

THOMAS JOHN SAUER
Supervisory Research Soil Scientist

Contact Information: U.S. Department of Agriculture-Agricultural Research Service
National Laboratory for Agriculture and the Environment
1015 North University Boulevard
Ames, IA 50011-3611
Voice: (515) 294-3416 Fax: (515) 294-8125 Email: tom.sauer@ars.usda.gov

Education:

<i>Date</i>	<i>Major</i>	<i>Institution</i>	<i>Degree</i>
1993	Soil Science	University of Wisconsin-Madison	Ph.D.
1985	Soil Science	University of Wisconsin-Madison	M.S.
1982	Soil Science	University of Wisconsin-Stevens Point	B.S.

Professional Experience:

2014 - present Research Leader and Supervisory Soil Scientist, USDA-ARS, National Laboratory for Agriculture and the Environment
1999-2014 Research Soil Scientist, USDA-ARS, National Soil Tilth Laboratory/National Laboratory for Agriculture and the Environment, Ames, IA
1996-1999 Soil Scientist, USDA-ARS, Fayetteville, AR
1993-1996 Research Associate, USDA-ARS, National Soil Tilth Laboratory, Ames, IA

Research Responsibilities:

Define and characterize surface soil, canopy, and crop residue properties that influence greenhouse gas emissions and soil organic carbon dynamics. Develop innovative land use and bioenergy management strategies that mitigate climate change impacts and enhance soil quality.

<u>Publications:</u>	<u>Lead Author</u>	<u>Co-Author</u>	<u>Total</u>
Journal Articles	26	81	107
Conference Proceedings	13	27	40
Book Chapters	9	8	17
Books (Author)	0	3	3
Books (Editor)	1	1	2
Abstracts	58	157	215

Honors & Awards:

Outstanding Alumnus, University of Wisconsin-Stevens Point, College of Natural Resources (2013)
Fellow, Soil Science Society of America (2012)
Superior Paper Award, American Society of Agricultural and Biosystems Engineers (2012)
Research Fellowship, Organisation for Economic Co-operation and Development (OECD) University of Bologna, Italy (2007)
Senior Fellowship, Institute for Advanced Studies, University of Bologna, Italy (2007)
Early Career Scientist Award, USDA-ARS Midwest Area (2002)
Fulbright Scholarship, Massey University (New Zealand, 1986)

Professional & Honorary Society Memberships:

American Geophysical Union	Sigma Xi
American Society of Agronomy	Soil Science Society of America
Association for Temperate Agroforestry	Soil and Water Conservation Society
International Union of Soil Sciences	

Recent Extramural Funding:

Sauer, T.J., D. Zamora, J. Zhu, J.T. Tyndall, and E.C. Brevik. Woody bioenergy feedstock from marginal agricultural lands: red cedar feedstock quality and environmental sustainability. North Central Sun Grant-USDA. \$139,455. (2017-2019)

Sauer, T.J. Great Plains agroforestry: evaluating bioenergy feedstock and carbon sequestration as potential long-term revenue streams to diversify landowner income. North Central Sustainable Agriculture, Research and Education (NCR-SARE). \$191,212 (2013-2016)

Sauer, T. J. and Y. G. Chendev. Contribution of woody vegetation to organic matter content of soils under forest plantations – assessment for bioenergy production in the Great Plains (U.S.) and Central Russian Upland (Russia). Civilian Research and Development Foundation. \$15,880 (2012-2014)

Sauer, T. J., R. Horton, and H. Asbjornsen. Land use conversion to perennial vegetation: quantifying soil water regime and aeration and the implications for enhancing soil resilience to climate change. Leopold Center for Sustainable Agriculture. \$81,936 (2009-2012)

Sauer, T. J., J. C. Tyndall, R. L. Pfeiffer, and S. L. Trabue. Wind tunnel and field evaluation of vegetative buffers for particulate trapping and odor reduction near swine confinement facilities. National Pork Board. \$33,800 (2007-2008)

Professional Service:

Editorial Board, *Agroforestry Systems*, (2016-2018)

Chair, International Union of Soil Sciences Commission C4.5 - History, Philosophy, and Sociology of Soil Science (2014-2018)

President, Iowa State Chapter of Sigma Xi (2014-15)

Chair, Soil Science Society of America Division S-6 Soil and Water Management and Conservation (2014)

Associate Editor, *Soil Horizons*, Soil Science Society of America, (2012-2013)

Member (2005), Vice Chair and Secretary (2006), Chair (2007-2009), Soil Science Society of America S205.1 Council on the History, Philosophy, and Sociology of Soil Science

Program Chair, American Society of Agronomy Division A-3 (Agroclimatology and Agronomic Modeling) (2004)

Member, National Trends in Undergraduate Soil Science Education Subcommittee of the U.S. Natl. Comm. of Soil Science, National Academy of Sciences (2003-2005)

Associate Editor, Division S-6, *Soil Science Society of America Journal* (1999-2004)

Affiliate (Asst./Assoc./ Professor), Department of Agronomy, Iowa State University, Ames, IA (2000-present)