

James M. Le Moine

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Education

<i>Institution</i>	<i>Degree/Topic</i>	
University of Tasmania	Plant Evolution, Quantitative Ecology, Microbiology Zoology, Marine Ecology, Phycology Indigenous Studies	1999-2000
Michigan Technological University	B.S., Ecology; Minor Journalism	2001
University of Toledo	M.S., Ecosystem Science Soil Respiration Across Chronosequences of Three Dominant Forest Ecosystems in Northern Wisconsin, USA	2005

Professional Experience

Apr 2018—present	Research Associate, Northern Arizona University
Feb 2017—May 2018	Instrument Technician, Clemson University
May 2004—Sep 2017	Research Laboratory Specialist, University of Michigan
2000—2001	Research Technician, Michigan Technological University
1994—1999	Sole Proprietor, LeMoine Landscaping, Ontonagon, MI

Skills

organizing and executing field sampling campaigns; stable and radioactive isotope (^{15}N , ^{13}C , ^{14}C) biogeochemistry laboratory management including Radiation Safety and Occupational Safety and Environmental Health compliance; eddy covariance and biometeorological datalogger installation and maintenance; budget and supply chain management; data analysis and presentation; student mentoring; workshop/meeting facilitation

Undergraduate Students Co-Mentored

Zachary Fogel, Undergraduate Research Opportunity Program. September 2014—May 2015
Peter Hensold, Undergraduate Research Opportunity Program. September 2014—May 2015
Katherine Hunt, Undergraduate Research Opportunity Program. September 2014—May 2015
Brendan Nee, Undergraduate Research Opportunity Program. September 2014—May 2015
Katie Peterson, Undergraduate Research Opportunity Program. September 2014—May 2015
Brooke Shaw, Undergraduate Research Opportunity Program. September 2014—May 2015
Hannah Smith, Undergraduate Research Opportunity Program. September 2014—May 2015
Kathryn Tovar, Undergraduate Research Opportunity Program. September 2014—May 2015
Davon Wheeler, Undergraduate Research Opportunity Program. September 2014—May 2015
Katlyn Hogan, Undergraduate Research Opportunity Program. September 2015—May 2016
Elizabeth Michaelson, Undergraduate Research Opportunity Program. September 2015—May 2016
Elliot Nichols, Undergraduate Research Opportunity Program. September 2015—May 2016
Erin Rodewald, Undergraduate Research Opportunity Program. September 2015—May 2016

Undergraduate Students Co-Mentored (continued)

Rebecca Cotton, Undergraduate Research Opportunity Program. September 2014—May 2015
Independent Study. September 2014—May 2015, January 2016—May 2017

Kevin Amses, NSF Research Experience for Undergraduates. June—August 2014

Julia Fisher, NSF Research Experience for Undergraduates. June—August 2014

William Marshall, NSF Research Experience for Undergraduates. June—August 2013

John Menz, NSF Research Experience for Undergraduates. June—August 2013

Stephanie Patton, NSF Research Experience for Undergraduates. June—August 2013

Jeannie Wilkening, NSF Research Experience for Undergraduates. June—August 2013

Caleigh Chong, Undergraduate Research Opportunity Program. September 2012—May 2013

Rachel Pad, Undergraduate Research Opportunity Program. September 2012—May 2013

Cristina Shoffner, Undergraduate Research Opportunity Program. September 2012—May 2013

Will Schrier, Undergraduate Research Opportunity Program. January—May 2013

Renee Veresh, Undergraduate Research Opportunity Program. September 2012—May 2013

Clarisse Betancourt Román, Frontiers Master of Science Student Summer Project. June—August 2012

Buck Castillo, Frontiers Master of Science Student Summer Project. June—August 2012

Gabe Abud, NSF Research Experience for Undergraduates. June—August 2012

Ryan Chong, Undergraduate Research Opportunity Program. September 2011—May 2012

Nicole Dear, Undergraduate Research Opportunity Program. September 2011—May 2012

Matt Miyano, Undergraduate Research Opportunity Program. September 2011—May 2012

Sara Shamaskin, Undergraduate Research Opportunity Program. September 2011—May 2012

Emily Thompson, Independent Research in Ecology. July—December 2011

Sterling Atkins, NSF Research Experience for Undergraduates. June—August 2011

Sarah Liao, Undergraduate Research Opportunity Program. September 2010—May 2011

Erin Skallerup, Independent Research in Ecology. September 2010—May 2011

Spencer Shepherd, Undergraduate Research Opportunity Program. September 2010—May 2011

Samantha Yassine, Undergraduate Research Opportunity Program. September 2010—May 2011

Chris Bogdan, Undergraduate Research Opportunity Program. September 2009—May 2010

Amanda Brenske, Undergraduate Research Opportunity Program. September 2009—May 2010

Amanda Do, Undergraduate Research Opportunity Program. September 2009—May 2010

Kelly McClure, Undergraduate Research Opportunity Program. September 2009—May 2010

Alexis DeGabriele, Undergraduate Research Opportunity Program. September 2008—May 2009

Andrew Kimball, Undergraduate Student Researcher. September 2005—May 2007

Herschel Grisby, NSF Research Experience for Undergraduates. June—August 2006

John Keeton, Independent Research in Ecology. September 2005—May 2006

Anastacia Ciau, NSF Research Experience for Undergraduates. June—August 2004

Research Staff Supervised

Covington Watson, Undergraduate Work Study Student. December 2017—present
Mary Wilkinson, Research Technician. September 2017
Chelsea McKinney, Sustainability Intern. June—August 2017
Blake Newton, Sustainability Intern. June—August 2017
Shannon Skeffington, Sustainability Intern. June—December 2017
Renee Kinney, Research Technician. (Winters) December 2013—April 2017
Peter Ward, Research Technician. August—September 2013
Tim Ludington, Research Technician. June—August 2013
Lena Cruz, Research Technician. July—August 2012
Mark Fate, Research Technician. June 2012—May 2013
Tatia Bauer, Undergraduate Work Study Student. January—May 2012
Michelle Busch, Undergraduate Work Study Student. January—May 2012
Zach Zeneberg, Research Technician. October 2009—May 2010
Derek Ager, Undergraduate Field Researcher. June—August 2009
Bryce Bredell, Undergraduate Field Researcher. June—August 2009
Corey Higley, Undergraduate Field Researcher. June—August 2009
Kate Heflick, Undergraduate Field Researcher. June—August 2009
Rahul Gondalia, Undergraduate Field Researcher. June 2008—December 2009
Alex Bajcz, Undergraduate Work Study Student. September 2007—May 2009
Matt Pierle, Field and Laboratory Technician. November 2006—May 2009
Alex Smith, Undergraduate Field Researcher. June--August 2006
Mark Westbrook, Research Technician. September 2005—May 2006
Ryan Kenny, Undergraduate Work Study Student. October 2005—August 2007
Anthony Arnold, Undergraduate Work Study Student. September 2005—May 2007
Eileen Quintero, Undergraduate Work Study Student. September 2005—May 2006

Peer-Reviewed Publications

LE Nave, CM Gough, CH Perry, KL Hofmeister, **JM Le Moine**, et al. 2017. Physiographic factors underlie rates of biomass production during succession in Great Lakes forest landscapes. *Forest Ecology and Management* 397, p 157-173.

Crumsey, JM; Capowiez, Y; Goodsitt, MM; Larson, S; **Le Moine, JM**; Bird, JA; Kling, GW; Nadelhoffer, K. 2015. Exotic earthworm community composition interacts with soil texture to affect redistribution and retention of litter-derived C and N in northern temperate forest soils. *Biogeochemistry*, 126(3), p 379-395.

Nave, LE; Sparks JP; **Le Moine J**; Hardiman BS; Nadelhoffer, KJ; Tallant, JM; Vogel, CS; Strahm, BD; Curtis, PS. 2014. Changes in soil nitrogen cycling in a northern temperate forest ecosystem during succession. *Biogeochemistry*, 121(3). p 471-488.

Peer-Reviewed Publications (continued)

Crumsey, J M; **Le Moine, J**; Vogel, CS; Nadelhoffer, K. 2014. Historical patterns of exotic earthworm distributions inform contemporary associations with soil physical and chemical factors across a northern temperate forest. *Soil Biology and Biochemistry*, (68). p 503-514.

Crumsey, J; **Le Moine, J**; Capowiez, Y; Goodsitt, M; Larson, S; Kling, G; Nadelhoffer, K. 2013. Community-specific impacts of exotic earthworm invasions on soil carbon dynamics in a sandy temperate forest. *Ecology*, (94)12. p 2827-2837.

Nave, L; Nadelhoffer, K; **Le Moine, J**; van Diepen, L; Cooch, J; Van Dyke, N. 2013. Nitrogen Uptake by Trees and Mycorrhizal Fungi in a Successional Northern Temperate Forest: Insights from Multiple Isotopic Methods. *Ecosystems*, (16)4. p 590-603.

Nave, L; Gough, C; Maurer, K; Bohrer, G; Hardiman, B; **Le Moine, J**; Munoz, A; Nadelhoffer, K; Sparks, J; Strahm, B. 2011. Disturbance and the resilience of coupled carbon and nitrogen cycling in a north temperate forest. *Journal of Geophysical Research: Biogeosciences*, (116)G4. p 2005-2012.

Zheng, D; Chen, J; Noormets, A; Euskirchen, E; **Le Moine, J**. 2005. Effects of climate and land use on landscape soil respiration in northern Wisconsin, USA: 1972 to 2001. *Climate Research*, (28)2. p 163-173.

Bresee, M; **Le Moine, J**; Mather, S; Brosofske, K; Chen, J; Crow, T; Rademacher, J. 2004. Disturbance and landscape dynamics in the Chequamegon National Forest Wisconsin, USA, from 1972 to 2001. *Landscape Ecology*, (19)3. p 291-309.

Chen, J; Brosofske, K D; Noormets, A; Crow, T; Bresee, M; **Le Moine, J**; Euskirchen, E; Mather, S; Zheng, D. 2004. A working framework for quantifying carbon sequestration in disturbed land mosaics. *Environmental Management*, (33)1. p S210-S221.

Ma, S; Chen, J; North, M; Erickson, H; Bresee, M; **Le Moine, J**. 2004. Short-term effects of experimental burning and thinning on soil respiration in an old-growth, mixed-conifer forest. *Environmental Management*, (33)1. p S148-S159.

Zheng, D; Rademacher, J; Chen, Jiquan; Crow, T; Bresee, M; **Le Moine, J**; Ryu, S-R. 2004. Estimating aboveground biomass using Landsat 7 ETM+ data across a managed landscape in northern Wisconsin, USA. *Remote Sensing of Environment*, (93)3. p 402-411.

Le Moine, J; Chen, J. 2002. Placing our hypotheses and results in time and space. *Acta Phytocological Sinica*, (27)1. p 1-10.

Posters

I Bogoev; TL O'Halloran; E Smith; **JM Le Moine**. European Geophysical Union General Assembly 2018. Tidal Influence on CO₂ Exchange in a South Carolina Coastal Salt-marsh.

I Bogoev; TL O'Halloran; **JM Le Moine**. American Geophysical Union Annual Meeting. 2017. Assessing near-surface heat, water vapor and carbon dioxide exchange over coastal salt-marsh.

M Gormley; P-J Hatton; **JM Le Moine**; A Auclerc; TR Filley; KJ Nadelhoffer; JA Bird. BIOGEOMON 2017. Temperature & wood source control PyOM turnover in a North American forest soil.

P-J Hatton; **JM Le Moine**; A Auclerc; M Gormley; TR Filley; KJ Nadelhoffer; JA Bird. European Geophysical Union General Assembly 2016. Temperature & wood source control PyOM turnover in a Northern American forest

NL Medina; PJ Hatton; **JM Le Moine**; KJ Nadelhoffer. American Geophysical Union Annual Meeting. 2015. Soil Organic Carbon Sources of Respired CO₂ in a Mid-successional North Temperate Forest

Nave, LE; **Le Moine, J**; Gough, CM; Vogel, CS; Nadelhoffer, KJ; Curtis, P. American Geophysical Union Annual Meeting. 2013. Belowground processes regulate ecosystem nitrogen retention during a multi-year forest dieback event.

Hatton, P; Dastmalchi, K; Chatterjee, S; Auclerc, A; **Le Moine, J**; Filley, TR; Nadelhoffer, KJ; Stark, R; Bird, JA. American Geophysical Union Annual Meeting. 2013. Linking charring temperature and wood source to the structure and degradation rates of pyrogenic organic matter in soil.

Nave, LE; Sparks, JP; **Le Moine, J**; Hardiman, BS; Nadelhoffer, KJ; Strahm, BD; Curtis, P. American Geophysical Union Annual Meeting. 2012. Soil inorganic nitrogen cycling during successional change in a northern temperate forest.

Nave, L; Nadelhoffer, K; **Le Moine, J**; Hardiman, B; Sparks, J; Strahm, B; Munoz, A; Gough, C; Vogel, CS; Curtis, P. American Geophysical Union Annual Meeting. 2011. Disturbance and decoupling of belowground carbon and nitrogen cycles in a northern temperate forest.

Nave, L; Nadelhoffer, K; **Le Moine, J**; Smith, M. 2010. Ecological Society of America Annual Meeting. 2010. Variation in soil nitrogen availability and substrate use affect the 15 N signatures of trees, saprotrophic, and ectomycorrhizal fungi.

Nadelhoffer, K; **Le Moine, J**; DeGabriele, A; Frey, S D; Grant, M. Ecological Society of America Annual Meeting. 2010. 15N tracer recoveries in red pine and oak forests 16 years after labeling as constraints on estimates of N deposition effects on forest C storage.

Gough, CM; Nave, LE; Hardiman, BS; Bohrer, G; Halperin, A; Maurer, K; **Le Moine, J**; Nadelhoffer, K; Vogel, CS; Curtis, P. American Geophysical Union Annual Meeting. 2010. High rates of carbon storage in old deciduous forests: Emerging mechanisms from the Forest Accelerated Succession Experiment (FASET).

Meetings and Workshops

USDA Forest Service International Programs Soil Carbon Inventory Workshop, July 2013, 2014, 2015, and June 2016. University of Michigan Biological Station, Pellston, MI, USA. Co-conducted with Dr. Lucas Nave the planning, hosting, and presenting field and laboratory exercises for 10-16 forest researchers and agency personnel from Latin American countries.

North American Carbon Program's Enhanced Background Isotope Study (EBIS) Annual Research Meeting, February 2010. Lawrence Berkeley National Lab, Berkeley, CA, USA.

North American Carbon Program's Enhanced Background Isotope Study (EBIS) Annual Research Meeting, February 2009. Argonne National Lab, Argonne, IL, USA.

Center for Embedded Networked Sensors Workshop. July 2007. Wireless Sensing Systems: from Eco-Systems to Human-Systems. James Reserve, San Jacinto Mountains, CA, USA

Workshop on Automated Soil Respiration Measurements. September 2007. Durham, NH, USA

Chequamegon Ecosystem-Atmosphere Study Annual Research Meeting. June 2005. Kemp Natural Resources Station, Woodruff, WI, USA

Chequamegon Ecosystem-Atmosphere Study Annual Research Meeting. June 2004. Minneapolis, MN, USA

Ecological Society of America 87th Annual Meeting, August 2002. Tucson, AZ, USA

Conference of the Landscape Ecology Working Group. International Union of Forest Research Organizations. Emulating Natural Forest Disturbances: Concepts and Applications, May 2002. Sault Ste. Marie, Ontario Canada.

Ecological Society of America 86th Annual Meeting, August 2001. Madison, WI, USA

The Michigan Tech LeaderShape® Institute. June 1998. Alberta, MI, USA

References

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