatial variation in canopy structure across forest landscapes. *Forests*. 9(8), 474; doi:10.3390/f9080474
- LaRue, L., J.W. Atkins^, K. Dahlin, **R.T. Fahey**, C.M. Gough, S. Fei, and B.S. Hardiman. 2018. Linking Landsat to terrestrial LIDAR: Spectral indices of greenness and brightness are correlated with canopy structural complexity. *International Journal of Applied Earth Observations and Geoinformation*. 73: 420-427. <https://doi.org/10.1016/j.jag.2018.07.001>
- Atkins, J.W.^, **R.T. Fahey**, B.S. Hardiman, C.M. Gough. 2018. Forest structural complexity predicts canopy light absorption at the sub-continental scale. *Journal of Geophysical Research: Biogeosciences*. 123(4): 1387-1405. <https://doi.org/10.1002/2017JG004256>
- Roman, L.A., H. Pearsall, T. Eisenman, T. Conway, **R. Fahey**, S. Landry, J. Vogt, N. van Doorn, M. Grove, D. Locke, A. Bardekjian, J. Battles, M. Cadenasso, C. Konijnendijk, M. Avolio, A. Berland, D. Jenerette, S. Mincey, C. Staudhammer. 2018. Human and biophysical legacies shape contemporary

urban forests: A literature synthesis. *Urban Forestry and Urban Greening* 31: 157-168

- Fahey, R.T.**, B. Alvshere*, J. I. Burton, A. D'Amato, Y.L. Dickinson W.S. Keeton, C.C. Kern A. Larson, B. Palik, K.J. Puettmann, M.R. Saunders, C.R. Webster, J.W. Atkins^, C.M. Gough, B.S. Hardiman. 2018. Shifting conceptions of complexity in forest management and silviculture. *Forest Ecology and Management*. 421: 59-71 <https://doi.org/10.1016/j.foreco.2018.01.011>
- Sagara, B.T.*, **R.T. Fahey**, C.S. Vogel, A.T. Fotis, P.S. Curtis, and C.M. Gough. 2018. Moderate Disturbance Has Similar Effects on Production Regardless of Stand Productivity and Composition. *Forests*. 9: 70; doi:10.3390/f9020070
- Fotis, A.*, T. Morin, **R.T. Fahey**, B. Hardiman, G. Bohrer, and P. Curtis. 2018. Forest structure in space and time: biotic and abiotic determinants of canopy complexity and their effects on net primary productivity. *Agricultural and Forest Meteorology*. 250-251: 181-191. <https://doi.org/10.1016/j.agrformet.2017.12.251>
- Bialecki, M.B., **R.T. Fahey**, and B.C. Scharenbroch. 2018. Variation in urban forest productivity and response to extreme drought across a large metropolitan region. *Urban Ecosystems*. 21(1): 157-169. <https://doi.org/10.1007/s11252-017-0692-z>
- Scharenbroch, B.C., D.R. Carter, M.B. Bialecki, **R.T. Fahey**, L. Scheberl, M. Catania, L. Roman, N. Bassuk, R. Harper, L. Werner, A. Siewert, S. Miller, L. Hutyra, S. Raciti. 2017. A rapid urban site index for assessing the quality of street tree planting sites. *Urban Forestry and Urban Greening*. 27: 279-286. <https://doi.org/10.1016/j.ufug.2017.08.017>
- Scharenbroch, B.C., M.B. Bialecki, and **R.T. Fahey**. 2017. Distribution and factors controlling soil organic C in the Chicago region, Illinois, USA. *Soil Science Society of America Journal*. 81(6): 1436-1449. doi:10.2136/sssaj2017.03.0087
- Fahey, R.T.** and M. Casali. 2017. Distribution of forest ecosystems over two centuries in a highly urbanized landscape. *Landscape and Urban Planning*. 164: 13-24. <https://doi.org/10.1016/j.landurbplan.2017.03.008>
- Brandt, L., A. Derby-Lewis, L. Scott, L. Darling, **R.T. Fahey**, L. Iverson, D. Nowak, A. Bodine, A Bell, S. Still, P. Butler, A. Dierich, S. Handler, M. Janowiak, S. Matthews, J. Miesbauer, M. Peters, A. Prasad, P.D. Shannon, D. Stotz, and C. Swanston. 2017. Chicago Wilderness Region Urban Forest Vulnerability Assessment and Synthesis: A Report from the Urban Climate Change Response Framework Chicago Wilderness Pilot Project. Gen. Tech. Rep. NRS-168. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 142 p. <https://doi.org/10.2737/NRS-GTR-168>
- Swanston, C. W., M. K. Janowiak, L. A. Brandt, P. R. Butler, S. D. Handler, P. D. Shannon, A. Derby Lewis, K. Hall, **R.T. Fahey**, L. Scott, A. Kerber, J.W. Miesbauer, and L. Darling. 2016. Forest Adaptation Resources: climate change tools and approaches for land managers, 2nd ed. Gen. Tech. Rep. NRS-GTR-87-2. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 161 p. <http://dx.doi.org/10.2737/NRS-GTR-87-2>
- Fahey, R.T.**, E.J. Stuart- Haëntjens*, C.M. Gough, A. De La Cruz**, E. Stockton**, C.S. Vogel, and P.S. Curtis. 2016. Evaluating forest subcanopy response to moderate severity disturbance and contribution to ecosystem-level productivity and resilience. *Forest Ecology and Management*. 376:135-147. <https://doi.org/10.1016/j.foreco.2016.06.001>
- Brandt, L., A. Derby-Lewis, **R.T. Fahey**, L. Scott, L. Darling, and C. Swanston. 2016. A framework for adapting urban forests to climate change. *Environmental Science and Policy*. 66:393-402. <https://doi.org/10.1016/j.envsci.2016.06.005>
- Fahey, R.T.** 2016. Variation in responsiveness of woody plant leaf-out phenology to anomalous spring onset. *Ecosphere*. 7(2):e01209.
- Stuart-Haëntjens, E.J*, P.S. Curtis, **R.T. Fahey**, C.S. Vogel, and C.M. Gough. 2015. Net primary

- production of a temperate deciduous forest exhibits a threshold response to increasing disturbance severity. *Ecology*, 96:2478–2487.
- Barber, N. and **R.T. Fahey**. 2015. Consequences of phenology variation and oxidative defenses in *Quercus*. *Chemoecology*, 25: 261-270.
- Panchen, Z. A., R. Primack, A. Gallinat, B. Nordt, A.D. Stevens, Y. Du., **R.T. Fahey**. 2015. Substantial variation in leaf senescence times among 1360 temperate woody plant species: Implications for phenology and ecosystem processes. *Annals of Botany*. doi: 10.1093/aob/mcv015
- Fahey, R.T.**, A. Fotis*, and K.D. Woods. 2015. Quantifying canopy complexity and effects on productivity and resilience in late-successional hemlock–hardwood forests. *Ecological Applications*, 25(3): 834-847.
- Carter, D.R., **R.T. Fahey**, K. Driesilker, M. B. Bialecki, and M Bowles. 2015. Evaluating trade-offs between oak regeneration and C sequestration in relation to management and historical land-use. *Forest Ecology and Management*, 343: 53-62.
- Fahey, R.T.** 2014. Composition, structure, and trajectories of Great Lakes coastal pine forests in relation to historical baselines and disturbance history. *American Midland Naturalist*, 172(2): 285–302
- Fahey, R.T.** and C.G. Lorimer. 2014. Habitat associations and 150 years of compositional change in white pine-hemlock-hardwood forests based on resurvey of public land survey corners. *Journal of the Torrey Botanical Society*, 141(4): 277-293.
- Panchen, Z. A., R. Primack, B. Nordt, E.R. Ellwood, A.D. Stevens, S.S. Renner, C. G. Willis, **R.T. Fahey**, A. Whittemore, Y. Du, C.C. Davis. 2014. Leaf-out times in woody temperate plants are related to phylogeny, deciduousness, growth habit and wood anatomy. *New Phytologist* doi: 10.1111/nph.12892
- Fahey, R.T.**, D. Maurer, M. Bowles, and J. McBride. 2014. Evaluating restoration baselines for edaphically complex, historically fire-protected woodlands within a Prairie Peninsula landscape. *Natural Areas Journal*, 34(2): 166-177
- Fahey, R.T.** and C.G. Lorimer. 2014. Establishment and persistence of pine populations in late-successional forests: influence of variation in habitat-mediated disturbance regimes. *Journal of Vegetation Science*, 25(2): 584-600
- Fahey, R.T.** and C.G. Lorimer. 2013. Restoring a midtolerant pine species as a component of late-successional forests: results of gap-based planting trials. *Forest Ecology and Management*, 292: 139-149
- Fahey, R.T.**, M.B. Bialecki, and D.R. Carter. 2013. Tree growth and resilience to extreme drought across an urban land-use gradient. *Arboriculture and Urban Forestry*, 39(6): 279-285
- Fahey, R.T.**, C.G. Lorimer, and D.J. Mladenoff. 2012. Habitat heterogeneity and life-history traits influence presettlement distributions of early-successional tree species in a late-successional, hemlock-hardwood landscape. *Landscape Ecology*, 27:7. 999-1013
- Fahey, R.T.**, M. Bowles, and J. McBride. 2012. Origins of the Chicago urban forest: composition and structure in relation to pre-settlement vegetation and modern land-use. *Arboriculture and Urban Forestry*, 38 (5).181-193
- Fahey, R.T.** and K.J. Puettmann. 2008. Determination of gap influence extent based on patterns in understory plant communities. *Forest Ecology and Management*, 255: 2801-2810.
- Fahey, R.T.** and K.J. Puettmann. 2007. Ground-layer disturbance and initial conditions influence gap partitioning of understorey vegetation. *Journal of Ecology*, 95: 1098-1109.
- Suarez, E.R., Tierney, G.L., Fahey, T.J., and **Fahey, R.T.** 2006. Exploring patterns of exotic earthworm distribution in a temperate hardwood forest in South-Central New York, USA. *Landscape Ecology*, 21: 297-306

Bohlen, P.J., P.M. Groffman, T.J. Fahey, M.C. Fisk, E.R. Suarez, D.M. Pelletier, and **R.T. Fahey**. 2004. Ecosystem consequences of exotic earthworm invasion of north temperate forests. *Ecosystems*, 7:1-12

MANUSCRIPTS IN REVIEW

Gough, CM, G. Bohrer, B.S. Hardiman, L.E. Nave, C.S. Vogel, J. Atkins, B. Bond-Lamberty, **R.T. Fahey**, A.T. Fotis, M.S. Grigri, L.T. Haber, Y. Ju, C.L. Kleinke, K.C. Mathes, K.J. Nadelhoffer, E. Stuart-Haëntjens, P.S. Curtis. (In review). Rising net ecosystem production a decade after moderate severity disturbance: Revisiting the core hypothesis of the Forest Accelerated Succession Experiment. For *Ecological Applications*.

Fahey, R.T., D. Tanzer, B. Alvshere, J. Atkins, C.M. Gough, B.S. Hardiman. (In review). An experimental approach for crown to whole-canopy defoliation in forests. For *Methods in Ecology and Evolution*.

MANUSCRIPTS IN PREPARATION (draft available on request)

Rogers, J.*, T. Worthley, J. Volin, and **R.T. Fahey**. (In prep). Effects of management in roadside forests on understory light environment, plant community structure, and edge effects. For *Forest Ecology and Management*.

Rogers, J.*, T. Worthley, J. Volin, and **R.T. Fahey**. (In prep). Manipulation of forest edge environments affects the phenological niche advantage of invasive exotic plant seedlings. For *Journal of Ecology*.

LaRue, E, **R.T. Fahey**, B.S. Hardiman, J. Johnson, A. Elmore, P. Bhatt, C. Hakkenberg, S. Cousins, J.W. Atkins, B. Buma, D. Kashian, T. Surasinghe, A. Chen, M. Papes, L. Zhai, A. Koirala, J. Zambrano, B. Alvshere, J. St. Hilaire, S. Fei. (In prep). Toward a unifying framework for characterizing ecosystem structural diversity. For *Frontiers in Ecology and the Environment*.

Rodríguez González, M. I., B. C. Pijanowski, R. T. Fahey, and B. S. Hardiman (In prep). Distribution and access of top-ranked ecosystem services in the Chicago metropolitan region. For *Landscape and Urban Planning*

Alvshere B.C.*, C.C. Kern, and **R.T. Fahey**. (In prep). Management influences forest structural development and canopy structural complexity. For *Canadian Journal of Forest Research*.

Johnson, L., **R.T. Fahey**, L. Darling, J.P. Schmit, D.H. Locke, M. Aronson, N.F. Sonti. M. Johnson, L. Campbell, M. Carr, M. Clarke, V. D'Amico, T. Erker, K. Lautar, A.T. Morzillo, S. Pincetl, L. Rhodes, L. Scott. (In prep). Relationships between forest vegetation and social-ecological context across two urban mega-regions For *Ecological Applications*.

Hardiman, B.S., **R.T. Fahey**, J. Atkins, C. Gough, M.I. Disney, A. Shenkin, M. van Leeuwen, J.C. Zinnert, R. Swihart, A. Reinmann, and A.H. Stahler. (In prep). An ecological niche for Terrestrial Laser Scanners. For *Frontiers in Ecology and the Environment*.

Bialecki, M.B., **R.T. Fahey**, and B.C. Scharenbroch. (In prep). Landscape-level assessment of tree growth and climate response across the Chicago metropolitan region urban forest. For *Tree Ring Research*.

REPORTS

Brandt, L., A. Derby Lewis, L. Scott, **R.T. Fahey**, L. Darling, and C. Swanston. 2017. Adapting Urban Forests to Climate Change in the Chicago Region. *Arborist News*. December 2017.

Darling, L. and **R.T. Fahey**. 2016. Sustaining oaks in the Chicago region landscape: developing a plan for maintaining oak dominance in an urban landscape. *Journal of the International Oak Society*.

Brandt, L., L. Scott, A. Derby Lewis, L. Darling, and **R.T. Fahey**. 2016. Lessons learned from the Urban Forestry Climate Change Response Framework. Houghton, MI: Northern Institute of Applied Climate Science. 36 pp.

Fahey, R.T., L. Darling, J. Anderson. 2015. Sustaining Our Oaks: A Vision for the Future of Oak

CONFERENCES/WORKSHOPS/SESSIONS ORGANIZED

Novel Ecosystem Dynamics in Human Dominated Ecosystems. Organized Oral Session. Ecological Society of America Annual Meeting, Louisville, KY. August 13, 2019.

Understanding and promoting resilience of metropolitan-region forest socio-ecological systems. Organized Special Symposium. US Regional Association of the International Association for Landscape Ecology Annual Meeting. April 9-11, 2018.

Quantifying forest complexity and integrating data into management. Organized Special Session, North American Forest Ecology Workshop, Edmonton, AL. June 19-22, 2017.

Managing Urban Forests in a Changing Climate: The Morton Arboretum Urban Tree Conference. November 18–19, 2014. 126 Attendees.

Sustaining Oaks in the Chicago Wilderness Region: A Conference on the Chicago Wilderness Oak Recovery Plan. The Morton Arboretum, September, 2014. 94 Attendees.

INVITED SEMINARS/PRESENTATIONS

(*graduate student, **undergraduate student, ^post-doctoral advisee)

12 invited seminars as lead author while at UConn

D. Tanzer*, **Fahey, RT.**, A. Barker-Plotkin, R. Bagchi, J. Mickley. Assessing temporal dynamics of disturbance interactions as a driver of a forest mortality event. Ecological Society of America Annual Meeting. Salt Lake City, UT, August, 2020.

Fahey, RT. Connecticut's Changing Forests: What it Means for Carbon Dynamics and Climate Resilience. UConn CLEAR Webinar. May 11, 2020.

Fahey, RT. Connecticut's Changing Forests: What it Means for Carbon Dynamics and Climate Resilience. Presentation to the Governor's Council on Climate Change (GC3). April 7, 2020.

Bunce, AB*, **RT Fahey**, A. Morzillo, J. Parent, C Witharana, T. Worthley, D. Hale*, D. Kloster, N. Marek*, J. Rogers*. Stormwise: Promoting resilience in urban-exurban forest socioecological systems. IUFRO Wind and Trees Workshop, New Zealand. February, 2020. Invited Oral Presentation.

Fahey, RT. Understanding and managing urban forest socio-ecological systems to promote ecosystem functioning and resilience. University of Connecticut Department of Plant Sciences and Landscape Architecture Seminar Series. February, 2020.

Fahey, RT. Measuring and Manipulating Forest Canopy Structure to Promote Ecosystem Functioning and Resilience. Connecticut Agricultural Experiment Station Seminar Series. December, 2019.

Fahey, RT. Understanding and managing urban forest socio-ecological systems to promote ecosystem functioning and resilience. Virginia Commonwealth University Department of Biology Fall Seminar Series. October, 2019.

Fahey, RT., B. Alveshire*, J. Atkins^, C. Gough, B. Hardiman, L. LaRue. Quantifying and managing forest canopy structure to promote ecosystem resilience and functioning. Ecological Society of America Annual Meeting, Louisville, KY. August, 2019. Invited Oral Presentation.

Bunce, AB*, **RT Fahey**, A. Morzillo, J. Parent, C Witharana, T. Worthley, D. Hale*, D. Kloster, N. Marek*, J. Rogers*. Adapting silviculture to urban-exurban forest socioecological systems. Ecological Society of America Annual Meeting, Louisville, KY. August, 2019. Invited Oral Presentation.

Fahey, RT., L. Brandt, C. Staudhammer, N. VanDoorn. Vegetation conditions and dynamics in Wildland-Urban Interface Forests. USDA Forest Service National Workshop on Urban and Wildland-

- Urban Interface Forests Under Changing Conditions. Lone Tree, CO. June, 2019. Invited Presentation.
- Gough, C., Atkins, J.[^], **Fahey, R. T.**, Haber, L.* , Hickey, L.** , Stuart-Haentjens, E.* , Wales, S.*
December, 2018. When Does Shifting Species Diversity and Canopy Structure Matter for the Land Carbon Sink?: A Cross-Scale Analysis. Invited Presentation for the American Geophysical Union Fall Meeting, Washington, DC.
- Fahey, RT.** Understanding and managing urban forests at the metropolitan region scale. Purdue University College of Forestry and Natural Resources Fall Seminar Series. September 18, 2018. Invited Seminar.
- Gough, CM, **Fahey RT**, Hardiman, BS, Atkins, J.[^] The imperative of network ecology to advancing continental knowledge of carbon cycling-ecosystem structure relationships. Ecological Society of America Annual Meeting, New Orleans, LA. August, 2018. Invited Symposium Presentation.
- Atkins, J.[^]; **Fahey, R. T.**; Gough, C.; Hardiman, B. (2017, December). Canopy structural complexity predicts forest canopy light absorption at continental scales. Presentation for the American Geophysical Union, New Orleans, LA.
- Gough, C.; Bond-Lamberty, B.; Stuart-Haentjens, E.*; Atkins, J.[^]; Haber, L.*; **Fahey, R. T.** (2017, December). Carbon cycling at the tipping point: Does ecosystem structure predict resistance to disturbance? Presentation for the American Geophysical Union Fall Meeting, New Orleans, LA.
- Fahey RT.** Understanding linkages between forest structural complexity and ecosystem functioning and applications to ecologically-focused forest management. *Bennington College Department of Science Fall Seminar Series*. October 13, 2017. Invited Speaker.
- Fahey RT**, Atkins, J.[^] Gough, CM, Hardiman, BS. Quantifying forest structural complexity: approaches, metrics, and a conceptual framework. *North American Forest Ecology Workshop*, Edmonton, AL. June 19-22, 2017. Invited Oral Presentation.
- Gough C, Bohrer G, Curtis P, Bond-Lamberty B, Stuart-Haentjens E,* Hardiman B, **Fahey R**, Atkins J,[^] Sagara B,* Haber L.* The surprising role of disturbance in maintaining forest carbon sequestration: Implications for carbon science, policy and management. *2017 Joint NACP and Ameriflux Principal Investigators Meeting*, Plenary, Bethesda, MD, March 30, 2017.
- Atkins, JW [^], **Fahey RT**, Gough CM, Hardiman BS. Canopy structural complexity as a continental predictor of primary production: Using NEON to transform understanding of forest structure-function *American Geophysical Union Fall Meeting 2016*, December 15, 2016. Invited Oral Presentation.
- Fahey RT**, Forecasting the Future of Urban Forests. *Connecticut Urban Forest Conference*. Invited Oral Presentation. October 26, 2016.
- Fahey RT**, Gough, CM, Hardiman, BS, Atkins, J.[^] Understanding linkages between forest structural complexity and ecosystem functioning and applications to ecologically-focused forest management. *Harvard Forest Fall Seminar Series*. September 30, 2016. Invited Seminar.
- Fahey, R.T.** Sustaining Oaks in the Chicago Region Landscape through Restoration, Conservation, and Urban Forestry. Invited Oral Presentation. *8th International Oak Society Conference*. October 20, 2015.
- Fahey, R.T.** Modeling regional-scale urban forest composition, canopy structure, and benefits to support green infrastructure planning, oak ecosystem recovery, and climate adaptation. Invited Oral Presentation. *National Workshop on Large Landscape Conservation*, Washington, D.C. October 2014.

CONTRIBUTED PRESENTATIONS (SELECTED)

(*graduate student, **undergraduate student, [^]post-doctoral advisee)

- J.L Campbell, L. Rustad, CT Driscoll, T. Fahey, **R.T. Fahey**, H. Fakhraei, P. Groffman, W. Leuenberger, P. Schaberg, J. Weitzman. Effects of an Experimental Ice Storm on Carbon and Nitrogen Cycling in a Northern Hardwood Forest. American Geophysical Union Fall Meeting, San Francisco, CA, December, 2019.

- L. Hickey, J.W Atkins, **R.T. Fahey**, M.R Kreider, S Wales, C. Gough. Canopy Structure-Carbon Sequestration Relationships in Plantation and Naturally Regenerated Red Pine. American Geophysical Union Fall Meeting, San Francisco, CA, December, 2019.
- EJ Stuart-Haëntjens, B.S Hardiman, **R.T. Fahey**, G. Bohrer, C. Rey-Sanchez, S. J Cheng, T. Morin, P. Curtis, C.S Vogel, C. Gough. Lessons from a 15-year eddy-covariance dataset: could changing soil water content tip the temperate forest carbon balance? American Geophysical Union Fall Meeting, San Francisco, CA, December, 2019.
- E.A LaRue, W.K Dodds, J.R Rohr, K.M Dahlin, J.H Thorp, J.S Johnson, B.S Hardiman, M. Rodriguez-Gonzalez, M. Keller, **R.T Fahey**, J. Knott, M. D SanClements, J. Atkins, F. Tromboni, G.G Parker, J. Liu, S. Fei. The evolution of macrosystems biology. Ecological Society of America Annual Meeting, Louisville, KY. August, 2019.
- B. Hardiman, E. LaRue, J. Atkins, C.M Gough, **R.T Fahey**, K.M Dahlin, F. Wagner, S. Fei. Understanding the influence of forest canopy structure on ecosystem functions at continental scales. Ecological Society of America Annual Meeting, Louisville, KY. August, 2019.
- L. Johnson, M. Johnson, M. Aronson. **R.T. Fahey** et al. Social-ecological drivers of change in urban forest patches. Ecological Society of America Annual Meeting, Louisville, KY. August, 2019.
- Alveshere, B.C.*, C.C. Kern, and **R.T. Fahey**. Management influences forest structural development and canopy structural complexity. North American Forest Ecology Workshop. Flagstaff, AZ. June, 2019.
- Atkins, J.^, **Fahey, R. T.**, E. Stuart-Haentjens*, Haber, L. *, LaRue, L., McNeil, B. Orwig, D., Stovall, A., Tallant, J., Hardiman, B., Gough, C. December, 2018. Unique Canopy Structural Signatures of Moderate Disturbance Derived from Terrestrial LiDAR Poster for the American Geophysical Union Fall Meeting, Washington, DC.
- Stuart-Haentjens, E. *, Atkins, J, **Fahey, R. T.**, Fotis, A. Ricart, R. Hardiman, B., Gough, C. December, 2018. Using Terrestrial LiDAR to Examine Forest Structural Complexity Following Disturbance. Poster for the American Geophysical Union Fall Meeting, Washington, DC.
- S. Wales*, Kreider, M., Atkins, J, **Fahey, R. T.**, Nave, L. Nadelhoffer, K., Gough, C. December, 2018. Mechanisms underlying production stability in temperate deciduous forests. Poster for the American Geophysical Union Fall Meeting, Washington, DC.
- Volin, E.*; **Fahey, R. T.** Inequity in Urban Tree Canopy: Current Patterns and Future Scenarios. *Partners in Community Forestry Conference*, Irvine, CA. November 8, 2018. Contributed Oral Presentation.
- Rogers, J.* , T. Worthley, J. Volin, and **R.T. Fahey**. Edge effects in managed and unmanaged roadside forests. Natural Areas Conference. Bloomington, IN, October, 22-25, 2018. Contributed Oral Presentation. (Awarded best student presentation)
- Atkins, J.^; **Fahey, R. T.**; Gough, C.; Hardiman, B. Coupling ecosystem complexity with leaf to canopy light and carbon cycling dynamics. Ecological Society of America Annual Meeting, New Orleans, LA. August, 2018. Contributed Oral Presentation.
- LaRue, L.^, Atkins, J.W., K. Dahlin, **R.T. Fahey**, C.M. Gough, S. Fei, and B.S. Hardiman. Linking Landsat to terrestrial LIDAR: Spectral indices of greenness and brightness are correlated with canopy structural complexity. Ecological Society of America Annual Meeting, New Orleans, LA. August, 2018. Contributed Oral Presentation.
- Volin, E.*; **Fahey, R. T.** (2018, April). Understanding macro-scale patterns in urban tree canopy and inequity across socio-cultural and biophysical regions. Presentation for the American Association of Geographers, New Orleans, LA.
- Fahey, R. T.**; Atkins, J.^; Gough, C.; Haber, L.*; Stuart-Haentjens, E.*; Hardiman, B.; Orwig, D.; Campbell, J.; Rustad, L.; Duffy, M.** (2017, December). Effects of moderate severity disturbances on forest structural complexity: A study of ice and fire. Poster for the American Geophysical Union Fall Meeting, New Orleans, LA.

- Pastick*, J., D. Maurer, and **R.T. Fahey**. Adaptive management experiments for restoration of oak ecosystems: effects of canopy thinning on seedling regeneration and groundlayer plant communities. *Natural Areas Conference*, Fort Collins, CO, October 11, 2017. Contributed Oral Presentation
- Fahey RT**, Fan, C.^, Johnston, M., Scott, L., Darling, L. Modeling forest composition and biomass across large urbanized landscapes. *International Association of Landscape Ecology - US Annual Meeting*. April 11, 2017. Contributed Oral Presentation.
- Fahey RT**, Gough, CM, Hardiman, BS, Atkins, J.^ Mechanisms linking forest canopy structural complexity with primary production: Evaluating the generality of ecosystem structure-production relationships at a continental scale. *Harvard Forest Ecology Symposium*, March 21, 2017. Poster.
- Fahey RT**, Tallant J, Gough CM, Hardiman BS, Atkins J,^ Scheuermann CM.* Comparison of Aerial and Terrestrial Remote Sensing Techniques for Quantifying Forest Canopy Structural Complexity and Estimating Net Primary Productivity. *American Geophysical Union Fall Meeting 2016*, December 15, 2016. Oral Presentation.
- C.M. Gough, **R.T. Fahey**, B.S. Hardiman, C.M. Scheuermann*, J.W. Atkins^ (2016). (Why) Does Physical Complexity Matter?: Forest Physical Structure and Carbon Cycling. *An Integrated Network for Terrestrial Ecosystem Research on Feedbacks to the Atmosphere and Climate (INTERFACE): Linking experimentalists, ecosystem modelers, and Earth system modelers*.
- B.S. Hardiman, C.M. Gough, **R.T. Fahey**, J.W. Atkins^ (2016). Is canopy complexity a global predictor of forest growth? Using NEON to understand ecosystem structure-production relationships across broad spatial scales. *2016 Ecological Society of American Annual Meeting*. Fort Lauderdale, FL.
- M.B. Bialecki and **Fahey, R.T.**, April 2015. Drivers of variation in tree productivity and response to extreme drought across an urban landscape. Contributed Oral Presentation at *American Association of Geographers Annual Meeting*, Chicago, IL
- M. Moses*, **Fahey, R.T.**, and D. Goldblum, April 2015. Carbon Assimilation of Oak Seedlings Under Canopy Openness Manipulations. Contributed Oral Presentation at *American Association of Geographers Annual Meeting*, Chicago, IL
- M.B. Bialecki and **Fahey, R.T.**, August 2014. Tree growth and resilience to extreme drought across an urban land-use gradient. Contributed Oral Presentation at *Ecological Society of America Annual Meeting*, Sacramento, CA
- M. Casali and **Fahey, R.T.** March 2014. Mapping temporal change in oak-dominated ecosystems in the Chicago metropolitan region. Contributed Poster at *Central Hardwood Forest Conference*. Carbondale, IL.
- Goodrich-Stuart, E.J.* , A. De La Cruz**, **R.T. Fahey**, and C.M. Gough. December 2013. Disturbance severity and net primary production resilience of a Great Lakes forest ecosystem. *American Geophysical Union*.
- M.B. Bialecki and **Fahey, R.T.**, August 2013. Tree growth and resilience to extreme drought across an urban land-use gradient. Contributed Poster at *Ecological Society of America Annual Meeting*, Minneapolis-St. Paul, MN
- Fahey, R.T.**, A. Fotis, and K. Woods. June 2013. Drivers of canopy structural complexity in old-growth forests. Contributed Oral Presentation at the *North American Forest Ecology Workshop*, Bloomington, IN.
- Fahey, R.T.** and M. Bowles, November 2012. Understanding the Chicago urban forest continuum. Contributed Oral Presentation at the *Chicago Wilderness Congress*, Chicago, IL.
- Fahey, R.T.** November 2012. Assessing inter- and intra-specific variation in tree phenology in response to recent climatic changes. Contributed Oral Presentation at the *Chicago Wilderness Congress*, Chicago, IL.

- Fahey, R.T.** and C.G. Lorimer, June 2011. Competitive status of underplanted eastern white pine in mesic hemlock-hardwood forests: can gap-based restoration succeed? Contributed Oral Presentation at the *North American Forest Ecology Workshop*, Roanoke, VA.
- Fahey, R.T.** C.G. Lorimer, and D.J. Mladenoff. August 2010. Persistence of Eastern White Pine in Hemlock-Hardwood Forests: An Early-successional Species in a Late-successional Landscape. Contributed Oral Presentation at *Ecological Society of America Annual Meeting*, Pittsburgh, PA.
- Fahey, R.T., and** C.G. Lorimer. August 2008. Eastern White Pine in Hemlock-Northern Hardwood Forests: Habitat Relationships and Change from Pre-settlement Condition. Contributed Poster at *Ecological Society of America Annual Meeting*, Milwaukee, WI
- Fahey, R.T.,** C.G. Lorimer. April 2008. Pre-settlement distributions of eastern white pine and development of predictive habitat models. Contributed Paper at US Regional Association of the *International Association for Landscape Ecology Annual Symposium*, Madison, WI.
- Fahey, R.T.,** K.J. Puettmann, and S.D. Berryman. August 2005. Patterns in understory vegetation distributions across gap openings in variable density thinned forest stands in western Oregon. Contributed Paper at *Ecological Society of America Annual Meeting*, Montreal, Quebec.

FUNDING

Awarded (Total - \$3,474,514; To UConn: \$2,326,179; As PI at UConn: \$1,172,105)

Active – as PI

National Science Foundation

R.T. Fahey, B.S. Hardiman, J. Matthes. (PIs). Collaborative Research: MSA: Incorporating Structural Effects of Disturbance into Ecosystem Models. 2019-2022: **\$299,384 (\$29,204 to UConn)**

USDA NIFA National Needs Fellowship Program

R.T. Fahey (PI), A. Helton, B. Lawrence, A. Morzillo, C. Rittenhouse, T. Rittenhouse, J. Vokoun, T. Worthley. Training Forest Resources Graduates For An Exurban Forest Future. 2019-2022. **\$246,000**

Eversource Energy Center

R.T. Fahey (PI), T. Worthley (co-PI). Vegetation management and modeling to promote resilient trees, power, and communities. 2020-2022. **\$306,072**

Tree Research and Education Endowment Fund

R.T. Fahey (PI), Roman, L (Co-PI), Grabowsky, J. (Co-PI). Monitoring and modeling changes in street tree communities over time. 2019-2023. **\$25,000** (Additional \$20,000 provided by USDA Forest Service through Research Joint Venture Agreement).

UConn Research Excellence Program

R.T. Fahey (PI). Interacting disturbance in forest ecosystems: Does disturbance memory affect resistance and resilience of forest productivity? 2019-2020. **\$24,896**

USDA McIntire-Stennis

R.T. Fahey (PI), Worthley, T. (Co-I). Experimentally testing linkages between forest canopy structural complexity and stand productivity and resilience. 2018-2021. **\$90,000**

Active – as co-PI

Civil and Environmental Engineering Research Initiative

Cerrai (PI), **RT Fahey** (co-PI). Machine learning based wildfire ignition model: preliminary study. 2020. **\$20,000.**

USDA McIntire-Stennis

T. Worthley (PI), Morzillo, A.T. (Co-I), **Fahey, R.T.** (Co-I). Assessing woodland owner interest in adaptive silviculture as a response to climate change. 2018-2021. **\$90,000**

Completed

At UConn

National Science Foundation.

R.T. Fahey (PI), C. Witharana (Co-PI). RAPID: Assessing temporal dynamics of disturbance interactions as a driver of a novel forest mortality event. 2019-2020. **\$57,849.**

Eversource Energy Center

A. Morzillo (PI), **R. Fahey**, J. Volin, T. Worthley, J. Parent (co-PIs). Stormwise II: Vegetation Management and Modeling for Storm Resistant Trees, Resilient Power and Sustainable Futures. 2018-2019. **\$1,004,000**

National Science Foundation

R.T. Fahey, C.M. Gough, and B.S. Hardiman (PIs). Is canopy structural complexity a global predictor of primary production?: Using NEON to transform understanding of forest structure-function. 2016-2018. **\$299,940 (\$59,940 to UConn)**

Eversource Energy Center

J. Parent (PI), J.C. Volin, T. Meyer, W. Zhang, **R. Fahey**, E. Anagnostou & D. Wanik. Further evaluation of airborne & mobile LiDAR technologies for monitoring roadside vegetation and utility infrastructure. 2016-2017. **\$150,074**

USDA McIntire-Stennis.

R.T. Fahey. Evaluating the effects of forest management on development of canopy structural complexity and light use efficiency. 2016-2018. **\$86,384**

USDA Forest Service - National Urban and Community Forestry Advisory Council.

R.T. Fahey (PI), D. Nowak, S. Hirabayashi, S. Maco, B. Toomey, R. Blankenhorn. Planning for equitable urban landscapes: Identifying communities underserved by urban forest green infrastructure, assessing future risks, and optimizing management strategies. 2016-2018. **\$298,525 (\$158,000 to UConn)**

Center for Tree Science at the Morton Arboretum

R.T. Fahey. Restoration of oak ecosystems in human-dominated landscapes. 2016-2019. **\$78,760.**

Prior to UConn

USDA Forest Service - National Urban and Community Forestry Advisory Council

Fahey, R.T. and B. Scharenbroch. 2012-14 (Co-PIs). Carbon Sequestration and Resiliency of the Urban Forest Landscape. **\$143,150**

USDA Forest Service – State and Private Forestry

Fahey, R.T. 2012-14. Assessing Oak Resources of Northeast Illinois and Implementing a Cooperative Strategy to Restore Oak Dominance to the Region's Tree Canopy. Received as subaward through Chicago Wilderness Trust. **\$115,000**

Lake County Forest Preserve District

Fahey, R.T. 2013-15. Oak Woodland Ecosystem Restoration Experiment: implementation and monitoring. **\$30,431**

Illinois DNR – Illinois Wildlife Preservation Fund

Fahey, R.T. 2012. Dendrochronological analysis of Illinois Natural Areas Inventory sites. **\$2,000**

Huron Mountain Wildlife Foundation

Fahey, R.T. 2012-13. Assessing drivers and implications of canopy structural complexity in late-successional hemlock-northern hardwood forests. **\$5,400**

Illinois-Indiana Sea Grant College Program

Fahey, R.T. 2011. Restoration of native pine species in Great Lakes coastal environments. **\$8,795**
Lake County Forest Preserve District

Fahey, R.T. 2011-12. Adaptive management of Southern Des Plaines River Forest Preserves: Data analysis and restoration experiment design. **\$69,871**
Huron Mountain Wildlife Foundation

Fahey, R.T. and C.G. Lorimer. 2007-8. The origin and perpetuation of emergent white pines in hemlock-northern hardwood forests. **\$4,983**
Garden Club of America: Ecological Restoration Grant

Fahey, R.T. 2006. Ecology and restoration of supercanopy white pine in mesic hemlock-northern hardwood forests. **\$8,000**

Pending

National Science Foundation

M. Anagnostou et al. (**R. Fahey** - Co-PI). Industry-University Cooperative Research Center (IUCRC) for Weather Innovation and Smart Energy Resilience.

National Science Foundation

M. Aronson et al. (**R. Fahey** - Senior Personnel). LTER: Philadelphia Metropolitan Region: Linking biodiversity, ecosystem functions, and human decision-making for sustainable urban systems

USDA Forest Service

R. Fahey (PI), I. Munck, J. Campbell, C. McIntire (co-PIs). Interactions of tree health and utility vegetation management. \$120,483 requested.

USDA McIntire-Stennis

R.T. Fahey (PI), Worthley, T. (Co-I). Evaluating patterns and drivers of structural variation in edge forests and their functional consequences. 2021-2024. \$59,639 requested.

RESEARCH NETWORKS/WORKING GROUPS

- Forest Pest Adaptation Working Group – USGS/NPN
- New England Forest Adaptation Working Group – USFS/NCASC
- NSF SESYNC Pursuit: Social and ecological drivers of change over time in urban forest patches - Named Participant
- NSF Research Coordination Network: Terrestrial Laser Scanning in Ecology – Named Participant
- NSF SESYNC Working Group: Growing the Urban Forest: Revealing the Processes that Shape Urban Canopy - Named Participant

HONORS/AWARDS

- UConn AAUP Excellence in Research and Creativity: Early Career - 2020
- UConn Research Excellence Program - 2019
- Provost Commendation for Teaching Excellence – 2016, 2017, 2018, 2019
- Huron Mountain Wildlife Foundation: Manierre Award - 2013
- UW Vilas Travel Award - 2010
- HHMI Program in Scientific Teaching Fellow - 2009
- Garden Club of America Fellowship in Ecological Restoration - 2007
- Oregon State University Department of Forest Science Hayes Fellowship - 2005
- Member Xi Sigma Pi Forestry Honor Society – 2005

SERVICE

Professional Memberships/Service:

- CT Governor’s Council on Climate Change – Working and Natural Lands Sub-group
- Connecticut Urban Forest Council
- Society of American Foresters – Yankee and New England Chapters
- Ecological Society of America
- American Geophysical Union
- International Association for Landscape Ecology – US Chapter
- Forest Guild
- International Society of Arboriculture – Urban Tree Growth and Longevity Working Group
- Chicago Regional Trees Initiative – Director of Forest Composition and Modeling Program
- Chicago Wilderness Oak Ecosystem Recovery Working Group – Co-chair
- Chicago Wilderness Climate Change Taskforce
- Chicago Wilderness Trees and Green Infrastructure Taskforce

UConn Service:

University level:

- Centers and Institutes Committee

College level:

- Excellence Committee
- Land Use Committee

Department level:

- UConn Forest Executive Committee
- Awards Committee – Chair
- Seminar Committee – Chair/Member
- Graduate Program Committee - Member
- Search Committee – Member

Reviews:

Granting agencies:

- USDA NIFA – BNRE Panel Fall 2018
- NSF (CAREER, DEB, CREST)
- Swiss NSF
- MITACS Canada
- UConn REP
- UConn SURF

Publishers:

- Yale University Press

Journals:

- | | |
|--|---------------------------------|
| – Frontiers in Ecology and the Environment | – Ecography |
| – Ecology Letters | – Ecosystems |
| – Ecology | – Plos One |
| – Ecological Monographs | – Journal of Vegetation Science |
| – Ecological Applications | – Applied Vegetation Science |
| – Journal of Ecology | – Forests |
| – Journal of Applied Ecology | – Plant Ecology |
| – Global Change Biology | – Forest Ecology and Management |
| – Agricultural and Forest Meteorology | – Ecosphere |
| – Urban Forestry and Urban Greening | – Botany |
| – Urban Ecosystems | – Rhodora |

- Arboriculture and Urban Forestry
 - European Journal of Forest Research
 - Journal of the Torrey Botanical Society
 - Northeastern Naturalist
 - Ecological Engineering
 - Canadian Journal of Botany
-