

Black Rock Forest Papers and Publications
2018

2018

- Case, M. and Stinson, K.A. 2018. Climate change impacts on the distribution on the allergenic plant common ragweed in the eastern US. *PLOS One* 13 (10) <https://doi.org/10.1371/journal.pone.0205677>
- Hooker, K.R., K.W. McFadden, K. Terlizzi and W.S.F. Schuster. 2018. Understanding abiotic and biotic responses of a forest ecosystem to a simulated pathogen attack. *Canadian Journal of Forest Research*, in review.
- Patterson, A.E., R. Arkebauer, C. Quallo, M.A. Heskell, X. Li, N. Boelman and K.L. Griffin. 2018. Temperature response of respiration and respiratory quotients of 16 co-occurring temperate tree species. *Tree Physiology*. DOI: 10.1093/treephys/tpx176/4841720
- Record, S., T. McCabe, B. Baiser, and A.M. Ellison. 2018. Identifying foundation species in North American forests using long-term data on ant assemblage structure. *Ecosphere* (9)3. DOI: 10.1002/ecs2.2139

2017

- Anthony, M.A., Frey, S.D., Stinson, K.A. 2017. Fungal community homogenization, shift in dominant trophic guild, and appearance of novel taxa with biotic invasion. *Ecosphere* 8(9). <https://doi.org/10.1002/ecs2.1951>
- Brady, J.F. 2017. Black Rock Forest Consortium white-tailed deer management. BRF internal report.
- Duveneck, M. J., and J. R. Thompson. 2017. Climate change imposes phenological trade-offs on forest net primary productivity, *Journal of Geophysical Research: Biogeosciences*. 122, doi:10.1002/2017JG004025.
- Duveneck, M.J., Thompson, J.R., Gustafson, E.J., Liang, Y., deBruijn A.M.G. Recovery dynamics and climate change effects to future New England forests. 2017. *Landscape Ecology* 32: 1385. <https://doi.org/10.1007/s10980-016-0415-5>
- Huntingford, C., Martinez- de la Torre, A., Mercado, L.M., Heskell, M.A., Harper, A.B., Bloomfield, K.J., O'Sullivan, O.S., Reich, P.B., Withers, K.R., Butler, E.E., Chen, M., Griffin, K.L., Meir, P., Tjoelker, M.G., Turnbull, M.H., Sitch, S., Wiltshire, A., Malhi, Y. 2017. Implications of improved representations of plant respiration in a changing climate. *Nature Communications* 8:1602
- Kutter, E., C. Yi, G. Hendrey, H. Liu, T. Eaton, and W. Ni-Meister. 2017. Recirculation over complex terrain. *Journal of Geophysical Research: Atmospheres* 122: 1-15. DOI: 10.1093/treephys/tpx176
- Levesque, M., L. Andreu-Hayles and N. Pederson. 2017. Water availability drives gas exchange and growth of trees in northeastern US, not elevated CO₂ and reduced acid deposition. *Nature.com/Scientific Reports* 7, Article number: 46158.
- Merrill, E. A new biomass equation for black birch from Black Rock Forest, New York. 2017. Undergraduate thesis, Barnard College, Department of Environmental Science.
- O'Sullivan, O.S., Heskell, M.A., Reich, P.B., Tjoelker, M.G., Lasantha K. Weerasinghe, L.K., Penillard, A., Zhu, L., Egerton, J.G., Bloomfield, K.J., Creek, D., Bahar, N.H.A., Griffin, K.L., Hurry, V., Meir, P., Turnbull, M.H., and O.K. Atkin. 2017. Thermal limits of leaf metabolism across biomes. *Global Change Biology* 23(1): 209-223 doi: 10.1111/gcb.13477, 1-15.
- Schuster, W.S.F. (ed.). 2017. Tenth Black Rock Forest Research Symposium: Proceedings.

Taylor, B., A.E. Patterson, M. Ajayi, R. Arkebauer, K. Bao, N. Bray, R.M. Elliott, P.P.G. Gauthier, J. Gersony, R. Gibson, M. Guerin, S. Lavenhar, C. Leland, L. Lemordant, E. Liao, R. Oliver, C. Prager, W.S.F. Schuster, N. Schwartz, C. Shen, K.P. Terlizzi, and K.L. Griffin. 2017. Growth and physiology of a dominant understory shrub *Hamamelis virginiana*, following canopy disturbance in a temperate hardwood forest. *Canadian Journal of Forest Research* 47(2): 193-202.

2016

- Bartnick, E. 2016. Calculations of biomass of Black Birch trees in Black Rock Forest, Cornwall, New York. Undergraduate thesis, Department of Environmental Science, Barnard College.
- Bartnick, E. 2016. Biomass of black birch trees in Black Rock Forest, Cornwall, NY. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- Brady, J.F. 2016. Black Rock Forest Consortium white-tailed deer management. BRF internal report.
- Chi, D. 2016. The effects of aggregate plant community functional biodiversity on local ecohydrology in herbivore-browsed and non-browsed forest areas. Undergraduate thesis, Department of E3B, Columbia University.
- Heskel, M.A., O.S. O'Sullivan, P.B. Reich, M.G. Tjoelker, L.K. Weerasinghe, A. Penillard, J.J.G. Egerton, D. Creek, K.J. Bloomfield, J. Xiang, F. Sinca, Z.R. Stangl, A. Martinez-de la Torre, K.L. Griffin, C. Huntingford, V. Hurry, P. Meir, M.H. Turnbull, and O.K. Atkin. 2016. Convergence in the temperature response of leaf respiration across biomes and plant functional types. *Proceedings of the National Academy of Sciences U.S.A.* 113 (14) 3832-3837.
- Naeem, S., C. Prager, B. Weeks, A. Varga, D.F.B. Flynn, K.L. Griffin, R. Muscarella, S. Wood, and W.S.F. Schuster. 2016. Biodiversity as a multidimensional construct: a review, framework and case study of herbivory's impact on plant diversity. *Proceedings of the Royal Society B* Vol. 283, No. 1844: 20153005
- Maenza-Gmelch, T, W.S.F Schuster and C. Kenyon. 2016. Hudson Highlands West Important Bird Area: Harriman and Sterling to Black Rock Forest and Storm King, New York. Poster, NAOC annual meeting, August 17, 2016 Washington, D.C.
- Merrill, E. A new biomass equation for black birch from Black Rock Forest, New York. 2016. Undergraduate thesis, Barnard College, Department of Environmental Science.
- Wasmuth, M. 2016. Patterns of bird diversity in relation to roads and trails. Undergraduate thesis, Department of Environmental Science, Barnard College.
- Xu, M. 2016. Ecological scaling laws link individual body size variation to population abundance fluctuation. *Oikos* 125(3): 288-299. DOI: 10.1111/oik.03100

2015

Atkin, O.K., K.J. Bloomfield, P.B. Reich, M.G. Tjoelker, G.P. Asner, D. Bonal, G.B. Bonisch, M.G. Bradford, L.A. Cernusak, E.G. Cosio, D. Creek, K.Y. Crous, T.F. Domingues, J.S. Dukes, J.J.G. Egerton, J.R. Evans, G.D. Farquhar, N.M. Fyllas, P.P.G. Gauthier, E. Gloor, T.E. Gimeno, K.L. Griffin, R. Guerrieri, M.A. Heskel, C. Huntingford, F.Y. Ishida, J. Kattge, H. Lambers, M.J. Liddell, J. Lloyd, C.H. Lusk, R.E. Martin, A.P. Maksimov, T.C. Maximov, Y. Malhi, B.E. Medlyn, P. Meir, L.M. Mercado, N. Mirotchnick, D. Ng, U. Niinemets, O.S. O'Sullivan, O.L. Phillips, L. Poorter, P. Poot, I.C. Prentice, N. Salinas, L.M. Rowland, M.G. Ryan, S. Sitch, M. Slot, N.G. Smith, M.H. Turnbull, M.C. VanderWel, F. Valladares, E.J. Veneklaas, L.K. Weerasinghe, C. Wirth,

- I.J. Wright, K.R. Wythers, J. Xiang, S. Xiang, and J. Zaragoza-Castells. 2015. Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. *New Phytologist*. 206(2): 614-636. DOI: 10.1111/nph.13253
- Aylward, J., D.F. Haines, and K. Stinson. 2015. Garlic mustard effects on landscape-scale temperate forest plant assemblages. 100th Symposium of the Ecological Society of America. 9–14 August, Baltimore, MD.
- Brady, J.F. 2015. Black Rock Forest Consortium white-tailed deer management. BRF internal report.
- Bray, N. 2015. Effects of tree girdling and herbivore exclusion on soils and microarthropod communities in a temperate deciduous forest. MS thesis, Department of E3B, Columbia University.
- Cohen, J.E., and M. Xu. 2015. Random sampling of skewed distributions implies Taylor's power law of fluctuation scaling. *Proceedings of the National Academy of Sciences U.S.A.* 112: 7749-7754. DOI: 10.1073/pnas.1503824112
- Cohen, J.E., M. Xu, and W.S.F. Schuster. 2015. Stochastic multiplicative population growth predicts and interprets Taylor's power law of fluctuation scaling. 9th International Conference on Differential Equations and Dynamical Systems, Dallas, TX, May 16, 2015.
- De Carvalho, A., D. DiStefano, and W. Schuster. 2015. A multidisciplinary, integrative approach to STEM teaching and learning. 44th Annual Conference of the North American Association for Environmental Education, San Diego, CA, October 14 – 18, 2015.
- Eisen, K., and A.B. Plotkin. 2015. Forty years of forest measurements support steadily increasing aboveground biomass in a maturing, *Quercus*-dominant northeastern forest. *The Journal of the Torrey Botanical Society*, 142(2): 97-112. DOI: 10.3159/torrey-d-14-00027.1
- Giometto, A., M. Formentin, A. Rinaldo, J.E. Cohen, and A. Maritan. 2015. Sample and population exponent of generalized Taylor's law. *Proceedings of the National Academy of Sciences* 112(25): 7755-7760. DOI: 10.1073/pnas.1505882112
- Haines, D.F., J. Aylward, and K. Stinson. 2015. Garlic mustard effects on landscape-scale temperate forest plant assemblages. 26th Annual Harvard Forest Ecology Symposium. 17 March, Petersham, MA.
- Higashino, S.I. 2015. Species richness of cutaneous bacteria varies with urbanization: implications of habitat conditions on defense mechanisms of *Plethodon cinereus*. High school paper, Ossining High School, Ossining, NY.
- Jackson, A.K., D.C. Evers, E.M. Adams, D.A. Cristol, C. Eagles-Smith, S.T. Edmonds, C.E. Gray, B. Hoskins, O.P. Lane, A. Sauer, and T. Tear. 2015. Songbirds as sentinels of mercury in terrestrial habitats of eastern North America. *Ecotoxicology* 24(2): 453-467. DOI: 10.1007/s10646-014-1394-4.
- Levesque, M., L. Andreu-Hayles, and N. Pederson. 2015. High sensitivity of northeastern broadleaf forest trees to water availability. AGU Fall Meeting 2015, 14-18 December 2015, San Francisco, CA.
- Lindner, C. 2015. Black Rock Forest Visitor Access Pathway: archaeological reconnaissance, background research, and evaluation. BRF internal report.
- Maenza-Gmelch, T. 2015. Black Rock Forest - Schunnemunk Mountain Important Bird Area Proposal. Black Rock Forest/Highlands Research Symposium (June, 2015). Cornwall, NY
- Maenza-Gmelch, T. and S. Gilly 2015. Bird diversity in relation to vegetation composition and structure at Black Rock Forest, Cornwall, New York. Abstracts of the 100th ESA Annual Meeting (August 10 – 14, 2015), Baltimore, Maryland.

- Patterson, A.E. 2015. Physiological capacities and response to temperature based on historic climatic provenances of tree species in a northeastern temperate forest. Oral presentation at public dissertation proposal, Columbia University, Department of Earth and Environmental Sciences (DEES), October 2015.
- Patterson, A.E. 2015. Physiological response to temperature across fifteen tree species in a northeastern temperate forest. Oral presentation, Columbia University Bridge to PhD Symposium, New York, NY, June 2015.
- Rubino, L., S. Charles, A.G. Sirulnik, A.R. Tuininga, and J.D. Lewis. 2015. Invasive insect effects on nitrogen cycling and host physiology are not tightly linked. *Tree Physiology* 35(2): 124-133. DOI: 10.1093/treephys/tpv004
- Schuster, W.S.F. (ed.). 2015. Ninth Black Rock Forest Research Symposium: Proceedings.
- Xu, M. 2015. Ecological scaling laws link individual body size variation to population abundance fluctuation. *Oikos* 125(3): 288-299. Published online ahead of print, Dec 7, 2015. DOI: 10.1111/oik.03100
- Xu, M., W.S.F. Schuster, and J.E. Cohen. 2015. Robustness of Taylor's law under spatial hierarchical groupings of forest tree samples. *Population Ecology* 57: 93-103. DOI 10.1007/s10144-014-0463-0
- Xu, M., W.S.F. Schuster and J.E. Cohen. 2015. Robustness of Taylor's law under spatial hierarchical groupings of forest tree samples. 2015 Ecological Society of America Annual Meeting, Modeling Section, Baltimore, MD, August 10, 2015.

2014

- Alt, M., D. M. Peteet, and J. Nichols. 2014. Macrofossil and leaf wax biomarkers reveal vegetational and climate history of Tamarack Pond, Black Rock Forest, southeastern New York. AGU Fall Meeting 2014, December 15-19, San Francisco, CA. PP11A-1318.
- Ansley, J. 2014. The enduring storm: the story of the Storm King case and the people who launched the modern environmental movement. Interview, Marist College archives.
- Arkebauer, R. 2014. Respiratory response to temperature of broadleaf trees from the northeastern US. Senior Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Brady, J.F. 2014. Black Rock Forest Consortium white-tailed deer management. BRF internal report.
- Comas, L.H., H.S. Callahan and P.E. Midford. 2014. Patterns in root traits of woody species hosting arbuscular and ectomycorrhizas: implications for the evolution of belowground strategies. *Ecology and Evolution* 4(15). DOI: 10.1002/ece3.1147.
- DeCarvahlo, A.M., K. Pavlis, N. Stahelin. 2014. An integrative program modeling authentic field science experiences for students. 43rd Annual conference for the North American Association of Environmental Educators, Ottawa, Ontario.
- Falxa-Raymond, N, M.I. Palmer, T. McPhearson, and K.L. Griffin. 2014. Foliar nitrogen characteristics of four tree species planted in New York City forest restoration sites. *Urban Ecosystems* 17:807–824. DOI 10.1007/s11252-014-0346-3
- Gillet, A. and C.L. Seewagen. 2014. Mercury exposure of a wetland songbird, *Agelaius phoeniceus*, in the New York metropolitan area and its effect on nestling growth rate. *Environmental Monitoring and Assessment* 186(7): 4029-4036. DOI: 10.1007/s10661-014-3677-x
- Hirshan, M. 2014. An analysis of biomass estimation techniques for two oak species at Black Rock Forest in Cornwall, New York. Undergraduate Thesis, Barnard College Department of Environmental Science.

- Keck, K.R. 2014. Assessing the response of small mammal functional guilds to a simulated pathogen attack in a deciduous forest. Masters Thesis, Clemson University.
- Keck, K.R. and K.W. McFadden. 2014. Loss of foundation tree species: Consequences for small mammal assemblages in forest ecosystems. North America Congress for Conservation Biology. Missoula, Montana. 14 July 2014. Oral presentation.
- Levy-Varon, J.H., W.S.F. Schuster, and K.L. Griffin. 2014. Rapid rebound of soil respiration following partial stand disturbance by tree girdling in a temperate deciduous forest. *Oecologia* 174: 1415 – 1424.
- Ovtsharenko, V.I., A.V. Tanasevitch, and B.P. Zakharov. 2014. A survey of the spiders of Black Rock Forest Preserve in New York (Arachnida: Araneae). *Entomologica Americana*, 120(1):24-38.
- Quallo, C.E. 2014. Is tree migration influenced by the respiratory quotient: a study in Black Rock Forest, NY. Undergraduate Thesis, Barnard College Department of Environmental Science.
- Patterson, A.E. 2014. Physiological response to temperature across fifteen tree species in a northeastern temperate forest. Oral presentation, Columbia University Bridge to PhD Symposium, New York, NY, June 2014.
- Patterson, A.E., W.S.F. Schuster, and K.L. Griffin. 2014. Physiological response to temperature across fifteen northern, central, and southern-ranged tree species in a northeastern temperate forest. Poster, Gordon Research Conference, Waterville Valley, New Hampshire, June 2014.
- Wayne, J. 2014. Effects of deer exclosure establishment and subsequent removal on vegetation diversity, tree regeneration, and vegetation biomass at Black Rock Forest. Undergraduate Thesis, Barnard College Department of Environmental Science.
- Xu, M., W.S.F. Schuster, and J.E. Cohen. 2014. Robustness of Taylor's law under spatial hierarchical groupings of forest tree samples. 7th International Symposium on Biomathematics and Ecology: Education and Research, Claremont, CA, October 11, 2014.
- Yu, J. 2014. Respiratory response to changing temperature across trees from three latitudinal ranges in Black Rock Forest. Undergraduate Thesis, Barnard College Department of Environmental Science.

2013

- Alt, M. 2013. Macrofossil evidence for the vegetation and climate history of southeastern New York State from the Late Glacial to Early Holocene. Senior thesis, Department of Earth and Environmental Sciences, Columbia University, 37 p.
- Brady, J.F. 2013. Black Rock Forest Consortium white-tailed deer management. BRF internal report.
- Cohen, J. E., M. Xu, and W.S.F. Schuster. 2013. Stochastic multiplicative population growth predicts and interprets Taylor's power law of fluctuation scaling. *Proceedings of the Royal Society B: Biological Sciences* 280: 20122955.
- Djukic, I., K. McGuire, K.L. Griffin and W.S.F. Schuster. . 2013. Effects of losing keystone oak species on soil microbial community composition in temperate forests in the USA. European Geosciences Union General Assembly 2013. Vienna, Austria, 7 – 12 April 2013.
- Gilly, S. 2013. Identifying and characterizing Cerulean Warbler (*Dendroica cerulean*) habitats in Black Rock Forest and Schunnemunk Mountain Forest, Orange County, NY. Senior Thesis, Barnard College Department of Environmental Science.

- Keck, K.R. and K.W. McFadden. 2013. Loss of foundation tree species: Consequences for small mammal assemblages in forest ecosystems. The Wildlife Society Conference. Milwaukee, Wisconsin. 7 October 2013. Poster presentation.
- Levy-Varon, J.H., W.S.F. Schuster, and K.L. Griffin. 2013. Impact of a simulated pathogen attack (Sudden Oak Death) on soil carbon storage in a northern temperate deciduous forest. *Ecosystems*; in review.
- Maenza-Gmelch, T. (2013). Bird Diversity in Relation to Vegetation Composition and Structure at Black Rock Forest. Black Rock Forest/Highlands Research Symposium (June, 2013). Cornwall, NY. (invited speaker, plenary session)
- McGuire, K.L., I. Djukic, W.S.F. Schuster, K.L. Griffin, K.C. Weathers, R. Rangamannar, C. Gillikin, C. Bateman, K. Pavlis, M. Orman, D. Merrer, and N. Fierer. 2013. Simulated oak loss in temperate forests results in increased N cycling and shifts in microbial community composition. Unpublished manuscript.
- McLear, B., and L. Mittel. 2013. The effect of oak death on non-oaks. Unpublished manuscript, Department of Statistics, Columbia University.
- Patterson, A.E. 2013. Physiological response to temperature across nine tree species in a northeastern temperate forest. MS Thesis, Department of Earth and Environmental Sciences, Columbia University.
- Patterson, A.E. 2013. Physiological response to temperature across nine tree species in a northeastern temperate forest. Oral presentation, abstract and poster, Graduate Student Symposium, Palisades, NY, March 2013.
- Patterson, A.E. 2013. Physiological response to temperature across nine tree species in a northeastern temperate forest. Oral presentation, abstract and poster, Northeastern Ecosystem Research Cooperative (NERC), Saratoga Springs, NY, April 2013.
- Patterson, A.E. 2013. Physiological response to temperature across nine tree species in a northeastern temperate forest. Oral presentation, abstract and poster, Graduate Climate Conference, Woods Hole Oceanographic Institution, Woods Hole, MA, November 2013.
- Schuster, W.S.F. (ed.). 2013. Eighth Black Rock Forest Research Symposium: Proceedings.
- Xu, M. 2013. Stochastic multiplicative population growth predicts and interprets Taylor's power law of fluctuation scaling. International Conference MPDE'13: Models in Population Dynamics and Ecology. University of Osnabrück, Germany, 26-29 August 2013 (<http://www.usf.uos.de/mpde13/programme/#TOP4>).

2012

- Black Rock Forest Consortium. 2012. Assessing brook trout population status and potential for restoration in the Hudson Highlands. Final report to the Sarah K. de Coizart Article TENTH Perpetual Charitable Trust, 30 p.
- Brady, J.F. 2012. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 10 pgs.
- Cohen, J.E., M. Xu, and W.S.F. Schuster. 2012. Allometric scaling of population variance with mean body size is predicted from Taylor's law and density-mass allometry. *Proceedings of National Academy of Science U.S.A.* 109(39): 15829-15834.
- Evers, D.C., A.K. Jackson, T.H. Tear, and C.E. Osborne. 2012. Hidden Risk: Mercury in terrestrial ecosystems of the Northeast. Biodiversity Research Institute. Gorham, Maine. BRI Report 2012-7. 33p.
- Falxa-Raymond, N., A. Patterson, W.S.F. Schuster, and K.L. Griffin. 2012. Oak loss increases foliar nitrogen, $\delta^{15}\text{N}$ and growth rates of *Betula lenta* in Black Rock Forest, Hudson Highlands, Southeastern New York State, USA. *Tree Physiology* 32 (9): 1092-1101.

- Levy-Varon, J. 2012. Belowground carbon pools and fluxes in a northern temperate deciduous forest and their response to stand disturbance. Ph.D. thesis, Graduate School of Arts and Sciences, Columbia University, New York.
- Levy-Varon, J., W.S.F. Schuster and K.L. Griffin. 2012. The autotrophic contribution to soil respiration in a northern temperate deciduous forest and its response to stand disturbance. *Oecologia* 169 (1): 211-220.
- Levy-Varon, J.H., W.S.F. Schuster, and K.L. Griffin. 2012. Soil respiration following partial stand disturbance by tree girdling rapidly rebounds within a three-year period in a temperate forest. Poster, Annual Meeting of the American Geophysical Union.
- Maenza-Gmelch, T. and S. Gilly (2012). Habitat-based bird monitoring in Black Rock Forest, Cornwall, NY: long-term trends and seasonal inventories, 2011. Abstracts of the 97th ESA Annual Meeting (August 5 – 10, 2012), Portland, Oregon.
- Maenza-Gmelch, T. and the members of the Case Studies in Land-use, Bird and Plant Dynamics class (2012). Encouraging Birds to Use the Barnard Green Roof: Feeder Pilot Project. Green Roof Science Symposium (April 17, 2012). Barnard College, New York, NY.
- Patterson, A.E. 2012. Warming Climates, Changing Forests: Temperature Tolerances of Trees and Carbon Dynamics in Northeastern Temperate Forests. *Consilience: The Journal of Sustainable Development* 9(1): 160-171
- Peterschild, J. 2012. Using dendrochronology to examine the growth patterns of eastern hemlock following hemlock woolly adelgid infestation. Senior Thesis, Division of Science, Mathematics, and Computing, Bard College, Annandale-on-Hudson, NY.
- Searle, S.Y., M.H. Turnbull, N.T. Boelman, W.S.F. Schuster, and K.L. Griffin. 2012. Urban environment of New York City promotes growth in northern red oak seedlings. *Tree Physiology* 32: 389-400.
- Villaba-Guerra, M. 2012. Assessing Populations of Painted Turtles (*Chrysemys picta*) in Ponds at Black Rock Forest, NY. Senior thesis, Department of Environmental Sciences, Barnard College, 34 p.
- Wyner, Y., and A. Berkov. 2012. The impact of an extended outdoor residential workshop on urban students' learning and appreciation of biodiversity. *Cities and The Environment (CATE)*: Vol. 5, Iss. 1, Article 12.
- Xu, C-Y, M.H. Turnbull, D.T. Tissue, J.D. Lewis, R. Carson, W.S.F. Schuster, D. Whitehead, A.D. Walcroft, J. Li, and K.L. Griffin. 2012. Age-related decline of stand biomass accumulation is primarily due to mortality and not to reduction in NPP associated with individual tree physiology, tree growth or stand structure in a *Quercus*-dominated forest. *Journal of Ecology* 100: 428-440.

2011

- Bibbo, S., and F. Corsi. 2011. Saproxylic mycodiversity in the Future of Oak Forests experiment. Poster, Columbia University.
- Brady, J.F. 2011. Black Rock Forest Consortium white-tailed deer management. Black Rock Forest internal report, 14 p.
- Falxa-Raymond, N. 2011. Ecological physiology of nitrogen use in trees following forest disturbances. M.As thesis, Department of Ecology, Evolution and Environmental Biology, Columbia University, New York.
- Falxa-Raymond, N., M.I. Palmer, T. McPhearson and K.L. Griffin. 2011. Leaf nitrogen characteristics of four tree species at New York City reforestation sites. Presentation, Society for Ecological Restoration Annual Mid-Atlantic Conference in New York, NY.

- Gary, G., and J.D. Lewis. 2011. Changes in plant growth, reproduction and offspring vigor with increasing distance from an urban center. Poster, Louis Calder Center – Biological Station, Fordham University, Armonk, NY.
- Maenza-Gmelch, T., R. Kelsey and A. Cox (2011). A web-based paleoecology module provides a virtual palynological experience for undergraduates: Virtual Forest Initiative at Black Rock Forest. Black Rock Forest/Highlands Research Symposium (June 20, 2011). Cornwall, NY.
- Maenza-Gmelch, T., R. Kelsey, and A. Cox. 2011. Virtual paleoecology: from sediment sampling to pollen analysis in two hours. Northeast Natural History Conference.
- Osborne, C., and D.C. Evers. 2011. Beyond the loon: mercury concentrations in songbirds of the Northeastern US. Northeast Natural History Conference.
- Patterson, A. Temperature tolerance of the physiological processes controlling carbon gain in Northeastern forests. NSF Graduate Research Fellowship Program; unpublished manuscript.
- Patterson, A.E., L.H. Comas, B. McTeague, and H.S. Callahan. 2011. Does mycorrhizal colonization elicit fine root trait plasticity? Green house and field studies with native temperate woody species. Oral presentation, Columbia University Bridge to PhD Symposium, New York, NY, June 2011.
- Peteet, D. and T. Maenza-Gmelch. 2011. Strengths and weaknesses of Sutherland Pond vs. Fen archive, Black Rock Forest, NY. Northeast Natural History Conference Abstracts (April 6-9, 2011) Albany, New York.
- Rangamannar, R., I. Djukic, K. McGuire, W.S.F. Schuster, K.L. Griffin, and N. Fierer. 2011. Effects of losing keystone oak species on soil microbial community composition in temperate forests in the USA. Poster, Argonne Soil Metagenomics Workshop. Chicago, IL.
- Schuster, W.S.F. 2011. Forest Ecology. Chapter 7 in *The Highlands: Critical Resources, Treasured Landscapes*, R.G. Lathrop, Jr. Ed. Rutgers University Press, New Brunswick, NJ, p. 132-157.
- Schuster, W.S.F. (ed.). 2011. *Seventh Black Rock Forest Research Symposium: Proceedings*.
- Searle, S.Y., D.S. Bitterman, S. Thomas, K.L. Griffin, O.K. Atkin, and M.H. Turnbull. 2011. Respiratory alternative oxidase responds to both low- and high-temperature stress in *Quercus rubra* leaves along an urban-rural gradient in New York. *Functional Ecology* 25 (5) 1007-1017.
- Seto, S. 2011. Small mammal community dynamics in an oak forest in the northeastern United States. M.A. Thesis Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York.
- Wilhelm, A. 2011. A preliminary habitat suitability analysis for brook trout in Black Rock Forest, NY. Senior Thesis, Department of Environmental Science, Barnard College.

2010

- Abbott, D.H., P. Gerard Little, Sa. Coste, St. Coste, D. Breger and S. Haslett. 2010. Exotic grains in a core from Cornwall, NY- Do they have an impact source? *Journal of Siberian Federal University. Engineering and Technologies* 1 (3) 5-29.
- Brady, J.F. 2010. Black Rock Forest Consortium white-tailed deer management. Black Rock Forest internal report, 13 p.
- Callahan, H.S. 2010. Plant evolution and phenotypic plasticity underground: Sources of variation in fine-root traits of woody plants. Invited seminar, Rutgers University.

- Diefenbach, L. 2010. The influence of natural events and hunting on a small white-tail deer population. Senior Thesis, Department of Environmental Science, Barnard College.
- Diefenbach, L. 2010. The influence of natural events and hunting on a small white-tail deer population. Poster, Department of Environmental Science, Barnard College.
- Falxa-Raymond, N., K.L. Griffin, M. Palmer and W.S.F. Schuster. 2010. Effects of altered nitrogen cycling on temperate deciduous forest trees: an urban-rural comparison, AMNH student science symposium.
- Frei, A., S. Gruber, C. Molnar, J. Zurovchak, S.Y. Lee. 2010. Potential impacts of climate change on sustainable water use in the Hudson Valley. The CUNY Institute for Sustainable Cities. 21 p.
- Gillet, A. 2010. Mercury and nestling growth rates of red-winged blackbirds (*Agelaius phoeniceus*) in the New York metropolitan area. M.A. Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Hotopp, K.P., T.A. Pearce, J.C. Nekola and K. Schmidt. 2010. New land snail (Gastropoda: Pulmonata) distribution records for New York State. Proceedings of the Academy of Natural Sciences of Philadelphia 163 (1).
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