

## **EDUCATION**

- 2014 Ph.D. Natural Resources Science & Management (Forests: Biology, Ecology, Conservation & Management). University of Minnesota, Saint Paul, MN.
- 2008 M.S. Natural Resources (Forestry). University of Vermont, Burlington, VT.
- 2005 B.A. Ecology & Biodiversity, Environmental Science, Literary Studies. University of Denver, Denver, CO.

## **RESEARCH EXPERIENCE**

- 2017-present *Assistant Professor. Department of Natural Resources Ecology and Management. Iowa State University, Ames, IA.*
- 2015-2017 *Postdoctoral Fellow. Department of Interior Northeast Climate Science Center*
- 2014-2017 *Research Associate. The University of Minnesota. St. Paul, MN.*
- 2010-2014 *Graduate Research Assistant. The University of Minnesota. St. Paul, MN.*
- 2005-2007 *Graduate Research Assistant. University of Vermont, Burlington, VT.*
- 2003 *Research Assistant. University of Idaho. Moscow, Idaho.*

## **TEACHING EXPERIENCE**

### **Course Instruction**

*Assistant Professor. Iowa State University, Ames, IA (2017-present)*

- Instructor (Spring 2018), Silviculture (FOR 302; 27 students)

*Instructor. University of Minnesota, St. Paul, MN (2013- 2015)*

- Instructor (Spring 2015), Managing Forest Ecosystems: Silviculture (FNRM 3411/5411; 29 students)
- Instructor (Spring 2015), Managing Forest Ecosystems: Silviculture Lab (FNRM 5413; 12 students)
- Co-Instructor (Fall 2013), Ecology of Managed Systems (ESPM 3108/5108; 65 students)

*Graduate Teaching Assistant. University of Minnesota, St. Paul, MN (2010)*

Responsible for assisting undergraduate and graduate students with course material outside of class and managing grades on assignments and exams.

- Managing Forest Ecosystems: Silviculture (FR3411/5411; 50 students), 1 semester

*Graduate Teaching Assistant. University of Vermont, Burlington, VT (2005 – 2007)*

Responsible for reinforcing concepts and providing assistance to graduate and undergraduate students enrolled in multiple courses (below). Coached undergraduate students on their writing, led field trips, and facilitated group discussions.

- Natural History and Field Ecology (NR 001; 20 students), 1 semester
- Biostatistics (NR 25; 25 students), 2 semesters
- Conservation Biology (NR 224), 1 semester
- Wildlife Conservation (WFB 74), 1 semester
- Remote Sensing (NR 146), 1 semester

- Global Environmental Assessment (ENSC 130), 1 semester

### Graduate advising and mentoring

*Current Graduate Committee Member*

1. Carullo, Sally, MS student in Environmental Science, Winter 2017-present

### PROFESSIONAL EXPERIENCE

- 2009 *Field Research Assistant. Natural Areas Program, Colorado State Parks. Denver, CO.*  
Monitored private land protected by voluntary conservation agreements with the Natural Areas Program, monitored endangered plant populations, and coordinated volunteers.
- 2008-2009 *Stewardship Ecologist. The Nature Conservancy. Boulder, CO.*  
Managed stewardship of preserves owned by The Nature Conservancy, assessed the efficacy of conservation efforts through monitoring, collaborated with researchers on the development of studies to measure conservation success, provided map (ArcGIS) support for conservation easements, coordinated with private landowners and government agencies on addressing conservation concerns including forest restoration and invasive species management.
- 2008 *Science Technician, Stewardship. The Nature Conservancy. Boulder, CO.*  
Mapped, monitored, and managed invasive species on TNC preserves, collaborated with private landowners and government agencies on invasive species management statewide, addressed stewardship concerns on TNC preserves and easements.
- 2007 *Easement Monitoring Intern. The Nature Conservancy. Montpelier, VT.*  
Monitored private and public lands with conservation easements administered by TNC and assisted with stewardship of TNC preserves.
- 2004-2005 *NEPA Compliance Intern. National Park Service. Denver, Colorado.*  
Contributed to environmental impact statements, coded public comments, and provided map (ArcGIS) support.

### PUBLICATIONS

#### RESEARCH (peer-reviewed):

- Clough, B., **Curzon, M.**, Russell, M., Domke, G., and Woodall, C. 2017. Climate-driven variation in stem wood density of tree species in the eastern United States: ecological impact and implications for national biomass assessments. *Global Ecology and Biogeography* 26(10): 1153-1164.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2017. Early regeneration response to aggregate overstory and harvest residue retention in *Populus tremuloides* (Michx.)-dominated forests. *New Forests* 48(5): 719-734.
- Curzon, M.T.**, D'Amato, A.W., Fraver, S., Palik, B.J., Gleason, A., Bottero, A., and Foster, J. 2017. Harvesting influences functional identity and diversity over time in forests of the northeastern U.S.A. *Forest Ecology and Management* 400: 93-99.
- Curzon, M.T.**, S.C. Baker, C.K. Kern, B.J. 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(2): 31.
- Curzon, M.T.**, A.W. D'Amato, S. Fraver, E. Huff, and B.J. Palik. 2017. Succession, climate, and neighborhood dynamics influence tree growth over time: an 87-year record of change. *Journal of Vegetation Science* 28: 82-92.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2016. Bioenergy harvest impacts to biodiversity and resilience in woody vegetation vary across aspen-dominated forest ecosystems in the Lake States region, USA. *Applied Vegetation Science* 19:667-678.

- 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(1): 99-107.
- Curzon, M.T.** and W.S. Keeton. 2010. Spatial characteristics of canopy disturbance in riparian old-growth hemlock – northern hardwood forests, Adirondack Mountains, New York, USA. *Canadian Journal of Forest Research*. 40: 13-25.
- Roon, D.A., **M.E. Thomas**, K.C. Kendall, and L.P. Waits. 2005. Evaluating mixed samples as a source of error in non-invasive genetic studies using microsatellites. *Molecular Ecology* 14(1): 195-201.

## OUTREACH

- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2015. Soil texture matters: the effects of removing harvest residues. *Forestry Source* 20(5):12. Reprinted from an online research report sponsored by the University of Minnesota Extension. <http://www.myminnesotawoods.umn.edu/2014/10/researchreport-harvest-residues-and-compaction-impact-productivity>

## PRESENTATIONS

### RESEARCH (presenter in bold):

- Foster, J.R.** D'Amato, A.W., Itter, M., Reinikainen, M., and Curzon, M.T. 2017. Landsat Time-series for the masses: Predicting wood biomass growth from tree-rings using departures from mean phenology in Google Earth Engine. Invited poster at the American Geophysical Union Fall Meeting. December 11.
- Curzon, M.T.**, D'Amato, A.W., Fraver, S., Palik, B.J., Gleason, A., Bottero, A., and Foster, J. 2017. Harvesting Influences Functional Identity and Diversity in Forests across the Northeastern USA. Poster at the Society of American Foresters Annual Convention. Albuquerque, NM. November 16.
- Curzon, M.T.**, D'Amato, A.W., Fraver, S., Palik, B.J., Bradford, J.B., Gleason, A., Bottero, A., and Foster, J. 2017. Impacts of climate, disturbance, and management on the growth and dynamics of northern forest ecosystems. Poster at the Northeast Climate Science Center Regional Meeting. Amherst, MA. May 15.
- Curzon, M.T.** A.W. D'Amato, C. Kern, B.J. Palik, S. Baker. 2016. Retention forestry: Implications for diversity and function in aspen-dominated forests. Seminar at the Society of American Foresters Annual Convention. Madison, WI. November 5.
- Curzon, M.T.**, D'Amato, A.W., Fraver, S., Foster, J.R., Palik, B.J., Bradford, J.B., Bottero, A., Gleason, K.E. 2016. Management influences functional composition and diversity in northern hardwood and mixed conifer forests of New England, USA. Seminar at ECANUSA Forest Science Conference, Burlington, VT. September 30 (35 attendees).
- Curzon, M.T.**, D'Amato, A.W., Fraver, S., Foster, J.R., Bradford, J.B., Palik, B.J., Gleason, K., and Bottero, A. 2016. Management influences functional identity and functional diversity in northern forests across the northeastern USA. Seminar at 101<sup>st</sup> Annual Meeting of the Ecological Society of America, Fort Lauderdale, FL. August 10 (12 attendees).
- Dymond, S.**, R. Kolka, P. Bolstad, K. Gill, M. Curzon, and A. D'Amato. 2015. Excess growing-season water limits lowland black spruce productivity. Poster at the American Geophysical Fall Meeting. San Francisco, CA. December 16.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2015. Aspen-Dominated Forest Response to Organic Matter Removal and Compaction Varies with Site Conditions. Invited seminar at the Soil Science Society of America Annual Meeting, Minneapolis, MN. November 16 (30 attendees).
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2015. Historic patterns of neighborhood crowding and composition influence growth of red pine. Seminar at 10<sup>th</sup> North American Forest Ecology Workshop, Veracruz, Mexico. (40 attendees).
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2013. Biomass harvests in the Lake States: How aggregated overstory retention and residual woody debris influence the understory. Seminar at 9<sup>th</sup> North American Forest Ecology Workshop, Bloomington, IN. (15 attendees).

- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2013. Functional responses to varying disturbance severities 15 years following biomass harvests in aspen forests. Seminar at 98<sup>th</sup> Annual Meeting of the Ecological Society of America. Minneapolis, MN. (30 attendees).
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2012. Harvest-related disturbance effects on species richness and community composition in Lake States aspen-dominated forests. Seminar at 97<sup>th</sup> Annual Meeting of the Ecological Society of America. Portland, OR. (15 attendees)
- Keeton, W.S.**, C.E. Kraft, D.R. Warren, J.P. Stovall, and M.T. Curzon. 2012. A re-evaluation of biomass dynamics and riparian functions in late-successional forests of the northeastern U.S. Invited Seminar at the 97th Annual Meeting of the Ecological Society of America. Portland, OR.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2011. Productivity and species composition response to biomass removal and soil compaction in aspen-dominated forests of the Lake States. Seminar at 8th North American Forest Ecology Workshop. Roanoke, VA. June 20 (32 attendees).
- Keeton, W.S.**, C. Kraft, J. Stovall, M.T. Curzon, D.R. Warren, and J. Nunery. 2009. Old-growth riparian forests have dramatic effects on Adirondack stream habitats: a synthesis of seven years of research. Seminar at the Adirondack Research Consortium, Old Forge, N.Y., March 4-5.
- Curzon, M. T.**, and W.S. Keeton. 2007. Canopy gap dynamics in old-growth riparian forests along low order streams, Adirondack Mountains, NY. Seminar at 92<sup>nd</sup> Annual Meeting of the Ecological Society of America, San Jose, CA.
- Thomas, M. E.** and R. L. Sanford, Jr. 2005. Lower treeline in the Front Range foothills. Poster at 90<sup>th</sup> Annual Meeting of the Ecological Society of America, Montreal, Canada.
- Thomas, M. E.**, D. A. Roon, L. P. Waits, and K. C. Kendall. 2004. Mixed hair samples from grizzly bear populations: an assessment of noninvasive genetic sampling methods. Poster at the 89<sup>th</sup> Annual Meeting of the Ecological Society of America, Portland, OR.

#### **OUTREACH (presenter in bold):**

- Curzon, M.T.**, A.W. D'Amato, B.J. Palik, and C.K. Kern. 2016. Influence of aggregated overstory retention on regeneration and biodiversity in aspen-dominated forests. Annual Forest and Wildlife Research Review, Cloquet, MN, January 12. 125 attendees.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2015. Succession and related neighborhood dynamics influence growth of red pine over 87 years. Invited seminar at the Chequamegon-Nicolet National Forest. October 22. 10 attendees.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2015. Aspen-dominated forest response to harvest residue removal and compaction varies with site conditions. Invited seminar at the Chippewa National Forest Science Meeting, Bemidji, MN. March 17. 60 attendees.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2015. Forest response to harvest residue removal and associated practices varies with site conditions. Invited seminar at the Annual Forest and Wildlife Research Review, Cloquet, MN. February 24. 120 attendees.
- Curzon, M.T.**, A.W. D'Amato, and B.J. Palik. 2011. Forest productivity response to organic matter removal and soil compaction in aspen-dominated forests of the Lake States. Poster at the 8<sup>th</sup> Annual Forestry, Wildlife, and Natural Resources Research Review, Cloquet, MN. February 22.

#### **PROFESSIONAL MEMBERSHIPS**

Ecological Society of America  
 Society of American Foresters  
 Forest Stewards Guild  
 Xi Sigma Pi (Forestry Honors Society)

#### **SERVICE**

- Officer (Science and Technology), Society of American Foresters Iowa Chapter (2018-present)

- Reviewer: *New Forests, Forest Ecology and Management, Biodiversity and Conservation, Canadian Journal of Forest Research, Ecology, Environmental Planning and Management, Forests, Forest Science*
- USFS and USGS friendly reviews
- Volunteer, Natural Resources Association of Graduate Students, University of Minnesota. (2012-2014)
- Judge, Academy for Science and Agriculture Annual Science Fair, Vadnais Heights, MN. (2012-2014)

### **FELLOWSHIPS AND GRANTS**

- UMN Postdoctoral Career Development Award, \$400 (2016)
- University of Minnesota Doctoral Dissertation Fellowship, \$22,500 plus tuition (2013-2014)
- Student scholarship, North American Forest Ecology Workshop, \$350 (2011)

### **PROFESSIONAL DEVELOPMENT**

- USGS Climate Science Center Early Career Training. November 1-3, 2016. Amherst, MA.
- Preparing Future Faculty: Teaching in Higher Education. January-May, 2013. (3 credits)
- North American Dendrochronological Fieldweek. May 28-June 5, 2012. Jemez Springs, NM.
- Efrogmson coaches' training (The Nature Conservancy). 2008. Allenspark, CO.