

JONATHAN R. THOMPSON

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Biography:

Dr. Jonathan Thompson is the Research Director and Senior Ecologist at the Harvard Forest, a department of Harvard University. His research is highly interdisciplinary and focuses on long-term and broad-scale changes in forest landscapes, with an emphasis on quantifying how land use affects forest ecosystem processes and services. He is the lead Principal Investigator for the Harvard Forest Long Term Ecological Research (LTER) program, sponsored by the National Science Foundation and involving more than 100 scientists and students investigating the dynamics of the New England landscape. He also leads the New England Landscape Futures project, which collaborates with diverse stakeholders from throughout the region to build and evaluate scenarios that show how land-use choices and climate change could shape the landscape over the next 100 years. He is the lead author of *Changes to the Land: Four Scenarios for the Future of the Massachusetts Landscape* and is the Land Sector Lead for the Commonwealth of Massachusetts' *Decarbonization Roadmap*.

Appointments:

2022-Present	Research Director, Harvard Forest, Harvard University
2022	Lone Mountain Fellow; Property and Environment Research Center, Bozeman, MT
2019-Present	Lead Principal Investigator, Harvard Forest Long Term Ecological Research Program
2013-Present	Senior Ecologist, Harvard Forest, Harvard University
2014-Present	Adjunct Professor, Dept of Earth and Environment, Boston University
2014-Present	Adjunct Research Professor, Ecological Conservation, U. of Massachusetts, Amherst
2011-2014	Research Assistant Professor, University of Virginia, Charlottesville
2009-2013	Research Ecologist, Smithsonian Institution
2008-2009	Charles Bullard Fellow of Forest Science, Harvard Forest, Harvard University
2007-2010	Freelance Science Writer contracted by US Forest Service, PNW Research Station

Professional Preparation:

University of Massachusetts	Amherst, MA	Natural Resources	B.S.	1999
Oregon State University	Corvallis, OR	Forest Policy	M.S.	2004
Oregon State University	Corvallis, OR	Forest Ecology	Ph.D.	2009

Selected Service Activities:

2018– Present	Member of Executive Board for the NSF's Long Term Ecological Research (LTER) Network; Chair of the LTER Future Scenarios Working Group; Member of the LTER Diversity Equity and Inclusion Standing Committee
2023-Present	Braiding Indigenous Knowledge and Western Science for Forest Landscape Adaptation to Climate Change – Core Writing Team, Commissioned by President Biden Executive Order 14072 <i>Strengthening the Nation's Forests, Communities, and Local Economies</i> “
2022-Present	Board Member, Massachusetts Audubon, Resilient Landscapes Board
2020-Present	Expert Consultant, Massachusetts Executive Office of Energy and Environmental Affairs for development of 2050 Clean Energy and Climate Plan
2021-Present	Massachusetts Forest as a Climate Solution, Expert Assessment Team
2014-Present	Editorial Board <i>Landscape Ecology</i>
2010-2015	Editorial Board <i>ESA Ecosphere</i>
2013-Present	CO-PI and Science Coordinator for the <i>Scenarios, Services, and Society (s³)</i> Research Coordination Network (NSF RCN)

2011-Present Board member and secretary for the LANDIS-II Foundation (501c3), which supports training, use, and maintenance of the LANDIS-II open-source forest landscape simulation platform.

Research Grants:

- 2023-2025 Salata Institute for Climate and Sustainability at Harvard University** “The Policy and Ecology of Nature-based Climate Change Mitigation.” (PI: Holbrook, Co-PIs: Joe Aldy from KSG, and J.R Thompson) \$215K
- 2023-2027 NSF: Dynamics of Integrated Social and Ecological Systems (DISES)** “Co-produced modeling of socio-environmental dynamics of financialized forestlands and alternative future scenarios” (PI: Abrams, U. Georgia); \$1.6mil Total, Thompson portion \$480K
- 2021-2024 USDA NIFA: Natural Resource Economics** “Toward a comprehensive understanding of the economic and ecological impacts of land protection” (PI: Thompson) \$500K
- 2022-2023 Mass Audubon** “Energy and Ecosystem Tradeoffs when siting alternative energy” (PI Thompson) \$120K
- 2022-2023 USDA: Ecosystem Monitoring Fund** “Integrating field and Landsat data to Monitor Forest Conditions in the New York City Watershed” (PI: Thompson) \$25K
- 2021-2023 USDA: Forest Service: GLRI** “Past and future land use change within watersheds of the upper Great Lakes” (PI: Sturdivant, Forest Service) \$300K; Thompson portion \$69K
- 2020-2023 Dept of Energy** “Operation of the Harvard Forest Core Site in the AmeriFlux Network Management Project” \$1.1m (PI Munger; HF Site PI: Thompson)
- 2020-2023 USDA: CARES** “Adaptive forest management options for white ash influenced by the invasive emerald ash borer” (PI: Orwig; Co-PI: Thompson) \$300K
- 2020-2023 NSF: REU Site Grant:** “Summer Research Program in Ecology at Harvard Forest” (PI Barker-Plotkin, Harvard) \$583K
- 2019-2025 NSF: LTER-HFR-VI:** “From microbes to macrosystems: Understanding global change drivers and their interactions” (PI: Thompson) \$7,100,000
- 2020-2021 NSF: RAPID:** “RAPID: Is Carbon Starvation a Proximal Cause of Tree Mortality from Defoliation” (PI: Thompson) \$100K
- 2019-2020 Commonwealth of Massachusetts:** Massachusetts Global Warming Solutions Act – Decarbonization Roadmap Study (PI Thompson Lead of Land-use sector with Cadmus Inc) \$230K
- 2019-2020 Smithsonian Tropical Research Institute:** “Reforestation scenarios for the Panama Canal Watershed” (PI: Thompson) \$105K
- 2017-2022 NASA: Carbon Cycle Science/ USDA NIFA:** “Fragmentation effects on forest productivity across managed ecosystem gradients” (PI: Huttyra of BU \$1mil; Co-PI Thompson Institutional PI) \$360K
- 2018-2022 NSF: Coupled Human and Natural Systems:** “The consequences of climate change-driven land-use regime shifts in New England forests” (PI: Thompson, Harvard University) \$900K
- 2018 - 2023 Highstead Foundation:** “Wildlands and Woodlands. Translating the Vision into Sustained and Strategic Activities” (PI: Thompson) \$350K
- 2014-2019 NSF: DEB Ecosystems:** “Assessing evidence for a climate induced biome shift in the Klamath EcoRegion” (PI J.R. Thompson) \$965K

- 2013-2018** NSF: **RCN-SEES: Research Coordination Network** “Scenarios, Services, and Society” (PI D.R. Foster; Thompson Co-PI and Science Director), \$750K
- 2012-2018** NSF: **LTER HFR: “New Science, Synthesis, Scholarship and Strategic Vision for Society: Harvard Forest ”** (PI D.R. Foster) Total \$5.8mil Thompson Portion \$550K
- 2013-2014** **Smithsonian: Grand Challenge Award: “BiodiversiTREE @ the Smithsonian”** (PI: J. Parker SERC) \$200K
- 2012-2013** **Smithsonian: Grand Challenge Award; “Integrating traditional ecological knowledge and modern forest science toward resilient tribal management”** PI: J Kress) Thompson Portion \$110K
- 2012** **Center for Tropical Forest Science; “Gap model simulations of long-term impacts of deer over-abundance on forest successional dynamics”** (PI: Thompson) \$12K
- 2011-2012** NSF: **LTER Supplemental: “Future scenarios of forest change in Massachusetts”** (PI: Foster, Harvard) \$44K
- 2011-2012** **Smithsonian Institution “Estimating the carbon storage potential of Mid-Atlantic forests based on remnant old-growth sites”** (PI: Thompson) \$166K
- 2010-2012** NSF: **LTER Supplemental: “Landscape vulnerability and resilience to global change – Regional scenario analysis across LTER sites”** (PI: Foster, Harvard) \$50K
- 2010** **Smithsonian Global Earth Observatory (SIGEO); “Herbivory effects on overstory tree growth – A dendrochronological approach** (PI: W. McShea Smithsonian) \$24K
- 2009-2011** NSF: **RAPID: “Ecological patterns and consequences of catastrophic mortality of a foundation species due to abrupt climatic and biotic stresses”** (PI: Foster, Harvard) \$100K
- 2009-2010** NSF: **LTER LNO: “Workshop Grant: Future scenarios of land use and climate change”** (PI: Thompson) \$30K

Significant Reports:

1. “*Growing Solar, Protecting Nature*”. **Thompson J. R.***, Manion, M.*, K. Pickrell, L. Lee, H. Ricci, J. Collins, J. Plisinski, R. Jones, G. Kwok, D. Powell, and W. Rhatigan. 2023. Mass Audubon and Harvard Forest. DOI: <https://doi.org/10.5281/zenodo.8403839>. *Co-Lead Authors
2. “*Forests as a Climate Solution: A Recommendations for the management of Massachusetts’ forests*” 2023. The Healey-Driscoll Administration convened the Climate Forestry Committee, a group of ten experts (including **Thompson**), to inform the development of climate-oriented management guidelines that increase carbon storage and resilience to climate change in Massachusetts.
3. “*Braiding Indigenous Knowledge and Western Science for Forest Landscape Adaptation to Climate Change: An Ecocultural State of Science Report*” Eisenberg C., S. Prichard...**J.R. Thompson** and 35 co-authors. 2023. A report commissioned by the U.S. Dept. of Interior as part of President Biden’s Executive Order 14072 *Strengthening the Nation’s Forests, Communities, and Local Economies*. Thompson leads the Northeast Section of the Core Writing Team
4. “*Wildlands in New England. Past, Present, and Future*” Foster, D., E. E. Johnson, B. R. Hall, J. Leibowitz, E. H. Thompson, B. Donahue, E. K. Faison, J. Sayen, D. Publicover, N. Sferra, L. C. Irland, **J. R. Thompson**, R. Perschel, D. A. Orwig, W. S. Keeton, M. L. Hunter Jr., S. A. Masino, and L. Howell. 2023. Harvard Forest Paper 34. Harvard University.
5. “*New England’s Climate Imperative: Our Forests as a Natural Climate Solution*” Meyer, S. R*., Kapur, K*., **Thompson, J. R*.**, Foster, D. R., Perschel, R., St. Clair Knobloch, N., Leibowitz, J., Donahue, B., Giffen, A., Vaughn, T., Whalen, T., Labich, B., Colnes, A., Ammermuller, J. 2022. Highstead Foundation ISBN: 979-8-218-09736-3 *Co-Lead Authors

6. “*The Role of Terrestrial Carbon in Achieving Net Zero Emissions: Market Approaches and Authority*” Joroff A., L. Cohen, **J. R. Thompson**. 2021. Harvard Environmental Law and Policy Clinic and the Harvard Forest. Report to the Commonwealth of Massachusetts.
7. “*Land Sector Report: Massachusetts Decarbonization Study*” **Thompson, J. R., Laflower, D., Plisinski, J., Graham MacLean, M.** 2020. . Massachusetts 2050 Decarbonization Roadmap. 62 pp.
8. “*Voices from the Land: Listening to New Englanders’ Views of the Future*” Fallon Lambert K., McBride M., M. Weiss, **J. R. Thompson**, K. A. Theoharides, P. Field. 2018. Harvard Forest, Harvard University and the Science Policy Exchange. ISBN: 978-962-14667-5
9. “*Wildlands and Woodlands, Farmlands and Communities: Broadening the Vision for New England*” Foster, D. R., K. Fallon Lambert, D. B. Kittredge, B. Donahue, C. M. Hart, W. Labich, S. R. Meyer, **J. R. Thompson**, M. Buchanan, J. Levitt, R. Perschel, K. Ross, G. Elkins, C. Daigle, B. Hall, E. Faison, A. W. D’Amato, R. T. T. Forman, P. Del Tredici, L. Irland, B. Colburn, D. Orwig, J. Aber, A. Berger, C. Driscoll, W. Keeton, R. J. Lilieholm, N. Pederson, A. Ellison, M. Hunter, and T. Fahey. 2017. Harvard Forest, Harvard University, Petersham, MA. ISBN 978-0674185036
10. “*Changes to the Land: Four Scenarios for the Future of the Massachusetts Landscape*” **Thompson, J. R.,** K. Fallon-Lambert, D. R. Foster, M. Blumstein, E. N. Broadbent, and A. M. Almeyda Zambrano. 2014. 50p. Harvard Forest, Harvard University. ISBN:978-0615-9852-68.
11. “*Wildland and Woodlands: A Forest Vision for New England*” Foster, D. R., B. Donahue, D. Kittredge, K. Fallon-Lambert, M. Hunter, B. Hall, L. Irland, R. Lilieholm, D. Orwig, A. D’Amato, E. Colburn, **J. R. Thompson**, J. Levitt, A. Ellison, W. Keeton, J. Aber, C. Cogbill, C. Driscoll, T. Fahey, and C. Hart. 2010. Harvard University Press. Cambridge, MA. ISBN: 978-1-4507-0603-250500

Peer Reviewed Publications: Note: Starting in mid-2017, I adopted the convention of placing my name at the end of the author list when the work was based primarily in my lab and under my direction. Underline indicates an advisee in my lab. PDFs of all papers are freely available on my website.

In Review & Revision:

1. **Thompson, J. R.,** K. Sims, A. Kalinin, L. Lee, V. Pasquarella, J. Plisinski, “Do working forest easements work for conservation” In Review: *Conservation Letters*.
2. Tumber-Dávila S. J., T. Lucey, E. Boose, D. LaFlower, A. León-Sáenz, B. Wilson, M. MacLean **J.R. Thompson.** Hurricanes pose substantial risk to New England’s forest carbon stocks. In Review at: *Global Change Biology*.
3. Kalinin A., Sims, K., and **J. R. Thompson.** Ecological impacts of land protection in New England. In Review at: *Conservation Biology*.
4. Morreale L.L., **J. R. Thompson,** V. Pasquarella, Hutyrá L. “The fragmented temperate forest landscape” In Revision: *Frontiers in Ecology and the Environment*.
5. Hundertmark W., L. Morreale, A. Reinmann, **J. R. Thompson,** P. Templer, L. Hutyrá. “Canopy structure, foliar chemistry, and spatial characteristics of temperate forest edges” In Revision: *Ecosystems*.

In Press & Published:

6. Liang, Y., Gustafson, E. J., Serra-Diaz, J. M., Duveneck, M. J., **Thompson, J. R.** 2023. “What is the role of disturbance in catalyzing spatial shifts in forest composition and tree species biomass under climate change?” *Global Change Biology* 10.1111/gcb.16517: 18 pp.

7. Faison, E., D. LaFlower, L. Morreale, D. R. Foster, **J. R. Thompson**. 2023. "Adaptation and mitigation capacity of wildland forests in the northeastern United States" *Forest Ecology and Management*. 544:121145.
8. Kalinin A., Sims, K., and **J. R. Thompson**. 2023. "Does land conservation raise property taxes? Evidence from New England cities and towns" *Journal of Environmental Economics and Management*. 119:102782
9. Markowski-Lindsay, M., B. J. Butler, M. J. Duvencek, J. Laflower, M. Graham MacLean, D. Orwig, **J. R. Thompson**. 2023. "Forester and logger response to Emerald Ash Borer in Massachusetts and Vermont: A secondary disturbance" *Journal of Forestry*. 121:319-332.
10. Pasquarella V., L. Morreale, J. Hastings, **J. R. Thompson**. 2023. "Not-so-random forests: Comparing voting and decision tree ensembles for characterizing partial harvest events in complex forested landscapes" *Journal of Applied Earth Observation and Geoinformation*
11. Sims, K. Lee, L. Lurie, M., N. Estrella-Luna, **J. R. Thompson**. 2022. "Incorporating environmental justice criteria in land conservation prioritization systems" *Environmental Research Letters*. 17: 064014.
12. Campbell J., C. Driscoll J. A. Jones, E. Boose, H. Dugan, P. Groffman, C. R. Jackson, J. Jones, G. Juday, N. Lottig, B. Penaluna, R. Ruess, K. Suding, **J. R. Thompson**, J. K. Zimmerman. 2022. "Forest and freshwater ecosystem responses to climate change and variability at U.S. LTER sites" *BioScience*. Vol. 72 No. 9
13. Rastetter, E. B. Kwiatkowski, d. Kicklighter, A. Barker Plotkin, H. Genet, T. Mann, J. Nippert, K. O'Keefe, S. Perakis, S. Porder, S. Roley, R. Ruess, **J. R. Thompson**, W. Wieder, K. Wilcox, R. Yanai. 2022. "Nitrogen and phosphorus constrain carbon gain in terrestrial ecosystems under climate change: the roles of nutrient redistribution and accumulation and of changes in plant and soil stoichiometry" *Ecological Applications*. DOI: 10.1002/eap.2684
14. Hall, J. S., Plisinski, J. S., Mladinich, S. K., Van Breugel, M., Lai, H. R., Asner, G. P., Walker, K., **Thompson, J. R.** 2022. "Deforestation scenarios show the importance of secondary forest for meeting Panama's carbon goals" *Landscape Ecology* 37(3)672-690.
15. Morreale, L. L., **Thompson, J. R.**, Tang, X., Reinmann, A. B., Hutyra, L. R. 2021. "Elevated growth and biomass along temperate forest edges" *Nature Communications* 12: article 7181, 8 pp.
16. Holt, J. R., Smetzer, J. R., Borsuk, M. E., Laflower, D., Orwig, D. A., **Thompson, J. R.** 2021. "Emerald ash borer intensifies harvest regimes on private land" *Ecological Applications* e2508:36p
17. Cinoglu, D., Epstein, H. E., Tepley, A. J., Anderson-Teixeira, K. J., **Thompson, J. R.**, 2021. "Climatic Aridity Shapes Post-Fire Interactions between *Ceanothus* spp. and Douglas-Fir (*Pseudotsuga menziesii*) across the Klamath Mountains" *Forests* 12: article 1567, 15 pp.
18. Barker Plotkin, A., Blumstein, M., Laflower, D., Pasquarella, V. J., Chandler, J. L., Elkinton, J. S., **Thompson, J. R.** 2021. "Defoliated trees die below a critical threshold of stored carbon" *Functional Ecology* 10.1111/1365-2435.13891: 12 pp.
19. **Thompson, J. R.**, J. Plisinski, K. Fallon Lambert, M. J. Duvencek, L. Morreale, M. McBride, M. Graham MacLean, M. Weis, L. Lee. 2021. "Spatial simulation of co-designed land-cover change scenarios in New England: Alternative futures and their consequences for conservation priorities" *Earth's Future* 8:e2019EF001348, 23 pp.
20. Holt, J. R., Butler, B. J., Borsuk, M. E., Markowski-Lindsay, M., MacLean, M. G., **Thompson, J. R.** 2021. "Using the Theory of Planned Behavior to Understand Family Forest Owners' Intended Responses to Invasive Forest Insects". *Society and Natural Resources*. DOI: 10.1080/08941920.2021. 18 pp.

21. MacLean, M. G., Duveneck, M. J., Plisinski, J., Morreale, L. L., Laflower, D., **Thompson, J. R.** 2021. “Forest carbon trajectories: Consequences of alternative land-use scenarios in New England” *Global Environmental Change* 69: article 102310, 28 pp.
22. Bahlai, C. A., Hart, C., Kavanaugh, M. T., White, J. D., Ruess, R. W., Brinkman, T. J., Ducklow, H. W., Foster, D. R., Fraser, W. R., Genet, H., Groffman, P. M., Hamilton, S. K., Johnstone, J. F., Kielland, K., Landis, D. A., Mack, M.C., Sarnelle, O., **Thompson, J. R.** 2021. “Cascading effects: insights from the U.S. Long Term Ecological Research Network” *Ecosphere* 12, 29 pp.
23. Swanson F.J., Foster D.R., Driscoll C.T., **Thompson J.R.**, Rustad L.E. 2021 “How LTER Site Communities Can Address Major Environmental Challenges”. In: Waide R.B., Kingsland S.E. (eds) “The Challenges of Long Term Ecological Research: A Historical Analysis” Archimedes (New Studies in the History and Philosophy of Science and Technology), vol 59. Springer, Cham-1_8
24. Vellend, M., **Thompson, J. R.**, Danneyrolles, V., Rousseu, F. 2020. “Changes in landscape-scale tree biodiversity in the north-eastern USA since European settlement” *Global Ecology and Biogeography* 10.1111/geb.13248: 8 pp.
25. Reinmann, A. B., Smith, I. A., **Thompson, J. R.**, Hutyra, L. R. 2020. “Urbanization and fragmentation mediate temperate forest carbon cycle response to climate” *Environmental Research Letters* 15: article 114036, 12 pp.
26. Finzi, A. C., Giasson, M.-A., Barker Plotkin, A., Aber, J. D., Boose, E. R., Davidson, E. A., Dietze, M. C., Ellison, A. M., Frey, S. D., Goldman, E., Keenan, T. F., Melillo, J. M., Munger, J. W., Nadelhoffer, K. J., Ollinger, S. V., Orwig, D. A., Pederson, N., Richardson, A. D., Savage, K., Tang, J., **Thompson, J. R.**, Williams, C. A., Wofsy, S. C., Zhou, Z., Foster, D. R. 2020. “Carbon budget of the Harvard Forest Long-Term Ecological Research site: pattern, process, and response to global change” *Ecological Monographs* 90(4):e01423.
27. Guswa, A. J., Hall, B., Cheng, C., **Thompson, J. R.** 2020. “Co-designed Land-use Scenarios and their implications for storm runoff and streamflow in New England” *Environmental Management* 66:785-800.
28. Maxwell, C. J., Serra-Diaz, J. M., Scheller, R. M., **Thompson, J. R.** 2020. “Co-designed management scenarios shape the responses of seasonally dry forests to changing climate and fire regimes” *Journal of Applied Ecology* 57(7)1328-1341.
29. MacLean, M. G., Holt, J., Borsuk, M. E., Markowski-Lindsay, M., Butler, B. J., Kittredge, D. B., Duveneck, M. J., Laflower, D., Orwig, D. A., Foster, D. R., **Thompson, J. R.** 2020. Potential Impacts of Insect-Induced Harvests in the Mixed Forests of New England. *Forests*. 11: 498, 19 pp.
30. Holt, J. R., M. E. Borsuk, B. J. Butler, D. B. Kittredge, D. Laflower, M. Graham MacLean, M. Markowski-Lindsay, D. Orwig, **J. R. Thompson**. Landowner functional types to characterize response to forest insects. *People and Nature*. 2(1)204-214.
31. Nolte C., S. Meyer, K. Sims, **J. R. Thompson**. 2019. “Voluntary, permanent land protection reduces forest loss and development in a rural-urban landscape” *Conservation Letters*. 1:9. <https://doi.org/10.1111/conl.12649>
32. Sims K. R. E., **J. R. Thompson**, S. R. Meyer, C. Nolte, J. S. Plisinski. 2019. “Assessing local economic impacts of protected land in New England 1990-2015” *Conservation Biology* 33:1035-1044.
33. Duveneck M. and **J. R. Thompson** 2019. “Social and biophysical determinants of future forest conditions in New England” *Global Environmental Change* 55:115-129.
34. Hastings, S., D. Laflower, **J.R. Thompson**. Indirect consequences of forest carbon offsets include benefits and detriments. 2019. *Frontiers in Ecology and the Environment*. 17 (3)143:144.

35. Markowski-Lindsay, M., M. E. Borsuk, B. J. Butler, M. J. Duveneck, J. Holt, D. B. Kittredge, D. Laflower, M. Graham MacLean, D. Orwig, J. R. **Thompson**. 2019. Compounding the disturbance: family forest owner reactions to invasive insects. *Ecological Economics* 167:8-16.
36. Helcoski, R. A. J. Tepley, N. Pederson, J. C. McGarvey, V. Meakem, V. Herrmann, **J. R. Thompson**, and K. J. Anderson-Teixeira. 2019. Growing season moisture drives interannual variation in woody productivity of a temperate deciduous forest. *New Phytologist* 13 pp.
37. Smith, I. A., L. Hutyra, A. B. Reinmann, **J. R. Thompson**, D. W. Allen. 2019. Evidence for edge enhancements of soil respiration in temperate forests. *Geophysical Research Letters* 46:10-20.
38. Simoes J., M. Markowski-Lindsay, B. Butler, D. Orwig, **J.R. Thompson**, D. B. Kittredge. Assessing New England Family Forest Owners' Invasive Insect Awareness. 2019. *Journal of Extension*. 57(3)1-16
39. McBride, M., M. J. Duveneck*. K Fallon Lambert, K. A. Theoharides. **J. R. Thompson**. 2019. Perspectives of resource management professionals on the future of New England's landscape: Challenges, barriers, and opportunities. *Landscape and Urban Planning*. 188:30-42.
40. McKenzie, P. F., M. J. Duveneck, L. L. Morreale, and J. R. Thompson. 2019. Local and global parameter sensitivity within an ecophysiological based forest landscape model. *Environmental Modelling and Software* 117:1-13.
41. Helcoski, R., A. Tepley, J. McGarvey, E. Gonzalez, V. Meakem, **J. R. Thompson**, K. A. Anderson-Teixeira. 2019. No significant increase in tree mortality following coring in a temperate hardwood forest. *Tree Ring Research*. 75(1):67-72
42. Lacher, I., M. McShea, T. Akre, J. R. Thompson. 2019. Engaging regional stakeholders in scenario planning for the long-term provisioning of ecosystem services in northwestern Virginia. *Case Studies in the Environment* 3:1-27.
43. Jose-Lopez, M., T. Marcey, M. Lucash, D. Hibbs, Shatford, **J. R. Thompson**. 2019 Post-fire management affects species composition but not Douglas-fir regeneration in the Klamath Mountains. *Forest Ecology and Management* 432:1030-1040.
44. Serra Diaz, J. M., C. Maxwell, M Lucash, R. M. Scheller, D. Laflower, A. Miller, A. Tepley, H. Epstein, K. Anderson Teixeira, and J. R. Thompson. 2018. Disequilibrium of fire-prone forests sets the stage for a rapid decline in conifer dominance during the 21st century. *Scientific Reports* 8:6749.
45. Smith, I., L. R. Hutyra, A. Reinmann, J. Marrs, and **J. R. Thompson**. 2018. Piecing together the fragments: Elucidating edge effects on forest carbon dynamics. *Frontiers in Ecology and the Environment*. 16(213-221)
46. Miller, A. **J. R. Thompson**, A. Tepley, K. Anderson-Teixeira. 2018. Critical thresholds in a fire-prone landscape: how fire regimes and plant responses create alternative stable equilibria. *Ecography*. 42(1): 55-66.
47. Liang, Y. , M. Duveneck, E. Gustafson, J. Serra-Diaz, J. R. Thompson. 2018 How disturbance, competition and dispersal interact to prevent tree range boundaries from keeping pace with climate change. *Global Change Biology* 24:335-351
48. **Thompson, J. R., J. Plisinski**, P. Olofson, C. Holden, M. Duveneck. 2017. Forest loss in New England: A projection of recent trends. *PloS ONE* 12(12): e0189636.
49. Duveneck M. D. and J. R. Thompson. 2017. Climate change imposes phenological tradeoffs on forest net primary productivity. *Journal of Geophysical Research – Biogeosciences* 122:2298-2313.
50. Kittredge D. B., **J. R. Thompson**, L. Morreale, A. Short, L. Hutyra. 2017. Timber harvesting along a suburban - rural continuum through time. *Ecosphere* 8(7)

51. McBride M. F., K. F. Lambert, E. S. Huff, K. Theoharides, P. Field and **J. R. Thompson**. Increasing the effectiveness of participatory scenario development through co-design. 2017. *Ecology and Society* 22(3)
52. Tepley, A. J., **J. R. Thompson**, H. Epstein, K. Anderson-Teixeira. 2017. Vulnerability to forest loss through altered post-fire recovery dynamics in a warming climate in the Klamath Mountains. *Global Change Biology* 23(10): 4117-4132.
53. Shifley S., H. He, H. Leschke, W. Wang, W. Jin, E. Gustafson, **J. R. Thompson**, F. Thompson, W. Dijak, J. Yang. 2017. The past and future of modeling forest dynamics: from growth and yield curves to forest landscape models. *Landscape Ecology* 32:1307-1325.
54. **Thompson, J. R.** 2017. Reciprocity in ecological understanding *Ecology* 98(3):1939-1940.
55. Duveneck, M.D., **J. R. Thompson**, E. Gustafson, and A. de Bruijn. 2017. Recovery dynamics and climate change effects to future New England forests. *Landscape Ecology*. 32:1385–1397
56. **Thompson, J. R.** C. Canham, L. Morreale, D. B. Kittredge, B. Butler. 2017. Social and biophysical variation in regional harvest regimes. *Ecological Applications* 27:942-955.
57. Thorn, A. **J. R. Thompson**, J. Plisinski. 2016. Patterns and predictors of recent forest conversion in New England. *Land*. 5(3), 30-39
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89. **Thompson J. R.**, M. Anderson, and K. N. Johnson. 2004. Ecosystem management across ownerships: The potential for collision with antitrust laws. *Conservation Biology*. 18(6):1475-1481.
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Advisees:

Xiaojie Gao, Post-Doctoral Fellow, Harvard University (Aug 2023 – Present)
Shersing Joeseoph Tumber-Dávila, Post-Doctoral Fellow, Harvard University (Aug 2022 – Present)
Alexey Kalinin, Post-Doctoral Fellow, Harvard University, (Jan 2019 – May 2023)
Luca Morealle, PhD Student (Co-Advised w L. Hutyra), Boston University, (Sept 2017 – June 2023)
Meghan MacClearn Post-Doctoral Fellow, Harvard University, (Sept 2017 – Aug 2019)
Jennifer Smetzer, Post-Doctoral Fellow, Harvard University, (Oct 2018 – May 2019)
Marissa McBride, Post-Doctoral Fellow, Harvard University, (Sept 2015 – Sept 2017)
Jose Serra ‘Pep’ Diaz, Post-Doctoral Fellow, Harvard University, (June 2015 – July 2017)
Alexandra Thorn, Post-Doctoral Fellow, Harvard University, (Sept 2014 – June 2015)
Matthew Duvencek, Post-Doctoral Fellow, Harvard University, (Dec 2013 - Sept 2017)
Iara Lacher, Post-Doctoral Fellow, Smithsonian Institution, (Sept 2015 -)
Eben Broadbent, Post-Doctoral Fellow, Smithsonian Institution (Oct 2012 – Oct 2013)
Angélica M. Almeyda Zambrano, Post-Doctoral Fellow, Smithsonian Institution (Oct 2012 – Oct 2013)
Jennifer Holm, Post-Doctoral Fellow, Smithsonian Institution (March 2012 – August 2012)
Jennifer McGarvey, M.S. Student, Dept. of Environmental Science, U. of Virginia
Aticus Stonewall, M.S. Student, Dept. of Environmental Science, U. of Virginia

Grant-funded Full-time Research Assistants at Harvard Forest:

Lucy Lee (9/2018 – Present)
Danelle Laflower (1/2017 – Present)
Josh Plinsinski (2016 – Present)
Luca Morealle (2015 – 2017),
Meghan Blumstein (2013 – 2015)

Selected Invited Presentations

University of Massachusetts, Dept. of Environmental Conservation Seminar, Amherst MA (Oct 2022)
Property and Environment Research Center, Bozeman MT (July 2022)
Clark University, Geography Graduate Program Seminar Series (Feb 2021)
Boston University Biogeosciences Seminar Series (2019)
New England Regional Conservation Partnership Annual Meeting (Keynote) (2019)
United Nations Association of Greater Boston (Feb 2018)
Klamath National Forest, Medford OR (Nov 2018)
University of Massachusetts, Applied Silviculture, Amherst MA (5/2017)
Clark University, Geography Department, Worcester MA (5/2017)
International LTER Meeting, Kruger National Park, South Africa (10/2016)
University of Massachusetts, Dept. of Environmental Conservation Seminar , Amherst MA (10/2016)
University of Connecticut, Department of Natural Resources Seminar, Storrs CT (9/2016)
Harvard University Herbaria Lecture Series, Cambridge, MA (10/2015)
Join Sino-US Workshop on Landscape Modeling, Northeast University Chang Chun, China (6/2015)

Smithsonian Temperate Forest Symposium, Hirshhorn Museum, Washington D.C. (3/2015)
 Clark University, Guest Lecture in GIS and Land Change Science, Worcester, MA (3/2015)
 U. of Wisconsin, Dept. of Forestry and Wildlife Departmental Speaker, Madison, WI (11/2014)
 U. of Missouri, Dept. of Forestry, Departmental Speaker, Columbia, MO (11/2014)
 Highstead Conservation Foundation, Member Open House, Redding, CT (Keynote; 5/2014)
 Westfield River National Wild and Scenic Symposium, Westfield, MA (Keynote; 4/2014)
 New England Society for American Foresters, Nashua, NH (3/2014)
 Harvard University, Harvard Forest Annual Ecology Symposium. Petersham, MA (3/2014)
 Massachusetts Association of Conservation Commissions Annual Meeting (2/2014)
 Massachusetts Forests Forum Annual Retreat, Boston MA (1/2014)
 LANDIS-II Users Meeting, Madison WI (1/2014)
 Dynafac, Ministry of Water and Forest, Liberville, Gabon (9/2013)
 Springfield Science Museum, Springfield MA (12/2013)
 Harvard Kennedy School of Government, Forest Scenario Press Conference, Cambridge MA (12/2013)
 Global Earth Observatory, Washington D.C. (6/2013)
 Harvard University, Harvard Forest Annual Ecology Symposium. Petersham, MA (4/2013)
 University of Virginia, Guest Lecture. Charlottesville VA (4/2012)
 Harvard University, Harvard Forest Annual Ecology Symposium. Petersham, MA (3/2012)
 State Arboretum of Virginia, Summer Lecture Series. Boyce, VA (6/2011)
 Shout Learning Project, Microsoft Corp. Online Event (5/2011)
 Smithsonian Climate Change Research Symposium. Washington DC (5/2011)
 University of Virginia, Guest Lecture. Charlottesville VA (4/2011)
 Harvard University, Harvard Forest Annual Ecology Symposium. Petersham, MA (3/2011)
 Smithsonian Tropical Research Institute. Panama City, Panama. (Plenary; “The Tupper Talk” 2/2011)
 Ministry of Water and Forests, Gabon, West Africa (2/2011)
 University of Maryland, Appalachian Lab, Departmental Seminar. Frostburg, MD (2/2011)
 Smithsonian Environmental Research Center. Edgewater, MD (2/2011)
 George Mason University. Front Royal, VA (1/2011)
 SCBI Public Lecture Series. Front Royal, VA (10/2010)
 University of Virginia, Environmental Science Departmental Seminar. Charlottesville VA (4/2010)
 LANDIS-II Forest landscape modeling conference. Madison, WI (3/2010)
 Harvard University, Harvard Forest Annual Ecology Symposium. Petersham, MA (3/2010)
 LTER All Scientists’ Meeting. Estes Park, CO (10/2009)
 Hubbard Brook Annual Ecology Symposium. North Woodstock, NH (7/2009)
 Westfield State College, Distinguished Lecturer Series. Westfield, MA (5/2009)
 Harvard University, Harvard Forest Annual Ecology Symposium. Petersham, MA (3/2009)
 Clark University Departmental Seminar. Worcester, MA (5/2009)
 Oregon Forestry Dept. - Science foundations of post-wildfire policy workshop. Corvallis, OR (3/2008)
 Oregon State University, Oregon Remote Sensing Workshop. Portland, OR (2/2007)
 Third International Fire Ecology and Management Congress. San Diego, CA (11/2006)
 PNW Research Station, Future Range of Variability Symposium. Corvallis, OR (6/2006)
 International Ecological Society Meeting. Merida, Mexico (1/2006)
 National Commission on Science for Sustainable Forestry. Denver, CO (5/2006)
 Southwestern Oregon Wildfire Research Symposium. Gold Beach, OR (2/2006)
 US Forest Service, Using Past Ecological Conditions in Resource Planning. Corvallis, OR (7/2004)

Contributed Abstracts & Presentations:

Ecological Society of America Annual Meeting	2023-22, 2019-09, 2006, 2004
International Congress for Conservation Biology	2019, 2017, 2013
International Association of Landscape Ecologists	2016, 2015, 2012, 2011, 2009
LTER All Scientist and Science Council Meetings	2008-2022

Environment History Society Annual Meeting
American Geophysical Union
North American Forest Ecology Workshop
Northwest Scientific Association Annual Meeting

2012
2018-2015, 2011
2011, 2009, 2007
2007, 2005