Jennifer Pontius

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PROFESSIONAL EXPERIENCE:

Associate Dean of Curriculum (2020-present), University of Vermont Rubenstein School of Environment and Natural Resources

Program Director   Environmental Science Program (2015 to 2020), University of Vermont Rubenstein School of Environment and Natural Resources

Principle Investigator   Vermont Monitoring Cooperative (2013 to present)
https://www.uvm.edu/femc/

Research Associate Professor   University of Vermont, Rubenstein School of Environment and Natural Resources (2008 to 2020)

Research Ecologist   USDA Forest Service, Northern Research Station (2004 to 2020)

EDUCATION:

Ph.D. Earth and Ecosystem Sciences, 2004, University of New Hampshire

M.S. Natural Resources, 1998, University of New Hampshire

BS Environmental Science / Terrestrial Ecology, 1993, University of Virginia

BA Spanish, 1993, University of Virginia

Additional Certifications

***Certificate in Industrial Statistics**, Department of Mathematics, University of New Hampshire, Durham, New Hampshire, May 2002*

***Soil Scientist Certification**, New Hampshire Board of Certification of Natural Scientists, September 1997*

PUBLICATIONS
Indicates student co-authorship

Tool Development

Climate Connection (2019): The FEMC Climate Connection is a simple portal to access key resources on climate change in our region and the impacts it will have on forested ecosystems, providing a comprehensive resource for policy makers, researchers, students and natural resource professionals to quickly find the tools they need to explore climate change and how it will impact forests in the Northeast. https://www.uvm.edu/femc/climate-connection

Hemlock Woolly Adelgid Riparian Risk Mapping Tool (2019):   An online tool to quantify the risks to stream corridors of hemlock loss due to hemlock woolly adelgid in New York and make this information easily accessible to the research and monitoring community. https://uvm.maps.arcgis.com/apps/MapSeries/index.html?appid=7be2d6aa0ec54b51bd2fd266a7b0ba85

N-CLAS (2019): The Nitrogen Critical Load Assessment by Site Tool is designed to calculate critical loads and exceedances for N deposition to forests in the northeastern US. It provides high resolution outputs (maps, graphs, and tables) for multiple areas and accounts for the influence of site, climate, and topographic conditions on 23 key tree species in the region. N-CLAS facilitates assessment of risk to forest ecosystems for resource managers and policy makers. http://nclas.ecosheds.org/

Northeastern Forest Health Atlas (2018) Aggregates 50+ years of aerial sketch mapping data across 6 states, with search and filter options by damage agent and damage type). Available at: www.uvm.edu/femc/forest-health-atlas/methods

Vermont Forest Indicators Dashboard (2018) This dynamic online tool aggregates and summarizes key ecosystem monitoring metrics into a relative score and trend to quantify and monitor the condition of Vermont's forested ecosystems). https://www.uvm.edu/femc/indicators

FragNet (2018). The Northeast Forest Fragmentation Information Network (FragNet) is a clearinghouse of resources to understand and address forest fragmentation, with a goal to facilitate discovery, access and integration of all the available information on fragmentation occurring within their area of interest. https://www.uvm.edu/femc/fragnet

Textbooks

Pontius, J. and A. McIntosh. 2020. Critical Skills for Environmental Professionals: Connecting science to action. Springer, London, UK. pp. 250.

McIntosh, A. and J. Pontius. 2016. Case Studies for Integrating Science and the Global Environment, 1st Edition. Elsevier, London UK. pp. 515. ISBN: 9780128017128

Book Chapters

Pontius, J. 2020. Early, detailed and accurate detection of forest disturbance and decline for protection of biodiversity. In: Remote Sensing of Plant Biodiversity Using spectral signals of plants to understand the biology and biodiversity of plants, plant communities, ecosystems and the tree of life. Editors: Jeannine Cavender-Bares, John Gamon, Phil Townsend, Springer International Publishing.

Schaberg, P., Kosiba, A., Hawley, G., Rayback, S., Pontius, J., Miller, E. and B. Engel. 2019. Assessing Impacts of Acid Deposition on Red Spruce Forests – Do Pollution Legacies Matter? In: Advances in Environmental Research. Volume 70. Nova Sciences Publisher. ISBN: 978-1-53616-972-0

Pontius, J. and J. Duncan. 2018. Linking Science and Management in a Geospatial, Multi-Criteria Decision Support Tool. In: New Perspectives in Forest Science. Editor: Helder Viana, IntechOpen, DOI: 10.5772/intechopen.73083. Available from: https://www.intechopen.com/books/new-perspectives-in-forest-science/linking-science-and-management-in-a-geospatial-multi-criteria-decision-support-tool

Peer Reviewed Journal Articles

Pardo, L, Coombs, J., Pontius, J., Robin-Abbott, M. and A D'Amato. 2019. Tree species at risk from nitrogen deposition in the northeastern United States: a geospatial analysis of effects of multiple stressors using exceedance of critical loads. Forest Ecology and Management. 454 (2019) p. 117528.

*Adams, A., Pontius, J., Galford, G. and D Guddex-Cross. 2019. Forest Fragmentation: Patterns, Trends, and Drivers across Northeastern US Forests. Landscape Ecology. 34(10), pp.2401-2419.

* Kosiba AM, Meigs G, Duncan J, Pontius J, Keeton W, Tait E. 2018. Spatiotemporal patterns of forest damage and disturbance in the Northeastern United States: 2000 - 2016. Forest Ecology and Management. 430: 94-104. https://doi.org/10.1016/j.foreco.2018.07.047

Oswald, E., Pontius, J., Rayback, S., Schaberg, P., Wilmot, S. and L.A. Dupigney-Giroux. 2018. The complex relationship between climate and sugar maple health: climate change implications for a key northern hardwood species. Forest Ecology and Management. 422: 303-312. https://doi.org/10.1016/j.foreco.2018.04.014.

*Adams, A. Pontius, J. Galford, G., D. Gudex-Cross and S. Merrill. 2018. Modeling carbon storage across a heterogeneous mixed temperate forest: the influence of forest type specificity on regional-scale carbon storage estimates. Landscape Ecology. 33: 641-658. https://doi.org/10.1007/s10980-018-0625-0.

Pontius, J. Cook, B. Hanavan, R and R. Hallett. 2017. High spatial resolution spectral unmixing for mapping ash species across a complex urban environment. Remote Sensing of Environment. 199: 360-369.

*Guddex-Cross, D., Pontius, J. and Adams, A. 2017. Enhanced forest cover mapping using spectral unmixing and object-based classification of multi-temporal Landsat imagery. Remote Sensing of Environment 196: 193-204.

*Krebbs, J., Pontius, J. and P. Schaberg. 2017. Modeling the Impacts of Hemlock Woolly Adelgid on Carbon stocks in Northern New England. Canadian Journal of Forest Research 47: 727-734.

*Livingston, W., Pontius, J., Costanza, K. and S. Trosper. 2017. Using changes in basal area increments to map relative risk of HWA impacts on hemlock. Biological Invasions 19(5), 1577-1595.

Pontius, J.A., Halman, J. and Schaberg, P.G., 2016. 70 years of forest growth and community dynamics in an undisturbed northern hardwood forest. Canadian Journal of Forest Research, 46(7): 959-967.

*Engel, B.J., Schaberg, P.G., Hawley, G.J, Rayback, S.R. Pontius, J.A. Kosiba, A.M. and E.K. Miller. 2016. Assessing relationships between red spruce radial growth and pollution critical load exceedance values. Forest Ecology and Management, 359: 83-91.

Hanavan, R.P., Pontius, J., Hallett, R.A. 2014. A ten year assessment of hemlock decline in the Catskill Mountain region of New York State using hyperspectral remote sensing techniques. Environmental Entomology, 108:1 339-349.

Pontius, J. 2014. A new approach for forest decline assessments: Maximizing detail and accuracy with multispectral imagery. International Journal of Remote Sensing. 35:9, 3384-3402.

Pontius, J. and R. Hallett. 2014. Comprehensive methods for earlier detection and monitoring of forest decline. Forest Science. For. Sci. 60(6):1156-1163.

*White, K., Pontius, J. and P. Schaberg. 2014. Remote sensing of spring phenology in northeastern forests: a comparison of methods, field metrics and the impact image availability. Remote Sensing of Environment: 148, 97–107

*Russel-Roy, E., Keaton, W., Pontius, J. 2014. Rehabilitation forestry and carbon market access on high-graded northern hardwood forests. Canadian Journal of Forest Research. 44: 1–13.

Dukes, J., Pontius, J., Orwig, D., Garnas, J., Rodgers, V., Brazee, N., Cooke, B., Theoharides, K., Stange, E., Harrington, R., Ehrenfeld, J., Gurevitch, J., Lerdau, M., Stinson, K., Wick, R., and M. Ayres. 2009. Responses of pests, pathogens and invasive species to climate change in the forests of Northeastern North America: What can we predict? Canadian Journal of Forest Research. 39(2): 231-248.

Pontius, J., Martin, M., Plourde, L. and R. Hallett. 2008. Ash Decline Assessment in Emerald Ash Borer infested regions: a test of tree-level, hyperspectral technologies. Remote Sensing of Environment, 112, 5: 2665-2676.

Pontius, J.; Hallett, R. A., and Martin, M. E. 2006. Foliar chemistry linked to hemlock woolly adelgid success and hemlock susceptibility. Environmental Entomology 35(1):112-120.

Pontius, J.; Hallett, R. A., and Martin, M. E. 2005. Assessing hemlock decline using hyperspectral imagery: signature analysis, indices comparison and algorithm development. Journal of Applied Spectroscopy. 2005; 59 (6): 836-843.

Pontius, J.; Martin, ME, and Hallett, RA. 2005. Using AVIRIS to assess hemlock abundance and early decline in the Catskills, New York. Remote Sensing of Environment. 2005; 97:163-173.

Technical Reports

Nevins, M., J. Duncan, A. Kosiba, J. Truong, R. Stern and J. Pontius (Eds.) 2019. The Forest Ecosystem Monitoring Cooperative Long-Term Monitoring Update – 2018. DOI: 10.18125/vt2018. Available online at https://www.uvm.edu/femc/products/long_term_update/2018.

Wilmot, S., Duncan, J.A., Pontius, J., Gudex-Cross, D., Sandbach, C., and J. Truong. 2019. Vermont Forest Health Monitoring Protocol. Forest Ecosystem Monitoring Cooperative: South Burlington, VT. Available online at: https://www.uvm.edu/femc/attachments/project/17/FHM_MethodsFullManual_2019.pdf

Edling, L., J. Duncan, A. Kosiba, and J. Pontius. 2019. Linking Forest Science to Policy: Improving a Forest Indicators Dashboard to inform policy and decision making across Vermont's forested landscape. Final report to the University of Vermont James M. Jeffords Fund Grant Program for Policy Studies. Available online at: https://www.uvm.edu/femc/file/info/9554

Kosiba, AM, Finnegan MO, Truong, J, Duncan JA and Pontius, J. 2019. Climate Connection: Tools for understanding climate change and how it impacts forest ecosystems in the Northeast. Version 1.0. Forest Ecosystem Monitoring Cooperative: South Burlington, VT. Available online at https://www.uvm.edu/femc/file/info/9568 .

Kosiba, AM, Truong, J, Duncan JA, Finnegan MO, and Pontius, J. 2019. Northeast Forest Fragmentation Information Network Version 1.0: Analysis of Resources and Gaps. Forest Ecosystem Monitoring Cooperative: South Burlington, VT. Available online at https://www.uvm.edu/femc/fragnet/gap_analysis

Duncan, J., J. Pontius, A. Kosiba and J. Truong. 2019. Forest Ecosystem Monitoring Cooperative Strategic Plan 2018-2020. Forest Ecosystem Monitoring Cooperative. Available online at: https://www.uvm.edu/femc/about/strategic_plan

Nicholson, C., J Duncan, A. Kosiba, J. Truong and J. Pontius (Eds.) 2018. The Forest Ecosystem Monitoring Cooperative **Long-Term** Monitoring Update – 2017.

Nicholson, C., A. Kosiba, J. Duncan, J. Truong and J. Pontius (Eds.) 2018. The Forest Ecosystem Monitoring Cooperative **Regional** Monitoring Update – 2017.

Duncan, J., Tait, E.R., Meigs, G.W., Kosiba, A.M., Pontius, J.A. and W. Keeton. 2018. The Northeastern Forest Health Atlas – Technical Report. Available online at https://www.uvm.edu/femc/forest-health-atlas/methods.

Wilmot, S., Duncan, J., Pontius, J., Gudex-Cross, D., and C. Sandbach. 2017. FEMC Forest Health Monitoring Field Methods. Forest Ecosystem Monitoring Cooperative. Available online at: https://www.uvm.edu/femc/attachments/project/17/Forest_health_field_methods_2017.pdf

Kosiba, A., J. Duncan, J. Truong and J. Pontius (Eds.) 2017. The Forest Ecosystem Monitoring Cooperative Regional Monitoring Update – 2016. Available online at https://www.uvm.edu/femc/products/long_term_update/2016/region.

Duncan, J., J. Truong, M. Pendleton, A. Kosiba, J. Katz, J. Pontius (Eds.) 2017. The Forest Ecosystem Monitoring Cooperative Long-Term Monitoring Update – 2016. Available online at https://www.uvm.edu/femc/products/long_term_update/2016/vermont.

Pontius, J., J. Duncan, M. Pendleton, J. Rosovsky, and C. Waite (Eds.) 2016. The Vermont Monitoring Cooperative Long-Term Monitoring Update – 2015. Available online at http://www.uvm.edu/vmc/annual_report/2015.

Pontius, J., J. Duncan, M. Pendleton, J. Rosovsky, and C. Waite (Eds.) 2015. The Vermont Monitoring Cooperative Long-Term Monitoring Update – 2014. Available online at http://www.uvm.edu/vmc/annual_report/2014.

Pontius, J., J. Duncan, M. Pendleton, J. Rosovsky, and C. Waite. 2014. Vermont Monitoring Cooperative Strategic Plan 2015-2020. Vermont Monitoring Cooperative. Available online at http://www.uvm.edu/vmc/documents/2014_VMC_Strategic_Plan_Final_Complete.pdf

Pontius, J., J. Duncan, M. Pendleton, J. Rosovsky, and C. Waite (Eds.) 2014. The Vermont Monitoring Cooperative Long-Term Monitoring Update – 2013. Available online at http://www.uvm.edu/vmc/annual_report/2013.

Hallett, R., Martin, M., Plourde, L., Pontius, J., Siemion, J., Murdoch, P. 2010. Assessment of regional forest health and stream and soil chemistry using a multi-scale approach and new methods of remote sensing interpretation in the Catskill Mountains of New York. Technical Report 10-28. Albany, NY: NYSERDA. pg: 1-33. https://www.sciencebase.gov/catalog/item/55c9f580e4b08400b1fdb74f

Pontius, Jennifer; Hallett, Richard; Martin, Mary; Plourde, Lucie. 2010. A Landscape Scale GIS Tool to Assess Eastern Hemlock Susceptibility to Hemlock Wooly Adelgid Infestation. In: Pye, J.M.; Rauscher, H.M.; Sands, Y.; Lee, D.C.; Beatty, J.S., eds. Advances in Threat Assessment and their Application to Forest and Rangeland Management. Gen. Tech. Rep. PNW-GTR-802. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest and Southern Research Stations. Pp 657-672. https://www.fs.fed.us/pnw/pubs/pnw_gtr802/pnw_gtr802a.pdf

*Contosta, A.; Hallett, R., and Pontius, J. 2005. A New Image for the Forest: Using Hyperspectral Remote Sensing to Map Forest Health. In: Forest Matters 8(1): p. 9. USDA Forest Service; Morgantown, WV. https://www.na.fs.fed.us/stewardship/newsltr/newsletter/05spring_stewardship.pdf

Editorial Products

E. Schuett, J. Truong, J. Duncan, and J. Pontius, (Eds.) 2021. Revealing a Changing Forested Landscape: Where we have come from, what we have learned, and what is next in long-term ecosystem monitoring. Proceedings of the December 17-18, 2020 Forest Ecosystem Monitoring Cooperative Conference: Burlington, VT, Forest Ecosystem Monitoring Cooperative. https://www.doi.org/10.18125/5w6dh2 . Available online at https://www.uvm.edu/femc/cooperative/conference/2020/proceedings

Pontius, J. and A. McIntosh. 2020. Direct instruction in learning outcomes for more meaningful assessment of students of the environment. NILOA Viewpoint. National Institute for

Learning Outcomes Assessment.
https://www.learningoutcomesassessment.org/viewpoints/

Belisle A., J. Pupko, J. Truong, A. Kosiba, J. Duncan, and J. Pontius, (Eds.) 2020. Monitoring for Impacts of Climate Change: Tracking and measuring outcomes in northeastern forests. Proceedings of the December 13, 2019 Forest Ecosystem Monitoring Cooperative Conference: Burlington, VT, Forest Ecosystem Monitoring Cooperative. https://doi.org/10.18125/s4gksc. Available online at https://www.uvm.edu/femc/cooperative/conference/2019/proceedings

Kosiba A., J. Truong, S. Rotella, J. Duncan, and J. Pontius (Eds.) 2019. Forests and Climate Change: Managing impacts and planning for the future. Proceedings of the December 14, 2018 Forest Ecosystem Monitoring Cooperative Conference: Burlington, VT, Forest Ecosystem Monitoring Cooperative. https://doi.org/10.18125/xJ29uE.

Pendleton M., J. Truong, A. Kosiba, J. Duncan, and J. Pontius (Eds.) 2018. Beyond Communication: Advocating for Science and our Forests. Proceedings of the December 15, 2017 Forest Ecosystem Monitoring Cooperative Conference: Burlington, VT, Forest Ecosystem Monitoring Cooperative. https://doi.org/10.18125/D2WQ0X

Pontius, J., Schaberg, P. and J. Duncan (Eds.) 2017. Proceedings of the 8th Eastern CANUSA Forest Science Conference: Understanding and Managing ECANUSA Forests in a Changing Environment. September 30-October 1, 2016. Burlington, VT. Forest Ecosystem Monitoring Cooperative. pp 121. doi:10.18125/D2MW2X. Available online at https://www.uvm.edu/femc/ecanusa2016#proceedings

Pontius, J., M. Pendleton, J. Rosovsky, J. Truong and J. Duncan (Eds.) 2017. Healthy Forests, Healthy Watersheds. Proceedings of the December 02, 2016 Vermont Monitoring Cooperative Conference: Burlington, VT, Vermont Monitoring Cooperative. https://doi.org/10.18125/D2RP4V. Available online at http://www.uvm.edu/vmc/annualMeeting/2016/proceedings.

Pontius, J., M. Pendleton, J. Rosovsky, J. Duncan, and C. Waite (Eds.) 2016. 25 Years of Forest Ecosystem Monitoring: Trends, Patterns and Lessons Learned. Proceedings of the December 11, 2015 Vermont Monitoring Cooperative Conference: Burlington, VT, Vermont Monitoring Cooperative. Available online at htttp://www.uvm.edu/vmc/annualMeeting/2015/proceedings.

Pontius, J., J. Duncan, M. Pendleton, J. Rosovsky, and C. Waite (Eds.) 2015. Proceedings of the December 12, 2014 Vermont Monitoring Cooperative Conference: New Collaborations for Emerging Forest Needs. Burlington, VT, Vermont Monitoring Cooperative. Available online at http://www.uvm.edu/vmc/annualMeeting/2014/proceedings.

Pontius, J., J. Duncan, M. Pendleton, J. Rosovsky, and C. Waite (Eds.) 2014. Proceedings of the December 12, 2013 Vermont Monitoring Cooperative Conference. Burlington, VT, Vermont Monitoring Cooperative. Available online at http://www.uvm.edu/vmc/annualMeeting/2013/proceedings.php.

PRESENTATIONS
Indicates student co-authorship

Pontius, J. 2019. Monitoring for Impacts of Climate Change: Tracking and measuring outcomes in northeastern forests. VT Agency of Natural Resources Brown Bag Series. Montpelier, VT. December 11, 2019.

Kosiba, A., Duncan, J. and J. Pontius. 2019. Increasing policy relevance of the Forest Indicators Dashboard. Vermont Legislative Summit. Burlington, VT. November 21, 2019.

Pontius, J and R. Hanavan. 2019. Special Session: Integrating geospatial technologies into invasive species detection, monitoring and management efforts. North American Invasive Species Management Association Meeting. September 30 – October 4, 2019. Syracuse, NY.

Pontius, J. 2019. Online Tools and Maps for Invasive Species Management. North American Invasive Species Management Association Meeting. September 30 – October 4, 2019. Syracuse, NY.

Pontius, J. 2019. Scientific advancements in remote sensing for invasive species applications. North American Invasive Species Management Association Meeting. September 30 – October 4, 2019. Syracuse, NY.

Robin-Abbott, M, Pardo, LH, Coombs, J, Pontius, J and AW D'Amato. 2019. Geospatial analysis of tree species at risk from nitrogen deposition in the northeastern U.S. Ecological Society of America. August 11 2019. Louisville, KY.

Duncan, J. and J. Pontius. 2019. Mobilizing Continuous Forest Inventory Data for Regional Analyses of Patterns and Trends. NE SAF March 27-29, 2019. South Burlington, VT.

Duncan, J., Tait, E., Meigs, G., Kosiba, A., Pontius, J. and W. Keeton. 2019. The Northeastern Forest Health Atlas: A compilation of aerial survey and field datasets related to forest damage and disturbance in the Northeast. NE SAF March 27-29, 2019. South Burlington, VT.

Duncan, J. Kosiba, A., Pontius, J., Finnegan, M. and J. Truong. 2019. Vermont Forest Indicators Dashboard: Combining dozens of key datasets into a snapshot of the overall status of Vermont's forests. NE SAF March 27-29, 2019. South Burlington, VT.

Pontius, J. and J. Duncan. 2018. Vermont Forest Indicators Dashboard: Combining dozens of key datasets into a snapshot of the overall status of Vermont's forests. Forest Ecosystem Monitoring Cooperative Annual Meeting. December 15, 2018. Burlington, VT.

Pontius, J. and J. Duncan. 2018. Integrating science into a decision support tool to support forest management in a changing climate. Forest Ecosystem Monitoring Cooperative Annual Meeting. December 15, 2018. Burlington, VT.

*Pontius, J., Gudex-Cross, D., and A. Adams. 2018. What remote sensing tells us about the northeast's changing forests. Forest Ecosystem Monitoring Cooperative Annual Meeting. December 15, 2018. Burlington, VT.

Pontius, J. 2018. Vegetation Condition: Using remote sensing to assess early detailed decline to sustain forest biodiversity. NIMBIOS: National Institute for Mathematical and Biological Synthesis Remote Sensing of Biodiversity Meeting. October 29, 2018. Knoxville, TN.

Rayback, S.A., P.G. Schaberg, J. Duncan, A.M. Kosiba, C.F. Hansen, P.M. Murakami, J. Pontius, G.J. Hawley, R. Stern. 2018. Tree Ring Data in Eastern Forests and the DendroEcological Network (DEN). North American Forest Inventory and tree-Ring Data Network, Tucson, AZ, October 15.

*Pontius, J., Gudex-Cross, D., and A. Adams. 2018. Changes in tree species abundance: 30-year patterns, trends, and potential drivers across the northeastern United States. Ecological Society of America Conference. August 5-10, 2018. New Orleans, LA.

Pontius, J. 2018. Geospatial Tools for Assessing and Managing Forest Health Issues. May 22-23, 2018. Lake Placid, NY.

Pontius, J. 2018. Integrating Climate into Landscape Management Decisions. National Outdoor Recreation Conference. April 24, 2018. Burlington, VT.

Pontius, J. 2018. Modeling Tools for Landscape Assessment of Forest Pests. Northeastern Forest Pest Council Meeting. March 13-15, 2018. Burlington, VT.

Pontius, J. and J. Duncan. 2018. Sugar Maple Risk Mapping II. VT Sugar Makers Association Annual Meeting. January 28, 2018. Hyde Park, VT.

Pontius, J. and J. Duncan. 2018. Sugar Maple Risk Mapping. VT Sugar Maker Association Annual Meeting. January 21, 2018. Brattleboro, VT.

Pontius, J. and J. Duncan. 2017. Linking Science and Management in an Interactive Geospatial, Mutli-Criterion, Structured Decision Support Framework: Use Case Studies of the "Future Forests Geo-visualization and Decision Support Tool". Forest Ecosystem Monitoring Cooperative Annual Meeting. December 15, 2017. Burlington, VT.

Pontius, J. and J. Duncan. 2017. The Forest Health Indicators Dashboard: An online data aggregation and visualization tool. Forest Ecosystem Monitoring Cooperative Annual Meeting. December 15, 2017. Burlington, VT.

Pontius, J. and J. Duncan. 2017. Linking Science and Management in an Interactive Geospatial, Mutli-Criterion, Structured Decision Support Framework: Use Case Studies of the "Future Forests Geo-visualization and Decision Support Tool". American Geophysical Union Meeting. December 11-15, 2017. New Orleans, LA.

* Adams, A., Pontius, J. and Gudex-Cross, D. 2016. Modeling carbon storage across a heterogeneous mixed temperate forest: the influence of forest type specificity on regional-scale carbon storage estimates. American Geophysical Union Meeting. December 11-15, 2017. New Orleans, LA.

*Gudex-Cross, D., Pontius, J. and A. Adams. 2017. Recent Changes in Tree Species Abundance: Patterns, Trends and Drivers across Northeastern US Forests. American Geophysical Union Meeting. December 11-15, 2017. New Orleans, LA.

Schaberg, P.G., A.M. Kosiba, G.J. Hawley, S.A. Rayback, J. Pontius, E.K. Miller, B.J. Engel. 2017. Are reductions in acid deposition and warming temperatures responsible for the resurgence of red spruce in the northeastern United States? 2017 High Elevation Forest Restoration Workshop, November 15, 2017, Gatlinburg, TN.

Pardo, L., Robin-Abbott, M., O'Dea, C.B., Pontius, J. and J. Coombs. 2017. Effects of climate, site and soil characteristics on critical loads and exceedance in forests in the northeastern U.S. National Atmospheric Deposition Program Meeting. October 30-November 3, 2017, San Diego, CA.

Cook, B., Hanavan, R., Corp, L. Pontius, J., Hallett, R., Paynter, I., Morton, D., Serbin, S., Meng, R. and M. Verry. 2017. Augmenting aerial forest health surveys with G-LiHT multi-sensor airborne data. SilviLaser 2017. October 10-12, 2017. Blacksburg, VA.

*Schaberg, P., Rayback, S., Hansen, C., Murakami, P. Duncan, J., Kosiba, A., Stern, R., Hawley, G., Pontius, J. 2017. Expanding a dendroecology database to better understand tree growth at Hubbard Brook and beyond. Hubbard Brook Ecosystem Study Cooperators Meeting. July 13, 2017. Woodstock, NH.

*Rayback, S., Kilbride, J., Pontius, J., Tait, E., and J. Little. 2016. Climate drivers of blue intensity in two temperate eastern North American conifers. American Geophysical Union Meeting. December 12-16, 2016. San Francisco, CA.

* Schaberg, P., Rayback, S., Kosiba, A., Hawley, G., Pontius, J. 2016. Pollution Critical Load Exceedance and an Extended Growing Season as Modulators of Red Spruce Radial Growth. American Geophysical Union Meeting. December 12-16, 2016. San Francisco, CA.

*Pontius, J., Krebbs, J., Schaberg, P., Livingston, W., Costanza K. and S. Trosper. 2016. Pontius, J. 2015. Modeling hemlock woolly adelgid risk and impacts of presalvage harvesting on carbon stocks in northern hemlock forests. Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

Pardo, L., Robin-Abbott, M., O'Dea, C.B., Pontius, J. and J. Coombs. 2016. Identifying species at risk from nitrogen deposition in forests in the northeastern U.S.: a geospatial analysis using exceedance of critical loads. . Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

*Gudex-Cross, D. and J. Pontius. 2016. Changing tree species distributions: a 30 year investigation into spatiotemporal trends.. Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

*Adams, A., Pontius, J., Galford, G. Merrill, S. and D. Gudex-Cross. 2016. 30 years of forest conversion in the Northeast: historical patterns and future projections. . Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

Pardo, L. and J. Pontius. 2016. A new GIS tool for assessing forest risk from nitrogen deposition and climate change: hands-on workshop (Workshop). Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

*Pontius, J., Rayback, S., Tait, E., Little, J., and J. Kilbride. 2016. Landscape scale assessments of forest productivity: methods, patterns and trends. Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

*Gudex-Cross, D., Pontius, J., and A. Adams. 2016. Mapping Tree Species across Northern New York and Vermont using Spectral Unmixing of Multi-temporal Landsat Imagery. Vermont Monitoring Cooperative Annual Meeting. December 9, 2016. Burlington, VT.

*Pontius, J., Rayback, S., Tait, E., Little, J., and J. Kilbride. 2016. Landscape scale assessments of forest productivity: methods, patterns and trends. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

Pontius, J., Oswald, E., Wilmot, S., Rayback, S., and P. Schaberg. 2016. The complex relationship between climate and sugar maple health: climate change implications for a

key northern hardwood species. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

*Pontius, J., Krebbs, J., Schaberg, P., Livingston, W., Costanza K. and S. Trosper. 2016. Modeling hemlock woolly adelgid risk and impacts of presalvage harvesting on carbon stocks in northern hemlock forests. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

*Gudex-Cross, D., Pontius, J., and A. Adams. 2016. Enhanced forest cover mapping using spectral unmixing and object-based classification of multitemporal Landsat imagery. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

*Adams, A., Pontius, J., Galford, G. and D. Gudex-Cross. 2016. 30 years of forest conversion in the Northeast: historical patterns and future projections. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

Pardo, L., Robin Abbott, M., and J. Pontius. 2016. Assessing spatial patterns of the effects of nitrogen deposition on forests using a GIS management tool for critical loads and exceedance. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

Robin-Abbott, M., Pardo, L., and J. Pontius. 2016. Comparison of critical loads of nitrogen for forest species and communities in Class I areas of the Northeastern United States. ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

Duncan, J. and J. Pontius. 2016. Introducing a multi-criteria decision support tool for managing forests under climate change. . ECANUSA Forest Science Meeting. September 30 – October 1, 2016. Burlington, VT.

Hanavan, R., Cook, B., Hallett, R. and J Pontius. 2016. Enhanced early detection tools using remote sensing and GIS data fusion techniques. International Congress of Entomology. September 25-30, 2016. Orlando, Florida.

Pontius, J., Oswald, E., Dupigny-Giroux, L., Rayback, S., Schaberg, P. and S. Wilmot. 2016. The complex relationship between climate and sugar maple health: Climate change implications for a key northern hardwood species.   Ecological Society of America Annual Meeting. August 7-12, 2016. Ft. Lauderdale, FL.

*Tait, E., Little, Kilbride, J., J., Pontius, J., and S. Rayback. 2016. Predicting forest productivity across heterogeneous landscapes. Ecological Society of America Annual Meeting. August 7-12, 2016. Ft. Lauderdale, FL.

*Gudex-Cross, D., Pontius, J. and A. Adams. 2016. Mapping forest cover across the Northern Forest: Integrating pixel-based and object-based classification of multitemporal Landsat imagery. Ecological Society of America Annual Meeting. August 7-12, 2016. Ft. Lauderdale, FL.

*Little, J., Pontius, J., Rayback, S. Tait, E., and J. Kilbride. 2016. Modeling forest productivity across a heterogeneous landscape: A comparison of satellite, geospatial, and climate predictors. Ecological Society of America Annual Meeting. August 7-12, 2016. Ft. Lauderdale, FL.

*Adams, A., Pontius, J. and G. Galford. 2016. 30 years of forest conversion in the Northeast: historical patterns and future projections. US- International Association of Landscape Ecologists Meeting (presenation). April 3-7, 2016. Ashville, NC.

Pontius, J. 2016. Sugar maple health, trends, patterns and climate change implications. VT Forest Health Meeting (Invited Presentation). March 31, 2016. Woodstock, VT.

*Adams, A., Pontius, J. and G. Galford. 2016. Calculating carbon stored in a northeastern forest: a methods comparison. Earth Science Information Partners Winter Meeting, January 2016.

Pontius, J. Exploring a Forest Indicators Dashboard. (Workshop). Vermont Monitoring Cooperative Annual Meeting. December 11, 2015. Burlington, VT.

Pontius, J. 2015. The role of climate in sugar maple health: projections for the future.. Vermont Monitoring Cooperative Annual Meeting. December 11, 2015. Burlington, VT.

*Adams, A, Pontius, J., Galford, G., and D. Gudex-Cross. 2015. Calculating carbon storage in the Northern Forest: a methods comparison. Vermont Monitoring Cooperative Annual Meeting. December 11, 2015. Burlington, VT.

*Gudex-Cross, D., Pontius, J. and A. Adams 2015. A Novel Approach to Mapping Forest Cover in Vermont: Coupling Spectral Unmixing and Object-based Classification of Multitemporal Landsat TM Imagery Vermont Monitoring Cooperative Annual Meeting. December 11, 2015. Burlington, VT.

Robin-Abbott, M., Pardo, L.H., Pontius, J. and C. O'Dea. 2015. Abiotic Modifying Factors of Critical Loads of Nitrogen: Critical load ranges for Class I Areas in the Northeastern United States. Acid Rain Conference, Rochester, NY. October 19-23, 2015

Hallett, R., Pontius, J, Cook, B and R. Hanavan. Urban Remote Sensing: Using NASA Goddard's LiDAR, Hyperspectral & Thermal Imager to map Ash and detect the effects of emerald ash borer (EAB), *Agrilus plannipenis*, in Bowie, MD. Baltimore Urban Waters Federal Partnership Project Quarterly Meeting September 8, 2015.

*Adams, A., Galford, G. and J. Pontius. 2015. Accounting for tree species composition in landscape-scale forest carbon storage estimates. Ecological Society of America Conference. August 9-14, 2015. Baltimore MD.

Duncan, J. and J. Pontius. 2015. An integrated database for forest health monitoring. New England Society of American Foresters. March 24-27, 2015. Lake Fairlee, VT.

Pontius, J.A. 2014. Integrated Forest Ecosystem Assessment to Support Sustainable Management Decisions in a Changing Climate. (Workshop) Vermont Monitoring Cooperative Annual Meeting. December 11, 2014. Burlington, VT.

Pontius, J.A. Halman, J. and Schaberg, P. 2014. A long-term examination of changing species assemblages in a northern hardwood forest. Vermont Monitoring Cooperative Annual Meeting. December 11, 2014. Burlington, VT.

Pontius, J.A. and Hallet, R.A. 2014. Summarizing multiple variables for comprehensive assessment of forest characteristics. Vermont Monitoring Cooperative Annual Meeting. December 11, 2014. Burlington, VT.

Hanavan, R, Cook, B., Corp, L., Pontius, J. and Hallett, R. 2014. Data fusion techniques in pest detection: Using NASA Goddard's LiDAR, Hyperspectral & Thermal Imager to detect the emerald ash borer, *Agrilus plannipenis*, in New England. Entomological Society of America Annual Meeting. November 16-19, 2014. Portland OR.

Robin-Abbott M, Pardo LH, Pontius JA, O'Dea CB. 2014. The effect of abiotic modifying factors on critical loads of nitrogen: species-specific tables. National Atmospheric Deposition Program Meeting. October 21-24, 2014, Indianapolis, IN.

Pardo LH, Robin-Abbott M, Pontius JA, O'Dea CB. 2014. A management tool for setting critical loads for forest health considering interactions of climate change and nitrogen deposition. National Atmospheric Deposition Program Meeting. October 21-24, 2014, Indianapolis, IN.

Pontius, J.A. Halman, J. and Schaberg, P. 2014. A long-term examination of changing species assemblages in a northern hardwood forest. ECANUSA Conference. October 17, 2014. Rimouski, Canada.

Pontius, J.A. and Hallet, R.A. 2014. Summarizing multiple variables for comprehensive assessment of forest characteristics. ECANUSA Conference. October 17, 2014. Rimouski, Canada.

Pontius, J. 2014. Climate Change and Vegetation Phenology III: Using Satellites to Identify Trends. (Workshop) SWAC Summer Institute. July 16, 2014. Burlington, VT.

Pontius, J. 2014. The role of long-term monitoring in sustainable management of the forest resource: ongoing collections and recent findings. National Foresters Guild Meeting. June 19, 2014, Proctor Maple Research Center, Underhill, VT.

Pontius, J. 2014. A research statistics primer. (Workshop) UVM REU Summer Program. June 18, 2014. Burlington, VT.

Pontius J. 2014. Integrated Forest Research at the Rubenstein School. RSENR Board of Advisors Meeting. May 2, 2014. Burlington, VT.

Pontius, J. 2014. Satellites, trees and trends: spatial tools for monitoring forested landscapes. NSRC Webinar. April 30, 2014. Burlington, VT.

Pontius J. 2014. The role of the Vermont Monitoring Cooperative in building stronger collaborations across organizations. April 28, 2014. VT Forest Parks and Recreation State and Private Forestry Review Meeting. Montpelier VT.

*Pontius, J. White, K and Schaeberg, P. 2013. Remote Sensing of Spring Phenology: a twenty year assessment of trends and patterns. Vermont Monitoring Cooperative Conference, December 16, 2013. Burlington, VT.

Hanavan, R., Hallett, R. and Pontius, J. 2013. Hyperspectral Remote Sensing Techniques to Assess a Decade of Hemlock Mortality in the Catskills Mountains. The Entomological Society of America and The Conference Exchange. November 10-13, 2013. Austin, TX.

Pontius, J. 2013. Climate Change and Vegetation Phenology II: Online Resources for Phenological Monitoring. (Workshop) SWAC Summer Institute. July 16, 2013. Burlington, VT.

*Pontius, J. White, K. Remote Sensing of Spring Phenology: spatial and temporal patterns. Northeastern Ecosystem Research Cooperative Conference, March 19-20, 2013. Saratoga Springs, NY.

Hanavan, R., Hallett, R. and Pontius, J. 2013. Hyperspectral Remote Sensing Techniques to Assess a Decade of Hemlock Decline in the Catskills Mountains. 24th USDA Interagency Research Forum on Invasive Species. Jan 8-11, 2013, Annapolis MD.

Pontius, J., Martin. M. 2012. Remote Sensing of Canopy Condition Across the Northeast: Trends and patterns 1984-2009. Eastern CANUSA Forest Science Conference. November 1-3, 2012. Durham, NH.

*Keeton, W. Russell, Roy, E. Pontius, J. and Kerchner, C. 2012. Prospects for rehabilitation forestry through carbon market participation on over-harvested former industrial northern hardwood forests. Eastern CANUSA Forest Science Conference. November 1-3, 2012. Durham, NH.

Pontius, J. and Martin, M. 2012. Quantifying forest health trends across time and space: a hyperspectral approach using multi-spectral imagery. Ecological Society of America Conference, August 7, 2012, Portland, OR.

*Russell-Roy, E.T., Keeton, W.S., Pontius, J. and C. Kerchner. 2012. Rehabilitation forestry and carbon market access on overharvested, former industrial northern hardwood-conifer forests. Ecological Society of America Conference, August 7, 2012, Portland, OR.

*Weverka, A. and J. Pontius. 2012. Remote sensing of productivity in northeastern forests. Ecological Society of America Conference, August 10, 2012, Portland, OR..

*White, K. and J. Pontius. 2012. Remote sensing of spring phenology: Method development and temporal trends for northeastern forests. Ecological Society of America Conference, August 10, 2012, Portland, OR..

Pontius, J. 2012. Climate Change and Vegetation Phenology I: Photo metrics for phenological monitoring. (Workshop) SWAC Summer Institute. July 16, 2012. Burlington, VT.

Pontius, J., and Brissette, J. 2011. Increasing growth rates at the Bartlett Experimental Forest. Northern Forests Research Symposium, November 29 2011, Burlington, VT.

*Pontius, J., Olson, M., White, K., W. Young and E. Reagan. 2011. Remote Sensing of Canopy Condition Trends in Northern VT: 1984-2009. Vermont Monitoring Cooperative 2011 Annual Meeting, October 31, 2011, Burlington, VT.

Pontius, J and contributing Scientists to the VMC Online Database. 2011. Student Data Mining: a VMC Database Exploration. Vermont Monitoring Cooperative 2011 Annual Meeting, October 31, 2011, Burlington, VT.

Pontius, J. 2011. Climate Change and Vegetation Phenology: Picture Post for Phenological Monitoring. (Workshop) SWAC Summer Institute. July 16, 2011. Burlington, VT.

Lepine, L., Martin, M., Hallett, R., and J. Pontius. 2010. Forest Tree Species Maps from Hyperspectral Remote Sensing Imagery: Is it worth the effort? US Forest Service Hyperspectral Symposium, January 19-20, 2010, Salt Lake City, UT.

Pontius, J. Hallett, R., Martin, M., and Lepine, L. 2010. Beyond Classification: Hyperspectral Remote Sensing for Detailed Forest Health Mapping. US Forest Service Hyperspectral Symposium, January 19-20, 2010, Salt Lake City, UT.

Pontius, J. and Martin, M. Remote Sensing of Forest Health Trends in the northeastern United States. Northeastern Ecosystem Research Cooperative Conference, November 8-10, 2010, Saratoga Springs, NY.

Pontius, J. and Hallett, R. Data Overload: Modeling Ecosystem Sensitivity in the Catskills of NY. VT GIS Conference 2010, July 22, 201, Burlington, VT

Hallet, R., Pontius, J., Martin, M., and L. Lepine. 2010. Applications of Hyperspectral Remote Sensing for Urban Tree Canopy Monitoring.   Million Trees NYC, Green Infrastructure, and Urban Ecology: A Research Symposium, March 5- 6, 2010, New York, NY.

Lepine, L., Ollinger, S., Martin, M., Anderson, Pontius, J. and R. Hallett. 2010. Tree Species Mapping with Spectral Mixture Analysis: Applications for Moderate- and Fine-Scale Spatial Resolution Imagery. US Forest Service Hyperspectral Symposium, Salt Lake City, UT. January 19-20, 2010

Pontius, J., Hallet, R., Martin, M., and L. Lepine. 2010. Using AVIRIS to Assess Hemlock Woolly Adelgid Induced Decline and Susceptibility. US Forest Service Hyperspectral Symposium, Salt Lake City, UT. January 19-20, 2010

Hallett, R. Murdoch, P., Pontius, J., Martin, M. and L. Lepine. 2009. Regional Forest Health and Stream and Soil Chemistry Using a Multi-Scale Approach and New Methods of Remote Sensing Interpretation, Catskills Mountains, NY. Environmental Monitoring, Evaluation and Protection in NY, Linking Science and Policy Meeting. Albany, NY, October 14-15, 2009.

Pontius, J.A. Remote Sensing as a Tool for Invasive Species Management. Conference of the Northeastern Ecosystem Research Cooperative (NERC). November 12-13, 2008. Durham, NH.

Rogers, V., Dukes, J. and Pontius, J. Climate change and invasive species. Northern Forest Alliance Climate Change Conference. November 1-2, 2008. Hanover, NH.

Rustad, L., Campbell, J., Cox, R., DeBlois, M., Dukes, J., Huntington, T., Magill, A., Mohan, J., Rodenhouse, N., Pontius, J., Richardson, A., Watson, M. and N. Willard. 2008. NE Forests 2100: Understanding the Impacts of Climate Change on Northeastern North American Forest Ecosystems. Conference of the Northeastern Ecosystem Research Cooperative (NERC). Durham, NH. November 12-13, 2008.

Rustad, L., Campbell, J., Cox, R., DeBlois, M., Dukes, J., Huntington, T., Magill, A., Mohan, J., Rodenhouse, N., Pontius, J., Richardson, A., Watson, M. and N. Willard. 2008. NE Forests 2100: Understanding the Impacts of Climate Change on Northeastern North American Forest Ecosystems. SSSA Joint Annual Meeting. Houston, Texas. October 5, 2008.

Plourde, L.C., Pontius, J.H., Ollinger, S.V., Martin, M.E., and R. A. Hallett. 2008. Tree species mapping with spectral mixture analysis: Applications for moderate- and fine-scale spatial resolution imagery. NASA Carbon Cycle & Ecosystems Joint Science Workshop. Adelphi, Maryland. April 28, 2008.

*Trosper, S., W.H. Livingston, and J. Pontius. 2008. Modeling Hemlock Vulnerability To Hemlock Woolly Adelgid (*Adelges tsugae* Annand) Using Radial Growth Trends. Northeast Forest Pest Council, Gerald N. Lanier Graduate Student Forum, Saratoga Spring, New York, March 18, 2008.

Pontius, J.A., Martin, M., Plourde, L. and Hallett, R. Beyond the naked eye: What hyperspectral instruments can tell you that you might be missing. 2007 Annual Gypsy Moth Review. Shepherdstown, West Virginia. Oct. 29 - Nov. 1, 2007.

Pontius, J.A.,   Hallett, R., Martin, M., and Plourde, L.   Mapping ash and incipient EAB infestation using remote sensing technology. Emerald Ash Borer Research and Development Meeting. Pittsburg, Pennsylvania. October 23 & 24, 2007.

Hallett, R., Pontius, J.A., Martin, M., and Plourde, L.   The practical utility of hyperspectral remote sensing for early EAB detection. Emerald Ash Borer Research and Development Meeting.   Pittsburg, Pennsylvania. October 23 & 24, 2007.

Pontius, J.A. and Martin, M.E.   High Resolution / Hyperspectral Remote Sensing. What is in a Pixel?: A Remote Sensing Symposium. University of New Hampshire, Durham, New Hampshire. September 11, 2007.

Pontius, J.A., Dukes, J. and Rustad, L. Climate change impacts on northeaster forests: an Insect pest case study. 14th Annual Conference on the Adirondacks. Tupper Lake, New York. May 22-24, 2007.

*DeMaio, S., Livingston, W., Pontius, J., Kennefic, L. 2007. Site Factors Affecting Eastern Hemlock Response to Drought at the Northern Extent of Hemlock Woolly Adelgid Infestation. Northeast Forest Pest Council Meeting. Fairlee, Vermont. March 20-23, 2007.

Hallett, R., Pontius, J., Martin, M., and L. Plourde. 2007. Evaluating the practical utility of hyperspectral remote sensing imagery: An EAB case study. 18th USDA   Interagency Research Forum on Invasive Species. Annapolis,   Maryland. January 9-12, 2007.

Pontius, J., Hallett, R., Martin, M., and L. Plourde. 2006. A Landscape Scale GIS Tool to Assess Eastern Hemlock Susceptibility to Hemlock Wooly Adelgid Infestation. Advances in Threat Assessment Conference Proceedings. Boulder, Colorado. July 17– 21, 2006.

Pontius, J.A., Hallett, R., Martin. M. and Plourde, L. New Ways Remote Sensing Can Help Manage Forest Insect Pests. The North American Forest Insect Work Conference. Ashville, NC. February 5-8, 2006.

Pontius, J.A., Hallett, R.A. and Bailey, S.W. 2005. Using Foliar Chemistry to Assess Hemlock Susceptibility to Hemlock Woolly Adelgid, University of Maine Department of Forestry. Orono, Maine. April 7, 2005.

Pontius, J.A., Hallett, R.A. and Bailey, S.W. 2005. A Foliar Chemistry and Remote Sensing Approach to Hemlock Woolly Adelgid Risk Assessment. George Write Society Conference, Philadelphia, Pennsylvania, March 14-18, 2005.

Pontius, J.A., Martin, M.E. and Hallett, R.A. February 5, 2005. Using Hyperspectral Technologies to Assess Pre-Visual Hemlock Decline. 2005 Hemlock Woolly Adelgid Symposium. Charlotte, North Carolina. February 5, 2005.

Hallett, R.A., Pontius, J.A., and Martin, M.E. 2005. Operational Use of Hyperspectral Imagery for Forest Health Mapping. Hemlock Woolly Adelgid Symposium. Charlotte, North Carolina. February 5, 2005.

Pontius, J.A., R.A. Hallett, M.E. Martin and L.C. Plourde. 2005. Using AVIRIS to Assess Hemlock Woolly Adelgid Induced Decline and Susceptibility. 14th JPL Airborne Geoscience Workshop, Pasadena, California. May 25-27, 2005.

Plourde, L.C., J.A. Pontius, S.V. Ollinger, M.E. Martin, J.E. Anderson, M-L Smith, 2005. Using spectral mixture analysis to discriminate tree species and health in northern temperate forests. 14th JPL Airborne Geoscience Workshop, Pasadena, California. May 25-27, 2005.

Pontius, J.A., Hallett, R.A., Martin, M.E. 2003. Assessing Hemlock Woolly Adelgid Infestation, Hemlock Health and Susceptibility Using Hyperspectral Technologies. Forest Watch Workshop, Durham, New Hampshire, December 10, 2003.

Smith, M.L., Plourde, L., Pontius, J.A. 2003. More than Meets the Eye: Hyperspectral Remote Sensing for Forest Monitoring. Forest Service Geospatial 2003: Putting Geospatial Information to Work, Colorado Springs, Colorado, April 7-11, 2003.

Pontius, J.A., Hallett, R.A., Martin, M.E. 2002. Foliar chemistry and Hemlock Woolly Adelgid Infestation Patterns. Hemlock Woolly Adelgid Symposium, New Brunswick, New Jersey, February 5, 2002.

Pontius, J.A., Hallett, R.A., Martin, M.E. 2002. What drives patterns in Hemlock decline?: Response to the Hemlock Woolly Adelgid. Forest Health Information Meeting, Norfolk, Vermont, April 4, 2002.

Martin, M.E., M.L. Smith, S.V. Ollinger, R.A. Hallett, L. Plourde, M. Sytek, J.H. Pontius, S.W. Bailey, J.D. Aber. 2001. AVIRIS Analysis of Watershed Function in the White Mountain National Forest. Tenth JPL Airborne Earth Science Workshop, Feb. 27 – March 2, 2001. Pasadena, California.

Pontius, J.H., Hallett, R.A., Martin, M.E., Jenkins, J.L. and Bailey, S. 2001. Mechanisms of Hemlock Woolly Adelgid Invasion and Host Response. Northeastern Pest Council Meeting, Portland, Maine, March 18, 2001.

Smith, M-L., R.A. Hallett, S.V. Ollinger, M.E. Martin, J.D. Aber and J.H. Pontius. 2000. The MAPBGC Project: Hyperspectral Remote sensing, Mapping and Analysis of Forest Productivity and Biogeochemical Cycles in the White Mountains, NH. Eighth Biennial Remote Sensing Applications Conference, April 10-14, 2000. Albuquerque, New Mexico.

Pontius, J.H., Barrett J.A. and T.D. Lee. 1998. The effect of environmental factors on sugar maple distribution in the White Mountains of New Hampshire. Ecological Society of America Annual Meeting, Baltimore, MD, August 11-15, 1998.

Pontius, J.H., Barrett J.A. and T.D. Lee. 1995. Potential sugar maple elevational migration in the face of global climate change. Women in Science Exposition, University of New Hampshire Durham, New Hampshire.

ATTAINMENT OF EXTERNAL FUNDS:

Current grants

Pontius, Duncan J, D'Amato A, and A Kosiba. (Lead Investigator). Continuous Forest Inventory, Data Aggregation and Synthesis. NIFA, AFRI. 2019-2021. $291,187.

D'Amato A, Schaberg P, Pontius J, Hawley G and J Duncan. (Co-Investigator). Adaptive Management Strategies. MacIntire Stennis. 2019-2023. $1,382,722.

Pontius, J, and J Duncan. (Lead Investigator). Maintaining Forest Integrity: Planning tools to minimize loss and fragmentation. USFS NA Landscape Restoration Program. 2017 – 2020. $52,987

Pontius, J. (Lead Investigator). Vermont Monitoring Coop. USFS, NA and VT Department of Forests, Parks and Recreation. 2020-2022. $1,000,000.

Pontius, J. (Lead Investigator). Vermont Monitoring Coop. USFS, NA and VT Department of Forests, Parks and Recreation. 2019-2021. $350,000.

Pontius, J. (Lead Investigator). Vermont Monitoring Coop 2018. USFS, NA and VT Department of Forests, Parks and Recreation. 2018-2020. $330,285.

Pontius, J. (Lead Investigator). Vermont Monitoring Coop. USFS, NA and VT Department of Forests, Parks and Recreation. 2017-2019. $278,518.

Pontius, J. (Lead Investigator). Lake Champlain Meteorological, Temperature and Stage Monitoring. Lake Champlain Basin Program. 2018 - 2020. $63,156.

Pontius, J and J. Duncan (Lead Investigator). UVM Jeffords Award. Linking Forest Science to Policy: Enhancing quick and easy access to data required to inform decision making across Vermont's forested landscape. 2018-2019. $9,689.

Completed grants

Pontius, J, Adair, C, Donovan, T, Ginger, C, Hawley, G, Manning, R, Murdoch, J and P Schaberg. (Lead Investigator). Integrated Forest Ecosystem Assessment to Support Sustainable management Decisions in a Changing Climate. MacIntire Stennis. 2014-2019. $782,000

Pontius, J. (Lead Investigator). Forest Ecosystem Monitoring Coop. USFS, NA and VT Department of Forests, Parks and Recreation. 2013-2019. $2,000,000+ (cumulative multi-year budget).

Does not capture additional grants in support of VMC activities from: USGS, Colorado State, Lake Champlain Basin Program, VT Department of Environmental Conservation

Pardo, L., O'Dea, C.B., and J. Pontius. (Co- Investigator). Interaction of climate change, nitrogen deposition, and pest disturbance: a management tool for setting critical loads and predicting effects on forest health. NRS, 2015-2017. $50,000 - NRS.

Pontius, J. and G. Galford. (Lead Investigator). 30 years of forest conversion in the northeast: Historical patterns, ecosystem service impacts and future projections. USFS-NSRC. 2014-2017. $83,066.

Pontius, J., and J. Duncan. (Lead Investigator). Opening up Northern Forest Research Data – Improving Citation and Documentation Systems to Increase Participation in Publishing Data. Research Data Alliance 2016-2017. $35,712.

Keeton, W., Pontius, J., Meigs, G. and J. Duncan. (Co-Investigator). Disturbance dynamics across the Northern Forest: Synthesizing NSRC studies of ecosystem change within a regional forest health mapping framework. USFS-NSRC. 2016-2017. $59,991

Adams, A. and J. Pontius. (Co-Investigator). Tree species distribution in landscape-scale forest carbon storage estimates: a comparison of methods. USFS-NSRC. 2015-2016. $9,800.

Hanavan, R, Pontius, J. and R. Hallett. (Co-Investigator). Early detection and mapping of the emerald ash borer (EAB), *Agrilus plannipenis*, using data fusion techniques with a concurrent, LiDAR, hyperspectral, and thermal imaging system and existing risk map and detection tools. USDA Forest Service STDP. 2013-2016. $107,029.

Mathews, N., Strong, A., Pontius, J., Rimmer, C., Paradis, R. and J. Lloyd. (Co-Investigator). Research and Strategic Planning for the Mount Mansfield Science and Stewardship Center. NSF. 2015-2016. $24,987

Dupigney-Gireau, L.A. and J. Pontius. (Co-Investigator). Satellites, Weather and Climate: A professional development teacher collaborative to enhance literacy in the climate, atmospheric and geospatial sciences (NSF). 2010-2015. $400,000.

O'Neill-Dunn J. and Pontius, J. (Co-Investigator). Interactive Forest Health Viewer for Vermont. USGS America View. 2014-2015. $10,000.

Hanavan, R., Pontius, J. Cook, B., and R. Hallett. (Co-Investigator). Hyperspectral Remote Sensing Techniques to Assess a Decade of Hemlock Decline in the Catskills Mountains. USDA Forest Service NA. 2012-2013. $50,000.

Pontius, J. (Lead Investigator). Data Mining the Bartlett Experimental Forest: A long-term assessment of changing forest demographics, productivity, biomass and remote sensing techniques MacIntire Stennis, 2012-2013. $61,912

Pontius, J. (Lead Investigator). A top down approach to quantifying historical trends in Vermont's vegetation phenology in response to decadal climate change. Funded by MacIntire Stennis, RSENR. 2009-2012. $61,912 (including graduate student stipend)

Pontius, J. and Martin, M. (Lead Investigator). Using remote sensing to quantify and understand trends in northeastern forest health over the past 25 years. Funded by NSRC. 2008-2012. $114,956

Wang, D., Wallin, K. and J. Pontius. (Co-Investigator). Forest Ecosystem Health in a Globalizing World: Building a Diverse Community of Scholars. Funded by USDA CSREES. 2008-2012. $236,000.

Huffman, P., Plumb, S. and J. Pontius. (Co-Investigator). Implementation, coordination and exploration of iMapinvasives invasive species mapping in Vermont and New Hampshire. Northeastern IPM Center. 2010-2011-2012. $50,000.

White, K. and J. Pontius. (Co-Investigator). Quantifying forest vegetation phenology in Vermont: Remote Sensing of 28 year trends in northeastern vegetation phenology, 2011-2012, $5000. Funded by NSRC Graduate Research Grants.

Olson, M. and J. Pontius. (Co-Investigator). Forest condition change in Northern Vermont and New Hampshire: Potential causes and implications for landscape-scale analysis, 2011-2012, $3000. Funded by NSRC Graduate Research Grants.

Harry, D. and J. Pontius. (Co-Investigator). A field investigation of spatial trends in Vermont forest health over the past 25 years. 2011-2012. $3,500. Funded by the UVM Undergraduate Research Program.

Frolik, J., Moeser, C., Wemple, B., and J. Pontius. (Co-Investigator). The Vermont Frozen Landscape Monitoring Project. NASA EPSCOR. 2010-2011. $100,000. Co-Investigator. Role is to develop remote sensing methods to transfer plot level measurements of complex forest canopies for landscape scale modeling of snow hydrology.

Hanavan, R., Pontius, J. Cook, B. and R. Hallett. (Co- Investigator). Field implementation of High-Resolution Remote-Sensed Imagery for Rapid Early Detection of Emerald Ash Borer, Beech Bark Disease, Oak Wilt and Hemlock Woolly Adelgid in Urban and Rural Forest Landscapes in Michigan and Wisconsin. Funded by the USDA State and Private Forestry. 2008-2010. $74,735.

Livingston, W. and J. Pontius. (Co- Investigator). Landscape scale modeling of hemlock susceptibility to Hemlock Woolly Adelgid (HWA) and drought stressors in New England. Funded by the Eastern Forests Threats Center. 2007-2008. $97,576.

Hallett, R., Murdoch, P. and J. Pontius. (Co- Investigator). Assessment of Regional Forest Health and Stream and Soil Chemistry Using a Multi-Scale Approach and New Methods of Remote Sensing Interpretation in the Catskill Mountains of New York. Funded by the New York State Energy Research and Development Association. 2005-2008. $202,000.

Hallett, R. and J. Pontius. (Co- Investigator). Expansion of mesophytic species into historically oak-dominated forests: landscape consequences for fuels and fire behavior. Funded by the US Forest Service National Fire Plan. 2006-2008. $104,500.

Hallett, R. and J. Pontius. (Co- Investigator). Remote sensing for ash identification and pre-visual decline assessments. Funded by the Eastern Forests Threats Center. 2006-2007. $49,055.

Pontius, J. and R. Hallett. (Lead Investigator). Early Detection of Hemlock Woolly Adelgid Infestation: An Evaluation of a Commercially Available Hyperspectral Remote Sensing Tool. Funded by the US Forest Service Science Technology Development Program. 2005-2007. $53,080.

Hallett, R., Pontius, J. and P. Schaberg. (Co- Investigator). Aerial micro-nutrient application for hemlock health remediation. Funded by the US Forest Service Northern Research Station. 2005-2006. $30,391.

Pontius, J. and R. Hallett. (Lead Investigator). Mechanisms of Hemlock Woolly Adelgid Invasion and Host Response in Northeastern Hemlock Forests. Funded by the US Forest Service Northern Research Station. 2005-2006. $100,000.

Martin, M. and J. Pontius. (Co- Investigator). Remote Sensing of vegetation health at the Elizabeth Mine Superfund Site. Funded by the Environmental Protection Agency. 2005-2006. $21,523.

Pontius, J. and R. Hallett. (Lead Investigator). Site Nutrient Status and Susceptibility to the Hemlock Woolly Adelgid. Funded by the US Forest Service Northern Research Station. 2003-2005. $75,000.

Pontius, J. Martin, M. and R. Hallett. (Lead Investigator). Assessing Hemlock Woolly Adelgid Infestation, Hemlock Health and Susceptibility Using Hyperspectral Remote Sensing Technologies. Funded by the US Forest Service Science Technology Development Program. 2002-2004. $62,409.

TEACHING RESPONSIBILITIES
Note: Reported Overall Student Satisfaction Rating (1 highest possible score on a 5 point scale)

ENSC 9: Orientation to Environmental Science
2020: Enrollment 94 (Remote)
2019: Enrollment 89, 3.86 *Overall Instructor Rating (5 highest on a 1-5 scale)*
Note evaluation questions changed in Fall 2019
2018: Enrolment 88, *3.87 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
2017: Enrollment 100, *3.97 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
2016: Enrollment 95, *3.97 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*

NR 146. Introduction to remote sensing of natural resources. 3 cr.
2020: Enrollment 120 (Remote)
2019: Enrollment 72 (Hybrid), *4.67 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
2017: Enrollment 48, (Hybrid) *4.49 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
Note scale change in 2016
2015: Enrollment 48 (Hybrid), *1.72 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2012: Enrollment 67, *1.53 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2010: Enrollment 35, *1.57 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2008: Enrollment 28, *1.73 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*

NR140 Applied Environmental Statistics. 4 cr Service Learning component.
2020: Enrollment 72,
Note evaluation questions changed in Fall 2019
2019: Enrollment 70, *4.74 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
2018: Enrollment 80, *4.69 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
2017: Enrollment 70, *4.48 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
2016 Enrollment: 63 *4.59 Overall Student Satisfaction Rating (5 highest on a 1-5 scale)*
Note scale change in 2016
2015: Enrollment 58, *1.47 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2014: Enrollment 66, *1.45 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2013: Enrollment 65, *1.48 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2012: Enrollment 59, *1.71 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2011: Enrollment 65, *1.76 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2010: Enrollment 60, *1.48 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*
2009: Enrollment 56, *1.53 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*

NR 6 (Co- Facilitator). Race and Culture. 2 Cr. *(no official evaluation available)*
2012: Section Enrollment 18

2011: Section Enrollment 16

2010: Section Enrollment 16

2009: Section Enrollment 27

2008: Section Enrollment 22

NR 295 Remote Sensing for Biophysical Modeling. 4 cr.

2010: Enrollment 4, *1.17 Overall Student Satisfaction Rating (1 highest on a 1-5 scale)*

NR 285 Structured Decision Making (Faculty Mentor). 3 cr.

2012: Enrollment 11, *(no official evaluation available)*

STUDENT COMMITTEES

Graduate Students (primary advisor)

Christian Schorn M.S. Ecological Planning 2017-2019.

Andrew Wood: Rapid Assessment of Wildlife Crossings in the Berkshire Wildlife Linkage. M.S. Ecological Planning, 2016 – 2018.

David Gudex-Cross: Forest ecosystem assessment and modeling: methods and tools for the sustainable management of northern forests. Ph.D. Natural Resources, 2014 – 2018.

Alison Adams: Methods for the spatial modeling of forest carbon in the Northern Forest. M.S. Forestry, 2014-2016.

Sam Talbot: Wildlife Habitat Linkages Surrounding Lake George and Southern Lake Champlain. M.S. Field Naturalist, 2014-2016.

Jeffrey Krebbs: The Potential Effects of the Hemlock Woolly Adelgid on the Carbon Dynamics of Northern New England forests. M.S. Forestry, 2012-2014

Emily Rusell-Roy: Rehabilitation forestry and carbon market access on overharvested, former industrial northern hardwood forests. M.S. Forestry, 2012-2014.

Aiko Weverka: Remote sensing of productivity in northeastern forests. M.S. Forestry, 2010-2012.

Katherine White: Remote Sensing of Spring Phenology: an assessment of methods, indices, and field metrics in northeastern forests. M.S. Forestry, 2010-2012.

Mike Olson: Remote Sensing of forest health trends in the northern Green Mountains of Vermont. M.S. Forestry, 2009-2011.

Carly Brown: An assessment of the impacts of fire on rare Lepidoptera in the Ossipee Pine Barrens Preserve. M.S. Field Naturalist, 2011-2013.

Apisom Intralawan: Land Use and Land Cover Change Dynamics and Their Implications: A Case Study of a Community Along the MeKong River. Ph.D. Natural Resources, 2008-2010.

Graduate Student Committees

Jessica Wikle PhD. Forestry 2020-present

Liam Farley M.S. Forestry 2020 – present

Elizabeth Jameson M.S. Forestry 2020 – present

Hanusia Higgins M.S. Forestry 2019 – present

Olivia Box. M.S. Forestry 2019 – present

Jennifer Santoro. PhD. Forestry 2017 – 2020.

Mathias Nevins: Adaptive forest management across diverse forest ownerships in southeastern Vermont, USA M.S. Forestry. 2017-2020.

Nicole Rogers: Long-Term Dynamics and Silviculture of Northern Hardwood Forests in the Northeast United States. Ph.D. Natural Resources. 2015 – 2019.

Molly Heuss: Evaluating the Effects of Southern Pine Beetle in a Newly Invaded Region. M.S. Forestry. 2015 - 2017.

Emma Sass: Lasting legacies of hurricane, harvesting, and salvage logging disturbance on succession and structural development in an old-growth *Tsuga canadensis* – Pinus strobus forest. M.S. Forestry. 2015 - 2017.

Anya Tyson. NOLS and Nutcrackers: Investigating the Motivations, Barriers, and Benefits to Citizen Science Participation among Outdoor Adventure Educators. M.S. Field Naturalist. 2015 – 2017.

Lyra Brennan: An Ecological Inventory and Assessment of the Pond Brook Region in Monkton, Vermont. M.S. Ecological Planning Program. 2015 – 2017.

Rebecca Stern: Evaluating climat4e and environmental drivers of tree species' growth and adaptation within the northern forest. Ph.D. Natural Resources. 2014 – 2019.

Shelby Perry: Ecological Inventory of Deer Lake and E. B. Hyde Properties, Worcester, VT. M.S. Field Naturalist. 2014 – 2016.

Samuel Ervin: Describing Forest Structure in Old Growth Southern Blue Ridge Cove Forests: A LiDAR-Based Analysis. M.S. Field Naturalist. 2014 – 2016.

Charles Nicholson (PhD). Natural Resources. Matriculated September 2013 - present.

Matthew Cahill: Changes in White Pine Blister Rust (*Cronartium ribicola*) Infections in High-Elevation White Pines in Sequoia and Kings Canyon National Parks, USA. M.S. Field Naturalist Program. 2012 - 2014.

Gus Goodwin: An assessment of spatial variation in calcium content of glacial till for the Green Mountain National Forest, Vermont. M.S. Field Naturalist 2012 - 2014.

Benjamin Engle: Investigating the Relationship Between Modeled Calcium Depletion and Red Spruce Growth and Response to Environmental Stresses. M.S. Forestry. 2012 – 2014.

Neagha Leonard: Monitoring Patchy Groundcover: A Photographic Technique for Shenandoah National Park. M.S. Field Naturalist. 2010 - 2012.

Holli Howard: Methods for Mapping Zones in the Urban-Rural Gradient to Strengthen Ecological Vulnerability Planning. M.S. Natural Resources. 2010 – 2012.

Jonathan Cummings: Decision Support for Natural Resources Management. Ph.D Forestry and Wildlife. 2010 - 2014.

Sebastian Castro: Agroecology and ecosystem services in a coffee landscape of Costa Rica. Ph.D. Plant and Soil Science. 2010 - 2014.

Ali Kosiba: Quantifying the Influence of Winter Injury on the Carbon Sequestration of Red Spruce Trees in the Northeastern United States. M.S. Forestry. 2009 - 2011.

Taylor Bushnell: Monitoring Protocols for the Ossipee (NH) and Waterboro (ME) Pine Barrens. M.S. Field Naturalist Program). 2009 - 2011.

Bryarly McEachern: Modeling land stewardship at VINS: Opportunities for research and education. M.S. Field Naturalist. 2009 - 2011.

Caitlin McDonough: Collaboration at High Elevations: Monitoring Alpine Plant Phenology in the White Mountains with Citizen Scientists. M.S. Field Naturalist. 2008 - 2010.

Sophia DeMaio: Dendrochronological analysis of hemlock woolly adelgid infestations across the northeastern US. (MS). University of Maine, Orono. 2006 - 2008.

Undergraduate Honors Theses
Adviser
2016 *John Kilbride. New dendrochronological approaches to identifying climate drivers in northern conifers.
2012 *Maxwell Reis. Long-term trends in northern hardwood phenology; an examination of possible relationships with abiotic factors
2011 *Dylan Harry. A field investigation of Northeastern forest health trends
2010 *Johannes Griesshammer   Range and variability analysis of foliar chemistry for common species throughout the northeastern United States

Committees
2019 Calla Sopko. The silver fly, an agent of biological control, and their impact on densities of hemlock woolly adelgid.
2017 Kristin Switzer. Relationships between Climate and Growth of Quercus rubra, Pinus strobus, and Tsuga canadensis in Northern Vermont.
2017 Lucas Myers. A Quantitative Analysis of the Effects of Climate Change on Subjective Well-Being.
2016 Emily Peterson   Modeling Siberian Ibex (Capra silirica) Occupancy in Ikh Nart Nature Reserve
2016 Jessica Mailhot,   Wingstrokes: Linking migration citizen science data for Blue-headed & Red-eyed Vireos to spring climate in Vermont as depicted visually in art

2011   Katy Lord   Beaver Foraging in Northern Vermont Wetlands: A Field Test of
Central Place Foraging Theory 2010   Michael Lester. The Influence of Lunar
Phase and Predation on the Vocalization Behavior of Eastern Whip-poor-wills

2010   Audrey Reid   Comparing the Responsiveness of Streams and Ponds to Decreases
in Acid Deposition in the White Mountains of New Hampshire

2010   Autumn Amici   The Effects of Urban Habitats on Arthropod Prey Availability for
Woodpeckers

Internship Supervisor

2019   Maddie SanAngelo   Harbor Watch Water Monitoring Intern
2019   Ryan Leo   NH DES Lake Assessment Intern
2019   Abi Baker   ECHO Museum Amphibian and Reptile Intern
2018   Zijie Wen   Environmental Monitoring Technician
2018   Morgan Schwartz   Environmental Health, Dana Farber Institute
2018   Erin Johnson   Remote Sensing Technician, Digital Globe
2018   Charles Rorick   VT Lt. Govenor Envornmental Policy Intern
2018   FEMC Field Crew   Forest Health Monitoring Technicians
2017   Alison Schwartz   ECHO
2017   Chang Gao   Environmental Science Laboratory Methods
2016   Nikki Bouda   Evaluating and Managing Nonprofits in the Environmental
Sector
2016   Sarah Linder   World PEAS Food Hub Quality control and Infrastructure
2016   Laura Stalter   Missisquoi National Wildlife Refuge Wildlife Education
Development
2016   John Truong,   VMC Forest Health Evaluation
2016   Diana Gurvitch   VMC Forest Health Evaluation
2015-2016 Jessie Little   EPSCOR Student Research Remote Sensing of Forest
Productivity
2015-2016 Emma Tait   EPSCOR Student Research Remote Sensing of Forest
Productivity
2015-2016 Jack Kilbride   EPSCOR Student Research Remote Sensing of Forest
Productivity
2015   Amanda Adams   Pacific Salmon Population Research on the Gisasa River,
Interior Alaska
2015   Christine Sandback   VMC Forest Health Evaluation
2015   Caitlin Trimmer   VMC Forest Health Evaluation
2015   Helena Murray   VMC Forest Health Evaluation
2014   Jonathan Farmer   GIS for carbon accounting
2014   Andrea Blaser   GIS for Green Stormwater Infrastructure
2014   Catlin Trimmer   Landscape assessments of Forest Structure
2014   Amanda Adams   Historical Population Trends of Florida's Fisheries
2014   Colleen Iral   Tracking CSA Produce Quality Using the BRIX system
2014   Justin Sackel   VMC Forest Health Evaluation
2014   Sam Bennet   VMC Forest Health Evaluation
2014   Ellen Loftis   VMC Forest Health Evaluation
2013   Thomas Neweinhaus Hyperspectral Remote Sensing
2013   Amy Mietekwitz   Statistics and Forest Ecology
2013   Tiffany Doley Water Keepers Alliance, non-profit management and marketing

2013	Annie Rosenbauer	Conservation and Wildlife Rehabilitation
2012	Maxwell Reis	Geospatial Analysis
2012	Bonnie Ricord	Crop breeding and genetics: a business perspective
2012	Allison Carrier	Interpretive Guides for the National Parks Service
2011	Jon Schniederman	Remote Sensing
2011	Andrea Brendalen	Greenhouse Softwood Propagation
2010	Anna Caragee	Remote Sensing
2009	Eden Furtak-Cole	Statistics and Modeling

SERVICE
University
Database Manager Search Committee (2012)
Freshmen Orientation Representative (2008-2013)
Writing in the Disciplines Fellow (2010)
NYC School Field Visit RSENR experience leader 2010
Honors and Studies Committee (2009 – 2012, chair 2010-2012)
Lake Ecology Faculty Search Committee (2010 and 2011)
Graduation Marshall (2010-2016)
Database Manager Search Committee (2012)
School Affairs Committee (chair 2012-2013)
Grants Administrator Search Committee (2014)
Core Curriculum Committee (2014- 2017)
Sea Grant Extension Faculty Search Committee (2015)
Hybrid Initiative Fellow (2015)
Union Delegate (RSENR) (2015 – 2016)
Opportunity Hiring Committee (ENSC) (2016)
Opportunity Hiring Committee (ENSC) (2016)
VMC Database Manager Search Committee (2017)
FEMC Data and Web Coordinator Search Committee (2019)
Director Environmental Science Program (2015 – 2020)
Faculty Senate (RSENR) (2017 – 2020)
Forestry Curriculum Committee (2008 – present)
Natural Resources Curriculum Committee (2008 – present)
Environmental Science Curriculum Committee (2008 – present)
Admitted Students Day Faculty Representative (2008-present)
EAB Navigate Advisory Committee (2019 – Present)
Environmental Program Restructure Committee (2020 – present)
Honors College Advisory Committee (2020 – present)
Study Abroad Anchor Site Committee (2021 – present)
FEMC Outreach Specialist Search Committee (2021)
Outdoor Activities Safety Working Group (2021)

Professional Service

     USFS RNA Establishment Committee (2007 – 2008)

     Proposal Review Panel: NASA HyspIRI Preparatory Activities Using Existing Imagery solicitation (ROSES 2010 A.25). Washington, DC August 16-18, 2010.

     Proposal Review Panel: NSF Geography and Spatial Sciences Program. 2011.

     Proposal Review Panel: MacIntire-Stennis (UAK Fairbanks) 2011.

     USFS Research Natural Area Establishment Review Committee (2013-present)

     ECANUSA Conference Planning Committee (2014)

     Proposal Review Panel: NSRC Theme 3. 2015

     ECANUSA Conference Coordinator (2015-2016)

     Technical Reviewer NH/VT 5-Year FIA Report (2012)

     Reviewer: USFS RNA Establishment Records (~1/year)

     Text Reviewer, Sage Publications. Statistics for People Who Think they Hate Statistics Version 4.

     Technical Editor: The Nature Conservancy. Best Management Practices for Managing Invasive Species

     Nature Reader Advisory Panel

     Journal of Environmental Science Editorial Board (2017 – present)

     USFS Research Natural Area NRS Coordinator (2007 – 2020)

     Coordinator Forest Ecosystem Monitoring Cooperative Annual Meeting (2013 – present)

     NY DEC Remote Sensing for Invasive Steering Committee (2020 – present)

Journal reviews *(multiple reviews are indicated by *):*

     Agricultural and Forest Entomology

     Annals of the Entomological Society of America

     Annals of Ecology and Population Biology

     Annals of Forest Science

     Canadian Journal of Forest Research

     Cities and the Environment

     Ecosphere*

     Environmental Entomology*

     Environmental Monitoring and Assessment

     Functional Ecosystems and Communities

     Northeastern Geographer

     Remote Sensing*

     Remote Sensing of Environment*

     International Journal of Remote Sensing*

     ISPRS International Journal of Geo-Information

     Photogrammetric Engineering and Remote Sensing

     PLOS One*

Community

* Indicates service with a significant time requirements

     *Forest Ecosystem Monitoring Cooperative Principle Investigator (2013 – present)

     VT FRP Forester III Selection Committee (2014)

     MMSSC Steering Committee (2015-2016)

Vermont Natural Resource Council Parcelization Steering Committee (2015-present)
Hubbard Brook Research Foundation Climate Change Roundtable Panel (2016)
Hubbard Brook Research Foundation: Biodiversity Research Roundtable Panel (2016)
Vermont Monitoring Cooperative Advisory Committee (2009-2013)

AWARDS AND HONORS

Maurice Kopesh Teaching Award Nomination (3 times)
Outstanding Faculty Advisor Nomination
Marcia Caldwell Community Award

PROFESSIONAL DEVELOPMENT

Groundwork: A Diversity & Social Justice Learning Series September 2019 – June 2020
Courageous Conversations 2020
Pivotal Pedagogies 2020
Online Teaching Boot Camp 2020
Bringing your Authentic Self to Campus 2020
Designing and Reimagining Large Enrollment Courses 2020
Implicit Bias Training 2020
Gender and Leadership 2020
Just in Time Teaching 2019
Teaching and Learning in the Diverse Classroom 2019
Diversity and Social Justice Series 2019 – 2020
Behavioral Style, Academic Leadership and Professional Development 2019
Supporting Survivors 2019
Creating Space for Authenticity 2019
Leading, Managing and Coping through Change 2019
Effective Online Teaching Training 2018
UVM Hybrid Initiative Fellow 2015
UVM Writing in the Disciplines Fellow 2010