

Curriculum Vitae

James M. Schmierer, Jr.

Education

M.S. 2000. Forestry, Michigan Technological University, Houghton, MI
Thesis Title: Growth and development of tamarack following bucket mounding site preparation in an upper Michigan mineral wetland

B.S. 1998. Forestry, Michigan Technological University, Houghton, MI
Summa Cum Laude

A.A.S. 1996. Forest Technology, Michigan Technological University, Houghton, MI
Summa Cum Laude

Experience

Nov. 2000 to Present: School Forester/Lecturer, School of Forest Resources and Environmental Science (formerly School of Forestry and Wood Products) Michigan Technological University (MTU), Houghton, MI

May to Nov. 2000: Independent Forestry Contractor, Big Creek Forestry, Marquette, MI

May 1998 to Nov. 2000: Graduate Research/Teaching Assistant, (Forest Modeling), School of Forestry & Wood Products, MTU, Houghton, MI

May 1996 to May 1998: Greenhouse Technician, School of Forestry & Wood Products, MTU, Houghton, MI

May 1992 to Sept. 1994: Arborist, McDuffie Tree Care, Ellsworth, MI

Winters 1992-3 and 1993-4: Feller/Bucker, Drenth Brothers, Inc., Ellsworth, MI

Aug. 1987 to May 1992: Tree Care Technician/Foreman, Mt. Top/Green Ridge Tree Co., Northville, MI

Teaching

Fall 2006-2008: Instructor, FW3190 Multiple Resource Assessment, FW3150 Timber Harvesting

Spring 2003-2006: Instructor, FW3376, Forest & Environmental Resource Management (FERM)

Fall 2002-2006: Instructor, FW3150 Timber Harvesting, FW3376 FERM

Spring 2000-2002: Instructor, FW4140 Ecosystem Modeling

Fall 2001: Instructor, FW3150 Timber Harvesting

Fall 1999-2000: Co-Instructor, FW4140 Forest Modeling

Professional Affiliations

Society of American Foresters (SAF): 1995-present

International Society of Arboriculture Certified Arborist (ISA): 1996-present
Michigan Forestry and Park Association (MFPA): 1996-present
Forest Guild: 2005-present

Professional Training

Biomass Utilization and Restoration Network in the U.P. Workshops (*Invited Speaker*): Forest Restoration through Biomass Harvesting—Trenary and Shingleton, MI, Sept. 17-18, 2008.

MI Society of American Foresters Spring Meeting: The Northern Hardwood Resource—Where We've Come From and Where We're Heading, Marquette, MI, April 23-24, 2008.

Swamp Conifers—Ecology and Silviculture of Tamarack and Black Spruce (*Invited Speaker*): WI DNR Forestry Training, Minoqua, WI, Sept. 18, 2007.

Forest Guild Annual Meeting (*Invited Speaker*): Forestry in the Headwaters—Protecting Water Through Excellent Forestry, Boulder Junction, WI, Sept. 28-30, 2006.

American Tree Farm System Qualified Inspector Training, Ford Forestry Center and School Research Forest, Alberta, MI, Aug. 25, 2006.

MI Society of American Foresters Spring Meeting: Feathers in the Forest—Interactions Between Forest Management and Bird Habitats, Sault Ste. Marie, MI, May 10-11, 2006.

MI Society of American Foresters Fall Meeting: The Future of Michigan's Forests—Proactive Management in a Changing Forest Environment, Lewiston, MI, Nov. 3-4, 2005.

MI Society of American Foresters Spring Meeting: Forests and Whitetails—Striving for Balance, St. Ignace, MI, June 9-10, 2005.

National Council for Air and Stream Improvement Northern Regional Meeting, Forest Environmental Research in the Lake States, Green Bay, WI, May 25, 2005.

Forest Health Workshop, MSU Extension, MI DNR, MTU, Bay de Noc Community College, Escanaba, MI, March 15, 2005.

Managing Mature, Early Successional Forests, MI SAF and Ottawa National Forest Kenton Ranger Station, Kenton, MI, July 30, 2004.

North American Forest Biology Workshop, Michigan Technological University, USDA Forest Service, Houghton, MI, July 12-15, 2004.

Society of American Foresters National Meeting (*Presenter*), Buffalo, NY, Oct. 25-29, 2003

Lake States Silviculture Summit, School of Forest Resources and Environmental Science, Michigan Technological University, Houghton, MI, April 22-23, 2003

Invasive Species: Past, Present & Future of Lake States Ecosystems, MI SAF and Michigan Technological University, Houghton, MI, Apr. 3-4, 2003.

Sustainable Forestry Education Training, MSU Cooperative Extension, Ford Forestry Center and School Research Forest, Alberta, MI, Oct. 23-25, 2002

Forest Certification Auditing Workshop, Society of American Forester's National Meeting, Winston-Salem, NC, Oct. 5, 2002

Faculty Institutes for Reforming Science Teaching (MSU FIRST II) Workshop, Kellogg Biological Station, May 15-19, 2002

Emulating Natural Forest Landscape Disturbances Symposium, Sault Ste. Marie, Canada, May 7-9, 2002

Wilderness First Aid/CPR Training, MTU, NPS, U. Minn. Duluth, Houghton, MI, May 3-5, 2002

Gentle Logging Demo Satellite Conference, MTU, USDA, MIDNR, Houghton, MI, March 20, 2002

Forest Vegetation Simulator Conference, Forest Management Service Center, USDA, Fort Collins, CO, Feb. 12-14, 2002

Log Grading and Scaling Workshop, Ford Forestry Center, Alberta, MI, July 10-11, 2001

Wildfire Training Program, MTU, MIDNR, USFS, NPS, Houghton, MI, March 21-24, 2001

Outcomes-based Learning & Assessment Workshop, SAF National Meeting, Washington, D.C., Nov. 16, 2000

Tools and Techniques for Foresters in the 21st Century, MI SAF Meeting, Traverse City, MI, Feb. 29 to Mar. 2, 2000

Second North American Forest Ecology Workshop (Presenter), Orono, ME, June 27-28, 1999

Silviculture Instructor's Tour and SAF National Meeting, Traverse City, MI, Sept. 17-25, 1998

Achievements

Officer of the Year, Sigma Rho Fraternity, 1999
Upper Midwest Capstone Report Competition Winner, 1998
Outstanding Senior Award Winner, School of Forestry and Wood Products, 1998
Michigan Technological University Dean's List 1994-1998

University and Community Involvement

Research Forest and Ford Center Management Committee (School of Forest Resources and Environmental Science) 2001-present
Michigan DNR Western U.P. Citizen's Advisory Council 2008-present
Biomass Utilization and Restoration Network in the U.P. Steering Committee 2008-present
Regional Jack Pine Symposium Consortium 2008-present
Faculty Advisor, MTU Student Chapter of Society of American Foresters 2004-2006
Nara Nature Park Committee 2004-present
Michigan Tech Trails and Recreational Forest Management Committee 2002- present
Faculty Advisor, Sigma Rho Fraternity, 2001-present
Graduate Student Council Representative, 2000

Public Outreach

Presenter, Youth in Science & Engineering Expo, Detroit, MI, Nov. 2007 and Nov. 2008
Field Trip Leader, USFS National Advanced Silviculture Program, July 2007
Instructor, USFS Program in Advanced Silviculture Studies, May 2006, July 2003
Instructor, Detroit Applied Environmental Science Program (DAES), Aug. 2005
Instructor, Forestry Teacher Institute, July 2004 and 2005
Coordinator, Detroit Area Pre-College Engineering Program (DAPCEP), July-Aug. 2001
Field Trip Leader, Lake Superior Youth Symposium, May 17-20, 2001
Co-Instructor, USFS Program in Advanced Silviculture Studies (PASS), Sept. 2000

Research and Teaching Interests

Management and silviculture of northern hardwoods
Site preparation effects on forest regeneration
Sustainable management of natural resources
Forest recreational development

Grants

Ford Center Forest Water Quality Management Demonstration Area, 2009. MI DEQ Non-point Source Pollution Program; **Schmierer**, Rivard, Pypker, Forsman, Erickson; Total Funding \$221,447.

Ford Center Water Quality Management Project, 2008. MI DNR FMFMD Forest Stewardship Program Outreach and Education Grant; **Schmierer**, Rivard, Forsman; Total Funding \$10,000.

Demonstrate the Use of Red Pine and Eastern Hemlock in a Stress-Laminated Bridge, 2004-2006. USDA Forest Service, Northeastern Area State and Private Forestry--Wood in Transportation Program; Erickson, Forsman, **Schmierer**; Total Funding: \$59,635.

Geospatial Data Acquisition and Dissemination System (GDADS), 2003-2004. MTU Research Excellence fund; Gale, Hyslop, Noble, **Schmierer**; Total Funding: \$21,800.

Tech Trails Interpretive Sign Project, 2003. MI DNR FMFMD Forest Stewardship Program Outreach and Education Grant; **Schmierer**; Total Funding: \$10,000.

Construct and Evaluate the Performance of Six Timber Bridges Using Local Species in Northern Michigan, 2003-2005. USDA Forest Service, Northeastern Area State and Private Forestry—Wood In Transportation Program Grant; Erickson, Forsman, **Schmierer**; Total Funding: \$208,000.

Michigan Tech Institutional Team with MSU FIRST II (Faculty Institutes for Reforming Science Teaching), 2002-2005. National Science Foundation; Bagley, Baltensperger, Huckins, Nagel, **Schmierer**.

Presentations and Publications

Schmierer, J.M., J.C. Rivard, and A.L. Gahagan. 2007. Biomass potential in Lake States jack pine managed for multiple objectives. Poster presentation and published abstract, In: Proceedings of Society of American Foresters National Convention, Portland, OR, Oct. 22-28.

Schmierer, James. 2007. Lowland conifers: ecology, silviculture and management. Invited presentation for WI DNR Forestry Training, Sept. 18-19, Minoqua, WI.

Schmierer, James. 2006. Ford Forestry Center: 50 years of sustainable management. Invited presentation for Forest Guild Lake States meeting, Sept. 27-30, Boulder Junction, WI.

Nagel, L.M., and J.M. Schmierer. 2005. An integrated field practicum for forest and applied ecology majors: lessons learned. Poster presentation and published abstract, FIRST II National Meeting, May 13-15, Kellogg Biological Station, MI.

Schmierer, J.M., G.D. Mroz, and S.D. Noble. 2004. The FERM: Forestry and Environmental Resource Management, pgs. 151-155 in Thomas E. Kolb, compiler. Proceedings of the Fifth Biennial Conference on University Education in Natural Resources, Northern Arizona University, Flagstaff, AZ, March 13-17. Natural Resources and Environmental Issues, Vol. XII, Quinney Library, College of Natural Resources, Utah State University, Logan, UT.

Schmierer, J.M., and D.D. Reed. 2003. Mounding site preparation and artificial regeneration with tamarack in Upper Michigan. In: Proceedings of Society of American Foresters National Convention, October 25-29, Buffalo, NY.

Schmierer, J.M., D.D. Reed, A.J. Londo, G.D. Mroz, M.F. Jurgensen, and M.R. Gale. 1999. Bucket mounding site preparation: sustainable management for northern forested wetlands. In: Proceedings of the North American Forest Ecology Workshop, June 27-29, Orono, ME.

Londo, A.J., J.M. Schmierer, G.D. Mroz, D.D. Reed, and M.R. Gale. 1999. Bucket mounding site preparation for sustainable management of Lake States forested wetlands. In: Proceedings of

the Wildland Hydrology Specialty Conference, American Water Resources Association.
Bozeman, MT.

Londo, A.J., J.M. Schmierer, G.D. Mroz, D.D. Reed, and M.F. Jurgensen. 1998. Bucket mounding site preparation for sustainable management of Lake States forested wetlands. In: Proceedings of the 1998 Annual Meeting of the Society of American Foresters, Traverse City, MI.

Teaching Philosophy

I have adopted a teaching philosophy, which stresses the development of a necessary set of forest resources knowledge and skills. This philosophy incorporates traditional lectures with classroom and field-based activities designed to engage students on several levels. I attempt to solidify important concepts with realistic field exercises, which requires students to synthesize information from a variety of sources, and to utilize critical thinking and problem solving skills to produce timely, appropriate, and technically sound solutions. I feel that students need to have not only the necessary background knowledge and field techniques, but must also be able to share ideas and solutions and communicate effectively to a variety of audiences.

Incorporating an interactive teaching style can increase the level of student participation, give additional opportunities for assessing student performance, and allow students to improve their verbal communication skills. I feel that inquiry-based exercises provide a basis for learning how to learn not only from an instructor who is leading the class, but also from each other. The foundation that students build in college must also include cultivating their natural curiosity and developing an inquisitive approach to problems and new situations. These are the keys to life-long learning and continuing career development.