

# ANTHONY W. D'AMATO

Professor

Rubenstein School of Environment and Natural Resources

University of Vermont

204E Aiken Center

Burlington, VT 05405

[awdamato@uvm.edu](mailto:awdamato@uvm.edu)

## EMPHASIS AREA

---

Silviculture and applied forest ecology research focuses on long-term forest stand dynamics, forest management and natural disturbance effects on ecosystem structure and function, modeling forest growth and development, and assessments of silvicultural strategies for conferring adaptation and mitigation potential within the context of global change.

## EDUCATION

---

Ph.D. in Forest Resources (2007) University of Massachusetts, Amherst, MA

*Dissertation:* Structural attributes, disturbance dynamics, and ecosystem properties of old-growth forests in western Massachusetts. Advisors: Drs. David Orwig and Matthew Kelty

M.S. in Forest Science (2002), Oregon State University, Corvallis, OR

*Thesis:* Interference dynamics in mixed red alder/Douglas-fir forests. Advisor: Dr. Klaus Puettmann

B.S. in Forest Ecosystem Science (2000), University of Maine, Orono, ME

## PROFESSIONAL EXPERIENCE

---

Professor—Rubenstein School of Environment and Natural Resources, University of Vermont (September 2018-present)

Director—Forestry Program, Rubenstein School of Environment and Natural Resources, University of Vermont (September 2016-present)

Associate Professor—Rubenstein School of Environment and Natural Resources, University of Vermont (January 2015-present)

Adjunct Professor—Department of Forest Resources, University of Minnesota (2015-present)

Charles Bullard Fellow—Harvard Forest, Harvard University (2014)

Associate Professor—Department of Forest Resources, University of Minnesota (2012-2014)

Assistant Professor—Department of Forest Resources, University of Minnesota (2007-2012)

Postdoctoral Researcher—Dept. Natural Resources Conservation, Univ. of Massachusetts (2007)

Research Assistant—Harvard Forest, Harvard University (2002-2006)

Graduate Research Assistant—Dept. of Forest Science, Oregon State University (2001-2002)

## HONORS & AWARDS

---

Mollie Beattie Young Forester Leadership Award, New England Society of American Foresters (2017)

Marcia Caldwell Award for Outstanding Contributions to the Students of the Rubenstein School of Natural Resources and Environment, University of Vermont (2017)

Minnesota Department of Natural Resources, Division of Forestry, Award of Excellence (2014)  
Council of Graduate Students Outstanding Faculty Award, University of Minnesota (2014)  
Charles Bullard Fellowship in Forest Research, Harvard Forest, Harvard University (2014)  
Distinguished Teaching Award, University of Minnesota (2012)  
Richard C. Newman Art of Teaching Award, University of Minnesota (2011)  
Uncle of Paul Award for contributions to University of Minnesota Forestry Club (2008, 2011)  
Outstanding Academic Achievement in Forestry, University of Massachusetts (2005, 2006)  
Cort Dickson Memorial Forestry Scholarship, Harvard Forest, Harvard University (2005)  
Award for Outstanding Service, University of Massachusetts (2004)

### **PEER-REVIEWED PUBLICATIONS (\*student co-authorship) (126 Total)**

---

- \*Heuss, M., **A. W. D'Amato**, and K. J. Dodds. 2019. Northward expansion of southern pine beetle generates significant alterations to forest structure and composition of globally rare *Pinus rigida* forests. *Forest Ecology and Management* 434:119-130.
- \*Lewandowski, T. E., J. A. Forrester, D. J. Mladenoff, **A. W. D'Amato**, D. S. A. Fassnacht, E. Padley, and K. J. Martin. 2019. Do biological legacies moderate the effects of forest harvesting on soil microbial community composition and soil respiration. *Forest Ecology and Management* 432:298-308.
- Vickers, L. A., W. H. McWilliams, B. O. Knapp, **A. W. D'Amato**, M. R. Saunders, S. R. Shifley, J. M. Kabrick, D. C. Dey, D. R. Larsen, and J. A. Westfall. 2019. Using a tree seedling mortality budget as an indicator of landscape-scale forest regeneration security. *Ecological Indicators* 96:718-727.
- D'Amato, A. W.**, B. J. Palik, R. A. Slesak, G. Edge, C. Matula, and D. R. Bronson. 2018. Evaluating adaptive management options for black ash forests in the face of emerald ash borer invasion. *Forests* 9:348-365.
- Sommerfeld, A., C. Senf, B. Buma, **A. W. D'Amato**, T. Després, I. Díaz-Hormazábal, S. Fraver, L. E. Frelich, Á. G. Gutiérrez, S. J. Hart, B. J. Harvey, H. S. He, T. Hlásny, A. Holz, T. Kitzberger, D. Kulakowski, D. Lindenmayer, A. S. Mori, J. Müller, J. Paritsis, G. L. W. Perry, S. L. Stephens, M. Svoboda, M. G. Turner, T. T. Veblen, and R. Seidl. 2018. Patterns and drivers of recent disturbances across the temperate forest biome. *Nature Communications* 9:4355.
- \*Diamond, J. S., D. L. McLaughlin, R. A. Slesak, **A. W. D'Amato**, and B. J. Palik. 2018. Forested versus herbaceous wetlands: Can management mitigate ecohydrologic regime shifts from invasive emerald ash borer? *Journal of Environmental Management* 222:436-446.
- Ma, W., G. M. Domke, **A. W. D'Amato**, C. W. Woodall, B. F. Walters, and R. K. Deo. 2018. Using matrix models to estimate aboveground forest biomass dynamics in the eastern USA through various combinations of LiDAR, Landsat, and forest inventory data. *Environmental Research Letters* 13:125004.

- Fraver, S., M. J. Ducey, C. W. Woodall, **A. W. D'Amato**, A. M. Milo, and B. J. Palik. 2018. Influence of transect length and downed woody debris abundance on precision of the line-intersect sampling method. *Forest Ecosystems* 5:39.
- \*North, E. A., **A. W. D'Amato**, and M. B. Russell. 2018. Performance metrics for street and park trees in urban forests. *Journal of Forestry* 116:547-554.
- \*Looney, C. E., **A. W. D'Amato**, S. Fraver, B. J. Palik, and L. E. Frelich. 2018. Interspecific competition limits the realized niche of *Fraxinus nigra* along a waterlogging gradient. *Canadian Journal of Forest Research* 48:1292-1301.
- Woodall, C. W., J. A. Westfall, **A. W. D'Amato**, J. R. Foster, and B. F. Walters. 2018. Decadal changes in tree range stability across forests of the eastern U.S. *Forest Ecology and Management* 429:503-510.
- Ma, W., C. W. Woodall, G. M. Domke, **A. W. D'Amato**, and B. F. Walters. 2018. Stand age versus tree diameter as a driver of forest carbon inventory simulations in the northeastern U.S. *Canadian Journal of Forest Research* 48:1135-1147.
- \*Sass, E. M., **A. W. D'Amato**, D. R. Foster, A. Barker Plotkin, S. Fraver, P. K. Schoonmaker, and D. A. Orwig. 2018. Long-term influence of disturbance-generated microsites on forest structural and compositional development. *Canadian Journal of Forest Research* 48:958-965.
- Kolka, R. K., **A. W. D'Amato**, J. W. Wagenbrenner, R. A. Slesak, T. G. Pypker, M. B. Youngquist, A. R. Grinde, and B. J. Palik. 2018. Review of ecosystem level impacts of emerald ash borer on black ash wetlands: what does the future hold? *Forests* 9:179-194.
- \*Sass, E. M., **A. W. D'Amato**, and D. R. Foster. 2018. Lasting legacies of historical clearcutting, wind, and salvage logging on old-growth *Tsuga canadensis*-*Pinus strobus* forests. *Forest Ecology and Management* 419-420:31-41.
- Dodds, K. J., C. F. Aoki, A. Arango-Velez, J. Cancelliere, **A. W. D'Amato**, M. F. DiGirolomo, and R. J. Rabaglia. 2018. Expansion of Southern Pine Beetle into Northeastern Forests: Management and Impact of a Primary Bark Beetle in a New Region. *Journal of Forestry* 116:178-191.
- Looney, C. E., **A. W. D'Amato**, B. J. Palik, S. Fraver, and D. N. Kastendick. 2018. Size-growth relationship, tree spatial patterns, and tree-tree competition influence tree growth and stand complexity in a 160-year red pine chronosequence. *Forest Ecology and Management* 424:85-94.
- Fahey, R. T., B. C. Alveshire, J. I. Burton, **A. W. D'Amato**, Y. L. Dickinson, W. S. Keeton, C. C. Kern, A. J. Larson, B. J. Palik, K. J. Puettmann, M. R. Saunders, C. R. Webster, J. W. Atkins, C. M. Gough, and B. S. Hardiman. 2018. Shifting conceptions of complexity in forest management and silviculture. *Forest Ecology and Management* 421:59-71.

- \*Andrews, C., A. Weiskittel, **A. W. D'Amato**, and E. Simons-Legaard. 2018. Variation in the maximum stand density index and its linkage to climate in mixed species forests of the North American Acadian Region. *Forest Ecology and Management* 417:90-102.
- D'Amato, A. W.**, E. J. Jokela, K. L. O'Hara, and J. N. Long. 2018. Silviculture in the United States: an amazing period of change over the past 30 years. *Journal of Forestry* 116:55-67.
- Ontl, T. A., C. Swanston, L. A. Brandt, P. R. Butler, **A. W. D'Amato**, S. D. Handler, M. K. Janowiak, and P. D. Shannon. 2018. Adaptation pathways: ecoregion and land ownership influences on climate adaptation decision-making in forest management. *Climatic Change* 146:75-88.
- \*Scherer, S. S., C. C. Kern, **A. W. D'Amato**, B. J. Palik, and M. R. Russell. 2018. Long-term pine regeneration, shrub layer dynamics, and understory community composition responses to repeated prescribed fire in *Pinus resinosa* forests. *Canadian Journal of Forest Research* 48:117-129.
- Fraver, S., M. Tajvidi, **A. W. D'Amato**, D. L. Lindner, J. A. Forrester, and A. M. Milo. 2018. Woody material structural degradation through decomposition on the forest floor. *Canadian Journal of Forest Research* 48:111-115.
- Lesk, C., E. Coffel, **A.W. D'Amato**, K.J. Dodds, R.A. Horton. 2017. Threats to North American forests from southern pine beetle with warming winters. *Nature Climate Change* 7: 713-717.
- Bottero, A., **A.W. D'Amato**, B.J. Palik, J.B. Bradford, S. Fraver, M.A. Battaglia, and L.A. Asherin. 2017. Density-dependent vulnerability of forest ecosystems to drought. *Journal of Applied Ecology* 54:1605-1614.
- Youngquist, M.B., S.L. Eggert, **A.W. D'Amato**, B.J. Palik, and R.A. Slesak. 2017. Potential effects of foundation species loss on wetland communities: a case study of black ash wetlands threatened by emerald ash borer. *Wetlands* 37: 787-799.
- D'Amato, A.W.**, D.A. Orwig, D.R. Foster, A. Barker Plotkin, P.K. Schoonmaker, and M.R. Wagner. 2017. Long-term structural and biomass dynamics of virgin *Tsuga canadensis*-*Pinus strobus* forests after hurricane disturbance. *Ecology* 98:721-733.
- D'Amato, A. W.**, B. J. Palik, J. F. Franklin, and D. R. Foster. 2017. Exploring the origins of ecological forestry in North America. *Journal of Forestry* 115:126-127.
- \*Curzon, M.T., **A.W. D'Amato**, and B.J. Palik. 2017. Early regeneration response to aggregated overstory and harvest residue retention in *Populus tremuloides* (Michx.)-dominated forests. *New Forests* 48:719-734.
- Gleason, K.E., J.B. Bradford, A. Bottero, **A.W. D'Amato**, S. Fraver, B.J. Palik, M.A. Battaglia, L. Iverson, L. Kenefic, and C.C. Kern. 2017. Competition amplifies drought stress in forests across broad climatic and compositional gradients. *Ecosphere* 8:e01849-n/a.

- Curzon, M.T., **A.W. D'Amato**, S. Fraver, B.J. Palik, A. Bottero, J.R. Foster, and K.E. Gleason. 2017. Harvesting influences functional identity and diversity over time in forests of the northeastern U.S.A. *Forest Ecology and Management* 400:93-99.
- \*Rowe, E.R., **A.W. D'Amato**, B.J. Palik, and J.C. Almendinger. 2017. Early response of ground layer plant communities to wildfire and harvesting disturbance in forested peatland ecosystems in northern Minnesota, USA. *Forest Ecology and Management* 398:140-152.
- Itter, M.S., A.O. Finley, **A.W. D'Amato**, J.R. Foster, and J.B. Bradford. 2017. Variable effects of climate on forest growth in relation to climate extremes, disturbance, and forest dynamics. *Ecological Applications* 27:1082-1095.
- Nagel, L.M., B.J. Palik, M.A. Battaglia, **A.W. D'Amato**, J.M. Guldin, C.W. Swanston, M.K. Janowiak, M.P. Powers, L.A. Joyce, C.I. Millar, D.L. Peterson, L.M. Ganio, C. Kirschbaum, and M.R. Roske. 2017. Adaptive silviculture for climate change: a national experiment in manager-scientist partnerships to apply an adaptation framework. *Journal of Forestry* 115:167-178.
- Kabrick, J.M., K.L. Clark, **A.W. D'Amato**, D.C. Dey, L.S. Kenefic, C.C. Kern, B.O. Knapp, D.A. MacLean, P. Raymond, and J.D. Waskiewicz. 2017. Managing hardwood-softwood mixtures for future forests in eastern North America: assessing suitability to projected climate change. *Journal of Forestry* 115:190-201.
- Young, B.D., **A.W. D'Amato**, C.C. Kern, D.N. Kastendick, and B.J. Palik. 2017. Seven decades of change in forest structure and composition in *Pinus resinosa* forests in northern Minnesota, USA: Comparing managed and unmanaged conditions. *Forest Ecology and Management* 395:92-103.
- Slesak, R.A., B.J. Palik, **A.W. D'Amato**, and V.J. Kurth. 2017. Changes in soil physical and chemical properties following organic matter removal and compaction: 20-year response of the aspen Lake-States Long Term Soil Productivity installations. *Forest Ecology and Management* 392: 68-77.
- Palik, B. J., and **A. W. D'Amato**. 2017. Ecological forestry: much more than retention harvesting. *Journal of Forestry* 115:51-53.
- Curzon, M., S. Baker, C. Kern, B. Palik, and **A.W. D'Amato**. 2017. Influence of mature overstory trees on adjacent 12-Year regeneration and the woody understory: aggregated retention versus intact forest. *Forests* 8:31.
- \*Looney, C. E., **A. W. D'Amato**, B. J. Palik, R. A. Slesak, and M. A. Slater. 2017. The response of *Fraxinus nigra* forest ground-layer vegetation to emulated emerald ash borer mortality and management strategies in northern Minnesota, USA. *Forest Ecology and Management* 389:352-363.

- Bottero, A., **A. W. D'Amato**, B. J. Palik, C. C. Kern, J. B. Bradford, and S. S. Scherer. 2017. Influence of repeated prescribed fire on tree growth and mortality in *Pinus resinosa* forests, northern Minnesota. *Forest Science* 63:94-100.
- Curzon, M. T., **A. W. D'Amato**, S. Fraver, E. S. Huff, and B. J. Palik. 2017. Succession, climate and neighbourhood dynamics influence tree growth over time: an 87-year record of change in a *Pinus resinosa*-dominated forest, Minnesota, USA. *Journal of Vegetation Science* 28:82-92.
- \*Looney, C. E., **A. W. D'Amato**, B. J. Palik, and R. Slesak. 2017. Canopy treatment influences growth of replacement tree species in *Fraxinus nigra* forests threatened by emerald ash borer in Minnesota, USA. *Canadian Journal of Forest Research* 47:183-192.
- \*Roberts, M. W., **A. W. D'Amato**, C. C. Kern, and B. J. Palik. 2017. Effects of variable retention harvesting on natural tree regeneration in *Pinus resinosa* (red pine) forests. *Forest Ecology and Management* 385:104-115.
- Kern, C. C., J. I. Burton, P. Raymond, **A. W. D'Amato**, W. S. Keeton, A. A. Royo, M. B. Walters, C. R. Webster, and J. L. Willis. 2017. Challenges facing gap-based silviculture and possible solutions for mesic northern forests in North America. *Forestry* 90:4-17.
- Woodall, C. W., B. F. Walters, M. B. Russell, J. W. Coulston, G. M. Domke, **A. W. D'Amato**, and P. A. Sowers. 2016. A tale of two forest carbon assessments in the eastern United States: forest use versus cover as a metric of change. *Ecosystems* 19:1401-1417.
- \*Gill, K. G., A. W. D'Amato, and S. Fraver. 2016. Multiple developmental pathways for range-margin *Pinus banksiana* forests. *Canadian Journal of Forest Research* 46:200-214.
- \*Dymond, S. F., **A. W. D'Amato**, R. K. Kolka, P. V. Bolstad, S. D. Sebestyen, and J. B. Bradford. 2016. Growth–climate relationships across topographic gradients in the northern Great Lakes. *Ecohydrology* 9:918-929.
- \*Curzon, M. T., **A. W. D'Amato**, and B. J. Palik. 2016. Bioenergy harvest impacts to biodiversity and resilience vary across aspen-dominated forest ecosystems in the Lake States region, USA. *Applied Vegetation Science* 19:667-678.
- \*Roberts, M. W., **A. W. D'Amato**, C. C. Kern, and B. J. Palik. 2016. Long-term impacts of variable retention harvesting on ground-layer plant communities in *Pinus resinosa* forests. *Journal of Applied Ecology* 53:1106-1116.
- \*Looney, C. E., **A. W. D'Amato**, S. Fraver, B. J. Palik, and M. R. Reinikainen. 2016. Examining the influences of tree-to-tree competition and climate on size-growth relationships in hydric, multi-aged *Fraxinus nigra* stands. *Forest Ecology and Management* 375:238-248.
- \*Scherer, S. S., **A. W. D'Amato**, C. C. Kern, B. J. Palik, and M. B. Russell. 2016. Long-term impacts of prescribed fire on stand structure, growth, mortality, and individual tree vigor in *Pinus resinosa* forests. *Forest Ecology and Management* 368:7-16.

- Clark, J. S., L. Iverson, C. W. Woodall, C. D. Allen, D. M. Bell, D. C. Bragg, **A. W. D'Amato**, F. W. Davis, M. H. Hersh, I. Ibanez, S. T. Jackson, S. Matthews, N. Pederson, M. Peters, M. W. Schwartz, K. M. Waring, and N. E. Zimmermann. 2016. The impacts of increasing drought on forest dynamics, structure, and biodiversity in the United States. *Global Change Biology* 22:2329-2352.
- Foster, J. R., A. O. Finley, **A. W. D'Amato**, J. B. Bradford, and S. Banerjee. 2016. Predicting tree biomass growth in the temperate–boreal ecotone: Is tree size, age, competition, or climate response most important? *Global Change Biology* 22:2138-2151.
- \*Pszwaro, J. L., **A. W. D'Amato**, T. E. Burk, M. B. Russell, B. J. Palik, and T. F. Strong. 2016. Analysis of stand basal area development of thinned and unthinned *Acer rubrum* forests in the upper Great Lakes region, USA. *Canadian Journal of Forest Research* 46:645-655.
- Cai, Z., L. L. Narine, **A. W. D'Amato**, and F. X. Aguilar. 2016. Attitudinal and revenue effects on non-industrial private forest owners' willingness-to-harvest timber and woody biomass. *Forest Policy and Economics* 63:52-61.
- Slesak, R. A., T. B. Harrington, and **A. W. D'Amato**. 2016. Invasive scotch broom alters soil chemical properties in Douglas-fir forests of the Pacific Northwest, USA. *Plant and Soil* 398: 281-289.
- Woodall, C.W., B.F. Walters, J.W. Coulston, **A.W. D'Amato**, G.M. Domke, M.B. Russell, and P.A. Sowers. 2015. Monitoring network confirms land use change is a substantial component of the forest carbon sink in the eastern United States. *Scientific Reports* 5:17028.
- \*Looney, C.E., **A.W. D'Amato**, B J. Palik, and R.A. Slesak. 2015. Overstory treatment and planting season affect survival of replacement tree species in emerald ash borer threatened *Fraxinus nigra* forests in Minnesota, USA. *Canadian Journal of Forest Research* 45:1728-1738.
- Foster, J.R., and **A.W. D'Amato**. 2015. Montane forest ecotones moved downslope in northeastern USA in spite of warming between 1984 and 2011. *Global Change Biology* 21:4497-4507.
- Forrester, J.A., D.J. Mladenoff, **A.W. D'Amato**, S. Fraver, D.L. Lindner, N.J. Brazee, M.K. Clayton, and S.T. Gower. 2015. Temporal trends and sources of variation in carbon flux from coarse woody debris in experimental forest canopy openings. *Oecologia* 179:889-900.
- Kukrety, S., D.C. Wilson, **A.W. D'Amato**, and D.R. Becker. 2015. Assessing sustainable forest biomass potential and bioenergy implications for the northern Lake States region, USA. *Biomass and Bioenergy* 81:167-176.
- Russell, M.B., G.M. Domke, C.W. Woodall, and **A.W. D'Amato**. 2015. Comparisons of allometric and climate-derived estimates of tree coarse root carbon stocks in forests of the United States. *Carbon Balance and Management* 10:20.

- Russell, M.B., S. Fraver, T. Aakala, J.H. Gove, C.W. Woodall, **A.W. D'Amato**, and M.J. Ducey. 2015. Quantifying carbon stores and decomposition in dead wood: a review. *Forest Ecology and Management* 350:107-128.
- Russell, M.B., **A.W. D'Amato**, M.A. Albers, C.W. Woodall, K.J. Puettmann, M.R. Saunders, and C.L. VanderSchaaf. 2015. Performance of the Forest Vegetation Simulator in managed white spruce plantations influenced by eastern spruce budworm in northern Minnesota. *Forest Science* 61:723-730.
- Pederson, N., **A.W. D'Amato**, J.M. Dyer, D.R. Foster, D. Goldblum, J.L. Hart, A.E. Hessler, L.R. Iverson, S.T. Jackson, D. Martin-Benito, B.C. McCarthy, R.W. McEwan, D.J. Mladenoff, A.J. Parker, B. Shuman, and J.W. Williams. 2015. Climate remains an important driver of post-European vegetation change in the eastern United States. *Global Change Biology* 21:2105-2110.
- \*Telander, A.C., R.A. Slesak, **A.W. D'Amato**, B.J. Palik, K.N. Brooks, and C.F. Lenhart. 2015. Sap flow of black ash in wetland forests of northern Minnesota, USA: hydrologic implications of tree mortality due to emerald ash borer. *Agricultural and Forest Meteorology* 206: 4-11.
- Blanchette, R. A., B. W. Held, D. Mollov, J. Blake and **A. W. D'Amato**. 2015. First report of *Heterobasidion irregulare* causing root rot and mortality of red pines in Minnesota. *Plant Disease*.
- D'Amato, A.W.**, P. Catanzaro, L.S. Fletcher. 2015. Early regeneration and structural responses to patch selection and structural retention within second-growth northern hardwoods. *Forest Science* 61: 183-189.
- Woodall, C.W., M.B. Russell, B.G. Walters, **A.W. D'Amato**, K. Zhu, and S.S. Saatchi. 2015. Forest production dynamics along a wood density spectrum in eastern United States forests. *Trees-Structure and Function* 29:299-310.
- Woodall, C.W., M.B. Russell, B.F. Walters, **A.W. D'Amato**, S. Fraver, and G.M. Domke. 2015. Net carbon flux of dead wood in forests of the Eastern US. *Oecologia* 177: 861-874.
- Lewandowski, T. E., J. A. Forrester, D. J. Mladenoff, J. L. Stoffel, S. T. Gower, **A. W. D'Amato**, and T. C. Balser. 2015. Soil microbial community response and recovery following group selection harvest: Temporal patterns from an experimental harvest in a US northern hardwood forest. *Forest Ecology and Management* 340:82-94.
- \*Klockow, P.A., **A.W. D'Amato**, J.B. Bradford, and S. Fraver. 2014. Nutrient concentrations in coarse and fine woody debris of *Populus tremuloides* Michx.-dominated forests, northern Minnesota, USA. *Silva Fennica* 48: article 962, 24 p.
- Aguilar, F. X., Z. Cai, and **A. W. D'Amato**. 2014. Non-industrial private forest owner's willingness-to-harvest: How higher timber prices influence woody biomass supply. *Biomass and Bioenergy* 71:202-215.



- Russell, M.B., C.W. Woodall, **A.W. D'Amato**, S. Fraver, and J.B. Bradford. 2014. Technical note: Linking climate change and downed woody debris decomposition across forests of the eastern United States. *Biogeosciences* 11: 6417-6425.
- \*Curzon, M.T., A.W. D'Amato, and B.J. Palik. 2014. Harvest residue removal and soil compaction impact forest productivity and recovery: Potential implications for bioenergy harvests. *Forest Ecology and Management* 329:99-107.
- Russell, M.B., C.W. Woodall, **A.W. D'Amato**, G.M. Domke, and S.S. Saatchi. 2014. Beyond mean functional traits: Influence of functional trait profiles on forest structure, production, and mortality across the eastern US. *Forest Ecology and Management* 328:1-9.
- Kurth, V.J., J.B. Bradford, R.A. Slesak, and **A.W. D'Amato**. 2014. Initial soil respiration response to biomass harvesting and green-tree retention in aspen-dominated forests of the Great Lakes region. *Forest Ecology and Management* 328: 342-352.
- Slesak, R.A., C.F. Lenhart, K.N. Brooks, **A.W. D'Amato**, and B.J. Palik. 2014. Water table response to harvesting and simulated emerald ash borer mortality in black ash wetlands in Minnesota, USA. *Canadian Journal of Forest Research* 44: 961-968.
- Russell, M.B., C.W. Woodall, S. Fraver, **A.W. D'Amato**, G.M. Domke, and K.E. Skog. 2014. Residence time and decay for downed woody debris biomass/carbon in eastern US forests. *Ecosystems* 17: 765-777.
- Kurth, V.J., **A.W. D'Amato**, B.J. Palik, and J.B. Bradford. 2014. Fifteen-year patterns of soil carbon and nitrogen following biomass harvesting. *Soil Science Society of America Journal* 78: 624-633.
- Foster, J.R., **A.W. D'Amato**, and J. Bradford. 2014. Looking for age-related growth decline in natural forests: biomass patterns from tree rings and simulated mortality. *Oecologia* 175: 363-374.
- Braze, N., D. Linder, S. Fraver, A. Milo, **A.W. D'Amato**, J.R. Forrester, and D.J. Mladenoff. 2014. Disturbance and diversity: effects of canopy gaps and downed woody debris on wood-inhabiting fungi communities. *Biodiversity and Conservation* 23: 2155-2172.
- Fraver, S., **A. W. D'Amato**, J. B. Bradford, B. G. Jonsson, M. Jönsson, and P.-A. Esseen. 2014. Tree growth and competition in an old-growth *Picea abies* forest of boreal Sweden: influence of tree spatial patterning. *Journal of Vegetation Science* 25: 374-385.
- \*Reinikainen, M.R., **A.W. D'Amato**, J. Bradford, and S. Fraver. 2014. Influence of stocking, site quality, stand age, low-severity canopy disturbance, and forest composition on sub-boreal aspen mixedwood carbon stocks. *Canadian Journal of Forest Research* 44: 230-242.

- D'Amato, A.W.**, J. Bradford, S. Fraver, and B. Palik. 2013. Effects of thinning on drought vulnerability and climate response in north temperate forest ecosystems. *Ecological Applications* 23: 1735-1742.
- Bradford, J.B., N.R. Jensen, G.M. Domke, and **A.W. D'Amato**. 2013. Potential increases in natural disturbance rates could offset forest management impacts on ecosystem carbon stocks. *Forest Ecology and Management* 308: 178-187.
- \*Kern, C.C., **A.W. D'Amato**, and T.F. Strong. 2013. Diversifying the composition and structure of managed, late-successional forests with harvest gaps: What is the optimal gap size? *Forest Ecology and Management* 304: 110-120.
- Aakala, T., S. Fraver, **A.W. D'Amato**, and B. Palik. 2013. Influence of competition and age on tree growth in structurally complex old-growth forests in northern Minnesota, USA. *Forest Ecology and Management* 308: 128-135.
- Fraver, S., A. Milo, J. Bradford, **A.W. D'Amato**, L. Kenefic, B. Palik, C. Woodall, and J. Brissette. 2013. Woody debris volume depletion through decay: implications for biomass and carbon accounting. *Ecosystems* 16: 1262-1272.
- \*Silver, E.J., S. Fraver, **A.W. D'Amato**, T. Aakala, and B. J. Palik. 2013. Long-term mortality rates and spatial patterns in an old-growth *Pinus resinosa* forest. *Canadian Journal of Forest Research* 43: 809-816.
- Berger, A, B.J. Palik, **A.W. D'Amato**, J. Bradford, S. Fraver, D. King, K. Nislow, and R. Brooks. 2013. Ecological impacts of energy-wood harvests: lessons from whole-tree harvesting and natural disturbance. *Journal of Forestry* 111: 139-153.
- Russell, M., C. Woodall, S. Fraver, and **A.W. D'Amato**. 2013. Estimates of coarse woody debris decay class transitions for forests across the eastern United States. *Ecological Modeling* 251: 22-31.
- \*Klockow, P.A., **A.W. D'Amato**, and J.B. Bradford. 2013. Impacts of post-harvest slash and live-tree retention on biomass and nutrient stocks in *Populus tremuloides* Michx.-dominated forests, northern Minnesota, USA. *Forest Ecology and Management* 291: 278-288.
- \*Silver, E.J., **A.W. D'Amato**, S. Fraver, B.J. Palik, and J.B. Bradford. 2013. Structure and development of old-growth, unmanaged second-growth, and extended rotation *Pinus resinosa* forests in Minnesota, USA. *Forest Ecology and Management* 291: 110-118.
- Woodall, C.W., K. Zhu, J.A. Westfall, C.M. Oswalt, **A.W. D'Amato**, B.F. Walters, and H.E. Lintz. 2013. Assessing the stability of tree ranges and influence of disturbance in eastern US forests. *Forest Ecology and Management* 291: 172-180.

- Braze, N.J., D. L. Lindner, S. Fraver, **A.W. D'Amato**, and A.M. Milo. 2012. Wood-inhabiting, polyporoid fungi in aspen-dominated forests managed for biomass in the U.S. Lake States. *Fungal Ecology* 5: 600-609.
- \*Gronewold, C., **A.W. D'Amato**, and B.J. Palik. 2012. Relationships between growth, quality, and stocking within managed old-growth northern hardwoods. *Canadian Journal of Forest Research* 42: 1115-1125.
- Bradford, J.B., and **A.W. D'Amato**. 2012. Quantifying tradeoffs in multi-objective land management. *Frontiers in Ecology and the Environment* 10: 210-217.
- D'Amato, A.W.**, J. Segari\*, and D. Gilmore. 2012. Influence of site preparation on natural regeneration and understory plant communities within red pine shelterwood systems. *Northern Journal of Applied Forestry* 29: 60-66.
- Aakala, T., S. Fraver, B. Palik, and **A.W. D'Amato**. 2012. Spatially random mortality in old-growth red pine forests in northern Minnesota. *Canadian Journal of Forest Research* 42: 899-907.
- Bradford, J.B., S. Fraver, A. Milo, **A.W. D'Amato**, B. Palik, and D. Shinneman. 2012. Effects of multiple interacting disturbances and salvage logging on forest carbon stocks. *Forest Ecology and Management* 267: 209-214.
- \*Reinikainen, M.R., **A.W. D'Amato**, and S. Fraver. 2012. Repeated insect outbreaks promote multi-cohort aspen mixedwood forests in Minnesota, USA. *Forest Ecology and Management* 266: 148-159
- \*Domke, G.M., D.R. Becker, **A.W. D'Amato**, A.R. Ek, C.W. Woodall. 2012. Carbon emissions associated with the procurement and utilization of forest harvest residues for energy, northern Minnesota, USA. *Biomass and Bioenergy* 36: 141-150.
- D'Amato, A.W.**, S. Fraver, J. Bradford, B. Palik, and L. Dunn\*. 2011. Interactive effects of blowdown, salvage logging, and wildfire on sub-boreal pine systems. *Forest Ecology and Management* 262: 2070-2078.
- Woodall, C.W., **A.W. D'Amato**, J.B. Bradford, and A.O. Finley. 2011. Effects of stand and inter-specific stocking on maximizing standing tree carbon stocks in the eastern U.S. *Forest Science* 57: 365-378.
- \*Domke, G.M., A.J. David, **A.W. D'Amato**, and A.R. Ek. 2011. Hybrid aspen growth response to shearing in Minnesota: implications for biomass production and carbon sequestration. *Northern Journal of Applied Forestry* 28: 117-122.
- Fraver, S. T. Jain, J.B. Bradford, **A.W. D'Amato**, D. Kastendick, B. Palik, D. Shinneman, and J. Stanovick. 2011. The efficacy of salvage logging in reducing subsequent fire severity in conifer-dominated forests of Minnesota, USA. *Ecological Applications* 21: 1895-1901.

- \*Bolton, N., and **A.W. D'Amato**. 2011. Regeneration responses to gap size and coarse woody debris in forest harvests patterned after natural disturbances in northeastern Minnesota, USA. *Forest Ecology and Management* 262: 1215-1222.
- D'Amato, A.W.**, J. Bradford, B. Palik, and S. Fraver. 2011. Forest management for mitigation and adaptation to climate change mitigation: insights from long-term silviculture experiments. *Forest Ecology and Management* 262: 803-816.
- D'Amato, A.W.**, S.J. Troumbly\*, M.R. Saunders, K.J. Puettmann, and M. Albers. 2011. Five-year response of *Picea glauca* plantations thinned following spruce budworm outbreaks in Minnesota. *Northern Journal of Applied Forestry* 28: 72-78.
- D'Amato, A.W.**, B. Palik, and C. Kern. 2010. Growth, yield, and structure of extended rotation *Pinus resinosa* stands in Minnesota. *Canadian Journal of Forest Research* 40: 1000-1010.
- Bradford, J., **A.W. D'Amato**, B. Palik, and S. Fraver. 2010. A new method for evaluating forest thinning: growth dominance in managed *Pinus resinosa* stands. *Canadian Journal of Forest Research* 40: 843-849.
- \*Gronewold, C., **A.W. D'Amato**, and B.J. Palik. 2010. The influence of cutting cycle and stocking level on the structure and composition of managed old-growth northern hardwoods. *Forest Ecology and Management* 259: 1151-1160.
- D'Amato, A.W.**, P. Catanzaro, D. Damery, K. Ferrare, and D.B. Kittredge. 2010. Are family forest owners facing a future in which good forest management is not enough? *Journal of Forestry* 108: 32-38.
- Sharik, T.L., W. Adair, M. Battaglia, F.A. Baker, E.J. Comfort, **A.W. D'Amato**, C. DeLong, J. DeRose, M. Ducey, M. Harmon, L. Levy, J. Logan, J.J. O'Brien, B. Palik, S.D. Roberts, P.C. Rogers, D.J. Shinneman, T. Spies, and S.L. Taylor. 2010. Emerging themes in the ecology and management of North American forests. *International Journal of Forestry Research* 2010: 1-11.
- D'Amato, A.W.**, D.A. Orwig, and D.R. Foster. 2009. Understory vegetation in old-growth and second-growth *Tsuga canadensis* forests in western Massachusetts. *Forest Ecology and Management* 257: 1043-1052.
- Puettmann, K.J., **A.W. D'Amato**, U. Kohnle, and J. Bauhus. 2009. Growth dynamics of *Abies alba* during repeated group shelterwood (Femelschlag) cuttings. *Canadian Journal of Forest Research* 39: 2437-2449.
- D'Amato, A.W.**, and D.A. Orwig. 2008. Stand and landscape-level disturbance dynamics in western Massachusetts. *Ecological Monographs* 78: 507-522.

- D'Amato, A.W.**, D.A Orwig, and D.R. Foster. 2008. The influence of successional processes and disturbance on the structure of *Tsuga canadensis* forests. *Ecological Applications* 18: 1182-1199.
- Puettmann, K.J., **A.W. D'Amato**, M. Arikian, and J.C. Zasada. 2008. Spatial impacts of soil disturbance and residual overstory on density and growth of regenerating aspen. *Forest Ecology and Management* 256: 2110-2120.
- Kittredge, D.B., **A.W. D'Amato**, P.F. Catanzaro, J. Fish, and B. Butler. 2008. Estimating ownerships and parcels on non-industrial private forest in Massachusetts. *Northern Journal of Applied Forestry* 25: 93-98.
- Orwig, D.A., R.C. Cobb, **A.W. D'Amato**, M.L. Kizlinski, and D.R. Foster. 2008. Ecosystem response to hemlock woolly adelgid outbreaks in southern New England forests. *Canadian Journal of Forest Research* 38: 834-844.
- D'Amato, A.W.**, D.A. Orwig, and D.R. Foster. 2006. New estimates of Massachusetts old-growth forests: Useful data for regional conservation and forest reserve planning. *Northeastern Naturalist* 13: 495-506.
- D'Amato, A.W.**, and K.J. Puettmann. 2004. The relative dominance hypothesis explains interaction dynamics in mixed species *Alnus rubra/Pseudotsuga menziesii* forests. *Journal of Ecology* 92: 450-463.
- Puettmann, K.J., and **A.W. D'Amato**. 2002. Selecting plot sizes when quantifying growing conditions in understories. *Northern Journal of Applied Forestry* 19: 137-140.

## **PROCEEDINGS & OTHER ARTICLES**

---

- Fassnacht, K.S., D.R. Bronson, B.J. Palik, **A.W. D'Amato**, C.G. Lorimer, and K.J. Martin. 2015. Accelerating the development of old-growth characteristics in second-growth northern hardwoods. USDA Forest Service Northern Research Station GTR NRS-144. 33 p.
- Russell, M.B., A. R. Weiskittel, C.W. Woodall, and **A.W. D'Amato**. 2012. Assessing the uncertainty of forest carbon estimates using the FVS family of diameter increment equations. in Morin, R.S. and G.C. Liknes (eds.), *Moving from Status to Trends: Forest Inventory and Analysis (FIA) Symposium 2012*. USDA Forest Service Northern Research Station GTR NRS-P-105, pp. 378-382.
- Lenhart, C. K. Brooks, M. Davidson, R. Slesak, and **A.W. D'Amato**. 2012. Hydrologic source characterization of black ash wetlands: implications for EAB response. Proceedings of the AWRA Summer Specialty Conference, Denver, CO. July 27-29.
- D'Amato, A.W.** 2010. Silvicultural options for black ash communities facing the threat of emerald ash borer. Proceedings of the Black Ash Symposium, Chippewa National Forest May 25-27, Bemidji, MN.

- Fraver, S., **A.W. D'Amato**, J.B. Bradford, B.G. Jonsson, M.T. Jönsson, and P. Esseen. 2010. Tree growth and competition in an old-growth Norway spruce forest. Northern Primeval Forests: Ecology, Conservation, and Management, Sundsvall, Sweden, 9-13 August, Published Abstract.
- Foster, D.R., B.M. Donahue, D.B. Kittredge, K.F. Lambert, M.L. Hunter, B.R. Hall, L.C. Irland, R.J. Lillieholm, D.A. Orwig, **A.W. D'Amato**, E.A. Colburn, J.R. Thompson, J.N. Levitt, A.M. Ellison, W.S. Keeton, J.D. Aber, C.V. Cogbill, C.T. Driscoll, T.J. Fahey, and C.M. Hart. 2010. Wildlands and woodlands: a vision for the New England landscape. Harvard Forest Paper no. 30.
- D'Amato, A.W.**, N.W. Bolton, C.R. Blinn, and A.R. Ek. 2009. Current status and long-term trends of silvicultural practices in Minnesota: a 2008 assessment. University of Minnesota, Department of Forest Resources Staff Paper Series No. 205. 58 pp.
- Domke, G.M., **A.W. D'Amato**, A.J. David, and A.R. Ek. 2008. Hybrid aspen growth response to shearing in Minnesota: implications for biomass production and carbon sequestration. *In* Zalesny Jr., R.S., R. Mitchell, and J. Richardson (eds.). Proceedings of the Short Rotation Crops International Conference. USDA, Forest Service. Gen. Tech. Rep. NRS-P-31.
- Domke, G.M., A.R. Ek, D. R. Becker, J. F. Espeleta, **A.W. D'Amato**, P. B. Reich, S. Suh, M. A. Kilgore, D. A. Current, H. M. Hoganson, T. E. Burk, and C. R. Blinn. 2008. Assessment of carbon flows associated with forest management and biomass procurement for the Laskin Biomass Facility. University of Minnesota, Department of Forest Resources Staff Paper Series No. 198. 39 pp.
- Kelty, M.J., **A.W. D'Amato**, and P.K. Barten. 2008. Silvicultural and ecological considerations of forest biomass harvesting in Massachusetts. Massachusetts Sustainable Forest Bioenergy Initiative, Technical Report. 65 pp.
- Pederson, N., **A.W. D'Amato**, and D.A. Orwig. 2007. Central hardwood natural history from dendrochronology: maximum ages from rarely studied species. *In* Clatterbuck, W.K. and D.S. Buckley (eds.). Proceedings of the 15<sup>th</sup> Central Hardwood Forest Conference. USDA, Forest Service. Gen. Tech. Rep. SRS-101.
- Orwig, D.A. and **A.W. D'Amato**. 2007. Southern New England old-growth forests: how much is left and can they inform management decisions? *New England Society of American Foresters News Quarterly* Volume 68 (4): 10-11.
- Kelty, M.J., and **A.W. D'Amato**. 2006. An historical perspective on diameter-limit cutting in the Northeast. *In* Kenefic, L.S. and R.D. Nyland (eds.). Proceedings of the Conference on Diameter-limit Cutting in Northeastern Forests. USDA Forest Service. Gen. Tech. Rep. NE-342.

Foster, D.R., D.B. Kittredge, B. Donahue, G. Motzkin, D. Orwig, A. Ellison, B. Hall, B. Colburn, and **A. W. D'Amato**. 2005. Wildlands and woodlands: a vision for the forests of Massachusetts. *Harvard Forest Paper* no. 26. 24 pp.

## **BOOKS AND BOOK CHAPTERS**

---

D'Amato, A.W., P. Raymond, and S. Fraver. 2018. Old-Growth Disturbance Dynamics and Associated Ecological Silviculture for Forests in Northeastern North American. In: Barton, A.M. and W.S. Keeton (eds.). *Ecology and Recovery of Eastern Old-Grwth Forests*. Island Press, Washington, D.C. 360pp.

Fraver, S., T. Aakala, and **A.W. D'Amato**. 2017. Dendroecological applications to coarse woody debris dynamics. In: Amoroso, M.M, L.D. Daniels, P.J. Baker, and J.J. Camarero (eds.). *Dendroecology: tree-ring analyses applied to ecological studies*. Springer International Publishing, New York. 440 pp.

**D'Amato, A.W.**, B. Baiser, A.M. Ellison, D.R. Foster (ed.), D.A. Orwig, W. Oswald, A. Barker Plotkin, J. Thompson, S. Long. 2014. *Hemlock: a forest giant on the edge*. Yale University Press, 336 pp.

Goerndt, M.E., **A.W. D'Amato**, and J. Kabrick. 2014. Chapter 4: Wood energy and forest management. In: Aguilar, F.X. (eds). *Wood Energy in Developed Economies*. London,UK: Earthscan Publishing. 338 pp.

## **OUTREACH PUBLICATIONS**

---

Catanzaro, P.F., **A.W. D'Amato**, and E.J. Silver Huff. 2016. Increasing forest resiliency for an uncertain future. *University of Massachusetts, Cooperative Extension Landowner Outreach Pamphlet*. 32 pp.

**D'Amato, A.W.**, and P. Catanzaro. 2009. A forest manager's guide to restoring late-successional forest structure. University of Massachusetts, Cooperative Extension Landowner Outreach Pamphlet. 8 pp.

Catanzaro, P.F., D.T. Damery, **A.W. D'Amato**, and K. Ferrare. 2007. The economic viability of ownerships in the Deerfield River Watershed. Kohlberg Foundation and New England Forestry Foundation Pamphlet, 35 pp.

**D'Amato, A.W.**, and P.F. Catanzaro. 2007. Restoring old-growth characteristics. University of Massachusetts, Cooperative Extension Landowner Outreach Pamphlet, 18 pp.

Catanzaro, P.F., and **A.W. D'Amato**. 2006. High-grade harvesting: know the impacts and know your options. University of Massachusetts, Cooperative Extension Landowner Outreach Pamphlet, 16 pp.

## **GRANTS (Total Grants = \$10,302,165)**

---

AfterMATH: A decision Support Tool for Integrating Silviculture, Forest Resilience and Management of Emerald Ash Borer. *USDA Forest Service Health Monitoring Program* (\$80,884). PIs: **A.W. D'Amato** and N. Siegert. 1/2019-9/2020.

Developing a Stand Hazard Rating System to Guide Southern Pine Beetle Management in Northeastern Forests. *USDA Forest Service Health Monitoring Program* (\$63,406). PIs: **A.W. D'Amato** and K.J. Dodds. 1/2019-9/2020.

Future forest habitat conditions in the Adirondack Region, NY. *USGS National Climate Change and Wildlife Science Center* (\$76,044). PIs: **A.W. D'Amato** and J.R. Foster. 9/2017-9/2018.

Forests after Asian Longhorned Beetle Eradication: Current and Predicted Composition and Structure with Varying Climate Scenarios. *USDA Forest Service Health Monitoring Program* (\$60,000). PIs: **A.W. D'Amato** and K.J. Dodds. 9/2017-9/2019.

Long-term research data analysis and technology transfer from USDA Forest Service Experimental Forests. *USDA Forest Service Northern Research Station*. (\$38,278). PIs: **A.W. D'Amato** and L. Kenefic. 6/2017-6/2022.

Adaptive Silviculture for Climate Change in New England. *USDA Forest Service Northern Research Station*. (\$35,000). PIs: **A.W. D'Amato** and C. Woodall. 6/2016-6/2021.

Sustaining northeastern forests in the face of climate change. *USDA Forest Service Northern Research Station*. (\$66,000). PIs: **A.W. D'Amato** and K. Nislow. 6/2016-6/2021.

Impacts of Stand-Replacing Wind and Salvage Logging on the Adaptive Capacity of Hemlock-Hardwood Forests in Southern New England. (\$28,448). *USDA Forest Service Northern Research Station/Northern Institute of Applied Climate Science*. PIs: **A.W. D'Amato** and M. Janowiak. 7/2016-7/2018.

Adaptive Management Plan for Climate Change for the Marsh-Billings-Rockefeller NHP. *Woodstock Foundation*. (\$56,284). PIs: **A.W. D'Amato** and K. Jones. 7/2016-7/2018

Evaluating the effects of southern pine beetle in a newly invaded region: stand level impacts, fire hazard, and future forest conditions. *USDA Forest Service Health Monitoring Program* (\$48,725). PIs: **A.W. D'Amato** and K.J. Dodds. 1/2015-1/2017.

Identifying Factors Affecting Regional Patterns of Sugar Maple Regeneration in the Northern Forest. *Northeastern States Research Cooperative* (\$9,452). PI: **A.W. D'Amato**. 9/2015-5/2016.

Using Multiple Long-term Data Sets to Evaluate Dynamics and Characteristics of Managed Uneven-aged Northern Forest Stands. *Northeastern States Research Cooperative* (\$111,513). PIs: R.J. Nyland, L.S. Kenefic, **A.W. D'Amato**, C.C. Kern, D.H. Kiernan, E. Bevilacqua, B.J. Palik. 9/2015-8/2017.



Sustainable Northern Conifer Forest Management: New Findings and Outreach Tools. *Northeastern States Research Cooperative* (\$93,155). PIs: L.S. Kenefic, M. Crandall, **A.W. D'Amato**, A. Weiskittel. 9/2015-8/2017.

Emerald ash borer ecological and hydrological impacts-Phase II. *Legislative Citizen's Commission on Minnesota's Resources* (\$400,000). PIs: **A.W. D'Amato**, B. Palik, and R. Slesak. 6/2015-6/2020.

Refining Stand Dynamics within the US' Forest Carbon Accounting Framework. *USFS Northern Research Station Forest Inventory and Analysis Program* (\$56,660). PIs: **A.W. D'Amato** and C. Woodall. 6/2015-8/2017.

Quantifying and mitigating the impacts of emerald ash borer on black ash forests in the upper Great Lakes region. *Department of Interior: Upper Midwest and Great Lakes Landscape Conservation Cooperative* (\$155,641). PIs: **A.W. D'Amato**, B. Palik, K. Martin. 9/2014-9/2016.

Management tools for reducing the impacts of emerald ash borer on black ash forests. *USDA Forest Service Forest Health Monitoring Special Technology and Development Program* (\$74,000). PIs: **A.W. D'Amato** and B. Palik. 9/2014-9/2017.

Scotch broom alters Douglas-fir community structure and soil ecology: prevention and mitigation through alternative management practices. *USDA National Institute of Food and Agriculture, Agriculture and Food Research Initiative* (\$450,000). PIs: T. Harrington, R.A. Slesak, **A.W. D'Amato**. 1/2014-1/2018.

Developing historically-consistent and broadly-applicable monitoring, reporting, and verification system for quantifying forest change. *USFS Northern Research Station/NASA* (\$48,885). PIs: C. Woodall, G. Domke, and **A.W. D'Amato**. 2/2014-2/2015.

Modeling effects of climate change on spruce-fir forest ecosystems and associated priority bird populations. *US Geological Survey* (\$208,000). PIs: **A.W. D'Amato**, D. King, A. Weiskittel, B. Palik, D. Flaspohler, C. Rimmer, W. DeLuca, S. Auer. 9/2013-9/2015.

Future distribution and productivity of spruce-fir forests under climate change: A comparison of the Northeast and the Lake States. *Northeastern States Research Cooperative* (\$99,502). PIs: E. Simons-Legaard, A. Weiskittel, **A.W. D'Amato**, B.R. Sturtevant, S. Fraver, and K. Leggaard. 4/2013-4/2015.

Revising the LANDFIRE vegetation classification system for the Great Lakes region. PI: **A.W. D'Amato**. *Wisconsin Department of Natural Resources* (\$147,000). 1/2013-1/2015.

The effects of variable retention harvests on ground-layer plant diversity of red pine forests in northern Minnesota, USA. PI: C. Kern, B. Palik, **A.W. D'Amato**. *USDA Forest Service Northern Research Station* (\$40,000). 6/2012-6/2017.

Enhancing timber sale program environmental and economic sustainability. PIs: C. Blinn, M. Kilgore, **A.W. D'Amato**, and M. Davenport. *Legislative Citizen's Commission on Minnesota's Resources* (\$336,000). 6/2013-6/2016.

Northeast Climate Science Center. PIs: R. Palmer, M. Cook, **A.W. D'Amato**, L. Deegan, L. Gilbert, R. Horton, and F. Thompson. *U.S. Department of Interior USGS Climate Science Research Center* (Grant total: \$7,500,000; Lead PI on UMN portion: \$622,823). 2/2012-2/2017.

Assessing the response of tree regeneration and understory vegetation to managed old-growth silviculture strategies in second-growth hardwoods. PI: **A.W. D'Amato**. *Wisconsin Department of Natural Resources* (\$65,000). 2/2011-7/2013.

Carbon sequestration and greenhouse gas emissions associated with short-rotation woody biomass production in the Upper Great Lakes Region. PIs: Rothstein, D., D.J. Mladenoff, and **A.W. D'Amato**. *USDA National Institute of Food and Agriculture, Agriculture and Food Research Initiative*. (\$998,630). 1/2011-12/2015.

Assessing the Environmental Sustainability and Capacity of Forest-Based Biofuel Feedstocks within the Lake States Region. PIs: **A.W. D'Amato**, D.J. Mladenoff, J. Bradford, J. Forrester, S. Fraver, B. Palik, R. Kolka, and F. Aguilar. *USDA/DOE Biomass Research and Development Initiative* (\$2,715,006). 9/2009-9/2013.

Ecological and hydrological impacts of emerald ash borer. PIs: **A.W. D'Amato**, P. Reich, B. Palik, R. Slesak, A. Ek, G. Domke, and R. Vennette. *Legislative Citizen's Commission on Minnesota's Resources* (\$636,000). 6/2010-6/2015.

Carbon efflux from woody debris – field measurement and regional consequences. PIs: C. Woodall, J. Bradford, S. Fraver, R. Kolka, and **A.W. D'Amato**. *USDA Forest Service Forest Inventory and Analysis Program* (\$153,000). 8/2010-9/2014.

Evaluation of biomass harvesting impacts on Minnesota's forests. PIs: **A.W. D'Amato**, J. Bradford, S. Fraver, R. Slesak, B. Palik, R. Kolka, and C. Blinn. *Legislative Citizen's Commission on Minnesota's Resources* (\$350,000). 6/2011-6/2014.

Adaptation and mitigation options on the Superior National Forest in response to climate change: monitoring, assessing, and forecasting. PIs: J. Bradford and **A.W. D'Amato**. *American Revenue Recovery Act and USDA Forest Service* (\$607,000). 8/2009-8/2014.

Toward annual monitoring of climate change impacts on experimental forests across the northern forest region. PIs: Palik, B., J. Bradford, J. Brissette, S. Fraver, and **A.W. D'Amato**. *USDA Forest Service Northern Research Station Climate Change Funds* (\$360,000). 8/2009-8/2014.

Presentation of forest complexity in the Lake States: ownership patterns and implications for carbon storage. PIs: J. Bradford, **A.W. D'Amato**, and A.O. Finley. *USDA Forest Service Forest Inventory and Analysis Program* (\$48,000). 5/2009-5/2014.

- An ecological and socioeconomic evaluation of woody biomass harvesting in the northern forest. PIs: B. Palik, J. Bradford, **A.W. D'Amato**, C. Eagar, S. Fraver, D. King. *USDA Forest Service Northern Research Station* (\$54,768). 8/2009-8/2010.
- Quantifying wood decay rates across silvicultural experiments in the northern forest. PIs: S. Fraver, L. Kenefic, J. Bradford, **A.W. D'Amato**, B. Palik, and C. Woodall. *USDA Forest Service Northern Research Station* (\$25,500). 8/2009-8/2010.
- Impacts of woody biomass harvesting on saproxylic communities, nutrient availability, and productivity in aspen ecosystems. PIs: **A.W. D'Amato**, C. Blinn, J. Bradford, S. Fraver, R. Kolka, K. Kozak, R. Montgomery, M. Ostry, B. Palik, and D. Zamora. *Minnesota Forest Resources Council* (\$294,000). 7/2008-6/2011.
- Sustainable forest biomass production: comparing physical, economic, and social availability. PIs: D.R. Becker, **A.W. D'Amato**, D.A. Current, M.A. Kilgore, A.R. Ek, and T.E. Burk. *Minnesota Department of Agriculture NextGen Energy Grant* (\$144,895). 1/2009-5/2010.
- Assessment of carbon flows associated with forest management and biomass procurement for the Laskin biomass facility. PIs: A.R. Ek, D.R. Becker, C.R. Blinn, D. Current, T.E. Burk, **A.W. D'Amato**, M.A. Kilgore, H.M. Hoganson, P.B. Reich, G.M. Domke, and S. Suh. *Minnesota Power* (\$49,428). 4/2008-12/2008.
- Tree quality and structure in managed old-growth northern hardwood forests. PIs: **A.W. D'Amato** and B. Palik. *USDA Forest Service Northern Research Station* (\$56,000). 5/2008-5/2013.
- Effects of blowdown, salvage logging, and wildfire on regeneration and fuel characteristics in Minnesota's forests. PIs: S. Fraver, B. Palik, and **A.W. D'Amato**. *USDA Forest Service Northern Research Station* (\$187,238). 9/2008-8/2013.
- Resurvey of Minnesota Silvicultural Practices. PIs: **A.W. D'Amato** and C.R. Blinn. *Minnesota Interagency Information Cooperative* (\$30,000). 1/2009-6/2009.
- Assessing factors influencing eastern larch beetle outbreak severity and the response of tamarack ecosystems. PI: **A.W. D'Amato**. *University of Minnesota Grant in Aid of Research, Artistry, and Scholarship* (\$29,000). 1/2008-6/2009.
- Tools and approaches for minimizing the impacts of energy wood harvesting on the environment and soil productivity in Minnesota and beyond. PIs: A.R. Ek, C. R. Blinn, M. A. Kilgore, and **A. W. D'Amato**. *UPM-Kymmene, Blandin Paper Company* (\$14,000). 9/2008-12/2008.
- Economic viability of land ownership in the Deerfield Watershed of western Massachusetts. PIs: P. Catanzaro and **A.W. D'Amato**. *The Kohlberg Foundation* (\$44,000). 9/2007-12/2007.

Ecosystem responses to and social perceptions of late-successional forest restoration efforts in southern New England. PIs: **A.W. D'Amato**, M.J. Kelty, and P. Catanzaro. *The Nature Conservancy* (\$35,000). 1/2006-9/2007.

## **TEACHING EXPERIENCE**

---

Responsible for course development and instruction of undergraduate and graduate students on silviculture, applied forest ecology, forest conservation, quantitative methods, and the natural resource and environmental sciences at the University of Minnesota (8/07 – 6/14) and the University of Vermont (1/05- present). Courses serve students pursuing Forestry (FOR) majors or minors, undergraduates in Environmental Science, Wildlife and Fisheries Biology, Natural Resource Ecology (NR), Parks Recreation and Tourism, and Environmental Studies. Serve as instructor for the following courses with total instruction translating to 243-333 student credit hours per academic year:

**FOR 1** Introduction to Forest Conservation, 3 credits (41-43 students), Spring 2016-present

**FOR 223/385** Multi-resource silviculture, 4 credits (26-34 students), Fall 2015-present

**FOR 112** Natural Resources Ecology and Assessment II, 4 credits (23-40 students), Spring 2015-present

**FOR 195** New England Family Forests, 1 credit (11 students), Spring 2017.

**FOR 295** Forest Stand Dynamics, 2 credits (11 students), Fall 2017-present.

**NR 6** Race and Culture in Natural Resources (20 students), Fall 2015-present.

### ***Other courses taught: University of Minnesota***

**ESPM 3108/5108** Ecology of Managed Systems, 3 credits (55-70 students), Fall 2008-2013

**FNRM 3411/5411** Managing Forest Ecosystems: Silviculture, 3 credits (35-55 students), Spring 2008-2014.

**FNRM 4293** Silviculture Directed Study, 1-3 credits, (14 students total), Fall 2008-2014.

**FNRM 5413** Managing Forest Ecosystems: Silviculture Lab, 1 credit (11-23 students), Spring 2008-2014.

**FNRM 5611** Field Silviculture, 2 credits (4-19 students), Summer 2008-2014.

**FNRM 8104** Research Problems: Forest Ecology, 1 credit (5 students), Spring 2008.

**FNRM 8105** Research Problems: Silviculture and Quantitative Methods, 1-3 credits (6 students total), Fall 2007-2014

### ***Other courses where guest lectures have been provided***

**FNRM 3612/5612** Silviculture and Timber Harvesting Practices in Minnesota. 2008-2010

**ESPM 1001** Orientation to Environmental Sciences, Policy & Management. 2007, 2008

**FNRM 1001/ RRM 1001** Orientation and Information Systems. 2007-2012

**GEOG 8980** Topics in Geography. 2007

**NR 2** Nature and Culture

**NR 205** Ecosystem Management

### ***Other courses taught: University of Massachusetts, Amherst***

**FOREST 540** Forest Resources Management. 4 credits (24 students). Spring 2004

## MENTORING

---

### *Graduate Faculty Appointments*

Natural Resources, Rubenstein School of Environment Natural Resources, University of Vermont  
Natural Resource Science and Management (NRSM), University of Minnesota  
Conservation Biology, University of Minnesota  
School of Forest Resources, University of Maine  
Faculty of Forestry and the Forest Environment, Lakehead University  
Department of Biological Sciences, University of Quebec at Montreal  
Department of Environmental Conservation, University of Massachusetts  
College of Life Sciences and Agriculture, University of New Hampshire  
Department of Forest and Natural Resources Management, State University of New York

### Graduate Student Advising (2007-present)

<b>Advisor or Co-Advisor</b>	<b>Degree</b>	<b>Major</b>
<i>Current</i>		
Olivia Box	MS	NR
Peter Clark	PhD	NR
Jordan Luff	MS	NR
Matthias Nevins	MS	NR
Nicole Rogers	PhD	NR
Jennifer Santoro	PhD	NR
<i>Graduated*</i>		
Nicholas Bolton*	MS (2011)	NRSM
Miranda Curzon*	PhD (2014)	NRSM
Grant Domke*	PhD (2010)	NRSM
Kyle Gill*	MS (2014)	NRSM
Christopher Gronewold*	MS (2010)	NRSM
Molly Heuss*	MS (2017)	NR
Christopher Looney	PhD (2017)	NRSM
Eric North*	PhD (2017)	NRSM
Paul Klockow*	MS (2012)	NRSM
Justin Pszwaro*	MS (2014)	NRSM
Michael Reinikainen*	MS (2011)	NRSM
Laura Reuling*	MS (2014)	NRSM
Margaret Roberts*	MS (2015)	NRSM
Erika Rowe*	MS (2015)	NRSM
Emma Sass*	MS (2017)	NR
Emily Silver*	MS (2012)	NRSM
Sawyer Scherer*	MS (2016)	NRSM
Andrew Telander*	MS (2013)	NRSM
Stacy Troumbly*	MS (2010)	NRSM

### **Prelim and/or Final Examination Committee Member**

Chaina Baipkee*	PhD (2013)	NRSM
Megan Buchanan	PhD	Geography
Peter Dieser*	MS (2011)	NRSM
Salli Dymond*	PhD (2014)	NRSM
Nicholas Fisichelli*	PhD (2012)	NRSM
Chad Giblin*	MS (2012)	NRSM
Marina Golivets	PhD	NR
Aviva Gottesman*	MS (2016)	NR
Julie Hendrickson*	MS (2012)	NRSM
Christel Kern*	PhD (2011)	NRSM
Keegan Lund*	MS (2011)	Conservation Biology
Kyle Motley*	MS (2017)	NR
Paul Ojanen*	MS (2014)	NRSM
Fraser McKee*	PhD (2015)	Entomology
Julia Rauchfuss*	PhD (2009)	Geography
Karl Sames	MS	NRSM
Chris Smith*	MS (2011)	Conservation Biology
Joe Walton*	MS (2012)	NRSM
Kathryn Wrigley	PhD	NR
John Zobel*	MS/PhD (2013)	NRSM

### Post-doctoral research associates

Alessandra Bottero (2014-2015)  
Miranda Curzon (2014-2016)  
Jane Foster (2011-present)  
Sidhanand Kukrety (2011-2015)  
Valerie Kurth (2012-2014)  
Wu Ma (2017-present)  
David McKenzie (2012-2013)  
Matthew Russell (2012-2014)  
Brian Young (2013-2014)  
Melissa Youngquist (2015-present)

### **PROFESSIONAL SERVICE & DEVELOPMENT**

---

#### *University Service*

Director– University of Vermont, Research Forests (2019-present)  
Director– University of Vermont, Forestry Program (2016-present)  
Advisor – University of Vermont Forestry Club (2017-present).  
Advisor – University of Vermont, Alpha Omicron chapter of Xi Sigma Pi (National Forestry Honor Society; 2017-present)  
Faculty Senator (RSENR Representative) – University of Vermont Faculty Senate (2017-present).

Quiz Bowl Team Advisor – University of Vermont, Student Chapter of Society of American Foresters (2015-present).

Co-Advisor – University of Vermont Forestry Club (2015-2017).

Honors and Studies Committee, Rubenstein School of Environment and Natural Resources (RSENR), University of Vermont (2015-2018).

Chair, Forestry Lecturer Search Committee, RSENR, University of Vermont (2017-2018).

University Forest Lands Committee, RSENR, University of Vermont (2015-present).

Environmental Studies Director Search Committee, RSENR, University of Vermont (2015-2016).

Graduate Special Gift Committee, RSENR, University of Vermont (2015-2018).

Quiz Bowl Team Advisor – University of Minnesota, Student Chapter of Society of American Foresters (2007-2014).

Advisor – University of Minnesota Forestry Club (2008-2014).

University of Minnesota, Dept. of Forest Resources Curriculum Committee (2008-2014).

Forest Hydrology Faculty Search Committee, Department of Forest Resources (2012).

Department of Forest Resources Strategic Planning Committee (2013-2014)

Forest Ecosystem Health Faculty Search Committee, Department of Forest Resources (2012-2013).

Quantitative Ecologist Faculty Search Committee, Department of Fisheries, Wildlife, and Conservation Biology (2012-2013).

Faculty participant and tour leader – College of Food, Agricultural, and Natural Resource Sciences (CFANS) Dean’s Welcome, FR, RRM, and ESPM Presentations and Lab Tour (2011, 2014).

Cloquet Forestry Center Director of Operations Search Committee, Department of Forest Resources (2011-2012).

Faculty participant – CFANS Sneak Peak, Natural Resource and Environmental Sciences Tour (2010, 2011).

Department of Forest Resources Curriculum Refinement Committee (2010)

Forest Entomology Faculty Search Committee, Department of Entomology (2009).

Human Dimensions Faculty Search Committee, Department of Forest Resources (2009).

Faculty Senator (CFANS Representative) – University of Minnesota Faculty Senate (2009-2011).

Member – Biodiversity Task Force, University of Minnesota, CFANS (2008-2009).

Presenter and panel member – Center for Teaching and Learning. Assignments that Connect Field Work with Course Learning Goals. Workshop for visiting faculty from Copenhagen Danish Institute for Study Abroad (2008).

### ***National & International Service***

External evaluator – University of Florida-promotion and tenure. School of Forest Resources and Conservation (2020).

Member, Technical Advisory Committee, New England Forestry Foundation, Exemplary Forestry in the North Central and Transition Hardwoods (2020-present)

External evaluator – University of Kentucky-promotion and tenure. Department of Forestry and Natural Resources (2020).

External evaluator – Oregon State University-promotion and tenure. Department of Forest Engineering, Resources, & Management (2020).

Regional Representative, Northern Region – Society of American Foresters, Forest Science and Technology Board (2019-present)

Program Chair – 2019 New England Society of American Foresters Winter Meeting (2018-2019).

External evaluator – University of Alabama-promotion and tenure. Department of Geography (2018).

Reviewer–McIntire-Stennis Program Internal Competition, Penn State University (2018, 2019).

Co-Director – Northeast Silviculture Institute for Foresters, Northeast State Foresters Association (2017-present).

Member – Planning Committee, 2018 New England Society of American Foresters Winter Meeting (2017-present).

Technical Contributor – Fourth National Climate Assessment, Forests Chapter, U.S. Global Change Research Program (2017-present).

Member – Planning Committee, Science and Management of Ash Forests after Emerald Ash Borer Workshop (2016-2017).

Education Chair–Green Mountain Division Chapter of the Society of American Foresters (2016-present).

External evaluator – West Virginia University-promotion and tenure. Division of Forestry and Natural Resources (2016).

Co-Organizer – Multi-aged Silviculture of Northern Hardwood and Mixedwood Forests in Quebec. New England Society of American Foresters Silviculture Working Group Field Tour (2016).

Co-Chair – Planning Committee, 2016 Society of American Foresters National Convention (2015-2016).

Member – Planning Committee, 2017 New England Society of American Foresters Winter Meeting (2016-2017).

Forest Science Coordinator – New England Society of American Foresters Chapter (2015-present)

Co-Chair – Northern Forest Working Group, Upper Midwest and Great Lakes Landscape Conservation Cooperative (2013-present).

Panel member – USFS National Advanced Silviculture Program – Region 9 Silviculture Certification Panel (2013, 2016)

Reviewer–Mitacs Accelerate Internship Program, Quebec, CA (2016).

Reviewer–National Science Foundation, Division of Environmental Biology (2016).

Member – Ecological Subcommittee on Wisconsin’s Biomass Harvesting Guidelines (2013-present).

Subject-matter editor (Forest Ecology) – *Ecology* and *Ecological Monographs* (2011-present).

Subject-matter editor (Forest Ecology) – *Journal of Forestry* (2011-present).

Member – Planning Committee, 2015 Society of American Foresters National Convention (2014-2015).

External evaluator – Senior lecturer in Biodiversity in production forests. Faculty of Forest Sciences, Swedish University of Agricultural Sciences (2014).

Co-Organizer and Instructor – Climate-informed management workshop. Sustainable Forests Education Cooperative (2014).



External evaluator – Pennsylvania State University-promotion and tenure. Department of Ecosystem Science and Management (2013).

Reviewer – Wisconsin Department of Natural Resources, Swamp Hardwood Silviculture Guidelines (2013).

Reviewer – Minnesota Department of Natural Resources Tamarack Assessment (2013).

Instructor and workshop co-organizer – Adaptive Forest Management Workshop. Sponsored by the Sustainable Forestry Education Cooperative (2013).

Instructor and workshop co-organizer – Black ash field day. Sponsored by the Sustainable Forestry Education Cooperative (2013).

Session Organizer – Ecological Society of America National Convention. Minneapolis, MN (2013).

External thesis examiner – Department of Biological Sciences, University of Quebec at Montreal, Montreal, Canada (2012, 2017).

Session Organizer – North American Forest Ecology Workshop, Roanoke, VA (2011).

Reviewer – Minnesota Voluntary Forest Management Guidelines revisions, Minnesota Forest Resources Council (2012).

External Graduate Faculty Member – School of Forest Resources, University of Maine, Orono, ME (2011-present).

Reviewer – Climate Change and Renewable Energy Management Foundations-Biofuels and Carbon Sequestration Sections, Minnesota DNR (2011).

Instructor and workshop co-organizer – Certificate Course in Ecosystem Silviculture: Application of Ecological Classification Systems to Management. Sponsored by the Sustainable Forestry Education Cooperative (2011, 2013).

Instructor and workshop co-organizer – Intermediate Stand Treatments Mixed Species Field Day. Sponsored by the Sustainable Forestry Education Cooperative (2011).

Instructor and workshop co-organizer – Adaptive Management in the Face of Climate Change. Sponsored by the Sustainable Forestry Education Cooperative (2012).

Chair – Forest Ecology and Range working group, Society of American Foresters (2010- 2016).

Chair – Education Development Committee, Minnesota Chapter of the Society of American Foresters (2010-2014).

Session Organizer – Ecological Society of America National Convention. Pittsburgh, PA (2010).

External examiner – Office of Graduate Studies and Faculty of Forestry and the Forest Environment, Lakehead University, Ontario, Canada (2010).

Reviewer – National Park Service George Melendez Wright Climate Change Fellowship (2010).

Reviewer – Chequamegon-Nicolet National Forest Climate Change Response Framework (2010).

Delphi Study Panel member – Ash management recommendations for Minnesota family forest owners. University of Minnesota Extension (2010).

Instructor – National Advanced Silviculture Program: Lake States local module. Houghton, MI. Sponsored by USDA Forest Service (2010, 2012).

Instructor and workshop co-organizer – Intermediate Stand Treatments Workshop. Sponsored by the Sustainable Forestry Education Cooperative (2010).

Reviewer – Strategies for managing emerald ash borer introductions within Minnesota. Minnesota EAB Advisory Group (2009).

Member – Sustainable Forestry Education Cooperative, Education Advisory Committee (2009-present).

Member – Black ash management guidelines development group. Minnesota Department of Natural Resources (2009).

Panel member – Briefing on emerging and threatening tree diseases and forest pests. Legislative Citizen’s Commission on Minnesota’s Resources (2009).

Session Organizer – North American Forest Ecology Workshop, Logan, UT (2009).

Instructor – Ecological Forestry: natural disturbance-based silviculture and restoring late-successional forest structure. On-line videos sponsored by the University of Minnesota Extension My Minnesota Woods Website (2009).  
<http://www.myminnesotawoods.umn.edu/2009/11/two-videos-natural-disturbance-based-silviculture-and-restoring-late-successional-structure/>

Member – Silviculture Task Force coordinated by Minnesota Forest Resources Partnership (2007-2008).

Field tour organizer and leader – Improving Productivity of Minnesota’s Forest Resources Workshop coordinated by the Minnesota Forest Resources Partnership (2008).

Instructor – Certificate Course in Ecosystem Silviculture: Forest Ecology and Silvics. Sponsored by the Blandin Foundation and the Sustainable Forestry Education Cooperative (2008).

Instructor – Certificate Course in Ecosystem Silviculture: Silvicultural Systems. Sponsored by the Blandin Foundation and the Sustainable Forestry Education Cooperative (2008).

### ***Journal Reviewer***

American Midland Naturalist, Annals of Forest Science, Bioscience, Canadian Journal of Forest Research, Ecology, Ecological Applications, Ecological Monographs, European Journal of Forest Research, Forests, Forest Science, Forest Ecology and Management, Global Change Biology, Journal of Ecology, Journal of Environmental Management, Journal of Forestry, Journal of the Torrey Botanical Society, Journal of Vegetation Science, New Forests, Northeastern Naturalist, Northern Journal of Applied Forestry, Restoration Ecology, Rhodora, Western Journal of Applied Forestry

### ***Grant Proposal Reviewer***

Natural Sciences and Engineering Research Council of Canada, Northeastern States Research Cooperative, University of Massachusetts Agricultural Experiment Station, University of Minnesota Agricultural Experiment Station, University of Maine Agricultural and Forest Experiment Station, USDA NIFA: Small Business Innovation Research Program Forests & Related Resources

### ***Additional Academic Training***

Creating a culturally inclusive classroom-from pedagogy to practice, UMN (2010).

Panel Discussion on Students with Asperger’s Disorder (2010).

Early Career Faculty Learning Community, UMN (2008-2009).

Using Student Feedback to Improve Teaching and Learning, UMN (2008).

How (and Why) to Shift from Instructor-Centered to Student-Centered Teaching, UMN (2008).

Building Online Communication into Your Course, UMN (2007).

Course Design: Linking Content to Student Understanding and Performance, UMN (2007).

Teaching through Active Lectures, University Of Minnesota, UMN (2007).  
Getting Started as a Successful Grant Writer and Academician, UMN (2007).

### **SELECTED PROFESSIONAL PRESENTATIONS (presenter in bold)**

---

**D'Amato, A.W.** 2018. *Adaptive silvicultural strategies for northern hardwood forests: building on the past to address future challenges*. Invited Keynote Presentation. International Union of Forest Research Organizations: Uneven-aged Working Group Meeting. Valdivia, Chile. November 13.

**D'Amato, A.W.** 2018. *Silvicultural considerations for Vermont's ash within the context of emerald ash borer*. Managing our Changing Forests Webinar Series. University of Vermont Extension. June 20.

**D'Amato, A.W.** 2018. *A lesson in severe, episodic forest disturbances: The 1938 hurricane and long-term dead wood legacies*. New England Society of American Foresters Winter Meeting. Nashua, NH. March 28.

**D'Amato, A.W.** 2017. *Silviculture in the face of uncertainty: is the past still relevant?* Invited Keynote Presentation. 11th North American Forest Ecology Workshop, Edmonton, Alberta. June 20.

**Rogers, N.S., A.W. D'Amato, R. Nyland, L. Kenefic, and M. Twery.** 2017. *Long-term regeneration dynamics in northern hardwood forests of the northeast United States*. Presentation. 11th North American Forest Ecology Workshop, Edmonton, Alberta. June 20.

**Palik, B.J. and A.W. D'Amato.** 2017. *Operational-scale experiments: connecting scientists with real world forestry*. Presentation. 11th North American Forest Ecology Workshop, Edmonton, Alberta. June 20.

**D'Amato, A.W., B.J. Palik, C. Looney, R. Slesak, and M. Slater.** 2017. *Black ash, emerald ash borer, and climate change: assisting the replacement of a foundational species*. Presentation. 11th North American Forest Ecology Workshop, Edmonton, Alberta. June 22.

**Palik, B.J., A.W. D'Amato, L. Nagel, and J. Mueller.** 2017. *Transitioning red pine forests to a warmer, drier future: assisting replacement of an iconic species*. Presentation. 11th North American Forest Ecology Workshop, Edmonton, Alberta. June 22.

**Foster, J.R., and A.W. D'Amato.** 2017. *Forecasting migration rates of montane species under climate change with a spatially dynamic vegetation model*. Presentation. 11th North American Forest Ecology Workshop, Edmonton, Alberta. June 22.

**D'Amato, A.W.** 2017. *Strategies for managing forests to increase drought tolerance*. Invited presentation. New England Society of American Foresters Winter Meeting, Bangor, ME. March 8.

- D'Amato, A.W., and S. Bédard.** 2017. *A cross-border examination of the silviculture of northern hardwoods*. Presentation. New England Society of American Foresters Winter Meeting, Bangor, ME. March 7.
- Gill, K.G., A.W. D'Amato, and S. Fraver.** 2016. *Jack pine stand recruitment and development in Central Minnesota*. Presentation and discussion panel for Sustainable Forests Educational Cooperative Fire in Minnesota's Forests workshop, Grand Rapids, MN. December 1.
- D'Amato, A.W., B.J. Palik, and R.A. Slesak.** 2016. *Sustaining Great Lakes Black Ash Forests in the Face of Emerald Ash Borer*. Society of American Foresters National Convention. Madison, WI. November 5.
- Palik, B.J., A.W. D'Amato, and R.A. Slesak.** 2016. *Evaluating Replacement Tree Species in Black Ash Forests Threatened by EAB and Climate Change*. Society of American Foresters National Convention. Madison, WI. November 5.
- Pzswaro, J., A.W. D'Amato, B.J. Palik, and R.A. Slesak.** November 5. *Silvicultural Options for Increasing Resilience of Black Ash Wetlands to EAB in Wisconsin*. Society of American Foresters National Convention. Madison, WI. November 5.
- Foster, J.R., and A.W. D'Amato.** 2016. *Forecasting climate change refugia for montane species: how harvest and disturbance affect species persistence*. ECANUSA Conference, Burlington, VT. September 30.
- Curzon, M.T., A.W. D'Amato, J.R. Foster, B.J. Palik, S. Fraver, J.B. Bradford, A. Bottero, and K.E. Gleason.** 2016. *Management influences functional composition and diversity in northern hardwood and mixed-conifer forests in Maine and New Hampshire, USA*. ECANUSA Conference, Burlington, VT. September 30.
- D'Amato, A.W.** 2016. *Sustaining forest ecosystems in the face of global change*. Invited presentation. Marine Biological Laboratory Distinguished Scientist Seminar Series. Woods Hole, MA. September 16.
- Curzon, M.T., A.W. D'Amato, J.R. Foster, B.J. Palik, S. Fraver, J.B. Bradford, A. Bottero, and K.E. Gleason.** 2016. *Forest structure and management influence trait-based growth in northern forests across the northeastern United States*. 101st Ecological Society of America Meeting, Fort Lauderdale, FL. August 7-12
- Foster, J.R., and A.W. D'Amato.** 2016. *Forecasting potential climate change refugia to guide conservation of montane species*. 101st Ecological Society of America Meeting, Fort Lauderdale, FL. August 7-12.
- Foster, J.R., and A.W. D'Amato.** 2016. *Forecasting Potential Climate Refugia to Guide Conservation of Montane Species*. Northeast Climate Science Center Webinar. February 24.

- Youngquist, M.,** A.W. D'Amato, S. Eggert, B.J. Palik, and R.A. Slesak. 2016. *Potential Indirect Effects of Invasive Emerald Ash Borer on Wetland Fauna in Black Ash Forests*. Midwest Fish and Wildlife Conference, Grand Rapids, MI. January 25-27.
- D'Amato, A.W.** 2016. *Exploring silvicultural strategies in Vermont's changing forest – northern hardwoods*. Invited presentation. University of Vermont Extension Webinar. January 21.
- Looney, C.,** A.W. D'Amato, and B.J. Palik. 2015. *Treatment, Species, and Planting Season Impact Seedling Success in EAB-Imperiled Black Ash Forests*. Society of American Foresters National Convention, Baton Rouge, LA. November 5.
- Palik, B.J.,** L. Nagel, and A.W. D'Amato. 2015. *Adaptive silviculture for climate change in red pine forests*. Society of American Foresters National Convention, Baton Rouge, LA. November 5.
- D'Amato, A.W.** 2015. *Examining historic temperate forest dynamics to inform adaptive approaches*. Invited presentation at Biology Department Seminar Series, University of Quebec at Montreal. September 30.
- Bottero A.,** A.W. D'Amato, B.J. Palik, J.B. Bradford, S. Fraver. 2015. *Thinning reduces vulnerability of forest ecosystems to drought*. Italian Congress on Silviculture, Florence, Italy. September 15.
- Woodall, C.W.,** Walters, B.F., Coulston, J.W., D'Amato, A.W., Domke, G.M., Russell, M.B., Sowers, P.A. 2015. *Recent land use change is a substantial component of the forest carbon sink in the eastern United States*. 100th Ecological Society of America Annual Meeting. August 9-14. Baltimore, MD.
- D'Amato, A.W.,** B.J. Palik, L. Reuling, and K. Martin. 2015. *Moving beyond gap-phase replacement: strategies for increasing compositional diversity in northern hardwood systems*. North American Forest Ecology Workshop, Veracruz, Mexico. June 15.
- D'Amato, A.W.,** D.R. Foster, D.A. Orwig, A. Barker Plotkin, P. Schoonmaker. 2015. *Long-term deadwood dynamics following stand-replacing wind in an old-growth *Tsuga canadensis*-*Pinus strobus* forest in southern New England*. North American Forest Ecology Workshop, Veracruz, Mexico. June 15.
- Gill, K.G.,** A.W. D'Amato, S. Fraver, J. Almendinger, N. Aaseng. 2015. *Structure and dynamics of range-margin *Pinus banksiana* populations in Minnesota, USA*. North American Forest Ecology Workshop, Veracruz, Mexico. June 15.
- Looney, C.,** A.W. D'Amato, and B. J. Palik. 2015. *Overstory treatment and planting season affect survival of replacement tree species in emerald ash borer-threatened *Fraxinus nigra* forests in Minnesota, USA*. North American Forest Ecology Workshop, Veracruz, Mexico. June 18.

- Palik, B.J.**, L. Nagel, A.W. D'Amato, and C. Kern. 2015. *Adaptive silviculture for climate change in Pinus resinosa (red pine) forests*. North American Forest Ecology Workshop, Veracruz, Mexico. June 18.
- D'Amato, A.W.**, S. Fraver, J.B. Bradford, and B.J. Palik. 2015. *Salvage logging within the context of interacting disturbances in sub-boreal pine systems*. Invited talk at Symposium on the Ecological and Silvicultural Consequences of Disturbance and Salvage Logging on the Sustainability and Biodiversity of Forest Ecosystems. Powdermill Nature Reserve, Rector, PA. May 31.
- D'Amato, A.W.** 2015. *Something old, something new: silvicultural strategies for addressing climate change*. Invited presentation at New England Society of American Foresters 95th Winter Meeting. Fairlee, VT. March 26.
- D'Amato, A.W.** 2014. *Silvicultural scenarios under climate change*. Invited talk at Forest Guild National Meeting. Burlington, VT. June 20.
- D'Amato, A.W.** 2014. *Natural dynamics and management options for black ash forests threatened by emerald ash borer in the upper Great Lakes region, USA*. Invited talk at Harvard Forest Fall Seminar Series. September 12.
- D'Amato, A.W.** 2014. *Real world examples of forest adaptation*. Invited talk at Northern Institute of Applied Climate Science Climate Change and Southern New England Forests Workshop. Amherst, MA. September 23.
- Woodall, C.W.**, Russell, M.B., Walters, B.F., D'Amato, A.W., Zhu, K., Saatchi, S.S. 2014. *Forest production dynamics along a wood density spectrum in eastern US forests*. IUFRO World Congress and SAF National Convention. Salt Lake City, UT. October 5-11.
- Woodall, C.W.**, Russell, M.B., Walters, B.F., D'Amato, A.W., Fraver, S., Domke, G.M. 2014. *Downed dead wood net carbon flux in forests of the eastern United States*. IUFRO World Congress and SAF National Convention. Salt Lake City, UT. October 5-11.
- Woodall, C.W.**, Russell, M.B., D'Amato, A.W., Walters, B.F., Domke, G.M., McWilliams, W. 2014. *Drivers of forest regeneration in forests of the eastern United States*. IUFRO World Congress and SAF National Convention. Salt Lake City, UT. October 5-11.
- Woodall, C.W.**, Domke, G.M., Smith, J., Coulston, J., Russell, M., D'Amato, A.W., Ogle, S., Swan, A. 2014. *Recent technical changes to the United States forest carbon inventory*. IUFRO World Congress and SAF National Convention. Salt Lake City, UT. October 5-11.
- Russell, M.**, C. Woodall, G. Domke, A. D'Amato. 2014. *Coarse woody debris carbon dynamics: research insights from FIA's downed woody materials indicator*. 2014 Society of American Foresters National Convention CIF/IFC AGM Conference-Inventory, Monitoring, and Analysis Training Workshop. Salt Lake City, UT. October 8-11.

- Reinikainen, M.,** A.W. D'Amato, and B. Palik. 2014. *Three-year survival and growth of potential replacement tree species for black ash in north central Minnesota* (oral presentation). Black Ash Symposium, University of Maine, Orono, ME. November 4-7.
- Fraver, S.,** A.W. D'Amato, M. Reinikainen, K. Gill, and B. Palik. 2014. *Structure and stand dynamics of old-growth black ash stands in northern Minnesota* (oral presentation). Black Ash Symposium, University of Maine, Orono, ME. November 4-7.
- D'Amato, A.W.,** B.J. Palik, S. Fraver, E.J. Silver, and J.B. Bradford. 2014. *Long-term structural and compositional development of fire-origin red pine forests in north central Minnesota*. Invited webinar. Lake States Fire Science Consortium. November 20.
- Woodall, C.W.,** Domke, G.M., Smith, J.E., Coulston, J., Healey, S.P., Perry, C.H., Gray, A., Russell, M., D'Amato, A.W., Ogle, S., Swan, A. 2014. *Reducing uncertainty and increasing consistency: Recent technical improvements to the 2015 United States forest carbon inventory*. American Geophysical Union Annual Meeting. San Francisco, CA. Dec. 15-19.
- D'Amato, A.W.** 2013. *Black ash: characterizing stand dynamics, evaluating management options, and anticipating EAB impacts*. Invited talk at Forest Health Workshop sponsored by Chippewa National Forest and Minnesota DNR, Walker, MN. February 12.
- D'Amato, A.W.** 2013. *Current status and trends in silvicultural practices in Minnesota*. Invited talk at Minnesota Society of American Foresters Annual Meeting, Coon Rapids, MN. February 26.
- D'Amato, A.W.,** L. Reuling, B. Palik, and K. Martin. 2013. *Assessing the efficacy of natural disturbance-based harvest gaps at restoring old-growth composition and structure*. Talk at 98th Annual Meeting Ecological Society of America. August 4-9, 2013. Minneapolis, MN.
- D'Amato, A.W.** 2013. *Adaptive silviculture and site level considerations for northern hardwoods*. Invited presentation at the 2013 Wisconsin Society of American Foresters State Conference, Minocqua, WI. September 17.
- D'Amato, A.W.** 2013. *Examining management options and impacts for black ash forests threatened by EAB*. Invited seminar at North Central Forest Pest Workshop, Frontenac, MN. September 24.
- D'Amato, A.W.** 2013. *Silviculture is Dead. Long live Silviculture*. Invited panel presenter at Society of American Foresters National Convention plenary session. Charleston, SC. October 24.
- D'Amato, A.W.** 2012. *Looking back to inform the future: retrospective assessments of forest adaptation and mitigation strategies*. Invited webinar as part of Northeast Climate Science Center Colloquium, University of Massachusetts, Amherst, MA. February 15.

- D'Amato, A.W.** 2012. *Looking back to assess the efficacy of forest adaptation strategies: density management and drought.* Invited seminar as part of SFEC “Adaptive Management in the Face of Climate Change” Workshop, Cloquet, MN. February 21.
- D'Amato, A.W.** 2012. *Research examining EAB impacts and black ash management options.* Invited seminar at workshop organized by Aitkin County Land Department and Forest Stewards Guild: “Managing Black Ash in the EAB Era,” Isle, MN. March 9.
- D'Amato, A.W.,** S. Fraver, M. Reinikainen, B.J. Palik, and K. Gill. 2012. *Dynamics and structure of old-growth Fraxinus nigra systems: baselines for a foundation species in peril.* Talk at 97<sup>th</sup> Annual Meeting of the Ecological Society of America, Portland, OR. August 8.
- D'Amato, A.W.** 2011. *Future of forest management in the Lake States: insights from several long-term silviculture experiments.* Invited seminar at University of Maine, School of Forest Resources, Forestry Noontime Seminar Series, Orono, ME. January 28.
- D'Amato, A.W.** 2011. *Silviculture in the face of global change: an overview of the UMN silviculture program.* Invited seminar at USDA Forest Service Forest Health Cooperators Meeting, Roseville, MN. March 10.
- D'Amato, A.W.,** J.B. Bradford, S. Fraver, and B.J. Palik. 2011. *Looking back to inform the future: The effects of thinning and stand complexity on drought tolerance within Pinus resinosa systems.* Talk at 8<sup>th</sup> North American Forest Ecology Workshop, Roanoke, VA. June 21.
- D'Amato, A.W.** 2011. *Helping forests thrive in the face of global change.* Invited seminar at University of Minnesota Institute on the Environment, Frontiers in the Environment Seminar Series, St. Paul, MN. October 19.
- D'Amato, A.W.** 2010. *Impacts of biomass harvesting on aspen ecosystems in northern Minnesota.* Invited seminar at Minnesota Forest Resources Council Meeting, Shoreview, MN. January 20.
- D'Amato, A.W.** 2010. *Forest management: how our actions influence carbon storage.* Invited talk at Minnesota Society of American Foresters Winter Meeting, Nissiwana, MN. March 3.
- D'Amato, A.W.** 2010. *Landscape-level strategies for balancing forest management objectives: the TRIAD approach to land allocation.* Invited seminar at the Wisconsin Mid-State Chapter of the Society of American Foresters Meeting, Altoona, WI. March 30.
- D'Amato, A.W.** 2010. *Silvicultural options for black ash communities in the face of EAB.* 2010. Invited seminar at the Black Ash Symposium, Bemijdi, MN. May 26.
- D'Amato, A.W.,** J. Bradford, S. Fraver. 2010. *Neighborhood competition and carbon dynamics across a Pinus resinosa chronosequence in northern Minnesota: insights from*



- dendroecological examinations*. Talk at 95<sup>th</sup> Annual Meeting of the Ecological Society of America, Pittsburgh, PA. August 4.
- D'Amato, A.W.** 2009. *Urban silviculture: big woods thinking for urban scales*. Invited talk at Annual Minnesota Shade Tree Short Course, Arden Hills, MN. March 17-18.
- D'Amato, A.W.** 2009. *Forest management strategies for increasing carbon stocks and sequestration*. Invited webinar for Blandin Foundation Sponsored Carbon Markets and Forest Practices in Minnesota. April 8.
- D'Amato, A.W.** 2009. *The role of ecological silviculture in restoring and conserving forest ecosystems*. Invited seminar for The Nature Conservancy, Minnesota Chapter, Minneapolis, MN. April 16.
- D'Amato, A.W.** 2009. *Testing the effectiveness of Minnesota's biomass harvesting guidelines*. Invited seminar for National Council for Air and Stream Improvement, Northern Regional Meeting, Stevens Point, WI. May 20 (35 attendees).
- D'Amato, A.W.,** J. Bradford, S. Fraver, R. Kolka, B. Palik, J. Forrester, D. Mladenoff, C. Blinn, and F. Aguilar. 2009. *Assessing the environmental sustainability and capacity of forest-based biofuel feedstocks within the Lake States region*. Poster at Society of American Foresters National Convention, Orlando, FL. September 30-October 2.
- D'Amato, A.W.** 2009. *Silvicultural implications of biomass harvesting*. Invited seminar at Woody Biomass Harvest and Utilization: Opportunities for Private Forest Landowners Workshop. Sponsored by the University of Minnesota Extension Woodland Advisor Program, Grand Rapids, MN. September 18.
- D'Amato, A.W.** 2009. *Long-term effects of silviculture on carbon and complexity: evaluating tradeoffs and opportunities*. Invited seminar for Hanover Forest Science Lecture Series, Department of Forestry, Michigan State University. October 27.
- D'Amato, A.W.** 2009. *Silviculture in the 21<sup>st</sup> Century*. Invited webinar for University of Minnesota, Sustainable Forestry Education Cooperative. November 16.
- D'Amato, A.W.** 2008. *Assignments that Connect Field Work with Course Learning Goals: FR 5611*. Invited talk and panel for faculty from Copenhagen Danish Institute for Study Abroad. Walter Science Library, University of Minnesota. October 30.
- D'Amato, A.W.** 2007. *Late-successional forest habitats in the Commonwealth: their importance, extent, and management*. Invited seminar at UMass Extension COVERTS training workshop. Petersham, MA. April 28.
- D'Amato, A.W.** and D.A. Orwig. 2006. *Relationships between forest structure and disturbance dynamics in eastern hemlock-dominated forests*. Talk at 91st Annual Meeting of the Ecological Society of America, Memphis, TN. August 5-11.

**D'Amato, A.W.** 2006. *Late successional habitats in the Commonwealth and in the Highland Region*. Invited seminar at UMass Extension COVERTS training workshop. Hawley, MA. May 13.

**D'Amato, A.W.** 2005. *Old-growth forests in the Berkshire Hills and Taconic Mountains of western Massachusetts*. Invited talk at Eastern Native Tree Society's Forest Summit, Holyoke, MA. October 13-14.

**D'Amato, A.W.** 2005. *Insights into stand development from old-growth forest ecosystems in western Massachusetts*. Invited talk at Yankee Division of the Society of American Foresters Stand Development Workshop, Enfield, CT. February 10.

**D'Amato, A.W.** 2004. *Scientific and conservation lessons learned from old-growth forest ecosystems*. Invited talk as part of Harvard Forest Research Experience for Undergraduates Program, Petersham, MA. July 20.

**D'Amato, A.W.** and K.J. Puettmann. 2003. *Interaction dynamics in mixed *Alnus rubra/Pseudotsuga menziesii* forests: the relative dominance hypothesis*. Poster at 4<sup>th</sup> North American Forest Ecology Workshop, Corvallis, OR. June 16-20.

#### **PROFESSIONAL MEMBERSHIPS & ASSOCIATIONS**

---

Society of American Foresters, Green Mountain Division, Chair of Education Committee  
Society of American Foresters, New England Chapter, Forest Science Coordinator  
Ecological Society of America-Member  
Forest Stewards Guild-Member  
Xi Sigma Pi (National Forestry Honor Society)