

Black Rock Forest Papers and Publications
2019

2020

- Schuster, W.S. 2020. Future of Oak Forests experiment - DBH of trees in Black Rock Forest, New York, USA, 2007. ver 1. Environmental Data Initiative. <https://doi.org/10.6073/pasta/da52f36341eebd575824d9201d0b3f31>.
- Xu, M. 2020. Parametrized maximum entropy models predict variability of metabolic scaling across tree communities and populations. *Ecology*. <https://doi.org/10.1002/ecy.3011>

2019

- Kilheffer, C. R., Underwood, H.B., Leopold, D.J., and R. Guerrieri. 2019. Evaluating legacy impacts of hyper-abundant white-tailed deer in forested stands of Harriman and Bear Mountain State Parks. U.S. Geological Survey (USGS)
- Ladyhetz, E. 2019. Senior thesis.
- Levesque, M., L. Andreu-Hayles, W.K. Smith, A.P. Williams, M.L. Hobi, B.W. Allred, N. Pederson. 2019. Tree-ring isotopes capture interannual vegetation productivity dynamics at the biome scale. *Nature Communications* 10:742. <https://doi.org/10.1038/s41467-019-08634-y>
- Li, Ximeng, Xu, Chengyuan, Li, Zhengzhen, Feng, Jinchao, Tissue, David T. and Griffin, Kevin. 2019. Late growing season carbon subsidy in native gymnosperms in a northern temperate forest. *Tree Physiology* 00:1-12. <https://orcid.org/0000-0003-4124-3757>
- Maenza-Gmelch, T. 2019. NY Natural History Conference.
- O'Connor, M.R. (2019, August). A day in the life of a tree. *The New Yorker*.
- Singh-Smith, K. 2019. Post-Clean Air Act pH, alkalinity, and ecosystem recovery of 26 bodies of water in the Hudson Highlands. Senior Thesis, Dept. of Environmental Science, Barnard College.
- Singh-Smith, K. 2019. Post-Clean Air Act pH, alkalinity, and ecosystem recovery of 26 bodies of water in the Hudson Highlands. Poster, Senior Thesis Poster Session, Dept. of Environmental Science, Barnard College.
- Vaughan, E. 2019. Dietary analysis of the coyote (*Canis latrans*) population at Black Rock Forest. Senior Thesis, Dept. of Environmental Science, Barnard College.
- Vaughan, E. 2019. Dietary analysis of the coyote (*Canis latrans*) population at Black Rock Forest. Poster, Senior Thesis Poster Session, Dept. of Environmental Science, Barnard College.

2018

- Case, M. and K.A. Stinson. 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>
- Haines, D.F., J.A. Aylward, S.d. Frey, and K.A. Stinson. 2108. Regional patterns of floristic diversity and composition in forests invaded by garlic mustard (*Alliaria petiolata*). *Northeastern Naturalist* 25(3), 1 August, 2018. <https://doi.org/10.1656/045.025.0307>.
- 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.

- Metzger, E. 2018. The effects of bracket material on the accuracy of electronic dendrometer devices. Poster, Barnard College Environmental Science Poster Session, New York.
- 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
- Piana, M. 2018. Barriers to urban forest recruitment: comparing urban and rural seed predation rates and species preference. Poster, Rutgers University.
- 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.
- 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

- Adefunke, S. 2016. Differences in leaf pigments, nutrients and physiology among five species of deciduous trees throughout the growing season. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- 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. 2016. Estimating the biomass of black birch trees in Black Rock Forest. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- Merrill, E. 2016. A new biomass equation for black birch from Black Rock Forest, New York. 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.
- Wasmuth, M. 2016. Effects of different road types on breeding bird populations in a northeastern deciduous forest. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- 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. Mirotnick, 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
- Gmelch, P>L> 2015. Impact of deer herbivory on leaf nutrient content and leaf thickness of *Betula lenta* in Black Rock Forest, New York. Poster, 100th Annual Meeting of the Ecological Society of America, August 13, 2015, Baltimore, MD.
- 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.
- Arkebauer, R. 2014. Respiratory response to temperature of broadleaf trees in a northeastern forest. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- 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.
- Quallo, C.E. 2014. Is tree migration influenced by respiratory quotient: a study in Black Rock Forest, NY. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- 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.
- Wayne, J. 2014. Effects of deer exclosure establishment and subsequent removal on vegetation diversity, tree regeneration, and vegetation biomass at Black Rock Forest. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.
- 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.
- Yu, J. 2014. Respiratory response to changing temperature across trees from three latitudinal ranges in Black Rock Forest. Poster, Barnard College Senior Thesis Poster Session, Barnard College, NY.

- 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>).

- 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).
- Hoyt, M., and D. Wharton. 2010. Making Big Abstract Science Accessible. *ASTC Dimensions*, p. 14-15.
- Kastens, K., and M. Turrin. 2010. *Earth Science Puzzles: Making meaning from data*. NSTA Press, Arlington, VA. 186 p.
- Maenza-Gmelch, T. E. and A. J. Cox. 2010. A web-based paleoecology module provides a virtual palynological experience for undergraduates: Virtual Forest Initiative at Black Rock Forest. *Abstracts of the 95th ESA Annual Meeting (August 1- 6, 2010)*, Pittsburgh, PA.
- Munshi-South, J. 2010. Rapid, pervasive genetic differentiation of urban white footed mouse (*Peromyscus leucopus*) populations in New York City. *Molecular Ecology*. p. 1-13.
- Munshi-South, J. 2010. Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: concepts and preliminary results. 2010. Comparative Biology seminar, Richard Gilder Graduate School, American Museum of Natural History.
- Newman, S. 2010. The effect of oak removal on small mammal communities. M.S. Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Patterson, A.E., L.H. Comas, B. McTeague, and H.S. Callahan. 2010. 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 2010.

Patterson, A.E., L.H. Comas, B. McTeague, and H.S. Callahan. 2010. Does mycorrhizal colonization elicit fine root trait plasticity? Green house and field studies with native temperate woody species. Poster and abstract, 95th Annual Meeting of the Ecological Society of America, Pittsburgh, PA, August 2010.

Phillips, V.J. 2010. Using a high-resolution bog sediment core at Tamarack Pond, NY to constrain an extraterrestrial impact in the Hudson Region about 2300 BP. M.S. Thesis, School of Journalism, Columbia University.

2009

Abbott, D.H., P. Gerard-Little, Sa. Costa, D. Breger and S. Haslett. 2009. Exotic grains in a core Cornwall, NY- Do they have an impact source? Proceedings of the Tunguska Conference, Krasnoyarsk, Russia, June, 2008.

Bennett, C. 2009. Distribution, assemblage and activity of bats in a temperate urban landscape. BRF Small Grants Report.

Boyd, J.N., C-Y. Xu, and K.L. Griffin. 2009. Cost-effectiveness of leaf energy and resource investment of invasive *Berberis thunbergii* (Japanese barberry) and co-occurring native shrubs. Canadian Journal of Forest Research 39: 2109-2118.

Brady, J.F. 2009. Black Rock Forest Consortium white-tailed deer management. Black Rock Forest internal report, 13 p.

Burns, C.E. 2009. New York City wildlife: 2008 annual report. Earthwatch research project, WildMetro, New York.

Burns, C.E. 2009. Reconnecting people and nature: Incorporating Earthwatch volunteers into wildlife research in the New York metropolitan region. 94th Annual Meeting of the Ecological Society of America, Albuquerque, New Mexico.

Chen, R. 2009. Temperature effects on the physiological traits of *Quercus rubra* in New York. Poster, Department of Earth and Environmental Engineering, Columbia University.

Chen, R. 2009. Temperature effects on the physiological traits of *Quercus rubra* in New York. Senior Thesis, Department of Earth and Environmental Engineering, Columbia University.

Chihara, A., C. Thomas and R. Jarvis. 2009. EAEE 3999: Black Rock Forest micro-hydro design. Undergraduate Senior Design Project, Columbia University, New York.

Comas, L.H., and H.S. Callahan. 2009. Symposium introduction: Co-evolution of plant-fungal interactions. BSA/MSA Joint Annual Meeting, Snowbird, UT, U.S.A.

Cruz, T. 2009. The impact of urbanization on *Quercus rubra* along an urban to rural gradient. Senior Thesis, Department of Environmental Policy. Barnard College.

Evers, D., M. Duron, and D. Yates. 2009. An Exploratory Study of Methyl Mercury availability in terrestrial wildlife of New York and Pennsylvania, 2005-2006. New York State Research and Development Authority, NYSERDA 7608-3 October 2009 Report 10-03.

Ho, A., A. Frei, and A. Carpi. 2009. Temporal and regional variation in the wet deposition of mercury in the New York State area. City University of New York. Internal report.

Hsueh, D. 2009. Present and past CO₂ concentration patterns from an urban to rural gradient. M.A. Thesis Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York.

Johnson, C.A. 2009. Ecology of slave-maker ants and their hosts: The effect of geographic variation in parasite and host range on co-evolutionary trajectories. BRF Small Grants Final Report.

Kemp, A. 2009. The effects of the invasive species *Berberis thunbergii* and exotic earthworms on salamander populations in deciduous forests of the northeastern United States. Senior Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.

- Lee, M-H, H.S. Callahan, M. Palmer, A.E. Patterson, and L.H. Comas. 2009. Mycorrhizal colonization elicits limited plasticity in functional root traits of maple and oak. BSA/MSA Joint Annual Meeting, Snowbird, UT, U.S.A.
- Levy, J.H., K.L. Griffin and W.S.F. Schuster. 2009. The autotrophic contribution to soil respiration and its associated mycorrhizal fungi at Black Rock Forest. 94th Annual Meeting of the Ecological Society of America, Albuquerque, New Mexico.
- Maenza-Gmelch, T. and D. Peteet. 2009. 15,000 Years of Vegetation, Climate and Carbon Sequestration in the Hudson Valley – An archive from Sutherland Fen, Black Rock Forest, New York. New York Wetlands Forum 15th Annual Conference Abstracts. Poughkeepsie, New York.
- Munshi-South, J. 2009. Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: preliminary results from a model system for investigating the evolutionary implications of urbanization. 94th Annual Meeting of the Ecological Society of America, Albuquerque, New Mexico.
- Ovtsharenko, V., A. Tanasevitch, and B. Zakharov. 2009. Diversity and seasonal dynamics of spiders in oak forests of Black Rock Forest near New York City. Proceedings of the 25th European Congress of Arachnology, August 16-21, 2009, Alexandropoli, Greece.
- Patterson, A.E., L.H. Comas, B. McTeague, and H.S. Callahan. 2009. Does mycorrhizal colonization elicit fine root trait plasticity? Greenhouse and field studies with native temperate woody species. Abstracts of the 94th Annual Meeting of the Ecological Society of America, Albuquerque, New Mexico.
- Patterson, A.E., T. Maenza-Gmelch and W.S.F. Schuster. 2009. Field ecology at Black Rock Forest with high schoolers from an urban-suburban-rural gradient. Poster, Abstracts of the 94th Annual Meeting of the Ecological Society of America, Albuquerque, New Mexico.
- Roberts, S., B. McTeague, A. Patterson, L. Comas, and H.S. Callahan. 2009. Among-species diversity in fine root traits: Informing studies in mature forests with a survey of glasshouse collections. Annual Meeting of the Botanical Society of America, July 25-29, 2009, Snowbird, UT.
- Schuster, W.S.F. (ed.). 2009. Sixth Black Rock Forest Research Symposium: Proceedings.
- Spokowski, E. 2009. Painted turtle growth correlates negatively with the pH of their environment. Poster, Lamont-Doherty Research Internship Poster Session, Lamont Doherty Earth Observatory, Palisades, NY.
- Spokowski, E. 2009. Painted turtle growth in correlation with the pH of their environment. Senior Thesis, Barnard College.
- Turner, G.D., J.D. Lewis, J.T. Mates-Muchin, W.S.F. Schuster and L. Watt. 2009. Light availability and soil moisture influence ectomycorrhizal fungal communities on oak seedlings grown in oak- and hemlock-associated soils. Canadian Journal of Forest Research 39: 1247-1258.

2008

- Bowman, W.P., M.H. Turnbull, D.T. Tissue, D. Whitehead and K.L. Griffin. 2008. Sapwood temperature gradients between lower stems and the canopy do not influence estimates of stand-level stem CO₂ efflux. Tree Physiology 28: 1553-1559.
- Brady, J.F. 2008. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 13 pgs.
- Burdette, C.E. 2008. Coarse woody debris dynamics in Black Rock Experimental Forest of the Hudson Highlands. 2008 Environmental Science Senior Thesis Poster Session, Columbia University.

- Burdette, C.E. 2008. Coarse woody debris dynamics in Black Rock Experimental Forest of the Hudson Highlands. Senior Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York.
- Burns, C.E. 2008. New York City Wildlife, EarthWatch Research Project. 2007 Annual Report, University of Maine. 8 p.
- Callahan, H.S., K. del Fierro, A.E. Patterson, and H. Zafar. 2008. Impacts of elevated nitrogen inputs on oak reproductive and seed ecology. *Global Change Biology* 14 (2): 285-293;
- Carpi, A. 2008. Predicting the effect of climate change on global mercury transport. Invited lecture: Analytical Chemistry Symposium, University of Massachusetts Lowell, Lowell, MA, March 26, 2008.
- Chan, N.L. 2008. Reproductive and offspring traits in northern red oak, *Quercus rubra*, at Black Rock Forest. Poster. 2008 Environmental Science Senior Thesis Poster Session, Columbia University.
- Chan, N.L. 2008. Reproductive and offspring traits in northern red oak, *Quercus rubra*, at Black Rock Forest. Senior Thesis, Department of Environmental Science, Barnard College.
- Chan, N.L., A.E. Patterson, M. Mattioli, and H.S. Callahan. 2008. Influence of tree age on reproductive, seed, and seedling traits in three northern red oak stands at Black Rock Forest in Cornwall, NY: A preliminary study. Poster and abstract, 93rd Annual Meeting of the Ecological Society of America, Milwaukee, WI.
- Gerard-Little, P.A. 2008. Establishing a dated stratigraphy for a core from Black Rock Forest, Hudson Highlands, New York. 2008 Environmental Science Senior Thesis Poster Session, Columbia University.
- Gerard-Little, P.A. 2008. Establishing a dated stratigraphy for a core from Black Rock Forest, Hudson Highlands, New York. Senior Thesis, Department of Environmental Science, Barnard College.
- Gruber, S., J.K. Nolan, and D. Reed. 2008. Water Quality Biomonitoring Project Summary Report for years 2004 - 2006. Orange County Water Authority, Goshen, NY.
- Johnson, C.A. 2008. Ecology of slave-maker ants. Invited address, Annual Meeting of the Pavlovian Society, September 27, 2008, Weehawken, NJ.
- Kays, R.W., M.W. Gompper, and J.C. Ray. 2008. Landscape ecology of eastern coyotes based on large-scale estimates of abundance. *Ecological Applications* 18:1014-1027.
- Lee, C. 2008. The effects of night-time warming on chlorophyll fluorescence of *Quercus rubra* L. along an urban to rural gradient. Third Annual Rabi Scholars Research Symposium, September 2008, Columbia University.
- Levy, J. 2008. Total belowground carbon allocation at Black Rock Forest. MS Thesis, Department of Earth and Environmental Sciences, Columbia University.
- Lewis, J.D. 2008. Integrating gas-exchange equipment into a field-based undergraduate experience. August 5, 2008. 93rd Annual Meeting of the Ecological Society of America.
- Lewis, J.D. 2008. Status of research on the effects of the hemlock woolly adelgid on eastern hemlock in southern New York. October 2008. Annual Meeting of the Organization of Biological Field Stations, Black Rock Forest, Cornwall, NY.
- Lewis, J.D., J. Licitra, A.R. Tuininga, A. Sirulnik, G. Turner and J. Johnson. 2008. Oak seedling growth and ectomycorrhizal colonization are less in eastern hemlock stands infested with hemlock woolly adelgid than in adjacent oak stands. *Tree Physiology Special Issue: IUFRO workshop Regional Forest Responses to Environmental Change* 28: 629-636.
- Li, J., C-Y. Xu, K.L. Griffin, and W.S.F. Schuster. 2008. Dendrochronological potential of Japanese barberry (*Berberis thunbergii*): A case study in the Black Rock Forest, New York. *Tree-Ring Research* 64:115-124.

- Maenza-Gmelch, T. and D. Peteet. 2008. Comparing Pollen records from a Pond and a Fen, Black Rock Forest, NY. Northeast Natural History Conference X Abstracts. p. 74. Albany, New York.
- Matteson, K.C., J.S. Ascher, and G.A. Langellotto. 2008. Bee richness and abundance in New York City urban gardens. *Ann. Entomol. Soc. Am.* 101(1): 140-150.
- McNamara, I., A. Cirimo, and A.E. Gates. 2008, Geologic map of the Cornwall 7.5 minute quadrangle, NY; New York State Geological Survey Open-file Report, 2508.
- Peteet, D.M., M. Beh, Maia, C. Orr, Calder, D. Kurdyla and T. Guilderson. 2008. Early landscapes at the southern Laurentide Margin - basal macrofossils and LOI from new sites in New York, New Jersey, and Connecticut. AMQUA meeting, Pennsylvania State University, PA, June 4-7, 2008.
- Peteet, D.M., and T. Guilderson. 2008 Holocene vegetation and climate shifts from Sutherland Fen, Black Rock Forest, NY – Plant macrofossils, charcoal, and carbon. *EOS Trans. AGU* 89(53), Fall Meet. Suppl., Abstract PP41B-1445.
- Peteet, D.M., T. Maenza-Gmelch and D. Kurdya. 2008. Macrofossils and Carbon Storage over 15,000 Years, Sutherland Fen, Black Rock Forest. Northeastern Natural History Conference X, April 17-18, 2008.
- Schuster, W.S.F., K.L. Griffin, H. Roth, M.H. Turnbull, D. Whitehead and D.T. Tissue. 2008. Changes in composition, structure, and aboveground biomass over seventy-six years (1930-2006) in the Black Rock Forest, Hudson Highlands, southeastern New York State. *Tree Physiology Special Issue: IUFRO workshop Regional Forest Responses to Environmental Change.* 28: 537-549.
- Son Young Kim, D., C. Burns and D. Burg. 2008. Impact of urbanization of amphibians in the New York Metropolitan Region. Poster, WildMetro.
- Tupper, E.B. 2008. Effects of urbanization on pigment content in red oak seedlings using remote sensing. 2008 Environmental Science Senior Thesis Poster Session, Columbia University.
- Tupper, E.B. 2008. Effects of urbanization on pigment content in red oak seedlings using remote sensing. Senior Thesis, Department of Environmental Science, Barnard College.
- Wolf, Z. 2008. The effects of the hemlock woolly adelgid on riparian habitat and macroinvertebrate diversity in Connecticut streams. Senior Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Xu, C.-Y., and K.L. Griffin. 2008. Scaling foliar respiration to the stand level throughout the growing season in a *Quercus rubra* forest. *Tree Physiology Special Issue: IUFRO workshop Regional Forest Responses to Environmental Change,* 28: 637-646.

2007

- Abbott, D., and D. Breger. 2007. Major local and worldwide impact events recorded in sediments from Black Rock Forest. Fifth Black Rock Forest Research Symposium, June 25-26, 2007.
- Applebome, P. 2007. Taking the measure of snowfalls, or the lack of them. *New York Times.* Sunday January 7, 2007.
- Brady, J.F. 2007. Black Rock Forest Consortium white-tailed deer management. Black Rock Forest internal report, 10 p.
- Carpí, A., A. Frei, D. Cocris, R. McCloskey, E. Contreras, and K. Ferguson. 2007. Analytical artifacts produced by a polycarbonate chamber compared to a Teflon chamber for measuring surface mercury fluxes. *Analytical and Bioanalytical Chemistry* 388(2): 361-365.

- Collins, G. 2007. Forests in peril: Concern mounts that alien species will crowd out classic oaks and maples. *New York Times*, Sunday October 7, 2007.
- Detroy, V. 2007. The photosynthetic potential of *Quercus rubra* L. as estimated from chlorophyll fluorescence along an urban to rural transect. Senior Thesis, Department of Earth and Environmental Sciences, Columbia University.
- Dunn, R.R., and J.A. Danoff-Burg. 2007. Road size and carrion beetle assemblages in a New York Forest. *Journal of Insect Conservation* 11:325–332
- Ellison, A.M., S. Record, A. Arguello and N.J. Gotelli. 2007. Rapid inventory of the ant assemblage in a temperate hardwood forest: species composition and assessment of sampling methods. *Environmental Entomology* 36 (4): 766-775.
- Filosa, D.C. 2007. Unraveling the mercury mystery. Poster, Hunter College, CUNY.
- Hotopp, K.P., and T.A. Pearce. 2007. Land snails in New York: Statewide distributions and talus site faunas. Final Report for Contract #NYHER 041129, April 23, 2007, New York State Biodiversity Research Institute, 91 p.
- Levy, J.H., and K.G. Griffin. 2007. Total belowground carbon estimate for Black Rock Forest. Poster, Fifth Black Rock Forest Research Symposium, Orange County, NY.
- Pederson, D.C., and D.M. Peteet. 2007. Carbon storage in soils of the Cascade Brook Watershed, Black Rock Forest. Poster, Lamont-Doherty Earth Observatory of Columbia University.
- Schuster, W.S.F. (ed.). 2007. Fifth Black Rock Forest Research Symposium: Proceedings.
- Searle, S., C. Marin, and K. Griffin. 2007. Proposed causes and mechanisms for variation in photosynthesis of *Quercus rubra* along an urban to rural gradient. *Columbia Undergraduate Science Journal* 2:1.
- Shapiro, J.B., H.J. Simpson, K.L. Griffin and W.S.F. Schuster. 2007. Precipitation chloride at West Point, NY: Seasonal patterns and possible contributions from non-seawater sources. *Atmospheric Environment* 41: 2240-2254.
- Sircely, J.A. 2007. The influence of scale on the relationships among diversity, function, and invisibility. M.A. thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York.
- Sircely, J.A., W.S.F. Schuster and S. Naeem. 2007. Evidence for niche-based community assembly in a deciduous forest understory plant community. Poster, Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York.
- Trimarco, E. 2007. Soil macrofaunal community structure and decomposition processes are closely linked in a northern deciduous forest. M.A. Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Trimarco, E., J. Sircely, S. Naeem, M. Palmer, W.S.F. Schuster, and R. Wyman. 2007. Diversity for lunch: does community structure of macroinvertebrates matter in a northeastern deciduous forest? Poster, Department of Ecology, Evolution and Environmental Biology, Columbia University.
- Xu, C-Y., and K.L. Griffin. 2007. Seasonal variation in the temperature response of leaf Respiration in *Quercus rubra*. Poster, Lamont-Doherty Earth Observatory of Columbia University.
- Xu, C-Y., K.L. Griffin and W.S.F. Schuster. 2007. Leaf phenology and seasonal variation of photosynthesis of invasive (*Berberis thunbergii*) Japanese barberry and two co-occurring native understory shrubs in a northeastern US deciduous forest. *Oecologia* 154: 11-21.
- Xu, C-Y., W.S.F. Schuster and K.L. Griffin. 2007. Seasonal variation of temperature response of respiration in invasive (*Berberis thunbergii*) Japanese barberry and two co-occurring native understory shrubs in a northeastern United States deciduous forest. *Oecologia* 153: 809-819.

2006

- Abbott, D., M-A Courty, Sa. Costa, St. Costa, P. Gerard-Little, L. Burckle, D. Breger and S. Pekar. 2006. Evidence for multiple Holocene marine impact events: Ejecta in a bog core. EOS, Trans. AGU 87 (52), Abstract PP23D-1806.
- Brady, J.F. 2006. Black Rock Forest Consortium white-tailed deer management. 10 p.
- Breger, D., D. Abbott, L. Burckle, P. Gerard-Little, H. Elkington and S. Martos. 2006. Plop plop fizz fizz: Identifying and characterizing Holocene microejecta from two oceanic cosmic impacts using analytical scanning electron microscopy. EOS, Trans. AGU 87 (52), Abstract P51A-1179.
- Buzzetto-More, N. 2006. The story of Black Rock: How an early sustainable forest spawned the American environmental movement and gave birth to a unique Consortium that links science, conservation, and education. Hudson River Valley Review 22(2): 109-121.
- Giles, V., and J.S. Ascher. 2006. A survey of the bees of the Black Rock Forest Preserve, New York (Hymenoptera: Apoidea). Journal of Hymenoptera Research 15(2): 208-231.
- Griffin, K.L., and C-Y. Xu. 2006. Seasonal variation in the temperature response of leaf respiration in *Quercus rubra* at the Black Rock Forest. IUFRO workshop.
- Johnson, J., A. Sirulnik, A.R. Tuininga and J.D. Lewis. 2006. Molecular and morphological analyses of ectomycorrhizal fungal communities across hemlock defoliation and composition gradients. Annual Meeting of the Mycological Society of America, Quebec City, Canada.
- Lewis, J.D., J. Licitra, A.R. Tuininga, A. Sirulnik and J. Johnson. 2006. Indirect effects of the hemlock woolly adelgid on oak seedling growth through effects on mycorrhizal richness and abundance. IUFRO workshop.
- Liddicoat, J., T. Maenza-Gmelch, and K. Jennings. 2006. Paleomagnetic dating of late Pleistocene sediments in Sutherland Pond, Hudson Highlands, New York. Geological Society of America, Abstracts with Programs, v. 38 (7), p. 400.
- Maenza-Gmelch, T.E., J. Liddicoat and K. Jennings, 2006. Paleomagnetic dating of late Pleistocene sediments in Sutherland Pond, Hudson Highlands, New York. Annual Meeting of the Geological Society of America, October 2006, Philadelphia, PA.
- Mates-Muchin, J.T. 2006. Changes in forest productivity and nitrogen cycling associated with decline of eastern hemlock. Ph.D. Dissertation, Fordham University.
- Nelson, P.K., and K.B. Barringer. 2006. Mosses from Black Rock Forest, Orange County, New York. Journal of the Torrey Botanical Society 133: 490-493.
- Ovtsharenko, V., and A. Tanasevitch. 2006. The spider fauna of the Black Rock Forest, New York. 30th Annual meeting of the American Arachnological Society, College of Notre Dame of Maryland, Baltimore, Maryland.
- Ronen, M. 2006. Relationship of understory vegetation, tree regeneration, and soil composition to stand age in Black Rock Forest. Senior Thesis. Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Rothe, J., E. McGowan and J.A. Danoff-Burg. 2006. The effects of hiking trails and forest roads on avian diversity and abundance. American Museum of Natural History's Center for Biodiversity and Conservation Symposium.
- Rubino, L., S. Charles, A. Sirulnik, A. Tuininga and J.D. Lewis. 2006. Hemlock woolly adelgid density affects net photosynthetic rates but not respiration rates or needle biochemistry in eastern hemlock. IUFRO workshop.
- Sirulnik, A.G., J.D. Lewis, A. Tuininga and J. Johnson. 2006. Infestations of hemlock woolly adelgid are associated with changes in eastern hemlock ectomycorrhizal fungal communities and soil conditions. IUFRO workshop.

- Sirulnik, A.G., J.D. Lewis, A. Tuininga and J. Johnson. 2006. Infestations of hemlock woolly adelgid are associated with changes in eastern hemlock ectomycorrhizal fungal communities and soil conditions. Poster, IUFRO workshop.
- Tuininga, A.R., A. Sirulnik, J.D. Lewis, and J. Johnson. 2006. The exotic, invasive hemlock woolly adelgid (*Adelges tsugae* Annand.) affects mycorrhizal fungal communities and soil conditions in eastern U.S. forests. August, 2006, Fifth International Conference on Mycorrhizae, Spain.
- Warrach, K., M. Stieglitz, J. Shaman, V.C. Engel and K.L. Griffin. 2006. Twentieth century climate in the New York Hudson Highlands and the potential impacts on eco hydrological processes. *Climatic Change* 75: 455–493.
- Xu, C.-Y. 2006. Foliar dark respiration: scaling gas exchange characteristics and isotopic signals from leaf to canopy and ecosystem level. Ph.D. Dissertation. Lamont-Doherty Earth Observatory, Department of Earth and Environmental Sciences, Columbia University.
- Xu, C.-Y., and K.L. Griffin. 2006. Seasonal variation in the temperature response of leaf respiration in *Quercus rubra*: foliage respiration and leaf properties. *Functional Ecology* 20: 778-789.

2005

- Avolio, M., A.R. Tuininga, J.D. Lewis and M. Marchese. 2005. Nitrogen form affects ectomycorrhizal fungal colonization and growth. 90th Annual Meeting of the Ecological Society of America, Montreal, Canada.
- Bowman, W.P. 2005. Respiratory ecophysiology of woody stems and branches in temperate forest trees. Ph.D. Dissertation. Department of Ecology, Evolution and Environmental Biology, Columbia University.
- Brady, J.F. 2005. Black Rock Forest Consortium white-tailed deer management. 10 p.
- Buzzetto-More, N. 2005. Technology to create global learning communities. International Conference on Global Perspective in Education March 13-18, 2005, Cambridge, MD.
- Buzzetto-More, N. 2005. Consortia and human ecology: Bridging the gaps between research, practice, education and the community. Proceedings of the 20th Anniversary Conference of the Society for Human Ecology, Salt Lake City, Utah.
- Callahan, H.S., J. Aber, K. del Fierro, A.E. Patterson, and H. Zafar. 2005. Impacts of chronic N amendments on tree reproduction in an oak-dominated stand at Harvard Forest. Poster and abstract, 16th Annual Harvard Forest Symposium, Petersham, MA, February 2005.
- Cohn, J.P. 2005. Urban Wildlife. *BioScience* 55(3): 201 – 205.
- Danoff-Burg, J.A. 2005. Beetles lose ground: Carcass, dung eaters are ecological cleanup crews. *Poughkeepsie Journal*, Sept. 18, 2005.
- Fener, H.M., J.R. Ginsberg, E. Sanderson and M.E. Gompper. 2005. Chronology of range expansion of the coyote (*Canis latrans*) in New York. *Canadian Field Naturalist* 119: 1 - 5.
- Ferraz, G. 2005. Dynamics of bird communities, populations, and individuals. Ph.D. Dissertation, Department of Ecology, Evolution and Environmental Biology, Columbia University.
- Gompper, M.E., and A.N. Wright. 2005. Altered prevalence of raccoon roundworm (*Baylisascaris procyonis*) owing to manipulated contact rates of hosts. *Journal of Zoology* 266: 215- 219.
- Gould, K.L. 2005. Designing for the Built Realm, Fox and Fowle Architects. The Images Publishing Group. pp. 40-43.

- Maenza-Gmelch, T., and D. Peteet. 2005. Comparison of Sutherland Pond and Sutherland Bog pollen profiles over the last 12,000 years. Black Rock Forest Research Symposium Abstracts. pg. 17. Cornwall, New York.
- Nichols, L., and J.A. Danoff-Burg. 2005. Community response of dung beetles and dung flies to forest fragmentation and urbanization: implications for preservation of ecosystem services along an urban-to-rural gradient. Annual Meeting of the Society for Conservation Biology, July 2005, New York, NY.
- Pederson, N.A. 2005. Climatic sensitivity and growth of southern temperate trees in the eastern US: Implications for the carbon cycle. Ph.D. Dissertation. Columbia University.
- Peteet, D.M., T. Maenza-Gmelch, D. Pederson, D. Kurdyla, and T. Gulderson. 2005. Wetlands in Black Rock Forest, NY: changes in carbon storage since deglaciation. Black Rock Forest Research Symposium Abstracts. pg. 8. Cornwall, New York.
- Schuster, W.S.F. (ed.). 2005. Fourth Black Rock Forest Research Symposium: Talks title and abstracts.
- Shapiro, J.B. 2005. Watershed budgets of chloride and sulfate as integrators of ecosystem processes. Ph.D. Dissertation. Department of Ecology, Evolution and Environmental Biology, Columbia University.
- Sirulnik, A., J.D. Lewis, A.R. Tuininga, and J. Johnson. 2005. Soil conditions, host community, and infestations of the hemlock wooly adelgid (*Adelges tsugae*) affect ectomycorrhizal diversity in eastern temperate forests. 90th Annual Meeting of the Ecological Society of America, Montreal, Canada.
- Sirulnik, A., J.D. Lewis, A.R. Tuininga and J. Johnson. 2005. Hemlock wooly adelgid (*Adelges tsugae*) infestation reduces ectomycorrhizal diversity and accelerates N cycling in eastern hemlock (*Tsuga canadensis*) stands. 10th Biennial International Conference of the Soil Ecology Society, Argonne, Illinois.
- Steinberg, R. 2005. Surface exposure dating of glacial features in the lower Hudson Valley using the cosmogenic nucleide ¹⁰Be. Lamont-Doherty Earth Observatory Earth Internship Report, Lamont-Doherty Earth Observatory, Palisades, NY.
- Steinberg, R., M. Kelly, J. Schaefer, V. Rinterknecht, R. Schwartz and G. Balco. 2005. Measuring the retreat velocity of the Laurentide ice sheet by cosmogenic nucleides. Poster, 2005 Annual AGU meeting, San Francisco, CA.
- Turner, G.D., J.D. Lewis and W.S.F. Schuster. 2005. Effects of nitrogen on ectomycorrhizal abundance and diversity from red oak seedlings grown in contrasting soils. 90th Annual Meeting of the Ecological Society of America, Montreal, Canada.
- Wright, A.N., and M.E. Gompper. 2005. Altered parasite assemblages in raccoons in response to manipulated resource availability. *Oecologia* 144: 148 - 156.

2004

- Blankley, S. 2004. Coarse woody debris and its role in carbon sequestration. Hughes Fellowship Report.
- Bowman, W., R. Carson, W.S.F. Schuster and K. Griffin. 2004. Patterns of CO₂ efflux from woody stems in a red oak (*Quercus rubra*) chronosequence. Annual Meeting of the Ecological Society of America.
- Brady, J.F. 2004. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 14 p.
- Buzzetto-More, N. 2004. The Black Rock Forest Consortium: A narrative. Ph.D. Dissertation, Teachers College, Columbia University.

- Carson, R. 2004. Age-related decline in *Quercus rubra*: A physiological test of the hydraulic limitation hypothesis. MA Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.
- Carson, R., and W.S.F. Schuster. 2004. Hemlock wooly adelgid impacts from the Canterbury Brook Exclosure: Results of a tree ring analysis of an introduced insect outbreak in the Black Rock Forest. Internal Report.
- Cerbone, W.C., and D.E. Karrmann. 2004. Morphological intergradation of two subspecies of *Chrysemys picta* within a discrete metapopulation. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Cerbone, W.C., and D.E. Karrmann. 2004. Morphological intergradation of two subspecies of *Chrysemys picta* within a discrete metapopulation. Poster, AMNH education department, Central Park West @ 79th St, NYC.
- Danoff-Burg, J.A. 2004. From dung beetles to parasitic wasps: Insects as urbanization indicators. Annual Meeting of the Society for Conservation Biology, New York, NY.
- Danoff-Burg, J.A., E. Nichols and F.W. Koontz. 2004. From dung beetles to parasitic wasps: Keeping insects in the metropolitan mix. 18th Annual Meeting of the Society for Conservation Biology, July 30, 2004, New York, NY.
- Doobar, K., and D.E. Karrmann. 2004. Correlation of turtle *Chrysemys picta* feeding and thermoregulatory behavior and environmental temperature. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Doobar, K., and D.E. Karrmann. 2004. Correlation of turtle *Chrysemys picta* feeding and thermoregulatory behavior and environmental temperature. Poster, AMNH education department, Central Park West @ 79th St, NYC.
- Effendy, A.G., and D.E. Karrmann. 2004. Dimorphisms in shell morphology of a *Chrysemys picta* metapopulation. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Effendy, A.G., and D.E. Karrmann. 2004. The sexual dimorphism of a *Chrysemys picta* metapopulation. Poster, Polytechnic University 2004 NYC Science Mathematics and Technology Regional Fair, March 2004.
- Effendy, A.G., and D.E. Karrmann. 2004. Dimorphisms in shell morphology of a *Chrysemys picta* metapopulation. Poster, AMNH education department, Central Park West @ 79th St, NYC.
- Hoyt, E. 2004. Carbon in coarse woody debris on the long-term plots of Black Rock Forest, Cornwall, NY. Senior Thesis, Department Ecology, Evolution and Environmental Biology, Columbia University.
- Karrmann, D.E., W.C. Cerbone, A. Effendy, K. Doobar, A. Lee and S. Elsayd. 2004. Structure and dynamics of a *Chrysemys picta* metapopulation (Integrating Science and Education). Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Koontz, F.W., S.B. Elbin and S.H. Newman. 2004. The New York bioscape initiative: A collaborative study of ecology and health. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- LaRocco, M. 2004. The effect of prior land use on biomass growth rates in the Black Rock Forest. Senior Thesis, Department of Environmental Science, Barnard College.
- Lee, A., and D.E. Karrmann. 2004. Recatchability of a pit tagged *Chrysemys picta* metapopulation. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Lee, A., and D.E. Karrmann. 2004. Recatchability of a pit tagged *Chrysemys picta* metapopulation. Poster, AMNH education department, Central Park West @ 79th St, NYC.

- May, D. 2004. Remote sensing of tree species using high-resolution spectrophotometry. MS Thesis. Miami University of Ohio.
- Mickelson, J.G., Jr. 2004. Initiation and development of a USGS National Biological Information Infrastructure (NBII) node for the northeastern U.S. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Mickelson, J.G., Jr., F.W. Koontz and W.S.F. Schuster. 2004. Delineating detailed ecological land units in the New York bioscape using multi-temporal Landsat Imagery. 18th Annual Meeting of the Society for Conservation Biology, July 30, 2004, New York, NY.
- Nagel, J., and K.L. Griffin. 2004. Exploring influences of leaf-level physiology on plant community assembly in the Black Rock Forest. Poster, Lamont-Doherty Earth Observatory of Columbia University.
- Nagel, J.M., and K.L. Griffin. 2004. Can gas-exchange characteristics help explain the invasive success of *Lythrum salicaria*? *Biological Invasions* 6: 101-111.
- Nagel, J.M., and K.L. Griffin. 2004. Can gas-exchange characteristics help explain the invasive success of *Lythrum salicaria*? Poster, Annual Meeting of the Ecological Society of America, Portland, Oregon.
- Nagel, J.M., K.L. Griffin and W.S.F. Schuster. 2004. Energy assimilation and expenditure of invasive *Berberis thunbergii* and co-occurring native understory shrubs. Annual Meeting of the Ecological Society of America, Portland, Oregon.
- Nichols, E. 2004. Community dynamics of dung beetles (Family Scarabaeidae) and flies (Superfamily Muscoidea) along an urban-to-rural gradient. MA Thesis, Department of Ecology, Evolution and Environmental Biology, Columbia University.
- Pederson, N., E.R. Cook and G.C. Jacoby. 2004. The geographic influence of winter temperatures on Oak and Hickory species. Abstract, Northeast Natural History Conference, May 2004, Albany, NY.
- Pederson, N., E.R. Cook, G.C. Jacoby, D.M. Peteet and K.L. Griffin. 2004. The influence of winter temperatures on the annual radial growth of six northern range margin tree species. *Dendrochronologia* 22: 7-29.
- Roth, H., and C. Law. 2004. The effects of deer browsing on forest regeneration in Black Rock Forest. BRF internal report.
- Schuster, W.S.F. 2004. Long-term trends in forest regeneration at Black Rock Forest, Cornwall, New York. 18th Annual Meeting of the Society for Conservation Biology, July 30, 2004, New York, NY.
- Trow, G.W.S. 2004. The Harvard Black Rock Forest. University of Iowa Press, Iowa City, Iowa.
- Whitehead, D., A.S. Walcroft, K.L. Griffin, D.T. Tissue, M.T. Turnbull, V. Engel, K.J. Brown and W.S.F. Schuster. 2004. Scaling carbon uptake from leaves to canopies: insights from two forests with contrasting properties. In: *Forests at the Land-Atmosphere Interface*. CAB International, Edinburgh, England. p. 321 – 254.
- Whitehead, D., K.L. Griffin, M.H. Turnbull, D.T. Tissue, V.C. Engel, K.J. Brown, W.S.F. Schuster and A.S. Walcroft. 2004. Response of total night-time respiration to differences in total daily photosynthesis for leaves in a *Quercus rubra* L. canopy: Implications for modelling canopy CO₂ exchange. *Global Change Biology* 10: 925-938.
- Xu, C-Y., G. Lin, K.L. Griffin and R.N. Sambrotto. 2004. Leaf respiratory CO₂ is ¹³C-enriched relative to leaf organic components in five species of C₃ plants. *New Phytologist* 163: 499-505.
- Xu, C-Y., and K.L. Griffin. 2004. Seasonal variations in leaf respiration, temperature of leaf respiration and leaf characteristics of *Quercus rubra*. Supplement to the Bulletin of the Ecological Society of America.

2003

- Barringer, K., and S. Clemants. 2003. Vascular flora of Black Rock Forest, Orange County, New York. *Journal of the Torrey Botanical Society* 130 (4): 292-308.
- Blankley, S., and E. Hoyt. 2003. A guideline to methods of carbon measurement in coarse woody debris in the long-term plots of Black Rock Forest. Senior Thesis, Department of Environmental Science, Barnard College.
- Bowman, W., and K.L. Griffin. 2003. Quantifying stem respiration in stands of red oak at Black Rock Forest. Third Black Rock Forest Research Symposium.
- Brady, J.F. 2003. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 13 p.
- Daly, A. 2003. A Teacher's Guide to Black Rock Forest. A Manual for Use in the Classroom and in the Field. Friends Seminary, New York.
- Gompper, M.A. and A.N. Wright. 2003. Changes in prevalence of *Baylisascaris procyonis* due to experimentally altered contact rates of raccoons. Abstract, 2003 Midwest Fish and Wildlife Conference, Kansas City, MO.
- Gompper, M.A. and A.N. Wright. 2003. Changes in the parasite community of raccoons in response to experimental manipulation of resource availability. Abstract, Annual Meeting of the Wildlife Society, Burlington, VT.
- Gompper, M.A., R.M. Goodman, R.W. Kays, C.V. Fiorello and S.E. Wade. 2003. A survey of the parasites of coyotes, *Canis latrans*, in New York based on fecal analysis. *Journal of Wildlife Diseases* 39: 712 – 717.
- Hoyt, E.
- Kimble, A. 2003. Impact of hemlock Woolly Adelgid on Eastern Hemlock stands in the Black Rock Forest, Cornwall, New York. MS Thesis, Bard College.
- Martin, A., L. Rubino and J.D. Lewis. 2003. Hemlock woolly adelgid density affects net photosynthetic rates but not respiration rates or needle biochemistry in eastern hemlock. 88th Annual Meeting of the Ecological Society of America, Savannah, Georgia.
- Mates-Muchin, J.T., J.D. Lewis, G.D. Turner, J. Richards and W.S.F. Schuster. 2003. Variation in above and below-ground nitrogen and growth rate of a hemlock-hardwood forest with the loss of a dominant tree species. Poster, 88th Annual Meeting of the Ecological Society of America, Savannah, Georgia.
- May, D., S.A. Bohlman and K.J. Brown. 2003. Evaluation of high-resolution, multi-band imagery for determining proportions of oak and maple LAI in Black Rock Forest, NY. Supplement to the Bulletin of the Ecological Society of America.
- Schuster, W.S.F. (ed.). 2003. Third Black Rock Forest Research Symposium: Talk titles and abstracts.
- Shaman, J., M. Stieglitz, S. Zebiak and M. Cane. 2003. A local forecast of land surface wetness conditions derived from seasonal climate predictions. *Journal of Hydrometeorology* 4(3): 611-626.
- Starkey, D.E., H.B. Shaffer, R.L. Burke, M.R.J. Forstner, J.B. Iverson, F.J. Janzen, A.G.J. Rhodin and G.R. Ultsch. 2003. Molecular systematics, phylogeography, and the effects of Pleistocene glaciation in the painted turtle (*Chrysemys picta*) complex. *Evolution* 57: 119-128.
- Steiglitz, M., J. Shaman, J. McNamara, V. Engel, J. Shanley and G.W. Kling. 2003. An approach to understanding hydrologic connectivity on the hillslope and the implications for nutrient transport. *Global Biogeochemical Cycles* 17(4): 1105.

- Turnbull, M.H., D. Whitehead, D.T. Tissue, W.S.F. Schuster, K.J. Brown and K.L. Griffin. 2003. Scaling foliar respiration in two contrasting forest canopies. *Functional Ecology* 17: 101-114.
- Turner, G.D. 2003. Host composition, light, and nitrogen effects on ectomycorrhizal communities from *Quercus* seedlings grown in soils from regional hardwood-hemlock forests. Ph.D. Dissertation, Fordham University.
- Turner, G.D., and J.D. Lewis. 2003. Ectomycorrhizal community patterns from *Quercus rubra* seedlings grown in soils from regional hemlock-hardwood forests. Fourth International Conference on Mycorrhizae, Montreal, Canada.
- Turner, G.D., J. Licitra, J.D. Lewis and W.S.F. Schuster. 2003. Forest composition affects ectomycorrhizal fungal community composition on *Quercus rubra* seedlings. 88th Annual Meeting of the Ecological Society of America, Savannah, Georgia.

2002

- Bower, P., S. Jones, J. Stamatelos, S. Reynolds, S. Daddi, G. Kim and C. Duerkes. 2002. Forest succession and biomass accumulation of 70-year-old experimental plots in Black Rock Forest, NY. www.columbia.edu/itc/barnard/envsci/bc3016/brf_online
- Brady, J.F. 2002. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 13 p.
- Brown, K.J., K. Griffin, W. Schuster, D. Tissue, M. Turnbull and D. Whitehead. 2002. Spatial and temporal variability of soil CO₂ efflux from xeric and mesic sites within Black Rock Forest, New York. Supplement to the Bulletin of the Ecological Society of America.
- Danoff-Burg, J.A. 2002. Evolutionary lability and phylogenetic utility of behavior in a group of ant-guest staphylinidae beetles. *Annals of the Entomological Society of America* 95(2): 143-155.
- Danoff-Burg, J.A., and S. Bird. 2002. Hemlock woolly adelgid and elongated hemlock scale: Partners in crime? Pages 254-268 in Proceedings: Hemlock Woolly Adelgid in the Eastern United States Symposium, February 2002, East Brunswick, NJ. USDA Forest Service.
- Engel, V. 2002. Forest canopy hydraulic conductance and catchment water balance: observations and modeling. Ph.D. Dissertation, Lamont-Doherty Earth Observatory of Columbia University.
- Engel, V., M. Stieglitz, M. Williams and K.L. Griffin. 2002. Forest canopy hydraulic properties and catchment water balance: observations and modeling. *Ecological Modeling* 154(3): 263-288.
- Gompper, M.E. 2002. The ecology of northeast coyotes: current knowledge and priorities for future research. *Wildlife Conservation Society Working Paper* 20:1-48.
- Gompper, M.E. 2002. Top carnivores in the suburbs? Ecological and conservation issues raised by colonization of northeastern North America by coyotes. *Bioscience* 52: 185-190.
- Heusser, L.E., T. Maenza-Gmelch, T.V. Lowell, and R. Hinnefeld. 2002. Late Wisconsin periglacial environments of the southern margin of the Laurentide Ice Sheet reconstructed from pollen analyses. *Journal of Quaternary Science* 17(8): 773-780.
- Karrmann, D.E., and A. Marchini. 2002. A field research project (Turtle population assessment) integrated into the classroom. *National Science Teachers Association Abstracts* 2:71.
- Karrmann, D.E., E. Cordero and J. Javier. 2002. A proposed long-term assessment of a scattered *Chrysemys picta picta* population. Abstracts, Northeast Natural History Conference VII, New York State Museum Circular 64: 34-68.
- Kimple, A., and W.S.F. Schuster. 2002. Spatial patterns of HWA damage and impacts on tree physiology and water use in the Black Rock Forest, southern New York. Pages 344-350

- in Proceedings: Hemlock Woolly Adelgid in the Eastern United States Symposium, February 2002, East Brunswick, NJ. USDA Forest Service.
- Lewis, J.D., J.T. Mates-Muchin and G. Turner. 2002. Relationship between defoliation associated with the hemlock wooly adelgid (*Adelges tsugae*) and growth of eastern hemlock (*Tsuga canadensis*). Supplement to the Bulletin of the Ecological Society of America 83(3).
- Mates-Muchin, J.T., J.D. Lewis and W.S.F. Schuster. 2002. Change in forest nitrogen cycling during the decline of a dominant tree species. Supplement to the Bulletin of the Ecological Society of America 83(3).
- Mickelson, J.G. Jr., W.S.F. Schuster and F.W. Koontz. 2002. Delineating detailed ecological land units in the New York bioscape using multi-temporal Landsat imagery: A pilot study. Center for Environmental Research and Conservation (CERC). Summary report. 9 p.
- Nagel, J.M., K.L. Griffin, W.S.F. Schuster, D.T. Tissue, M.H. Turnbull, K.J. Brown and D. Whitehead. 2002. Energy investment in leaves of red maple and co-occurring oaks at sites within a forested watershed. *Tree Physiology* 22: 859 – 867.
- Ovtsharenko, V. 2002. Biodiversity of spiders of Black Rock Forest. Abstracts Northeast Natural History Conference VII. NY State Mus. Circ. 64: 18.
- Ovtsharenko, V., K. Catley and A. Tanasevitch 2002. Biodiversity of spiders of Black Rock Forest. In: 20th European Colloquium of Arachnology Szombathely, Hungary.
- Ovtsharenko, V., A. Tanasevitch and K. Catley. 2002. Spiders and insects of the Black Rock Forest. <http://research.amnh.org/entomology/blackrock>.
- Peteet, D., T. Maenza-Gmelch and D. Kurdyla. 2002. Long term wetland carbon storage in Black Rock Forest. BRF Small Grants Final Report.
- Peteet, D.M., Maenza-Gmelch, T., Kurdyla, D., and Gulderson, T. (2002). Black Rock Forest, New York: A carbon sink during the late-glacial. Abstracts of the Northeast Natural History Conference VII. pg. 131. Albany, New York.
- Shaman, J., M. Stieglitz, V. Engel, R. Koster and C. Stark. 2002. Representation of subsurface storm flow and a more responsive water table in a TOPMODEL-based hydrology model. *Water Resources Research* 38(8): 1156.
- Turnbull, M.H., D. Whitehead, D.T. Tissue, W.S.F. Schuster, K.J. Brown, V.C. Engel and K.L. Griffin. 2002. Photosynthetic characteristics in canopies of *Quercus rubra*, *Quercus prinus* and *Acer rubrum* differ in response to soil water availability. *Oecologia* 130: 515 - 524.
- Turner, G.D., J.T. Mates-Muchin, J.D. Lewis, W.S.F. Schuster and R. Evans. 2002. Ectomycorrhizal fungal community response to host species and host community composition. Supplement to the Bulletin of the Ecological Society of America 83(3).
- Wright, A.N. 2002. Changes in raccoon parasite communities in response to an experimental manipulation of resource availability. MA Thesis, Department of Ecology, Evolution, and Environmental Biology, Columbia University.

2001

- Bennett, C.E. 2001. Sex ratio dynamics of the northeastern coyote (*Canis latrans*) using non-invasive molecular techniques. MA Thesis, Columbia University, New York.
- Brady, J.F. 2001. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 13 p.
- Brown, K.J. 2001. Remote detection of sun and shade leaf area for three tree species in the Cascade Brook watershed in Black Rock Forest. Internal report.

- D'Arrigo, R.D., W.S.F. Schuster, D.M. Lawrence, E.R. Cook, M. Wiljanen and R.D. Thetford. 2001. Climate-growth relationships of eastern hemlock and chestnut oak from Black Rock Forest in the Highlands of southeastern New York. *Tree-Ring Research* 57: 183-190.
- Fener, H.M. 2001. Coyote (*Canis latrans*) colonization of New York: The influence of human-induced landscape changes. MA Thesis, Columbia University, New York.
- Garey, V. 2001. Bringing the classroom to the forest. Abstract, NTSA (National Science Teachers Association) Annual Meeting, San Diego, CA.
- Gompper, M.E. 2001. Parasites and host social structure: An experimental analysis. BRF Small Grants Final Report.
- Gompper, M.E. 2001. The biology of an expanding coyote population. Second Black Rock Forest Research Symposium, Cornwall, New York.
- Gompper, M.E., A.N. Wright and R. Goodman. 2001. Sociality of seasonal den use in the raccoon, *Procyon lotor*. Second Black Rock Forest Research Symposium, Cornwall, New York.
- Gompper, M.E., A. Wright and R. Goodman. 2001. The sociality of den use in the raccoon, *Procyon lotor*. 57th Annual Meeting of the Northeast Fish and Wildlife Conference, Saratoga Springs, New York.
- Gompper, M.E., C. Bennett, R. DeSalle, R. Kays and J. Ray. 2001. Sex ratio dynamics of the northeastern coyote (*Canis latrans*) in New York using molecular genetics. 57th Annual Meeting of the Northeast Fish and Wildlife Conference, Saratoga Springs, New York.
- Gompper, M.E., C. Fiorello and R. Goodman. 2001. Gastrointestinal parasites of New York coyotes and fishers. 57th Annual Meeting of the Northeast Fish and Wildlife Conference, Saratoga Springs, New York.
- Gompper, M.E., C. Fiorello, R. Goodman, R. Kays and J.C. Ray. 2001. Survey of enteric parasites of coyote scats and carcasses. 57th Annual Meeting of the Northeast Fish and Wildlife Conference, Saratoga Springs, New York.
- Goodman, R. M. 2001 Parasitology and denning ecology of raccoons, *Procyon lotor*, in Black Rock Forest, NY. Senior Thesis, Columbia University.
- Griffin, K.L., O.R. Anderson, M.D. Gastrich, J.D. Lewis, G. Lin, W.S.F. Schuster, J.R. Seemann, D.T. Tissue, M.H. Turnbull and D. Whitehead. 2001. Plant growth in elevated CO₂ alters mitochondrial number and chloroplast fine structure. *Proceedings of the National Academy of Sciences* 98: 2473-2478.
- Hoffman, E. 2001. Hemlock wooly adelgid in Black Rock Forest. Senior Thesis, Department of Environmental Science, Barnard College.
- Madad, A. 2001 Analysis of heating the Black Rock Forest visitor center between November and March (2000-2001). Senior Thesis, Barnard College.
- Mates-Muchin, J.T., J.D. Lewis and W.S.F. Schuster. 2001. Effects of stand composition on changes in productivity associated with hemlock decline. *Supplement to the Bulletin of the Ecological Society of America* 82(3).
- Modi, P. 2001. Ground source geothermal power systems: How well do they work? Senior Thesis, Department of Environmental Science, Barnard College, 28 p.
- Nagel, J. 2001. Energy and investment in leaves of red maple and co-occurring oaks at sites differing in soil moisture availability. MS Thesis, Lamont-Doherty Earth Observatory of Columbia University.
- Nagel, J.M., and K.L. Griffin. 2001. Construction cost and invasive potential: Comparing *Lythrum salicaria* (Lythraceae) with co-occurring native species along pond banks. *American Journal of Botany* 88: 2252-2258.

- Nagel, J.M., K.L. Griffin and W.S.F. Schuster. 2001. Leaf energy and resource investment of *Acer rubrum* and *Quercus* spp. within a forested watershed. Supplement to the Bulletin of the Ecological Society of America 82(3).
- Ovtsharenko, V. 2001. Sequence analysis of 16S and 28S rRNA genes as a tool for resolving the phylogeny of ground spiders (Araneae: Gnaphosidae) West Virginia Academy of Science, V. 73.
- Pederson, N., G. Jacoby, E. Cook, D. Peteet and K.L. Griffin. 2001. Dendrochronological investigations of boreal and temperate tree species in the Hudson Valley. Association of American Geographers 97th Annual Meeting, February 28 – March 3, 2001, New York, NY.
- Perz, J.F., and S.M. Le Blancq. 2001. *Cryptosporidium parvum* infection involving novel genotypes in wildlife from lower New York State. Applied and Environmental Microbiology 67(3): 1154-1162.
- Perz, J.F., T.W. Wu and S.M. Le Blancq. 2001. Multilocus genotypic analysis of *Cryptosporidium* in wildlife and humans in New York, USA.
- Schuster, W.S.F. 2001. Changes in tree species composition over seven decades (1930-2000) in an aggrading deciduous forest. Abstract, Annual Meeting of the Ecological Society of America.
- Schuster, W.S.F. (ed.). 2001. Second Black Rock Forest Research Symposium: Talks titles and abstracts.
- Turnbull, M.H., D. Whitehead, D.T. Tissue, W.S.F. Schuster, K.J. Brown and K.L. Griffin. 2001. Responses of leaf respiration to temperature and leaf characteristics in three deciduous tree species vary with site water availability. Tree Physiology 21: 571-578.
- Turnbull, M.H., D. Whitehead, D.T. Tissue, W.S.F. Schuster, K.J. Brown and K.L. Griffin. 2001. Photosynthesis and respiration characteristics in canopies of three deciduous tree species differ in response to soil moisture. IUFRO Workshop on Canopy Processes.
- Turner, G.D, J.D. Lewis and W.S.F. Schuster. 2001. Northern red oak (*Quercus rubra* L.) seedling response to community ectomycorrhizal diversity in declining eastern hemlock (*Tsuga canadensis*) stands. Supplement to the Bulletin of the Ecological Society of America 82(3).
- Walls, S.C., and M.G. Williams. 2001. The effect of community composition on persistence of prey with their predators in an assemblage of pond-breeding amphibians. Oecologia 128: 134-141.
- Wolf, Z. 2001. Carbon storage in temperate forests: the role of biodiversity and functional evenness. Poster, Consortium Day 2001 presentation.
- Wright, A., R. Goodman and M.E. Gompper. 2001. Seasonal social den use in the raccoon, *Procyon lotor*. Abstract, 57th Annual Meeting of the Northeast Fish and Wildlife Conference, Saratoga Springs, NY, April 2001.

2000

- Ballantyne, J. 2000. Bambi is destroying our forests: a case study in vegetation regeneration following a clear-cut. Senior Thesis, Department of Environmental Science, Barnard College.
- Barringer, K., and S. Clements. 2000. Sixty years of floristic change at the Black Rock Forest, Cornwall, New York. Internal report, Brooklyn Botanic Garden, 12 pgs.
- Bongaarts, K., and D.E. Karrmann. 2000. Assessment of eastern painted turtle population in an artificial pond. Abstracts Northeast Natural History Conference VI, New York State Museum Circular 62: 26.

- Bossewitch, T.Z. 2000. The heat is on: geothermal heating and cooling systems. Senior Thesis, Department of Environmental Science, Barnard College, 28 p.
- Brady, J.F. 2000. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 10 p.
- Brown, K.J., K.L. Griffin and V. Engel. 2000. Seasonal and topographic variation in water availability: implications for carbon and nitrogen cycling in the Cascade Brook watershed of Black Rock Forest. BRF Small Grants Final Report.
- Brown, K.J., W.S.F. Schuster, J. Simpson and K.L. Griffin. 2000. A research overview of Black Rock Forest, NY. Northeastern Ecosystems Research Cooperative- Forest Sensitivity Workshop. United States Forest Service, Portsmouth, NH.
- Danoff-Burg, J.A. 2000. Summer Ecosystem Experiences for Undergraduates Online Introductory Ecology Textbook.
- Danoff-Burg, J.A. 2000. Why did the beetle not cross the road?: Linear barriers, habitat fragmentation, and carrion beetles. Poster, Entomological Society of America Meeting, Montreal, Canada, December 2000.
- Engel, V., M. Stieglitz, M. Williams and K. Griffin. 2000. Regulation of watershed hydrology by plant water-relations and topographic controls. Abstract, American Geophysical Union, San Francisco.
- Mates-Muchin, J.T., J.D. Lewis and W.S.F. Schuster. 2000. Replacement of eastern hemlock (*Tsuga canadensis*) in the Black Rock Forest in the Hudson Highlands of New York. Supplement to the Bulletin of the Ecological Society of America 81(3).
- Nagel, J. 2000. Construction cost and plant invasibility- Comparing purple loosestrife (*Lythrum salicaria*) with its native neighbors along artificial ponds. MS Thesis, Lamont-Doherty Earth Observatory of Columbia University.
- Nagel, J.M., and K.L. Griffin. 2000. Construction cost and plant invasiveness: Comparing purple loosestrife (*Lythrum salicaria*) with its noninvasive neighbors along disturbed ponds. Supplement to the Bulletin of the Ecological Society of America 81(3).
- Ovtsharenko, V.I. 2000. The study of spiders. Seminars on Science. CD, American Museum of Natural History, New York.
- Phillips, J.G. 2000. Estimation of canopy storage capacity as a function of leaf area index for use in modeling rainfall interception. Journal of Hydrology.
- Shestakovich, N. 2000. The heat is rising: Exploring geothermal resources at the Black Rock Forest Preserve. Senior Thesis, Department of Environmental Science, Barnard College, 30 p.
- Tanasevitch, A. 2000. Spiders of Black Rock Forest. 2000 Internal Report, 45 p.
- Turnbull, M., D. Whitehead, D. Tissue, W.S.F. Schuster, K. Brown and K.L. Griffin. 2000. Photosynthesis and respiration characteristics in canopies of three deciduous tree species vary with site water availability. Joint Annual Meeting of the Australian and New Zealand Societies of Plant Physiology, Wellington, New Zealand.
- Watt, L. 2000. Soils in a hemlock-hardwood watershed at Black Rock Forest in the Hudson Highlands, NY. Undergraduate Thesis, Northland College.
- Wiljanen, M. 2000. A three dimensional GIS model for a forest preserve in the Hudson Highlands. Abstract, North American Cartographic Information Society, Annual Conference, Knoxville, TN.

1999

- Brady, J.F. 1999. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 10 p.

- Chae, Y. 1999. Biodiversity of vagile arthropods and forest succession. Senior Thesis, Dept. of Earth and Environmental Sciences, Columbia University.
- Chin, M. 1999. How many top carnivores can Black Rock Forest support? Senior Thesis, Department of Environmental Science, Barnard College.
- Cohen, J. 1999. Sustainability. Black Rock Forest Paper No. 32. Cornwall, NY. 4 p.
- Grimaldi, D., and T. Nguyen. 1999. Monograph on the spittlebug flies, Genus *Gladochaeta* (Diptera: Drosophilidae: Cladochaetini). American Museum of Natural History Bulletin No. 241, New York.
- Hahn, W. 1999. Floristic inventory and development of monitoring programs for rare and invasive plant species at Black Rock Forest. BRF grant report.
- Hasan, F. 1999. Reconstructing past environmental conditions from diatom abundance in lake sediments at Black Rock Forest, Orange County, New York. Senior Thesis, Department of Environmental Science, Barnard College.
- Jensen, T.E., and W.A. Corpe. 1999. The study of enigmatic microbial communities. Book chapter in: Enigmatic microorganisms and life in extreme environments. Seckbach, J., (ed.), Kluwer Academic Publishers, the Netherlands.
- Kastens, K.A, W.S.F. Schuster and A. Kimple, 1999. Lessons from the digital library of the Black Rock Forest. EOS Transactions, AGU Vol. 80, No. 46.
- Le Blancq, S.M., and J.F. Perz. 1999. *Cryptosporidium* spp. systematics and water borne challenges in public health. EPA Office of Water, Office of Science and Technology, Washington, D.C.
- Maher, N. 1999. "A very pleasant place to build a town on": an environmental history of land preservation in New York's Hudson Highlands. Hudson Valley Regional Review 16(2): 21-39.
- Nichols, J. 1999. Dry deposition estimates of nitrate, sulfate and chloride based on throughfall measurements at Black Rock Forest. Lamont-Doherty Earth Observatory of Columbia University, unpublished manuscript.
- Patel, A. 1999. Strategies for thermal tolerance developed by Biosphere 2 plants and Black Rock Forest plants in the advent of global climate change. Senior Thesis, Department of Environmental Science, Barnard College.
- Perz, J.F. 1999. The epidemiology at *Cryptosporidium* infection: analyses of the roles of drinking water and wildlife. Doctor of Public Health Thesis, Columbia University.
- Vidor, C. 1999. An index of winter severity for the overwintering deer population at Black Rock Forest. Senior Thesis, Department of Environmental Sciences, Barnard College.
- White, M., and W.S.F. Schuster. 1999. Long term carbon storage in Black Rock Forest: Conversion of historical data to modern units. BRF internal report, 5 p.
- Wiljanen, M. 1999. GIS at Black Rock Forest. Museum of the Hudson Highlands lecture, Cornwall-on-Hudson, N.Y.
- Williamson, A. 1999. Analyses of dissolved organic nitrogen in forested and estuarine ecosystems: Black Rock Forest and Hudson River. Senior Thesis, Department of Environmental Sciences, Barnard College

1998

- Aengenheyster, K. 1998. Estimating population structure in two species of turtle using mark and recapture methods. Senior Thesis, Department of Earth and Environmental Sciences, Columbia University.
- Agyarko, A., J. Danoff-Burg, K. Pease and J. Ballantyne. 1998. Arthropod biodiversity in succession: separating the effects of litter depth and composition. Senior Thesis, Department of Biology, Barnard College.

- Ashton, I. 1998. The West Point temperature record and volcanic forcing. Senior Thesis, Department of Earth and Environmental Sciences, Columbia University.
- Barringer, K., and S. Clemants. 1998. Checklist of the vascular plants of Black Rock Forest. Black Rock Forest report to accompany BRF Herbarium, 50 p.
- Berger, J. 1998. Effects of clear-cutting and white-tailed deer herbivory on soil and litter arthropods at the Black Rock Forest, NY. Senior Thesis, Department of Environmental Sciences, Barnard College.
- Brady, J.F. 1998. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 10 p.
- Cannella, J. 1998. Observed carbon and biomass trends within the long term tree growth plots of the Black Rock Forest. BRF internal report, St. Lawrence University, 7 p.
- Chae, Y. 1999. Biodiversity of vagile arthropods and forest succession. Annual Meeting of the Entomological Society of America, November 1998, Las Vegas, NV.
- Danoff-Burg, J.A. 1998. Aerial arthropod diversity and forest succession. Poster, Entomology Society of America, November 1998, Las Vegas, NV.
- Danoff-Burg, J.A. 1998. Arthropod biodiversity in succession: separating the effects of litter depth and composition. Poster, Entomology Society of America, November 1998, Las Vegas, NV.
- Danoff-Burg, J.A. 1998. Roads, habitat fragmentation, and beetle dispersal. Poster, Entomology Society of America, November 1998, Las Vegas, NV.
- Danoff-Burg, J.A. 1998. Species diversity, trophic redundancy, and community stability. Poster, Entomology Society of America, November 1998, Las Vegas, NV.
- Danoff-Burg, J.A., S. Bird and J. Berger. 1998. Deer exclusion enhances predatory arthropod biodiversity. Poster, Annual Meeting of the Entomological Society of America, November 1998, Las Vegas, NV.
- Ford, R.E. 1998. The biology of an invasive plant species, *Phragmites australis*. Senior Thesis, Department of Environmental Sciences, Barnard College.
- Gracey, S. 1998. The effects of traffic density on biodiversity in Black Rock Forest. Senior Thesis, Biology Department Columbia University, 28 pp.
- Ho, D.T., P. Schlosser, W.M. Smethie, Jr. and H.J. Simpson. 1998. Variability in atmospheric chlorofluorocarbons (CCl₃F and CCl₂F₂) near a large urban area: implications for groundwater dating. Environ. Sci. Technol. 32: 2377-2382.
- Jennings, K. 1998. Paleomagnetic dating of Late Pleistocene vegetation and climate recorded in sediment from Sutherland Pond, Black Rock Forest, Orange County, New York. Senior Thesis, Department of Environmental Sciences, Barnard College, 124 p.
- Kastens, K.A., B. Blumenthal and A. Kimple. 1998. What does it take to make real data useful in pre-graduate school education? A case study using environmental sensor data from the Black Rock Forest, NY. Proceedings of the American Geophysical Union, spring 1998, Boston Massachusetts, p. S13.
- Kroenke, A.E., R.F. Bopp, D.A. Chaky, S.N. Chillrud, E. Shuster, F.D. Estabrooks and J. Swart. 1998. Atmospheric deposition and fluxes of mercury in remote and urban areas of the Hudson River Basin. EOS, Transactions of the American Geophysical Union 79(17): S86.
- McDonald, M.M., and J. Danoff-Burg. 1998. The effects of roads on arthropod dispersal ability. Abstract, Annual Meeting of the National Entomological Society of America, November 1998, Las Vegas, NV.
- Paek, W.L. 1998. Organic carbon in soils from Black Rock Forest, Cornwall, New York. Senior Thesis, Department of Environmental Sciences, Barnard College, 26 p.

- Schuster, W.S.F. 1998. Our forests and the global carbon cycle. Earth Matters, Fall 1998, pp. 6-7, Columbia University.
- Tobin, M., and M. Stute. 1998. Residence times of fractured rock groundwater flow systems at Black Rock Forest. EOS, Transactions of the American Geophysical Union 79 (17): S8
- Weber, G. 1998. Microclimatic effects on spring ephemeral flower species at Black Rock Forest in the Hudson Highlands, NY. Senior Thesis, Department of Environmental Sciences, Barnard College, 62 p.
- Winter, Steven (assoc.). 1998. Computer-assisted energy simulation of the Black Rock Forest center for science and education. Internal report. 50 Washington St., Norwalk, CT.
- Zhang, S. 1998. The development of sampling techniques for pore waters in lake sediments. Senior Thesis, Department of Environmental Sciences, Barnard College.

1997

- Bower, P. 1997. Stream-gauging stations for research at Black Rock Forest. BRF grant report.
- Brady, J.F. 1997. Black Rock Forest Consortium white-tailed deer management. BRF internal report, 10 p.
- Caldwell, J. 1997. Students becoming scientists. BRF grant report, Newburgh School District.
- DeMatteis, M. (ed). 1997. Black Rock Forest: of bugs and biodiversity: lessons of the forest. Rotunda Magazine, American Museum of Natural History, July/August 97, 22(7): 5.
- DeWitt, K. 1997. Inter-annual rainfall variability and hardwood growth in Black Rock Forest: comparing tree-rings and climate model results for the chestnut oak. Senior Thesis, Department of Environmental Sciences, Barnard College.
- Farrell, D. 1997. The diversity and species composition of woody plant species in a managed forest: A study of treatment effects in Black Rock Forest after 65 years. Senior Thesis, Department of Earth and Environmental Sciences, Columbia University, 142 p.
- Leger, A. 1997. Pressure and temperature conditions 1000 million years ago in and around Black Rock Forest, Cornwall, New York. BRF Small Grants Final Report.
- Liu, M. 1997. Chemistry and residence time of groundwater in Black Rock Forest springs and wells. Senior Thesis, Department of Environmental Sciences Barnard College.
- Maenza-Gmelch, T.E. 1997a. Holocene vegetation, climate, and fire history of the Hudson Highlands, southeastern New York, USA. The Holocene 7(1): 25-37.
- Maenza-Gmelch, T.E. 1997b. Late-glacial - early Holocene vegetation, climate, and fire at Sutherland Pond, Hudson Highlands, southern New York, USA. Canadian Journal of Botany 75: 431-439.
- Maenza-Gmelch, T.E. 1997c. Vegetation, climate, and fire during the late glacial-Holocene transition at Spruce Pond, Hudson Highlands, southern New York, USA. Journal of Quaternary Science 12: 15-24.
- McKinsey, K. 1997. Effects of pond acidity levels on the distribution of turtle populations (*Chrysemys picta* and *Chelydra serpentina*), at Black Rock Forest, NY. MS Thesis, Earth and Environmental Sciences, Columbia University.
- McKinsey, K., and C.J. Raxworthy. 1997. Effects of pond acidity levels on turtle populations at Black Rock Forest, NY. BRF grant report.
- Simpson, H.J. 1997. Trends in precipitation chemistry at West Point, NY. Internal report, Lamont-Doherty Earth Observatory of Columbia University.
- Simpson, H.J. 1997. Trends in dissolved chloride, sulfate and nitrate in Cascade and Canterbury Brooks at Black Rock Forest. Internal report, Lamont-Doherty Earth Observatory of Columbia University.

Tobin, M., M. Stute and M. Liu. 1997. $^3\text{H}/^3\text{He}$ dating of groundwater in fractured rock at Black Rock Forest, NY. Abstract, NSF GRT-Trainee Meeting, October 26-28, 1997, Washington, DC.

1996

- Brady, J.F. 1996. Black Rock Forest deer population management, 1985-1996. Black Rock Forest report, 65 p.
- Caldwell, J. 1996. Black Rock Forest resource repository. BRF grant report, Newburgh Magnet Middle School.
- Corpe, W.A., and T.E. Jensen. 1996. The diversity of bacteria, eukaryotic cells and viruses in an oligotrophic lake. *Applied Microbiology and Biotechnology* 46: 622-630.
- Goldberg, J., H. Gonzalez, T.E. Jensen and W.A. Corpe. 1996a. Quantitative analyses of the elemental composition of polyphosphate bodies in several bacteria. Abstracts of Annual Meeting of Amer. Society for Microbiology.
- Goldberg, J., H. Gonzalez, T.E. Jensen and W.A. Corpe. 1996b. Quantitative elemental analysis of bacterial polyphosphate bodies using scanning transmission electron microscopy and energy-dispersive X-ray spectroscopy. *Proc. 54th Ann. Meeting Microscopy Soc. America*, San Francisco Press, CA, pp. 802-803.
- Jeselsohn, A.M. 1996. An analysis of weather patterns along the lower Hudson Valley. Senior Thesis, Department of Environmental Sciences, Barnard College, Columbia University, 125 p.
- Kamlet, J. 1996. The white-tailed deer of Black Rock Forest. Teaching Manual. Cornwall Central School District.
- Webster, J. and A. Leger. 1996.. Investigation of chlorine-rich minerals associated with magnetite concentrations at Black Rock Forest, Cornwall, NY. BRF grant report, American Museum of Natural History.
- Leger, A., C. Rebert and J. Webster. 1996. Cl-rich biotite and amphibole From Black Rock Forest, Cornwall, New York. *American Mineralogist* 81: 495-504.
- Li, Z.-h, P.D. Matthews, B. Burr and E.T. Wurtzel. 1996. Cloning and characterization of a maize cDNA encoding phytoene desaturase, an enzyme of the carotenoid biosynthetic pathway. *Plant Mol. Biology*.
- Maenza-Gmelch, T.E. 1996a. Post-settlement vegetation and fire in the Hudson Highlands, southeastern New York, USA. Abstracts, 81st Annual Ecological Society of America Meeting, p. 279, Providence, RI.
- Maenza-Gmelch, T.E. 1996b. Early and middle Holocene forest composition in the Hudson Highlands, southeastern New York, USA. AMOUA Abstracts, 14th Biennial Meeting, p. 176. Northern Arizona University, Flagstaff, AZ.
- Moed, A. 1996. Sensurround. *Metropolis Magazine*, September 1996, pp. 53-57.
- Murray, T. 1996. The Storm King controversy: an experience in community problem solving for intermediate students; Facilitator's manual. School Curriculum, Ulster County BOCES.
- Muschamp, H. 1996. In cyberspace, seeing the forest for the trees. *New York Times Architecture Section*, February 25, 1996.
- Quigley, M.F., and W.J. Platt. 1996. Structure and pattern in temperate seasonal forests. *Vegetatio* 123: 117-138.
- Schuster, W.S.F. 1996. Differences in carbon storage rates over time on long-term (65-year) forest plots in southeastern New York. Abstract, 1996 Annual Meeting of the Ecological Society of America.

- Simpson, H.J. 1996. Monitoring of rain and stream chemistry at Black Rock Forest. Year 4 report: trends in precipitation chemistry at West Point, NY and trends in dissolved chloride, sulfate and nitrate in Cascade and Canterbury Brooks at Black Rock Forest. Lamont-Doherty Earth Observatory of Columbia University.
- Walls, S.C. 1996. The assembly of communities of pond-breeding amphibians: does high species richness promote coexistence between predators and their prey? Abstract, Annual Meeting of the American Herpetological Society.
- Webster, J. and A. Leger. 1996. Investigation of chlorine-rich minerals associated with magnetite concentrations at Black Rock Forest, Cornwall, NY. BRF grant report, American Museum of Natural History.

1995

- Brady, J.F. 1995. Black Rock Forest Consortium white-tailed deer management, 1995. Black Rock Forest report, 10 p.
- Brady, J.F. 1995. Black Rock Forest Deer Population Management Report 1984-1994. Black Rock Forest report, 58 p.
- Clark, J.F., P. Schlosser, R. Wanninkhof, H.J. Simpson, W.S.F. Schuster and D.T. Ho. 1995. Gas transfer velocities for SF₆ and ³He in a small pond at low wind speeds. *Geophysical Research* 22(2): 93-96.
- Kantzos, B. 1995. Black Rock Forest: an examination of chloride and sulfate. Senior Thesis, Department of Environmental Sciences, Barnard College, Columbia University, 60 p.
- Kipping, K. 1995. Black Rock Forest and the global carbon cycle: rates of carbon sequestration from 1931 - 1994. Senior Thesis, Department of Environmental Sciences, Barnard College, Columbia University, 44 p.
- Leger, A., C. Rebert and J. Webster. 1995. Cl-rich biotite and amphibole from Black Rock Forest, Cornwall, New York. Abstract, Proceedings of the Annual Meeting of the American Geophysical Union, Baltimore, MD, June 1995.
- Maenza-Gmelch, T.E. 1995a. High-resolution late-Quaternary biostratigraphic records from southeastern New York State, USA: paleoenvironmental implications. Ph.D. Thesis. New York University. 106 p.
- Maenza-Gmelch, T.E. 1995b. Forest, climate and fire history of the Hudson Highlands, southeast New York during the last >12,500 Years. *Trailside Museum and Zoo Botanical Papers*, B-2/95, Palisades Interstate Park Commission, Bear Mountain, New York.
- Maenza-Gmelch, T.E. 1995c. Forest, climate and fire history of the Hudson Highlands, southeast New York during the last >12,500 Radiocarbon Years (BP). Poster, Department of Environmental Science, Barnard College.
- Maenza-Gmelch, T.E. 1995d. The role of fire in the development and maintenance of *Quercus* forest in the Hudson Highlands, lower Hudson Valley, southeastern New York. Abstracts, 80th Annual Ecological Society of America Meeting, p 164. Snowbird, Utah.
- Maher, N. 1995. Black Rock's hidden past: a history of land use in Black Rock Forest from the pre-colonial period to 1927. BRF grant report, New York University, 80 p.
- Mellett, J.S. 1995. Profiling of ponds and bogs using ground-penetrating radar. *Journal of Paleolimnology* 14: 233-240.
- Phillips, J., and F. Tubiello. 1995. Preliminary estimate of evapotranspiration from Black Rock Forest, 1994. Internal report, Global Systems Institute of Columbia University and Goddard Institute of Space Studies. 11 p.
- Simpson, H.J. 1995. Monitoring of rain and stream chemistry at Black Rock Forest. Year 3 report. Lamont-Doherty Earth Observatory of Columbia University.

- Tang, M., T.E. Jensen and W.A. Corpe. 1995. The occurrence of polyphosphate bodies in polyhedral bodies (carboxysomes) in *Synechococcus leopoliensis* (Cyanophyceae). *Microbios* 81: 59-66.
- Thetford, R.D., E.R. Cook and R. D'Arrigo. 1995. Development of tree-ring records from the Black Rock Forest. BRF grant report, Tree-Ring Laboratory, Lamont-Doherty Earth Observatory of Columbia University.
- Wurtzel, E.T. 1995a. Carotenoid expression in maize and rice: a comparison. Abstract, Gordon Research Conference on Carotenoids, Oxnard, CA, Feb. 5-9.
- Wurtzel, E.T. 1995b. Regulation of carotenoid biosynthesis in maize endosperm. Abstract, Maize Genetics Conference, March 16-19, Asilomar, CA.

1994

- Barringer, K. 1994. The terrestrial vegetation of Black Rock Forest: a prototype. Internal report, Brooklyn Botanic Garden, 43 p.
- Baxter, M., and T.E. Jensen. 1994. Cultural conditions which favor polyphosphate body formation in *Staphylococcus aureus*. Proceedings of the Annual Meeting American Society of Microbiologists. Las Vegas, NV. May, 1994.
- Brady, J.F. 1994. Black Rock Forest Consortium white-tailed deer management, 1994. Black Rock Forest report, 9 p.
- Corpe, W.A., and T.E. Jensen. 1994a. An analytical electron microscope (TEM) study of metal content of microbes and inorganic particles in aquatic environments. Abstract, Northeastern Microbiologists, June 22-24, Minnbrook, Blue Mt. Lake, NY.
- Corpe, W.A., and T.E. Jensen. 1994b. Morphological diversity of microorganisms in activated sludge. Proceedings Annual Meeting of Society for Industrial Microbiology. Boston, MA. August 1-5, 1994.
- Gonzalez, H., and T.E. Jensen. 1994. Nickel uptake by *Staphylococcus aureus*: a quantitative energy dispersive x-ray (TEM-STEM) analysis. Abstract, Annual MBRs Symposium, Hilton Head, South Carolina, Dec. 1994.
- Gresko, M.A. 1994. An investigation into the chloride ion concentrations of four brooks within Black Rock Forest over a six-month period, as an indicator of chemical concentration increases of acid deposition. Internal Report, Columbia University Research Fellow Program. 9 p.
- Harrison, K.G. 1994. The impact of CO₂ fertilization, changing land use, and N-deposition on soil carbon storage. PhD Thesis, Columbia University. 134 pgs.
- Jensen, T.E., and W.A. Corpe. 1994a. Elemental analysis of non-living particles in picoplankton fractions from oligotrophic lake water. *Water Research* 28: 901-907.
- Jensen, T.E., and W.A. Corpe. 1994b. Picoplanktonic cyanophytes from three small lakes. *Arch. Hydrobiol. Suppl. Algological Studies* 75: 149-156.
- Jensen, T.E., and W.A. Corpe. 1994c. The electron microscope in the in-situ study of microorganisms in several aquatic environments. Abstract, Northeastern Environmental Symposium, Meadowlands Conv. Center, Secaucus, N.J., Dec. 6-8.
- Jensen, T.E., and W.A. Corpe. 1994d. An ultra-structural investigation of picoplankton from the lakes in Black Rock Forest. Lehman College and Columbia University, BRF grant final report.
- Jones, E., and T.E. Jensen. 1994. A morphometric analysis of structural responses in *Anabaena doliolum* to aluminum at selected pH levels. Proc. of Annual Meeting American Society for Microbiology. Las Vegas, NV. May 1994.

- Maenza-Gmelch, T.E. 1994. Paleoecology of the late-glacial/Holocene transition in the Hudson Highlands, New York, USA. AMQUA Abstracts of the 13th Biennial Meeting, p.124. University of Minnesota, MN.
- Schuster, W.S.F. 1994. Environmental research at Black Rock Forest. Proceedings of Symposium on Hudson River Research, Monitoring, and Information. The Hudson River Environmental Society, Marist College, Poughkeepsie, NY.
- Simpson, H.J. 1994. Monitoring of rain and stream chemistry at Black Rock Forest, Year 2 report. Lamont-Doherty Earth Observatory of Columbia University.
- Tang, M. 1994. Ultrastructural changes in *Synechococcus leopoliensis* produced by cadmium as influenced by pH. Ph.D. Thesis, Lehman College, City University of New York, NY.

1993

- Barringer, K., and S. Clemants. 1993. Checklist of the plants of Black Rock Forest, Black Rock Forest report to accompany BRF Herbarium, 53 p.
- Brady, J.F. 1993. Black Rock Forest Consortium white-tailed deer management, 1993. Black Rock Forest report, 6 p.
- Calquhoun, S., and T.E. Jensen. 1993. The uptake of Al, Pb, and Hg by *Staphylococcus aureus*. Abstract, Annual MBRS Meeting, Atlanta, GA.
- Corpe, W.A., and T.E. Jensen. 1993. Metal content of microbes and inorganic particles in natural aquatic environments: an analytical electron microscopic study. Abstract, Institute of Gas, Oil and Environmental Biotechnology, Nov. 29 - Dec. 1, Colorado Springs, CO.
- Jensen, T.E., and W.A. Corpe. 1993. Elemental composition of the polyphosphate bodies in microbial cells from a small lake. Arch. Hydrobiol. 127(4): 285-293.
- Lieberman, S., K. Lieberman, W.A. Corpe and T.E. Jensen. 1993. Comparative study of the elemental composition of polyphosphate bodies in bacteria and yeast cultures. Annual meeting, Amer. Soc. Microbiol., Atlanta, Georgia.
- Murray, T. 1993. The Black Rock Forest Project: creating connections in the living laboratory. Holistic Education Review 6(3): 44-55.
- Rachlin, J.W., and A. Pappantoniou. 1993. Populations of *Enneachanthus gloriosus* not *E. obesus* are in the lakes of Black Rock Forest, Orange Co., NY. Abstract, 49th Annual Northeast Fish and Wildlife Conference, April 18-21, 1993, Atlantic City, NJ.
- Shimoda, M. 1993. Visits to nine wetlands in northeastern United States. Bulletin Water Plant Society, Japan 49: 5-11.
- Wurtzel, E.T. 1993. Molecular genetics of maize carotenoid biosynthesis. Abstract, New York Area Plant Molecular Biology Symposium, Jan. 23, 1993, New York University, NY.

1992

- Brady, J.F. 1992. Black Rock Forest Consortium white-tailed deer management, 1992. Black Rock Forest report, 8 p.
- Corpe, W.A., and T.E. Jensen. 1992. An electron microscopic study of picoplanktonic organisms from a small lake. Microbial Ecology 24: 181-197.
- Grimaldi, D. 1992. Systematics and life histories of fungus gnats. Black Rock Forest grant report, American Museum of Natural History, NY.
- Grimaldi, D., A.C. James and J. Jaenike. 1992. Systematics and modes of reproductive isolation in the holarctic *Drosophila testacea* species group (Diptera: Drosophilidae). Ann. Entomological Society of America 85(6): 671-685.
- Kozower, C. 1992. White-tailed deer ecology and management at Black Rock Forest. Senior Thesis, Barnard College.

- Moore, K.E.B., and C.G. Jones. 1992. Estimating field hatch of gypsy moth (Lepidoptera: Lymantriidae). *Environmental Entomology* 21(2): 276-280.
- Sveck, S. 1992. Black Rock Forest. *The Times Herald Record, Sunday Magazine* November 15, 1992. Middletown, NY.
- Tang, M., T.E. Jensen and W.A. Corpe. 1992. The toxicological response of *Synechococcus leopoliensis* (Cyanophyceae) to cadmium. A morphometric and x-ray microanalysis study. Annual Meeting Amer. Soc. Microbiol., New Orleans, LA.
- Wurtzel, E.T. 1992. Use of a Ds chromosome-breaking element to examine maize Vp5 expression. *Journal of Heredity* 83(2): 109-113.

1991

- Brady, J.F. 1991. Black Rock Forest Consortium white-tailed deer management, 1990 and 1991. Black Rock Forest report, 8 p.
- Chemych, A., and C. Eisenberg. 1991. Magnetite ore deposits and related rocks in the Black Rock Forest, Cornwall, New York. Black Rock Forest grant report, Hunter College and American Museum of Natural History.
- Matthews, P., and E.T. Wurtzel. 1991. Molecular genetics of maize carotenoid biosynthesis. New York Area Plant Molecular Biology Symposium, Waksman Institute, Rutgers University, NJ.
- Quigley, M.F. 1991. Understory composition and change in temperate and tropical seasonal hardwood forest. Ph.D. Thesis, Louisiana State University. 20 p.
- Schlessman, M. 1991. Size gender and sex change in dwarf ginseng *Panax trifolium* (Araliaceae). *Oecologia* 87(4): 588-595.

1990

- Jones, C.G., M.K. Steininger, P. Luciano and K.E.B. Moore. 1990. Estimating gypsy moth (Lepidoptera: Lymantriidae) fecundity in the field: comparison of data from North America and Sardinia, Italy. *Environmental Entomology* 19(1): 108-110.
- Schlessman, M. 1990. Phenotypic gender in sex changing dwarf ginseng *Panax trifolium* (Araliaceae). *American Journal of Botany* 77(9): 1125-1131.
- Wallner, W.E., C.G. Jones, J.S. Elkinton and B.L. Parker. 1990. Sampling low-density gypsy moth populations. Proceedings USDA Interagency Gypsy Moth Research Review, NE Forest Experiment Station, General Technical Report NE-146: 40-44.

1989

- Brady, J.F. 1989. Harvard Black Rock Forest white-tailed deer management 1984 -1988. Black Rock Forest report, 33 p.
- Brady, J.F. 1989. Harvard Black Rock Forest white-tailed deer management, 1989. Black Rock Forest report, 5 p.

1988

- Brady, J.F. 1988. Harvard Black Rock Forest white-tailed deer management, 1988. Black Rock Forest report, 1 p.

1987

- Brady, J.F. 1987. Harvard Black Rock Forest white-tailed deer management, 1987. Black Rock Forest report, 1 p.
- Kelley, S.L. 1987. Patterns of germination and establishment for striped maple (*Acer pensylvanicum* L.). MA Thesis, Lehman College, City University of New York. 124 p.

- Moore, K.E.B., and C.G. Jones. 1987. Field estimation of fecundity of gypsy moth (Lepidoptera: Lymantriidae). *Environmental Entomology* 16: 165-167.
- Schlessman, M. 1987. Gender modification in North American ginsengs; dichotomous sex choice versus adjustment. *BioScience* 37: 469-475.
- Yost, S.E. 1987. The effect of shade on petiole length in the *Viola fimbriatula-sagittata* complex (Violaceae). *Brittonia* 39: 180-187.

1986

- Becker, A., and R.H. Boyle, 1986. The vulnerability of lakes, ponds, and reservoirs in the Hudson Highlands to acidification. Report to the Hudson River Fishermen's Association, Garrison, NY. 68 p.
- Brady, J.F. 1986. Harvard Black Rock Forest white-tailed deer management, 1986. Black Rock Forest report, 1 p.
- Curtis, L. 1986. Bird population studies on gypsy moth research areas in the Northeast. Entomology Research Laboratory, Plant and Soil Sciences Department, University of Vermont, progress report, 9 p.
- Jones, C.G. 1986. Development of adequate larval and pupal sampling procedures. Pages 18- 29 in Gypsy Moth Research Review Progress Reports, 1985 season, USDA Forest Service, NE Station, Windsor Locks, CT.
- Pijanowska, J. 1986. A report from summer research on zooplankton composition and distribution in the lakes of different pH. Institute of Zoology, University of Warsaw, Poland. 14 p.
- Schlessman, M. 1986. Interpretation of evidence for gender choice in plants. *American Naturalist* 128: 416-420.

1985

- Ahrens, E.H. Jr., and W.S. George, Jr. 1985. The Future of the Black Rock Forest. The Ernest G. Stillman Forest Committee. Black Rock Forest Internal Report.
- Brady, J.F. 1985. Harvard Black Rock Forest white-tailed deer management, 1985. Black Rock Forest report, 1 p.
- Friday, K.S., and J.B. Friday. 1985. Black Rock Forest inventory. Harvard Black Rock Forest internal report.
- Jones, C.G. 1985. Quantifying habitat-differentiated gypsy moth population dynamics at low densities. Pages 20-24 in Gypsy Moth Research Review Progress Reports, 1984 season, USDA Forest Service, NE Station, Windsor Locks, CT.

1984

- Brady, J.F. 1984. Harvard Black Rock Forest white-tailed deer management, 1984. Black Rock Forest report, 4 p.
- Lorimer, C. 1984. Development of the red maple understory in northeastern oak forests. *Forest Science* 30: 3-22.
- Trow, G.W.S. 1984. Annals of discourse, the Harvard Black Rock Forest. *The New Yorker Magazine* 6/11/84, p. 44-99.
- Yost, S.E. 1984. Habitat partitioning in *Viola sororia* and *V. fimbriatula*. Ph.D. Dissertation, City University of New York. 229 p.

1983

- Karnig, J.J. 1983. One view of clearcutting. Assessment of an oak forest 25 years after cutting the overstory. *Northern Logger* 32(3): 12-42.

Ledig, F.T., R.P. Guries and B.A. Bonefeld. 1983. The relation of growth to heterozygosity in pitch pine. *Evolution* 37: 1227-1238.

1982

Quadro, A.P. 1982. An analysis of production and costs of three small tractors used in fuelwood harvesting in New York State. MS Thesis, State University of New York, College of Environmental Science and Forestry. 124 p.

1981

Karnosky, D.G., and C.G. Jones. 1981. Living with the gypsy moth. *Garden Magazine* 5(3) 6p.

Lorimer, C.G. 1981. Survival and growth of understory trees in oak forest of the Hudson Highlands, New York. *Canadian Journal of Forest Research* 11: 689-695.

1977

Bascietto, J.J. 1977. Seasonal aspects of the ecology and microenvironment of beaver (*Castor canadensis* Kuhl) in New York. MS Thesis, New York University. 62 p.

1975

Harrington, C.A. 1975. Statistical analysis of a soil-site study. MS Thesis. State University of New York Syracuse, NY. 96 p.

Harrington, C.A., and J.J. Karnig. 1975. Growth increase after moderate thinning in a 70 year-old mixed oak stand. Black Rock Forest Paper No. 31. Cornwall Press, Cornwall, NY. 8 p.

1972

Karnig, J.J. 1972. Nitrogen fertilizer increases diameter growth of northern red oak. *Journal of Forestry* 70: 629.

1971

Mitchell, H.L. 1971. Effect of nitrogen fertilizer on the growth rate and certain wood quality characteristics of sawlog size red oak, yellow-poplar, and white ash. Government report, Forest Service Products Laboratory, U.S. Forest Service. 9pgs.

1969

Karnig, J.J., and B.B. Stout. 1969. Diameter growth of northern red oak following understory control. Black Rock Forest Paper No. 30. Cornwall Press, Cornwall, NY. 16 p.

1968

Karnig, J.J., and W.H. Lyford. 1968. Oak mortality and drought in the Hudson Highlands. Black Rock Forest Paper No. 29. Cornwall Press, Cornwall, NY. 13 p.

1966

Karnig, J.J. 1966. Recreation use within the Harvard Black Rock Forest. Black Rock Forest Paper No. 26. Cornwall Press, Cornwall, NY. 11 p.

Stillman, C.W. 1966. The issues in the Storm King controversy. Black Rock Forest Paper No. 27. Cornwall Press, Cornwall, NY. 18 p.

Stillman, C.W. 1966. The price of open space - The need for research. Black Rock Forest Paper No. 28. Cornwall Press, Cornwall, NY. 7 p.

1964

Norbert, E.A. 1964. Assessment of forest floor fuels. MS Thesis, Harvard University. 30 p.

1963

Karnig, J.J. 1963. Chemical control of hardwood sprouts using ammonium thiocyanate crystals. Proceedings of the Northeastern Weed Control Conference, Jan. 9-11, 1963. Vol. 17, 5 p.

1959

Stout, B.B. 1959. Supplemental irrigation of 75-year-old hardwoods. Black Rock Forest Paper No. 25. Cornwall Press, Cornwall, NY. 6 p.

1958

Ross, P. 1958. Microclimatic and vegetational studies in a cold-wet deciduous forest. Black Rock Forest Paper No. 24. Cornwall Press, Cornwall, NY. 89 p.

1956

Stout, B.B. 1956. Studies of the root systems of deciduous trees. Black Rock Forest Bulletin No. 15. Cornwall Press, Cornwall, NY. 45 p.

1949

Stillman, C.W. 1949. Economic relations of the Black Rock Forest. Black Rock Forest Paper No. 23. Cornwall Press, Cornwall, NY. 5 p.

Tryon, H.H., and R.F. Finn. 1949. Twenty-year progress report 1927 - 1948. Black Rock Forest Bulletin No. 14. Cornwall Press, Cornwall, NY. 89 p.

1947

Tryon, H.H., and R.F. Finn. 1947. On obtaining natural hardwood regeneration. Black Rock Forest Paper No. 22. Cornwall Press, Cornwall, NY. 4 p.

1945

Tryon, H.H. 1945. The management of young volunteer hardwood stands. Black Rock Forest Bulletin No. 13. Cornwall Press, Cornwall, NY. 28 p.

1943

Finn, R.F. 1943. The leaching of some plant nutrients following the burning of forest litter. Black Rock Forest Paper No. 21. Cornwall Press, Cornwall, NY. 7 p.

Tryon, H.H. 1943. Practical forestry in the Hudson Highlands. Black Rock Forest Bulletin No. 12. Cornwall Press, Cornwall, NY. 50 p.

1942

Finn, R.F. 1942a. Notes on the resampling of certain fertilized plots. Black Rock Forest Paper No. 16. Cornwall Press, Cornwall, NY. 2 p.

Finn, R.F. 1942b. Mycorrhizal inoculation of soil of low fertility. Black Rock Forest Paper No. 19. Cornwall Press, Cornwall, NY. 2 p.

Finn, R.F., and H.H. Tryon. 1942. The comparative influence of leaf mould and inorganic fertilizers on the growth of red oak. Black Rock Forest Paper No. 17. Cornwall Press, Cornwall, NY. 2 p.

Tryon, H.H., and R.F. Finn. 1942a. Test of chemical control of hardwood sprouts. Black Rock Forest Paper No. 18. Cornwall Press, Cornwall, NY. 2 p.

Tryon, H.H., and R.F. Finn. 1942b. Improvement cuttings in mixed hardwoods. Black Rock Forest Paper No. 20. Cornwall Press, Cornwall, NY. 7 p.

1940

Hardesty, J.S. 1940. Erosion and related land use conditions in the Black Rock Forest. MS Thesis, Harvard University. 40 p.

Tryon, H.H., and R.F. Finn. 1940. A compact precipitation record. Journal of Forestry 38(8): 644-645.

1939

Mitchell, H.L. 1939a. Preliminary notes on a method for the prevention and control of white grub infestations in nursery soils. Black Rock Forest Paper No. 14. Cornwall Press, Cornwall, NY. 2 p.

Mitchell H.L. 1939b. The growth and nutrition of white pine (*Pinus strobus* L.) seedlings in cultures with varying nitrogen, phosphorus, potassium and calcium. Black Rock Forest Bulletin No. 9. Cornwall Press, Cornwall, NY. 135 p.

Mitchell, H.L., and R.F. Chandler. 1939. The nitrogen nutrition and growth of certain deciduous trees of the northeastern United States. Black Rock Forest Bulletin No. 11. Cornwall Press, Cornwall, NY. 94 p.

Mitchell, H.L., and R.O. Rosendahl. 1939. The relationships between cumulative solar radiation and the dry weight increase of nursery-grown white pine and red pine seedlings. Black Rock Forest Paper No. 13. Cornwall Press, Cornwall, NY. 6 p.

Tryon, H.H. 1939a. Ten-year progress report 1928 - 1938. Black Rock Forest Bulletin No. 10. Cornwall Press, Cornwall, NY. 76 p.

Tryon, H.H. 1939b. A high-duty woodsaw. Black Rock Forest Paper No. 15. Cornwall Press, Cornwall, NY. 3 p.

1938

Denny, C.S. 1938. Glacial geology of the Black Rock Forest. Black Rock Forest Bulletin No. 8. Cornwall Press, Cornwall, NY. 70 p.

Raup, H.M. 1938. Botanical studies in the Black Rock Forest. Black Rock Forest Bulletin No. 7. Cornwall Press, Cornwall, NY. 161 p.

Tryon, H.H. 1938. Hardwood brush disposal in the Hudson Highlands. Black Rock Forest Paper No. 12. Cornwall Press, Cornwall, NY. 5 p.

1937

Hatch, A.B. 1937. The physical basis of mycotrophy in *Pinus*. Black Rock Forest Bulletin No. 6. Cornwall Press, Cornwall, NY. 168 p.

Mitchell, H.L., R.F. Finn and R.O. Rosendahl. 1937. The relation between mycorrhizae and the growth and nutrient absorption of coniferous seedlings in nursery beds. Black Rock Forest Paper No. 10. Cornwall Press, Cornwall, NY. 20 p.

Scholz, H.F. 1937a. Diameter outside bark as an index of bark thickness at breast height for red and chestnut oak. Black Rock Forest Paper No. 8. Cornwall Press, Cornwall, NY. 3 p.

Scholz, H.F. 1937b. The effect of soil texture upon the growth of red and chestnut oaks. Black Rock Forest Paper No. 11. Cornwall Press, Cornwall, NY. 4 p.

Tryon, H.H., and R.F. Finn. 1937a. Cordwood volume table for red oak and red maple in the Hudson Highlands. Black Rock Forest Paper No. 7. Cornwall Press, Cornwall, NY. 2 p.

Tryon, H.H., and R.F. Finn. 1937b. Notes on the terminal growth of coniferous plantations in the Hudson Highlands. Black Rock Forest Paper No. 9. Cornwall Press, Cornwall, NY. 3 p.

1936

Mitchell H.L. 1936a. The effect of varied solar radiation upon the growth, development and nutrient content of white pine seedlings grown under nursery conditions. Black Rock Forest Paper No. 4. Cornwall Press, Cornwall, NY. 7 p.

Mitchell, H.L. 1936b. Trends in the nitrogen, phosphorus, potassium and calcium content of the leaves of some forest trees during the growing season. Black Rock Forest Paper No. 6. Cornwall Press, Cornwall, NY. 17 p.

Mitchell, H.L., and N.W. Hosley. 1936. Differential browsing by deer on plots variously fertilized. Black Rock Forest Paper No. 5. Cornwall Press, Cornwall, NY. 5 p.

1935

Mitchell, H.L. 1935. A method for determining the nutrient needs of shade trees with special reference to phosphorus. Black Rock Forest Paper No. 1. Cornwall Press, Cornwall, NY. 3 p.

Mitchell, H.L., and R.F. Finn. 1935. The relative feeding power of oaks and maples for soil phosphorus. Black Rock Forest Paper No. 2. Cornwall Press, Cornwall, NY. 4 p.

Tryon, H.H., and R.F. Finn. 1935. A chestnut oak volume table for the Hudson Highland region. Black Rock Forest Paper No. 3. Cornwall Press, Cornwall, NY. 1 p.

1934

Mitchell, H.L. 1934. Pot culture tests of forest soil fertility. Black Rock Forest Bulletin No. 5. Cornwall Press, Cornwall, NY. 138 p.

1933

Tryon, H.H. 1933. A portable charcoal kiln. Black Rock Forest Bulletin No. 4. Cornwall Press, Cornwall, NY. 34 p.

Tryon, H.H. 1932. A study of certain coniferous underplantings in the upper Hudson Highlands. Black Rock Forest Bulletin No. 3. Cornwall Press, Cornwall, NY. 27 p.

1931

Scholz, H.F. 1931. Physical properties of the cove soils on the Black Rock Forest. Black Rock Forest Bulletin No. 2. Cornwall Press, Cornwall, NY. 59 p.

1930

Tryon, H.H. 1930. The Black Rock Forest. Black Rock Forest Bulletin No. 1. Cornwall Press, Cornwall, NY. 42 p.

1928

Terrell, C.B., and H. Hubert. 1928. How to attract birds, game and fish to Black Rock Forest, Orange County, New York; report I. Internal report, Oshkosh, WI.